CITY OF WYOMING

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AGENDA
WYOMING CITY COUNCIL MEETING
COUNCIL CHAMBERS
MONDAY, JUNE 1, 2026, 7:00 P.M.

1) **Call to Order**
2) **Invocation – Rick Alvarez, Amazing Church Michigan**
   If you wish and are able, please stand for the invocation. The Pledge of Allegiance will immediately follow the invocation.
3) **Pledge of Allegiance**
4) **Roll Call**
5) **Approval of Minutes**
   From May 18, 2026, Regular Meeting
6) **Approval of Agenda**
7) **Public Hearings**
   If you wish to speak to an item during a public hearing you are welcome to do so. It is important to note this is not an opportunity for dialogue or debate; this is an opportunity to provide comment to the City Council. Comments made during a public hearing may become part of the meeting's permanent record. Upon approaching the podium, please begin by providing your name and address. There is a 3 minute limit per person.
8) **Public Comment on Agenda Items**
   This public comment period is reserved for comment on agenda items only. If you wish to speak about an item that is not on the agenda, please hold your comments until the acknowledgement of visitors at the end of the meeting. It is important to note this is not an opportunity for dialogue or debate; this is an opportunity to provide comment to the City Council. Upon approaching the podium, please begin by providing your name and address. There is a 3 minute limit per person.
9) **Presentations and Proclamations**
   a) Presentations
      1. Kent District Library Community Report
   b) Proclamations
10) **Petitions and Communications**
   a) Petitions
   b) Communications
11) **Reports from City Officers**
   a) From City Council
   b) From City Manager
12) **Budget Amendments**
13) **Consent Agenda**
   All items under this section are considered to be routine and will be enacted by one motion with no discussion. If discussion is desired by a Councilmember, that member may request removal from the Consent Agenda.
   a) To Reappoint Members of the Grand Valley Regional Biosolids Authority as City of Wyoming Representatives
   b) Appreciation to Diana Ames for Her Service as a Member of the Housing Commission of the City of Wyoming

14) Resolutions

c) To Approve Adding a Local Business Opportunity (LBO) Program to the Purchasing Policy
d) For Reappropriation of Internal Service Fund Reserves to Pension Plan Contributions (Budget Amendment No. 28)
e) To Approve a Cybersecurity Mutal Aid Memorandum of Understanding to Authorize the City Manager to Approve Immaterial Future Amendments
f) To Grant a 90-Day Extension for Preliminary Plat Final Approval to the Proposed Malta Woods Plat

15) Award of Bids, Contracts, Purchases, and Renewal of Bids and Contracts

g) To Accept a Proposal for a Community Survey
h) To Concur with the Emergency Repair of Sprinkler Lines and to Authorize Payment
i) To Reimburse the Ottawa County Road Commission for Expenses Related to Providing Supplemental Water to Olive and Blendon Townships
j) To Concur with Disposal Services for the Third Transmission Main and Authorize Payment
k) To Accept a Quote for Proficiency Testing and Analytical Standards
l) To Accept a Quote for the Purchase of a Raw Sewage Pump
m) For Snowplow Underbody Scraper Replacement
n) To Perform Pavement Preservation Treatments
o) To Accept a Proposal for Construction of a Door and Related Framing for the Payroll Supervisor Office
p) To Accept a Bid for the City Hall Canopy Project and Accept Proposals for the Canopy Structure and Teller Carrier System
q) To Accept a Bid for the 2026 Wyoming Resurfacing Project (Budget Amendment No. 29)
r) To Extend the Bid for the Purchase of HVAC Supplies
s) For Award of Bid
   1. Electric Gate Operator Replacement
   2. IDEXX Laboratory Testing Supplies
   3. Long Line Pavement Markings
   4. Miscellaneous Pavement Markings

16) Ordinances

10-26 To Amend Section 90-515 of the Code of Ordinances by Adding Subsection (152) to Rezone 1006 26th Street SW from PUD-4 General Planned District to R-2 Residential District (Final Reading)

11-26 To Amend Zoning Code Article 4C and Sections 90-420C “Purpose”, 90-421C “Qualifying Conditions”, 90-422C “Principal Permitted Uses”, 90-423C “Permitted Uses After Special Approval”, 90-424C “Development Standards”, 90-511 “Application Procedures for PUD-4”, and 90-512 “Review Standards” (Final Reading)

12-26 To Amend Chapter 2, Article IV, of the Code of Ordinances to Amend Division 2, Section 2-258 and Section 2-259 to Modify Existing Procurement Standards (First Reading)

17) Informational Material

18) Acknowledgment of Visitors

This public comment period is an opportunity to share concerns or present topics to the City Council that were not part of this meeting’s agenda. This is not an opportunity for dialogue with Council, but Council may make referrals or request staff to follow up. Please provide your name and address when approaching the podium. There is a 3-minute limit per person.

19) Closed Session
20) Adjournment

The City of Wyoming, including the City Council, is committed to ensuring all persons have access to all its programs, services, and activities, including any public meetings. The City Council will coordinate with city staff to ensure the City Council fulfills that commitment for its programs, services, and activities, including public meetings. Accommodations to enable virtual meeting attendance and participation can usually be made if a request is received at least 5 hours before the meeting time. Other accommodations may require more time.

Special Accommodations – Persons with impairments or disabilities needing accommodations to participate in the meeting or persons who need language interpretation services may contact the city clerk at either Clerk_info@wyomingmi.gov or 616.530.7296 at least 36 hours before the meeting to make arrangements for appropriate accommodation.

Acomodaciones Especiales – Personas que deseen asistir a esta reunión y necesitan acomodación para participar, como servicios de interpretación, deben comunicarse con la Oficina del Administrador de la Ciudad al 616.530.7296 o Clerk_info@wyomingmi.gov al menos 36 horasantes de la reunion para hacer arreglos para el alojamiento apropiado.

06/01/26
Clerk/DC

RESOLUTION NO. _____

RESOLUTION TO REAPPOINT MEMBERS OF THE GRAND VALLEY REGIONAL BIOSOLIDS AUTHORITY AS CITY OF WYOMING REPRESENTATIVES

WHEREAS:

1. The City of Wyoming is entitled to representation on the Grand Valley Regional Biosolids Authority Board of Directors.
2. The terms of the City of Wyoming representatives on the Grand Valley Regional Biosolids Authority expire on June 30, 2026.
3. It is the desire of the Wyoming City Council to reappoint the board members listed below as City of Wyoming representatives to the Grand Valley Regional Biosolids Authority Board of Directors for three-year terms expiring June 30, 2029.

NOW, THEREFORE, BE IT RESOLVED:

1. That the City Council for the City of Wyoming, Michigan, does hereby reappoint the following named persons to serve on the Grand Valley Regional Biosolids Authority Board of Directors for the terms so stated.

Grand Valley Regional Biosolids Authority	Term Ending
Aaron Vis	06/30/2029
Myron Erickson	06/30/2029
John Shay	06/30/2029

Moved by Councilmember:
Seconded by Councilmember:
Motion Carried Yes
No

I hereby certify that the foregoing Resolution was adopted by the City Council for the City of Wyoming, Michigan at a regular session held on June 1, 2026.

_____
Kelli A. VandenBerg, Wyoming City Clerk

06/01/26
Clerk/DC

RESOLUTION NO. _____

RESOLUTION OF APPRECIATION TO DIANA AMES FOR HER SERVICE
AS A MEMBER OF THE HOUSING COMMISSION
OF THE CITY OF WYOMING

WHEREAS:

1. Diana Ames has served faithfully and effectively as a member of the Housing Commission since 2022.

NOW, THEREFORE, BE IT RESOLVED:

1. Councilmembers and residents of the City of Wyoming wish to express their deep appreciation to Diana Ames for her dedicated service as a member of the Housing Commission.

Moved by Councilmember:
Seconded by Councilmember:
Motion Carried Yes
No

I hereby certify that the foregoing Resolution was adopted by the City Council for the City of Wyoming, Michigan at a regular session held on June 1, 2026.

_____
Kelli A. VandenBerg, Wyoming City Clerk

06/01/26
Finance/LAJ

RESOLUTION NO. _____

RESOLUTION TO APPROVE ADDING A LOCAL BUSINESS OPPORTUNITY (LBO) PROGRAM TO THE PURCHASING POLICY

WHEREAS:

1. As detailed in the attached staff report, it is recommended City Council add a Local Business Opportunity (LBO) program to the city's purchasing policy.
2. The LBO Program will be available to all vendors with a physical presence in Kent County.
3. The LBO Program will provide a 5% bid-price reduction credit for qualifying local vendors on bids up to $500,000.
4. Total cost of the LBO Program shall not exceed $100,000 per fiscal year.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. City Council approves adding a Local Business Opportunity (LBO) program to the City's purchasing policy.

Moved by Councilmember:
Seconded by Councilmember:
Motion Carried Yes
No

I certify that this resolution was adopted by the City Council of the City of Wyoming, Michigan at a regular meeting held June 1, 2026.

_____
Kelli A. VandenBerg, City Clerk

ATTACHMENTS:
Staff Report

CITY OF WYOMING | FINANCE

1155 28th Street SW, Wyoming, MI 49509
616.530.7225 | wyomingmi.gov

STAFF REPORT

Date: May 13, 2026

Subject: Procurement of Goods and Services

From: Jodi Yenchar, Finance Director
Nicole Hofert, Deputy City Manager

Meeting Date: June 1, 2026

RECOMMENDATION:

It is recommended City Council adopt a resolution to add a Local Business Opportunity (LBO) program to the city's purchasing policy.

ALIGNMENT WITH STRATEGIC PLAN:

- PILLAR 3 – STEWARDSHIP
  - GOAL 2 – Enhance the efficiency and effectiveness of city operations and services.

DISCUSSION:

Council expressed interest in implementing an LBO program to provide economic opportunities for local businesses. Staff presented recommendations to the council at the May 11 work session. Based on council's feedback at that meeting, staff has drafted a resolution to add the LBO program to the purchasing policy with the following criteria:

- The LBO program will be available to all vendors with a physical presence in Kent County.
- The LBO program will provide a 5% bid-price reduction credit for qualifying local vendors on bids up to $500,000.
- The total cost of the LBO program shall not exceed $100,000 per fiscal year.

Staff will track program utilization and report the data to council. Council can choose to amend the program in the future by adopting an updated resolution.

BUDGET IMPACT:

The maximum impact to the city's budget is $100,000 per fiscal year.

06/01/2026
Finance/JLY

RESOLUTION NO. _____

RESOLUTION FOR REAPPROPRIATION OF INTERNAL SERVICE FUND RESERVES TO PENSION PLAN CONTRIBUTION

WHEREAS:

1. As detailed in the attached staff report, the City's Workers Compensation Fund and Health Insurance Fund have reserves greater than projected need.
2. The City of Wyoming Employees Retirement System has an unfunded liability of $16,608,270 as of June 30, 2025
3. The City of Wyoming Retiree Health Care Plan has an unfunded liability of $314,254 as of June 30, 2025.
4. A budget amendment is required.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. $700,000 from the Workers Compensation Fund reserves is reappropriated to be contributed to the City of Wyoming Employees Retirement System defined benefit pension plan.
2. $2,000,000 from the Health Insurance Fund reserves is reappropriated to be contributed to the City of Wyoming Employees Retirement System defined benefit pension plan.
3. City Council approves the attached budget amendment.

Moved by Councilmember:
Seconded by Councilmember:
Motion Carried Yes
No

I certify that this resolution was adopted by the City Council of the City of Wyoming, Michigan at a regular meeting held June 1, 2026.

_____
Kelli A. VandenBerg, Wyoming City Clerk

ATTACHMENTS:
Staff Report
Budget Amendment #028

CITY OF WYOMING | FINANCE

1155 28th Street SW, Wyoming, MI 49509
616.530.7225 | wyomingmi.gov

Staff Report

Date: May 19, 2026

Subject: Reappropriation of Internal Service Fund Reserves to Pension Contribution

From: Jodi Yenchar, Finance Director

Meeting Date: June 1, 2026

RECOMMENDATION:

It is recommended that City Council approve the refund of reserves in the workers compensation and health insurance internal service funds and approve the refunds be reappropriated to reduce the City's unfunded pension liability.

ALIGNMENT WITH STRATEGIC PLAN:

- PILLAR 3 – STEWARDSHIP
  - GOAL 1 – Strengthen and maintain the strong financial position of the city.
    - OBJECTIVE 1 – Develop a long-term sustainable funding plan for the city.

DISCUSSION:

The City financial records include several self-insurance funds. There are individual funds for each type of insurance the City maintains. Each year, the City evaluates the balance in these funds, forecasts future needs based on historical trends and sets the internal rates to be charged to departments through their operating budgets for the various types of coverage.

Dating back to at least 2010, the City has consistently transferred fund balance from the workers compensation, health and dental insurance funds to the Other Post Employment Benefit (OPEB) plan to reduce the unfunded liability for providing retiree defined benefit health plan benefits. These additional contributions have been a key factor in reducing the City's annual OPEB contributions from $9,878,994 in fiscal year 2020 to $834,186 in fiscal year 2026. Due to the additional funds previously contributed, the most recent OPEB valuation reported a small unfunded liability of $314,254. The most recent pension plan valuation reported a current unfunded liability of $16,608,270.

The last transfer from the insurance funds to the OPEB plan was completed in fiscal year 2025. As discussed last year, the City evaluates performance to budget and fund balance each year. Fiscal year 2025 claims were lower than projected and interest earnings were slightly higher than projected. It is my recommendation reserves greater than projected need be used to pay down the pension and OPEB plan liabilities.

BUDGET IMPACT:

When reserves greater than projected need are identified in an internal service fund, the amount must be refunded to the individual department budgets in the same proportion as they were contributed. This process provides accurate representation of the use of funds in the City's financial statements. These funds can then be reappropriated to the pension or OPEB expenditure line-item budgets.

The attached budget amendment reflects the credits to the various department budgets to refund $700,000 in workers compensation contributions and $2,000,000 in health insurance contributions, as well as the necessary appropriation increase to the pension accounts to provide the authority to reappropriate these refunds for additional contributions to the pension plan to pay down the unfunded liability. The net effect is $0 to each department, each fund, and the City budget as a whole.

Attachment:
Budget Amendment #028

CITY OF WYOMING BUDGET AMENDMENT

Date: June 1, 2026 **Budget Amendment No. 028**

To the Wyoming City Council:

A budget amendment is requested to reappropriate $2,700,000 of internal service fund reserves to the City's unfunded pension liability through a net neutral refund to and contribution from the originating departments in accordance with the attachment.

Summary of Changes by Fund	Revenue	Expense	Change in Fund Balance
Workers Compensation Insurance Fund	$ (700,000.00)		$ (700,000.00)
Health Insurance Fund	$ (2,000,000.00)		$ (2,000,000.00)
Pension Fund	$ 2,700,000.00		$ 2,700,000.00

Recommended: _____ _____
Deputy Finance Director City Manager

Motion by Councilmember _____, seconded by Councilmember _____ that the General Appropriations Act for Fiscal Year 2025-2026 be amended by adoption of the foregoing budget amendment.

Motion carried: Yes _____, No _____

I hereby certify that at a _____ meeting of the Wyoming City Council duly held on _____ the foregoing budget amendment was approved.

_____
City Clerk

ATTACHMENT
City of Wyoming
Budget Amendment No. 028
June 1, 2026

Refund from Workers Compensation Insurance Fund

Account	Fund	Department	Description	Revenue	Expense
682-643.005	Workers Comp Insurance Fund		Income-Workers Comp Ins Premium	(700,000)	
				(700,000)	
101-172-17200-719.000	General Fund	City Manager	Workers Comp Insurance Expense		(1,172)
101-191-19100-719.000	General Fund	Finance	Workers Comp Insurance Expense		(638)
101-191-25300-719.000	General Fund	Treasury	Workers Comp Insurance Expense		(221)
101-215-21500-719.000	General Fund	Clerk	Workers Comp Insurance Expense		(433)
101-215-26200-719.000	General Fund	Clerk-Elections	Workers Comp Insurance Expense		(112)
101-228-22800-719.000	General Fund	I.T.	Workers Comp Insurance Expense		(881)
101-257-25700-719.000	General Fund	Assessor	Workers Comp Insurance Expense		(5,752)
101-265-26500-719.000	General Fund	Facilities	Workers Comp Insurance Expense		(2,855)
101-266-26600-719.000	General Fund	Attorney	Workers Comp Insurance Expense		(405)
101-270-27000-719.000	General Fund	Human Resources	Workers Comp Insurance Expense		(55)
101-286-28600-719.000	General Fund	Court	Workers Comp Insurance Expense		(3,227)
101-286-28610-719.000	General Fund	Court-Building	Workers Comp Insurance Expense		(1,002)
101-286-29500-719.000	General Fund	Court-Probation	Workers Comp Insurance Expense		(3,756)
101-701-70100-719.000	General Fund	Planning	Workers Comp Insurance Expense		(305)
101-701-70200-719.000	General Fund	Planning-BZA	Workers Comp Insurance Expense		(13)
101-701-72800-719.000	General Fund	Planning-Economic Development	Workers Comp Insurance Expense		(5)
110-191-27200-719.000	Allocation Fund	Housing	Workers Comp Insurance Expense		(9,029)
202-441-46300-719.000	Major Streets	Street Maintenance	Workers Comp Insurance Expense		(18,486)
202-441-47400-719.000	Major Streets	Traffic Services	Workers Comp Insurance Expense		(13,956)
202-441-47800-719.000	Major Streets	Winter Maintenance	Workers Comp Insurance Expense		(5,133)
203-441-46300-719.000	Local Streets	Street Maintenance	Workers Comp Insurance Expense		(10,334)
203-441-47400-719.000	Local Streets	Traffic Services	Workers Comp Insurance Expense		(6,823)
203-441-47800-719.000	Local Streets	Winter Maintenance	Workers Comp Insurance Expense		(4,402)
205-301-30500-719.000	Public Safety	Police-Admin	Workers Comp Insurance Expense		(14,594)
205-301-30610-719.000	Public Safety	Police-Building	Workers Comp Insurance Expense		(2,700)
205-301-30700-719.000	Public Safety	Police-Records	Workers Comp Insurance Expense		(327)
205-301-31000-719.000	Public Safety	Police-Detective	Workers Comp Insurance Expense		(38,382)
205-301-31200-719.000	Public Safety	Police-FSU	Workers Comp Insurance Expense		(8,684)
205-301-31500-719.000	Public Safety	Police-Patrol	Workers Comp Insurance Expense		(133,258)
205-336-33700-719.000	Public Safety	Fire-Admin	Workers Comp Insurance Expense		(15,120)
205-336-33800-719.000	Public Safety	Fire-Building	Workers Comp Insurance Expense		(424)
205-336-33900-719.000	Public Safety	Fire-Fighting	Workers Comp Insurance Expense		(139,277)
205-336-34100-719.000	Public Safety	Fire-Prevention	Workers Comp Insurance Expense		(10,539)
208-751-75200-719.000	Parks Fund	Administration	Workers Comp Insurance Expense		(3,179)
208-751-75600-719.000	Parks Fund	Facilities	Workers Comp Insurance Expense		(23,480)
208-751-75800-719.000	Parks Fund	Senior Center	Workers Comp Insurance Expense		(2,839)
208-751-76100-719.000	Parks Fund	Recreation	Workers Comp Insurance Expense		(6,253)
228-441-44300-719.000	Solid Waste Fund	Yard Waste Disposal	Workers Comp Insurance Expense		(8,655)
249-371-37100-719.000	Building Inspections	Permits	Workers Comp Insurance Expense		(7,911)
249-371-37210-719.000	Building Inspections	Code Enforcement	Workers Comp Insurance Expense		(1,519)
249-371-37220-719.000	Building Inspections	CE-CDBG Eligible	Workers Comp Insurance Expense		(1,303)
249-371-37300-719.000	Building Inspections	Rental	Workers Comp Insurance Expense		(1,649)
272-265-26500-719.000	Library Building	Facilities	Workers Comp Insurance Expense		(2,134)
401-441-17500-719.000	Capital Improvement	Administration	Workers Comp Insurance Expense		(23,555)
551-751-76300-719.000	Godwin Mercado	Public Market	Workers Comp Insurance Expense		(113)
590-441-54200-719.000	Sewer Fund	Transmission	Workers Comp Insurance Expense		(20,937)
590-536-54300-719.000	Sewer Fund	Treatment	Workers Comp Insurance Expense		(24,880)
590-536-54310-719.000	Sewer Fund	Treatment-Lab	Workers Comp Insurance Expense		(5,334)
590-536-54700-719.000	Sewer Fund	Ind Pretreatment	Workers Comp Insurance Expense		(4,186)
590-536-54800-719.000	Sewer Fund	GVRBA-Land App	Workers Comp Insurance Expense		(837)
590-536-54801-719.000	Sewer Fund	GVRBA-Pump House	Workers Comp Insurance Expense		(224)
590-536-56500-719.000	Sewer Fund	T&D-Meters	Workers Comp Insurance Expense		(3,855)
591-441-55400-719.000	Water Fund	Installation	Workers Comp Insurance Expense		(408)
591-441-55700-719.000	Water Fund	Services	Workers Comp Insurance Expense		(23,255)
591-441-56200-719.000	Water Fund	Mains	Workers Comp Insurance Expense		(22,786)
591-441-56600-719.000	Water Fund	Hydrants	Workers Comp Insurance Expense		(2,913)
591-537-55300-719.000	Water Fund	Pumping & Treatment	Workers Comp Insurance Expense		(29,595)
591-537-55310-719.000	Water Fund	P&T-Lab	Workers Comp Insurance Expense		(5,184)
591-537-55600-719.000	Water Fund	Utility Billing	Workers Comp Insurance Expense		(339)
591-537-55800-719.000	Water Fund	T&D-Tanks	Workers Comp Insurance Expense		(188)
591-537-55900-719.000	Water Fund	T&D-Gezon	Workers Comp Insurance Expense		(1,229)
591-537-56300-719.000	Water Fund	T&D-Gezon Pipeline	Workers Comp Insurance Expense		(1,475)
591-537-56400-719.000	Water Fund	T&D-Pipeline Meters	Workers Comp Insurance Expense		(521)
591-537-56500-719.000	Water Fund	T&D-Meters	Workers Comp Insurance Expense		(3,855)
661-441-58200-719.000	Motor Pool Fund	Equipment Operations	Workers Comp Insurance Expense		(8,118)

Account	Fund	Department	Description	Revenue	Expense
661-441-58300-719.000	Motor Pool Fund	Building	Workers Comp Insurance Expense		(3,221)
678-000-96200-719.000	General Liability Ins	Risk Management	Workers Comp Insurance Expense		(478)
679-000-96300-719.000	Fleet Insurance	Risk Management	Workers Comp Insurance Expense		(407)
680-000-96400-719.000	Property Insurance	Risk Management	Workers Comp Insurance Expense		(372)
682-000-96500-719.000	Work Comp	Risk Management	Workers Comp Insurance Expense		(513)
					(700,000)

Refund from Health Insurance Fund

Account	Fund	Department	Description	Revenue	Expense
683-643.250	Health Insurance Fund		Income-Health Insurance Premium	(2,000,000)	
				(2,000,000)	
101-172-17200-716.000	General Fund	City Manager	Hospitalization Insurance Expense		(42,900)
101-191-19100-716.000	General Fund	Finance	Hospitalization Insurance Expense		(30,834)
101-191-25300-716.000	General Fund	Treasury	Hospitalization Insurance Expense		(12,700)
101-215-21500-716.000	General Fund	Clerk	Hospitalization Insurance Expense		(31,053)
101-228-22800-716.000	General Fund	I.T.	Hospitalization Insurance Expense		(49,347)
101-257-25700-716.000	General Fund	Assessor	Hospitalization Insurance Expense		(32,609)
101-265-26500-716.000	General Fund	Facilities	Hospitalization Insurance Expense		(5,118)
101-266-26600-716.000	General Fund	Attorney	Hospitalization Insurance Expense		(11,840)
101-270-27000-716.000	General Fund	Human Resources	Hospitalization Insurance Expense		(3,498)
101-286-28600-716.000	General Fund	Court	Hospitalization Insurance Expense		(59,592)
101-286-28610-716.000	General Fund	Court-Building	Hospitalization Insurance Expense		(3,467)
101-286-29500-716.000	General Fund	Court-Probation	Hospitalization Insurance Expense		(12,370)
101-701-70100-716.000	General Fund	Planning	Hospitalization Insurance Expense		(12,865)
101-701-70200-716.000	General Fund	Planning-BZA	Hospitalization Insurance Expense		(428)
101-701-72800-716.000	General Fund	Planning-Economic Development	Hospitalization Insurance Expense		(275)
110-191-27200-716.000	Allocation Fund	Housing	Hospitalization Insurance Expense		(62,140)
202-441-46300-716.000	Major Streets	Street Maintenance	Hospitalization Insurance Expense		(37,404)
202-441-47400-716.000	Major Streets	Traffic Services	Hospitalization Insurance Expense		(28,170)
202-441-47800-716.000	Major Streets	Winter Maintenance	Hospitalization Insurance Expense		(1,106)
203-441-46300-716.000	Local Streets	Street Maintenance	Hospitalization Insurance Expense		(23,497)
203-441-47400-716.000	Local Streets	Traffic Services	Hospitalization Insurance Expense		(10,567)
203-441-47800-716.000	Local Streets	Winter Maintenance	Hospitalization Insurance Expense		(1,106)
205-301-30500-716.000	Public Safety	Police-Admin	Hospitalization Insurance Expense		(40,922)
205-301-30610-716.000	Public Safety	Police-Building	Hospitalization Insurance Expense		(4,106)
205-301-30700-716.000	Public Safety	Police-Records	Hospitalization Insurance Expense		(25,135)
205-301-31000-716.000	Public Safety	Police-Detective	Hospitalization Insurance Expense		(128,301)
205-301-31200-716.000	Public Safety	Police-FSU	Hospitalization Insurance Expense		(31,355)
205-301-31500-716.000	Public Safety	Police-Patrol	Hospitalization Insurance Expense		(338,889)
205-336-33700-716.000	Public Safety	Fire-Admin	Hospitalization Insurance Expense		(21,056)
205-336-33800-716.000	Public Safety	Fire-Building	Hospitalization Insurance Expense		(671)
205-336-33900-716.000	Public Safety	Fire-Fighting	Hospitalization Insurance Expense		(192,125)
205-336-34100-716.000	Public Safety	Fire-Prevention	Hospitalization Insurance Expense		(15,529)
208-751-75200-716.000	Parks Fund	Administration	Hospitalization Insurance Expense		(20,565)
208-751-75600-716.000	Parks Fund	Facilities	Hospitalization Insurance Expense		(52,428)
208-751-75800-716.000	Parks Fund	Senior Center	Hospitalization Insurance Expense		(9,553)
208-751-76100-716.000	Parks Fund	Recreation	Hospitalization Insurance Expense		(13,727)
228-441-44300-716.000	Solid Waste Fund	Yard Waste Disposal	Hospitalization Insurance Expense		(3,723)
249-371-37100-716.000	Building Inspections	Permits	Hospitalization Insurance Expense		(47,095)
249-371-37210-716.000	Building Inspections	Code Enforcement	Hospitalization Insurance Expense		(10,299)
249-371-37220-716.000	Building Inspections	CE-CDBG Eligible	Hospitalization Insurance Expense		(8,512)
249-371-37300-716.000	Building Inspections	Rental	Hospitalization Insurance Expense		(9,728)
272-265-26500-716.000	Library Building	Facilities	Hospitalization Insurance Expense		(6,376)
401-441-17500-716.000	Capital Improvement	Administration	Hospitalization Insurance Expense		(24,525)
551-751-76300-716.000	Godwin Mercado	Public Market	Hospitalization Insurance Expense		(275)
590-441-54200-716.000	Sewer Fund	Transmission	Hospitalization Insurance Expense		(45,471)
590-536-54300-716.000	Sewer Fund	Treatment	Hospitalization Insurance Expense		(109,770)
590-536-54310-716.000	Sewer Fund	Treatment-Lab	Hospitalization Insurance Expense		(23,900)
590-536-54700-716.000	Sewer Fund	Ind Pretreatment	Hospitalization Insurance Expense		(21,830)
590-536-54800-716.000	Sewer Fund	GVRBA-Land App	Hospitalization Insurance Expense		(5,117)
590-536-54801-716.000	Sewer Fund	GVRBA-Pump House	Hospitalization Insurance Expense		(1,412)
590-536-56500-716.000	Sewer Fund	T&D-Meters	Hospitalization Insurance Expense		(7,317)
591-441-55700-716.000	Water Fund	Services	Hospitalization Insurance Expense		(37,278)
591-441-56200-716.000	Water Fund	Mains	Hospitalization Insurance Expense		(51,752)
591-537-55300-716.000	Water Fund	Pumping & Treatment	Hospitalization Insurance Expense		(112,966)
591-537-55310-716.000	Water Fund	P&T-Lab	Hospitalization Insurance Expense		(24,399)
591-537-55600-716.000	Water Fund	Utility Billing	Hospitalization Insurance Expense		(20,111)
591-537-55800-716.000	Water Fund	T&D-Tanks	Hospitalization Insurance Expense		(831)
591-537-55900-716.000	Water Fund	T&D-Gezon	Hospitalization Insurance Expense		(5,445)
591-537-56300-716.000	Water Fund	T&D-Gezon Pipeline	Hospitalization Insurance Expense		(6,433)
591-537-56400-716.000	Water Fund	T&D-Pipeline Meters	Hospitalization Insurance Expense		(2,385)
591-537-56500-716.000	Water Fund	T&D-Meters	Hospitalization Insurance Expense		(7,317)

Account	Fund	Department	Description	Revenue	Expense
661-441-58200-716.000	Motor Pool Fund	Equipment Operations	Hospitalization Insurance Expense		(30,946)
661-441-58300-716.000	Motor Pool Fund	Building	Hospitalization Insurance Expense		(3,353)
678-000-96200-716.000	General Liability Ins	Risk Management	Hospitalization Insurance Expense		(1,130)
679-000-96300-716.000	Fleet Insurance	Risk Management	Hospitalization Insurance Expense		(963)
680-000-96400-716.000	Property Insurance	Risk Management	Hospitalization Insurance Expense		(879)
682-000-96500-716.000	Work Comp	Risk Management	Hospitalization Insurance Expense		(1,214)
					(2,000,000)

Contribution to Pension Fund

Account	Fund	Department	Description	Revenue	Expense
731-598.000	Pension Fund		Employer Contributions - Police	766,653	
731-679.001	Pension Fund		Employer Contributions - Fire	394,741	
731-684.000	Pension Fund		Employer Contributions - General	338,238	
731-684.220	Pension Fund		Employer Contributions - Group A	570,545	
731-684.230	Pension Fund		Employer Contributions - Group B	629,823	
				2,700,000	
101-172-17200-718.000	General Fund	City Manager	Pension Contribution Expense		44,072
101-191-19100-718.000	General Fund	Finance	Pension Contribution Expense		31,472
101-191-25300-718.000	General Fund	Treasury	Pension Contribution Expense		12,921
101-215-21500-718.000	General Fund	Clerk	Pension Contribution Expense		31,486
101-215-26200-718.000	General Fund	Clerk-Elections	Pension Contribution Expense		112
101-228-22800-718.000	General Fund	I.T.	Pension Contribution Expense		50,228
101-257-25700-718.000	General Fund	Assessor	Pension Contribution Expense		38,361
101-265-26500-718.000	General Fund	Facilities	Pension Contribution Expense		7,973
101-266-26600-718.000	General Fund	Attorney	Pension Contribution Expense		12,245
101-270-27000-718.000	General Fund	Human Resources	Pension Contribution Expense		3,553
101-286-28600-718.000	General Fund	Court	Pension Contribution Expense		62,819
101-286-28610-718.000	General Fund	Court-Building	Pension Contribution Expense		4,469
101-286-29500-718.000	General Fund	Court-Probation	Pension Contribution Expense		16,126
101-701-70100-718.000	General Fund	Planning	Pension Contribution Expense		13,170
101-701-70200-718.000	General Fund	Planning-BZA	Pension Contribution Expense		441
101-701-72800-718.000	General Fund	Planning-Economic Development	Pension Contribution Expense		280
110-191-27200-718.000	Allocation Fund	Housing	Pension Contribution Expense		71,169
202-441-46300-718.000	Major Streets	Street Maintenance	Pension Contribution Expense		55,890
202-441-47400-718.000	Major Streets	Traffic Services	Pension Contribution Expense		42,126
202-441-47800-718.000	Major Streets	Winter Maintenance	Pension Contribution Expense		6,239
203-441-46300-718.000	Local Streets	Street Maintenance	Pension Contribution Expense		33,831
203-441-47400-718.000	Local Streets	Traffic Services	Pension Contribution Expense		17,390
203-441-47800-718.000	Local Streets	Winter Maintenance	Pension Contribution Expense		5,508
205-301-30500-718.000	Public Safety	Police-Admin	Pension Contribution Expense		55,516
205-301-30610-718.000	Public Safety	Police-Building	Pension Contribution Expense		6,806
205-301-30700-718.000	Public Safety	Police-Records	Pension Contribution Expense		25,462
205-301-31000-718.000	Public Safety	Police-Detective	Pension Contribution Expense		166,683
205-301-31200-718.000	Public Safety	Police-FSU	Pension Contribution Expense		40,039
205-301-31500-718.000	Public Safety	Police-Patrol	Pension Contribution Expense		472,147
205-336-33700-718.000	Public Safety	Fire-Admin	Pension Contribution Expense		36,176
205-336-33800-718.000	Public Safety	Fire-Building	Pension Contribution Expense		1,095
205-336-33900-718.000	Public Safety	Fire-Fighting	Pension Contribution Expense		331,402
205-336-34100-718.000	Public Safety	Fire-Prevention	Pension Contribution Expense		26,068
208-751-75200-718.000	Parks Fund	Administration	Pension Contribution Expense		23,744
208-751-75600-718.000	Parks Fund	Facilities	Pension Contribution Expense		75,908
208-751-75800-718.000	Parks Fund	Senior Center	Pension Contribution Expense		12,392
208-751-76100-718.000	Parks Fund	Recreation	Pension Contribution Expense		19,980
228-441-44300-718.000	Solid Waste Fund	Yard Waste Disposal	Pension Contribution Expense		12,378
249-371-37100-718.000	Building Inspections	Permits	Pension Contribution Expense		55,006
249-371-37210-718.000	Building Inspections	Code Enforcement	Pension Contribution Expense		11,818
249-371-37220-718.000	Building Inspections	CE-CDBG Eligible	Pension Contribution Expense		9,815
249-371-37300-718.000	Building Inspections	Rental	Pension Contribution Expense		11,377
272-265-26500-718.000	Library Building	Facilities	Pension Contribution Expense		8,510
401-441-17500-718.000	Capital Improvement	Administration	Pension Contribution Expense		48,080
551-751-76300-718.000	Godwin Mercado	Public Market	Pension Contribution Expense		388
590-441-54200-718.000	Sewer Fund	Transmission	Pension Contribution Expense		66,408
590-536-54300-718.000	Sewer Fund	Treatment	Pension Contribution Expense		134,650
590-536-54310-718.000	Sewer Fund	Treatment-Lab	Pension Contribution Expense		29,234
590-536-54700-718.000	Sewer Fund	Ind Pretreatment	Pension Contribution Expense		26,016
590-536-54800-718.000	Sewer Fund	GVRBA-Land App	Pension Contribution Expense		5,954
590-536-54801-718.000	Sewer Fund	GVRBA-Pump House	Pension Contribution Expense		1,636
590-536-56500-718.000	Sewer Fund	T and D Meters	Pension Contribution Expense		11,172
591-441-55400-718.000	Water Fund	Installation	Pension Contribution Expense		408
591-441-55700-718.000	Water Fund	Services	Pension Contribution Expense		60,533
591-441-56200-718.000	Water Fund	Mains	Pension Contribution Expense		74,538
591-441-56600-718.000	Water Fund	Hydrants	Pension Contribution Expense		2,913

Account	Fund	Department	Description	Revenue	Expense
591-537-55300-718.000	Water Fund	Pumping & Treatment	Pension Contribution Expense		142,561
591-537-55310-718.000	Water Fund	P&T-Lab	Pension Contribution Expense		29,583
591-537-55600-718.000	Water Fund	Utility Billing	Pension Contribution Expense		20,450
591-537-55800-718.000	Water Fund	T&D-Tanks	Pension Contribution Expense		1,019
591-537-55900-718.000	Water Fund	T&D-Gezon	Pension Contribution Expense		6,674
591-537-56300-718.000	Water Fund	T&D-Gezon Pipeline	Pension Contribution Expense		7,908
591-537-56400-718.000	Water Fund	T&D-Pipeline Meters	Pension Contribution Expense		2,906
591-537-56500-718.000	Water Fund	T&D-Meters	Pension Contribution Expense		11,172
661-441-58200-718.000	Motor Pool Fund	Equipment Operations	Pension Contribution Expense		39,064
661-441-58300-718.000	Motor Pool Fund	Building	Pension Contribution Expense		6,574
678-000-96200-718.000	General Liability Ins	Risk Management	Pension Contribution Expense		1,608
679-000-96300-718.000	Fleet Insurance	Risk Management	Pension Contribution Expense		1,370
680-000-96400-718.000	Property Insurance	Risk Management	Pension Contribution Expense		1,251
682-000-96500-718.000	Work Comp	Risk Management	Pension Contribution Expense		1,727
					2,700,000

06/01/2026
Information Technology/PGG

RESOLUTION NO. _____

RESOLUTION TO APPROVE A CYBERSECURITY MUTUAL AID MEMORANDUM OF UNDERSTANDING AND TO AUTHORIZE THE CITY MANAGER TO APPROVE IMMATERIAL FUTURE AMENDMENTS

WHEREAS:

1. Cybersecurity incidents continue to rise in frequency and sophistication, posing significant operational and financial risks to local governments.
2. As detailed in the attached staff report, the proposed Cybersecurity Mutual Aid Memorandum of Understanding (MOU) establishes a voluntary, no-cost framework for participating jurisdictions - including Kent County and the cities of East Grand Rapids, Grand Rapids, Grandville, Kentwood, Walker, and Wyoming - to support one another during cybersecurity incidents through technical expertise, advisory assistance, and personnel support.
3. Participating organizations use similar technologies, applications, and regulatory frameworks, and share technical expertise that will improve the speed and efficiency of cyber incident response and recovery.
4. Leveraging pre-vetted staff familiar with municipal technology environments will shorten recovery timelines, reduce associated costs, and enhance regional resilience.
5. The MOU is modeled after traditional public-safety mutual aid practices, tailored specifically to cybersecurity response, recovery, and technical support.
6. Areawide exercises are planned to further strengthen cybersecurity readiness, and minor revisions to the MOU may be necessary based on lessons learned or additional agency participation.
7. The staff report identifies no budget impact associated with approving the MOU.

NOW, THEREFORE, BE IT RESOLVED:

1. City Council approves the Cybersecurity Mutual Aid Memorandum of Understanding.
2. City Council authorizes the City Manager to execute the MOU on behalf of the City of Wyoming.
3. City Council authorizes the City Manager to approve insignificant or unsubstantial future modifications to the MOU, including the addition of participating agencies.

Moved by Councilmember:
Seconded by Councilmember:
Motion Carried Yes
No

I certify that the foregoing resolution was adopted by the City Council of the City of Wyoming, Michigan at a regular meeting held June 1, 2026.

_____
Kelli A. VandenBerg, City Clerk

ATTACHMENTS:
Staff Report
Memorandum of Understanding

CITY OF WYOMING | INFORMATION TECHNOLOGY

1155 28th Street SW, Wyoming, MI 49509
616.261.3524 | wyomingmi.gov

STAFF REPORT

Date: May 20, 2026

Subject: Cybersecurity Mutual Aid Memorandum of Understanding

From: Paul Gerndt, Director of Information Technology

Meeting Date: June 1, 2026

RECOMMENDATION:

It is recommended that the City Council authorize the City Manager to approve the Cybersecurity Mutual Aid Memorandum of Understanding (MOU) and to approve future unsubstantial changes to the agreement.

ALIGNMENT WITH STRATEGIC PLAN:

- PILLAR – STEWARDSHIP
  - GOAL 1 – Strengthen and maintain the strong financial position of the city.
  - GOAL 2 – Enhance the efficiency and effectiveness of City operations and services.

DISCUSSION:

Cybersecurity incidents continue to rise in frequency and sophistication, presenting a significant operational risk to local governments. The MOU between the City of Wyoming and several regional partners: Kent County, and the cities of East Grand Rapids, Grand Rapids, Grandville, Kentwood, and Walker establishes a formal framework for voluntary, no-cost mutual aid among participating jurisdictions when responding to and recovering from a cybersecurity incident.

As local government partners within Kent County, participating organizations use many of the same technologies and applications. Staff members across the region share common regulatory clearances, technical expertise, and familiarity with municipal systems.

In the event of a significant adverse cybersecurity event, the recovery process often requires reloading computers from scratch and configuring each one for its intended purpose. Engaging personnel who are pre-vetted and already familiar with common municipal computing environments significantly shortens the recovery timeline and reduces associated costs.

This agreement is modeled after traditional public-safety mutual aid practices but is tailored specifically for cybersecurity response, recovery, and technical support.

Once in place, the MOU will provide benefit the City of Wyoming through:

- Rapid access to experienced personnel during cyber incidents, reducing potential downtime and associated costs.
- Enhanced regional resilience by leveraging shared expertise and resources.
- Formalized protocols that clarify roles, responsibilities, and communication paths during an emergency.
- Strengthened intergovernmental partnerships with neighboring jurisdictions and the county.

Approval of the MOU will enable the City of Wyoming to both request and provide timely, cooperative support during cybersecurity incidents, thereby improving overall resilience and preparedness. Areawide exercises are being planned to prepare staff for cybersecurity incident response. Minor modifications to the MOU may result from lessons learned through these exercises, and additional government agencies may wish to participate. It is therefore recommended that the City Manager be authorized to approve insignificant changes to the MOU.

BUDGET IMPACT:

There is no budget impact related to this memorandum of understanding.

Attachment:
Memorandum of Understanding

MEMORANDUM OF UNDERSTANDING
REGARDING MUTUAL CYBERSECURITY ASSISTANCE

THIS MEMORANDUM OF UNDERSTANDING ("MOU") is entered between the City of East Grand Rapids, the City of Grand Rapids, the City of Grandville, Kent County, the City of Kentwood, the City of Walker, and the City of Wyoming (collectively referred to as the "Parties" and individually as a "Party").

1. PURPOSE

The purpose of this MOU is to establish a framework for voluntary, mutual assistance between the Parties in the event of a Cybersecurity Incident. The Parties acknowledge that cyber threats pose a significant risk to local government operations and that sharing expertise and personnel during a crisis enhances the resilience of the region.

2. DEFINITIONS

- "Cybersecurity Incident" shall mean a breach or other occurrence that actually or potentially jeopardizes the confidentiality, integrity, or availability of information or information systems.
- "Requesting Party" refers to the Party experiencing a Cybersecurity Incident and asking for aid.
- "Assisting Party" refers to the Party responding to a request for aid by providing personnel, advice, or technical support.

3. NATURE OF ASSISTANCE

The assistance provided under this MOU is limited to technical expertise, advice, and temporary personnel support. It does not include the provision of hardware, software licenses, or funding unless explicitly agreed upon in a separate writing.

4. VOLUNTARY PARTICIPATION AND NO GUARANTEE

A. Right to Decline: Assistance under this MOU is strictly voluntary. The Assisting Party may decline a request for assistance for any reason, including but not limited to the unavailability of personnel, lack of expertise, or the need to prioritize other operations. The final decision on the amount and type of equipment to be sent shall be solely that of the Assisting Party.

B. Withdrawal: The Assisting Party may recall its personnel or cease assistance at any time if its resources are required for other needs.

C. No Guarantee of Success: As a condition of requesting assistance pursuant to this MOU, a Requesting Party acknowledges that any Assisting Party is responding and providing assistance on a "Best Effort" basis and makes no warranties, express or implied, or other representation regarding the outcome of the assistance provided, the recovery of data, or the general or specific effectiveness of the Assisting Party's efforts.

5. FINANCIAL TERMS

A. No Cost: Assistance provided under this MOU shall be at no cost to the Requesting Party.

B. Salary and Benefits: The Assisting Party shall remain solely responsible for the salaries, overtime, worker's compensation, and benefits of its own personnel while they are assisting the Requesting Party.

C. Incidental Expenses: Unless otherwise agreed, each Party shall bear its own incidental costs (e.g., travel, food) associated with the assistance.

D. Recovery: To the extent permitted by law, any expenses recoverable from third parties in connection with an incident for which assistance under this MOU was rendered will be equitably distributed among the Parties. Nothing in this MOU shall operate to bar any recovery of funds from any state or federal agency under any existing statutes.

6. LIABILITY AND IMMUNITY

To the fullest extent permitted by law, the Requesting Party agrees to hold harmless and indemnify the Assisting Party and its employees/agents against any claims, damages, or liabilities arising out of the "Best Effort" assistance provided, except in cases of gross negligence or willful misconduct.

7. CONFIDENTIALITY

The Parties acknowledge that during a Cybersecurity Incident, the Assisting Party may have access to sensitive data, system configurations, and vulnerability information ("Confidential Information") of the Requesting Party.

- The Assisting Party agrees to keep all such information strictly confidential.
- The Assisting Party shall not disclose the details of the Requesting Party's security posture to any third party or the media without express written consent.

8. PROTOCOL FOR REQUESTING AND DEPLOYING AID

A. Authorized Requestors: Authority to request assistance under this MOU is limited to the following roles within each Party:

1. City Manager / County Administrator
2. Chief Information Officer (CIO) / IT Director
3. Designated Incident Commander (as defined in the Party's Emergency Operations Plan)

B. Activation Process:

1. Initial Contact: The Authorized Requestor of the Requesting Party shall contact the Authorized Requestor of the potential Assisting Party via telephone or other agreed upon communication channel.

2. Specifics of Request: The Requesting Party must specify the *nature* of the help needed (e.g., "We need one network engineer familiar with Cisco firewalls" or "We need general support for re-imaging workstations").
3. Confirmation: The Assisting Party must verbally confirm or deny the request within 4 hours. If confirmed, the Assisting Party will identify the specific personnel being deployed.

C. Operational Command:

1. Check-In: Upon arrival (physical or virtual), personnel of the Assisting Party must check in with the Requesting Party's Incident Commander.
2. Chain of Command: Personnel of the Assisting Party remain employees of their home municipality for administrative purposes (pay, benefits) but fall under the operational command of the Requesting Party. They must follow the technical direction and priorities set by the Requesting Party's IT Director or Incident Commander.
3. Access Rights: The Requesting Party is responsible for provisioning and de-provisioning temporary administrative access for personnel of the Assisting Party.

D. Demobilization: The Requesting Party or the Assisting Party may initiate demobilization at any time and for any reason. Upon demobilization, personnel of the Assisting Party must immediately surrender all access credentials and verify that no data from the Requesting Party remains on their personal or municipal devices.

For purposes of this section and MOU, Addendum A attached hereto is incorporated herein

9. LIABILITY

A. No Liability: No Party to this MOU shall be liable for declining or failing to respond to a request for assistance under this MOU, or for withdrawing personnel or equipment. No Party shall be responsible for the liability or the defense of another Party regarding action or inaction under this MOU.

B. Governmental Immunity: Nothing in this MOU is intended to affect or limit in any way the immunity as afforded any party under the Governmental Liability for Negligence Act, PA 170 of 1964 (MCL 691.1401 et seq.), as amended.

10. NO EMPLOYMENT OR AGENCY RELATIONSHIP

Nothing in this MOU should be construed to create an agent or employee relationship between any of the Parties. Nor shall an agent or employee of a Party be considered an agent or employee of another Party. Each Party shall remain responsible for any claims arising out of its own acts or omissions during the performance of this MOU.

11. THIRD PARTY BENEFICIARIES

This MOU confers no rights or remedies on any third party, other than the Parties and their

respective successors and permitted assigns. There are no third-party beneficiaries.

12. TERM AND TERMINATION

This MOU shall remain in effect for ten years unless terminated earlier. Any Party may terminate their participation in this MOU for any reason by providing [30] days written notice to the other Parties.

The Parties have executed this MOU as of the latest date indicated below. This MOU may be executed in separate counterparts which shall be considered as one document.

City of East Grand Rapids

By: _____ Date: _____

_____

Its: _____

City of Grand Rapids

By: _____ Date: _____

_____

Its: _____

City of Grandville

By: _____ Date: _____

_____

Its: _____

Kent County

By: _____ Date: _____

_____

Its: _____

City of Kentwood

By: _____ Date: _____

_____

Its: _____

City of Walker

By: _____ Date: _____

_____

Its: _____

City of Wyoming

By: _____ Date: _____

_____

Its: _____

City of Wyoming
Approved as to Form

By: Gregory T. Stremers Date: May 20, 2026
Its: City Attorney

ADDENDUM A: CONFIDENTIAL EMERGENCY CONTACT LIST

TO THE MEMORANDUM OF UNDERSTANDING REGARDING MUTUAL CYBERSECURITY ASSISTANCE

WARNING: CONFIDENTIAL / SECURITY SENSITIVE INFORMATION

This document contains direct contact information for critical infrastructure personnel. It is intended for internal emergency use only and should be stored securely.

MAINTENANCE OF LIST:

The Parties agree to review and update this list **quarterly**. It is the responsibility of each Municipality to notify the others immediately if a Primary Contact person changes.

1. PRIMARY CONTACTS (CIO / IT DIRECTOR)

These individuals have the authority to activate the MOU and request technical resources.

Municipality	Name	Title	Cell	Alternate Email
East Grand Rapids				
Grand Rapids				
Grandville				
Kent County				
Kentwood				
Walker				
Wyoming				

2. SECONDARY CONTACTS (CITY MANAGER / ADMINISTRATOR)

To be contacted if the Primary Contact is unreachable.

Municipality	Name	Title	Cell	Office Phone
East Grand Rapids				
Grand Rapids				
Grandville				
Kent County				
Kentwood				
Walker				
Wyoming				

06/01/2026
CED/CH

RESOLUTION NO. _____

RESOLUTION TO GRANT A 90-DAY EXTENSION FOR PRELIMINARY PLAT FINAL APPROVAL TO THE PROPOSED MALTA WOODS PLAT

WHEREAS:

1. City Council granted preliminary plat final approval of the proposed subdivision at their April 1, 2024, meeting.
2. The developer has requested a 90-day extension for Malta Woods Preliminary Plat Final Approval.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. City Council does hereby grant a 90-day extension for Preliminary Plat Final Approval for Malta Woods subdivision.

Moved by Councilmember:
Seconded by Councilmember:
Motion Carried Yes
No

I certify that this Resolution was adopted by the City Council for the City of Wyoming, Michigan at a regular meeting held on June 1, 2026.

_____
Kelli A. VandenBerg, Wyoming City Clerk

CITY OF WYOMING | COMMUNITY AND ECONOMIC DEVELOPMENT

1155 28th Street SW, Wyoming, MI 49509
616.530.7285 | wyomingmi.gov

May 27, 2026

Ms. Kelli A. VandenBerg
City Clerk
Wyoming, MI

Subject: Request to extend by 90-days the Preliminary Plat Final Approval for Malta Woods.

Recommendation: To grant the requested extension.

Dear Ms. VandenBerg,

Matthew and Michael Langenberg have requested a 90-day extension for their Preliminary Plat Final approval which was granted by City Council on April 1, 2024.

Chapter 74 of the Code of Ordinances allows for City Council to grant extensions for preliminary plat final approvals. Original approvals are valid for a period of two years, after which they require an extension.

The applicant has obtained all required documents to submit for final plat approval but requires a 90-day extension from April 1, 2026 to finalize the plat process.

A letter from the applicant formally requesting the extension is attached.

Respectfully submitted,



Joel Klaassen, Acting Director of Community and Economic Development
Community and Economic Development Department

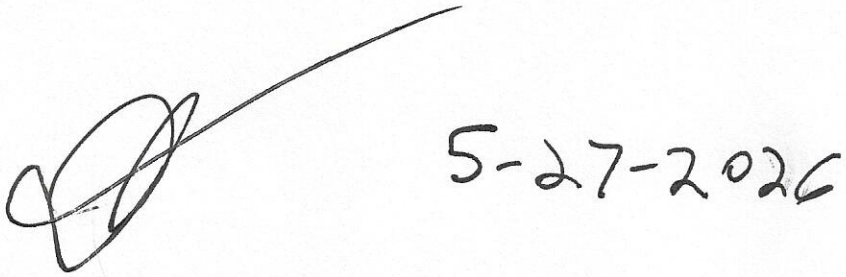
Cc: John Shay, City Manager

Mr. Colton Hyble
Assistant Director, Community and Economic Development
City of Wyoming
1155 – 28 th Street, SW
Wyoming, Michigan 495089

RE: Malta Woods – Final Preliminary Plat Approval Extension
Section 32, City of Wyoming, Kent County, Michigan

Dear Mr. Hyble:
As developer of the above referenced plat, I hereby request that the City of Wyoming extend the approval of the Final Preliminary Plat. The approval was granted by the City Council on April 1 st , 2024 and the approval has lapsed since its been over 2 years.
We request a 90-day extension to allow the City Council to vote on the Final Plat at their meeting on June 15th , 2026.

Should you have any questions, please feel free to contact me.
Sincerely,



Mike Langenberg
Owner Malta Woods Development

06/01/26
Finance/LAJ

RESOLUTION NO. _____

RESOLUTION TO ACCEPT A PROPOSAL
FOR A COMMUNITY SURVEY

WHEREAS:

1. As detailed in the attached staff report, proposals were received from consulting firms to conduct a statistically valid community survey.
2. It is recommended that City Council accept the proposal submitted by EPIC ▪ MRA.

NOW, THEREFORE, BE IT RESOLVED:

1. City Council accepts a proposal from EPIC ▪ MRA.
2. City Council authorizes the City Manager to sign the contract.

Moved by Councilmember:
Seconded by Councilmember:
Motion Carried Yes
No

I hereby certify that the foregoing Resolution was adopted by the City Council for the City of Wyoming, Michigan at a regular session held on: June 1, 2026.

_____
Kelli A. VandenBerg, Wyoming City Clerk

ATTACHMENTS:
Staff Report
Proposal

CITY OF WYOMING

City Manager | 1155 28th St. SW, Wyoming, MI 49509
616.530.7272 | Fax 616.261.7103 | wyomingmi.gov

Staff Report

Date: May 26, 2026

Subject: Community Survey

From: Nicole Hofert, Deputy City Manager

CC: John Shay, City Manager

Meeting Date: June 1, 2026

RECOMMENDATION

It is recommended that City Council approve a proposal from EPIC ▪ MRA for a community survey in the amount of $52,750.00.

ALIGNMENT WITH STRATEGIC PLAN

- PILLAR 1 – COMMUNITYSTEWARDSHIP
    - GOAL 1 – Strengthen community relations and Wyoming's sense of identity.

DISCUSSION

City staff requested proposals from consulting firms to conduct a statistically valid community survey. The survey will evaluate resident perceptions about a variety of issues and topics. Following a competitive interview process, staff recommends EPIC ▪ MRA for this project.

Interviews will be conducted this summer. City staff will work with EPIC ▪ MRA staff to craft a phone survey that is expected to take between 16 to 18 minutes to complete. The survey will be offered in both English and Spanish. The target sample size is 1,000 interviews; this is more than double the number of surveys required to make the results statistically valid. The total budget is $52,750.00.

Results from the survey will be presented to Council in the Fall and may help provide Council direction on future strategic and financial planning goals.

BUDGET IMPACT

Adequate funds exist in account 101-101-10300-900.000

ATTACHMENTS

Contract/Proposal

CITY OF WYOMING

PROFESSIONAL SERVICES CONTRACT
CITY OF WYOMING, MICHIGAN
(OVER $8,500)
(NO RFP)

This Contract is made as of the Effective Date between City and Professional.

City means the City of Wyoming, a Michigan municipal corporation, of 1155 28th St SW, Wyoming, MI 49509.

Deliverables means the work products of Professional's services as detailed in the Proposal, such as plans, specifications, bid documents, estimates, reports, opinions, recommendations, pleadings, and legal documents, real estate documents, etc.

Effective Date means: _____, 2026

Professional means: EPIC MRA
[Name of contracting entity]
A Michigan corporation
[State and type of entity, *e.g.*, corporation, limited liability company, etc.]
4710 W. Saginaw Highway, Suite 2C
[Professional's street address]
Lansing, MI 48917
[Professional's city, state & zip]

Professional's personnel means Professional's directors, members, partners, officers, employees, contractors, consultants, agents and representatives and any other individuals or entities Professional engages to provide services under the Contract.

Proposal means Professional's proposal attached as Exhibit B.

Services or *Work* means the services described and specified in the Proposal.

Standard Terms means "City Contract Standard Terms and Conditions" attached as Exhibit A.

TERMS AND CONDITIONS

In exchange for the consideration in and referred by this Contract, the parties agree:

1. Professional will perform the Services and provide the deliverables as detailed in the Proposal.
2. City will pay the Professional in accordance with the Proposal.
3. Professional represents and warrants, except for those listed in this paragraph as inapplicable or that are modified by this paragraph, Professional is complying with and will comply with the Standard Terms. Inapplicable conditions are as follows:

   The City is not requiring Professional to have Environmental/Pollution Liability insurance.

4. If the Services include preparation of bid documents, Professional must ensure those documents are consistent with and do not duplicate City's standard bid documents. Costs incurred by City to address duplicative or inconsistent provisions (including city staff time) will be deducted from any fixed fee or project-based cost paid Professional. Any bid documents Professional provides must show that Professional or the professional overseeing the project to be bid will be making recommendations about acceptance of work, substantial and final completion, substitutions, and other decisions for City to make determinations. AIA, EJCDC, or other standardized contract forms must be modified, if necessary, to meet this requirement.
5. This is the only agreement between the parties regarding City's engagement of Professional to perform the Services. There are no other agreements, representations, or warranties except as stated in the Proposal. This contract can be amended only in writing signed by both City and Professional.

City and Professional have signed this Contract as of the Effective Date.

City of Wyoming

By:_____
John Shay, City Manager

Date signed: _____, 20__

Approved as to form:

_____
Gregory T. Stremers, City Attorney

EPIC MRA

By:_____
[Signature officer, director or principal of Professional]
Kelly Sullivan, Vice President
[Typed/Printed Name & Title of Person Signing for Professional]

Date signed: 5-26, 2026

EPIC ▪ MRA
4710 W. Saginaw Highway
Suite 2C
Lansing, MI 48917
O: 517-886-0860
C: 517-449-4648
E: kelly@epicmra.com
W: www.epicmra.com

April 30, 2026

Nicole Hofert
Deputy City Manager
City of Wyoming, Michigan
1155 28th St SW
Wyoming, MI 49509

Ms. Hofert

Thank you for reaching out to EPIC ▪ MRA to inquire about the possibility of conducting a statistically valid survey of voters residing within the taxable boundaries of the City of Wyoming, Michigan, about perceptions of the City and the potential willingness of voters to support a future bond proposal. For nearly three decades, as you already know, educational, county, and municipal entities have used our firm's research services to assist in measuring policy direction, guidance for strategic planning, budgeting priorities, public outreach and education efforts, and to gauge voter sentiment on bond proposals and/or other ballot issues.

Such a survey can also measure voter perceptions of, among other things: the quality of services provided by the City; what City services are viewed as most important and/or valued; how the City compares to surrounding cities; the level of taxes and funding earmarked for the City; the condition of City-owned buildings, facilities, and grounds; the City's financial management; what components and/or proposed improvements funded by a potential future bond proposal are most supported or opposed; what information resonates the most among various demographic and geographic segments of the community; what election date (November 2026 vs. May 2027, for example) may prove most advantageous should a future bond be attempted; and where various segments of the population get the information that influences their opinions the most.

Our constituent contact databases have also been widely used by our clients to help advance their objectives as a proven effective and efficient means to communicate information gleaned from the research to the general public, whether simply educational in nature, or to communicate directly to voters about a ballot issue.

▪ **Educational**
▪ **Political**
▪ **Industrial**
▪ **Consumer**

▪ **Market**
▪ **Research**
▪ **Analysis**

Further to that conversation, I write to offer an outline of the typical process for conducting a public opinion survey. First, some brief background information about our company.

COMPANY BACKGROUND

EPIC ▪ MRA is the assumed name for Michigan Researchers Associates, Incorporated, a for-profit corporation formed in 1991 with headquarters in Lansing, Michigan. It is the successor entity to the partnership, Michigan Research Associates, formed in 1985. The principal officers of EPIC ▪ MRA have been active in governmental, political, marketing, business, and health issues at the state and national levels for over 40 years. Since its inception, the firm has provided services to a broad range of clients, including: public school districts, intermediate school districts, school boards; state, county, township and municipal legislative bodies and planning commissions; community colleges and universities; non-profit organizations; financial institutions; transportation authorities; public libraries and library boards; political and business leaders; professional associations; the legal and judicial communities; and members of the health care industry.

EPIC ▪ MRA takes great pride in the accuracy of our survey research. Nate Silver's former 538 website had given us a B+ grade for the accuracy of our polling on statewide election races; a ranking and grading system for all polling firms that are recognized nationally. EPIC ▪ MRA ranks higher than any other Michigan-based polling firm, and also higher than all but a handful of much larger national polling firms. In the November 2022 election, EPIC ▪ MRA also held the distinction of being the most accurate polling firm in predicting the outcomes of the 2022 races for Governor, Attorney General, Secretary of State - and the three ballot proposals - in Michigan, on surveys conducted for our media clients at that time, including the Detroit Free Press, WLNS TV 6, WOOD TV 8, and WJRT TV 12.

EPIC ▪ MRA provides a statistically valid sampling of residents, not only throughout the taxable boundaries of the City as a whole, but also within any desired sub-regions - such as by "jurisdiction" or Ward - as well as among several major demographic subgroups representative of the population, including parent status, race, gender, age, etc. In addition, should the placement of a proposal on a future election ballot be in question, survey participants can further be screened to include only respondents that are registered to vote within City boundaries, and self-identify as being *at least* "likely" to cast a vote in any particular tested election(s).

We also do our best to stay ahead of the curve when it comes to keeping on top of the industry's best practices in polling and market research. We always include a *minimum* of 60 percent cell phone only respondents in our polling samples - and often much higher percentages when the project requires - in order to make sure that all age groups, especially younger respondents, are appropriately represented in our sample frame; without the need to re-weight data once survey

data collection is complete. In this way, residents that have forgone traditional land line usage in favor of the exclusive use of mobile devices are able to be reliably reached. This practice mitigates - if not totally eliminates - the need to re-weight survey results once survey data collection (calling) is complete.

Because of its attention to sampling detail, its in-house capacity to generate customized telephone sample draws, and the incorporation of cell-only respondents, EPIC ▪ MRA rarely finds it necessary to re-weight the results of its surveys. Post-data collection weighting usually involves replicating responses from a relative handful of target respondents in one or more underrepresented demographic subsets in order to match those subsets' proportion of the population tested – thus, somewhat diminishing the influence of responses from the remaining subsets. While sparing use of this technique is appropriate in some circumstances, the practice carries the potential of producing findings that can be misleading, and at worst, wildly inaccurate; an outcome that becomes increasingly likely when multiple subsets are subject to even moderate post-data-collection weighting.

Consistent with the aim of providing statistically valid and naturally obtained data it is EPIC ▪ MRA's *preference* is to utilize live operator telephone interviews as its exclusive methodology in order to offer properly stratified and actionable data. While other methodologies can sometimes offer some cost savings (online, direct mail, mixed-mode, SMS, text-to-web, etc.), those more self-selective methodologies are often most appropriate when a discreet and already engaged audience is targeted (employees, members of an organization, etc.), but can prove unreliable, and are typically subject to large amounts of post-data collection weighting, when it comes to *accurately* predicting likely election outcomes.

PROCEDURAL PROCESS

Once a survey has been commissioned, we begin close consultation with the client to develop a survey instrument. The initial draft is then presented to the client for review and comment; with the review and re-draft process continuing until a questionnaire that is satisfactory to all parties is developed. Typically, this phase consumes the lion's share of what is normally a *six-to-eight week* timeline for completion of the research, from initial consultation through presentation of the final deliverables. However, presuming the construction and finalization of the survey instrument to be used can be expedited, a more contracted timeline can often be accommodated.

Regardless of when the survey research is desired, a potential timeline for the survey research contemplated in this proposal could be:

DATE	ACTIVITY
Week 1	Contract Award
Weeks 1 through 2	Initial and ongoing consultation with designated staff
	Presentation of 1st questionnaire draft for review and comment
	Receive final comments and suggested amendments to questionnaire
Weeks 2 through 3	Live operator calls/data collection
Weeks 3 through 4	Process data, present frequency report (top line results)
Weeks 3 through 4	Present cross-tabulation report
Weeks 5 through 6	Analyze data; develop and present textual report with recommendations
TBD	Oral presentation of survey findings; if desired

The presentation of the draft questionnaire would include an estimate of the average interview length. As can be seen from the price chart that follows, interview length is one primary factor in determining the overall cost of the research. Sample size, or the number of interviews to be completed, is the other main variable that determines the cost of a survey.

Once a survey instrument is completed and approved, we set about conducting the interviews. Typically, for example, the interview administration of a 400 sample, 15-minute survey, takes approximately five-to-seven days to complete. As each shift's production is completed, data entry is performed, so that by the end of the phoning, the data is ready to apply to our aggregation and tallying software.

The results of the tabulations are known as:

- Frequency results - the percentage of all respondents saying "yes, no, undecided, don't know/refused, etc." or all other responses to survey questions; and,

- Cross tabulation tables - the tabulation of responses to individual questions by segment (that is, demographic and geographic subgroup) such as; parents vs. non-parents, gender, age, education level, race, location in the City (Ward), income, etc.

The frequency results are useful in gauging overall reaction to specific questions posed, and for garnering an understanding of what the attitudes of the population are as a whole. The cross tabulations are beneficial in getting a handle on how particular segments (e.g. lower-income residents, homeowners, non-parents, men under age 50, etc.) of the population react to any given question in comparison to the entire sample.

The comparison of frequency results with the cross tabulations is useful in analyzing the attitudes of subgroups toward various issue questions and questions about a bond proposal. Moreover, if the survey includes detailed questions about the rationale behind pursuing or not pursuing certain specific ventures, one is able to see what information, and even which messages, resonate the most with all voters, as well as within specific subgroups and geographies.

EPIC ▪ MRA is well aware of the fact that the survey, its cost, and its results, are subject to the Freedom of Information Act when commissioned by a public entity, and thus, open to public scrutiny. However, our firm has great experience with taking on public entities as clients, and we pride ourselves on our ability to craft an unbiased survey instrument and present results in a manner that justifies the expenditure of public dollars. Moreover, our services include offering an oral presentation of results, if desired, which, more often than not, can be delivered as part of a regularly scheduled board meeting; a feature that goes a long way toward calming any concerns that may arise in the community about the allocation of tax dollars for a public opinion survey.

SAMPLE FRAME

To generate a sample, EPIC ▪ MRA maintains an in-house database of published telephone numbers, both landline and cell, and regularly appends this database with the Secretary of State's Qualified Voter File and Bureau of the Census information to generate the desired sample pool. For example, if the survey is to be conducted *only* among registered voters residing within the taxable boundaries of the City of Wyoming, Michigan, then the telephone file is matched against the voter file to identify addresses located within the geographic sub-areas of the City from all voting precincts. From this matched file, telephone numbers are randomly pulled in a manner that ensures proper stratification (i.e., proportional to each subunit's contribution to the total) across the entire geography.

After our initial conversation about the possible topics and lines of inquiry that ultimately may be examined in a live operator telephone survey, EPIC ▪ MRA recommends a *minimum* stratified N=400 sample (a margin of error of 4.9 points). Pricing for larger sample sizes are also presented for your consideration. Please note: Sample sizes refer to the number of interviews guaranteed to be *completed in full*; regardless of the number of attempts (calls) required.

As for interview length, from our experience with similar prior work and what is known at this time, it is our expectation that the interview will necessarily be *at least* 10 minutes (to include include warm-up atmospheric questions, presentation of "informed" proposal information, etc.) and could possibly range up to 18 minutes (to further include prioritization of City services, presentation of itemized proposal components, testing multiple proposals, and/or a message test battery, etc.), in order to accurately cover the topics under consideration.

Obviously, there are many possible permutations of sampling frames that could ultimately be chosen, and the same is true for the yet-to-be-determined lines of inquiry to be pursued. Ultimately, settling on an interview length and sample size is as much a balance between the reality of the available research budget as it is by the need for accurate, and actionable, information.

It is also noted that all EPIC ▪ MRA survey research services include an electronic voter contact database, which includes the name and address of all registered voters within the City, along with other designations, such as individual vote history, absentee-voter status, and other information for mailing purposes.

Voter contact databases are also available for purchase as a stand-alone product if survey research services are NOT commissioned (starting at $500). In addition, commercially available telephone numbers (landline and/or cell phone, if desired), can be appended to the voter contact database for an additional nominal fee.

With the foregoing given as a brief background primer, the following chart illustrates our firm's prices for live-operator, telephone survey research services:

LIVE OPERATOR TELEPHONE INTERVIEWS OF CITY OF WYOMING VOTERS

Survey Length	**400 Samples** *(Margin of error 4.9 points)*	**500 Samples** *(Margin of error 4.4 points)*	**600 Samples** *(Margin of error 4.0 points)*	**800 Samples** *(Margin of error 3.5 points)*	**1000 Samples** *(Margin of error 3.1 points)*	**Approximate Number of Questions** *(Including screening and demographic questions)*
Up to 10 Minute Interview	$15,600.00	$18,000.00	$20,350.00	$24,450.00	$28,550.00	18 to 21
11 to 12 Minute Interview	$18,000.00	$20,900.00	$23,750.00	$28,750.00	$33,750.00	22 to 28
13 to 15 Minute Interview	$21,985.00	$25,570.00	$29,150.00	$34,920.00	$40,690.00	26 to 35
16 to 18 Minute Interview	$26,000.00	$30,300.00	$34,050.00	$40,650.00	$47,250.00	32 to 42

The prices shown reflect the fee for all survey-related services, including:

- Pre-survey client consultation
- Ongoing telephone consultation to develop the questionnaire
- Final survey instrument drafting and programming
- Telephone sample draw and stratification
- A *minimum* of sixty percent cell-phone-only respondents as part of the sampling
- Telephone interview administration and supervision
- Data entry of results
- Coding and grouping of any open-ended responses
- Frequency Report - Top Line Results
- Cross Tabulation Tables
- Registered Voter Database
- Textual Executive Report with recommendations
- PowerPoint Presentation of results; if desired
- Post-survey oral presentation of results; if desired

BILINGUAL SERVICES

As an additional service, if desired, EPIC ▪ MRA offers translation and bilingual surveyor services in Spanish. This service includes translation and transcription of the approved telephone survey interview script into Spanish, having bilingual callers present for the duration of the data collection phase to field all surveys among respondents that identify as Spanish speaking only, and the translation of survey results obtained in Spanish back into English to be incorporated into the final data set. It should be noted that no set number of completed, Spanish-only surveys can be guaranteed.

Cost for this service: $5,500.00

It is hoped that the foregoing information is helpful, and on behalf of all of us at EPIC ▪ MRA, we appreciate the opportunity to offer our services to meet the research needs of the City of Wyoming, Michigan, and we appreciate your trust in our services. Of course, should you have any questions, the need for further detail or clarification, pricing for additional services beyond those contained in this proposal, or require a list of prior client references, please do not hesitate to contact me at your convenience.

Yours truly,

Kelly Sullivan, Project Director
EPIC ▪ MRA

06/01/26
Finance/LAJ

RESOLUTION NO._____

RESOLUTION TO CONCUR WITH THE EMERGENCY REPAIR
OF SPRINKLER LINES AND TO AUTHORIZE PAYMENT

WHEREAS:

1. As detailed in the attached staff report, Schepers' Lawn Sprinkling performed an emergency repair of sprinkler lines at the Wyoming Police Department.
2. It is recommended City Council concur with the repair and authorize payment to Schepers' Lawn Sprinkling in the total amount of $9,000.00.

NOW, THEREFORE, BE IT RESOLVED:

1. City Council concurs with the emergency repair of sprinkler lines.
2. City Council authorizes payment to Schepers' Lawn Sprinkling.

Moved by Councilmember:
Seconded by Councilmember:
Motion Carried Yes
No

I hereby certify that the foregoing Resolution was adopted by the City Council for the City of Wyoming, Michigan at a regular session held on: June 1, 2026.

_____
Kelli A. VandenBerg, Wyoming City Clerk

ATTACHMENTS:
Staff Report
Invoice

CITY OF WYOMING | COMMUNITY AND ECONOMIC DEVELOPMENT

1155 28th Street SW, Wyoming, MI 49509
616.530.7259 | wyomingmi.gov

Staff Report

Date: May 20, 2026

Subject: Emergency Repair of Sprinkler Line at Wyoming Police Department

From: Nicole Hofert, Deputy City Manager

CC: John Shay, City Manager
Aaron Vis, Director of Public Works

Meeting Date: June 1, 2026

RECOMMENDATION

It is recommended that City Council concur with the emergency repair of leaking sprinkler lines by Schepers' Lawn Sprinkling at 2300 DeHoop Avenue in the amount of $9,000.00.

ALIGNMENT WITH STRATEGIC PLAN

- PILLAR 3 – STEWARDSHIP
    - GOAL 3 – Improve City infrastructure and service reliability.

DISCUSSION

During the installation of the concrete trail that runs between Veteran's Park and the Wyoming Police Department multiple sprinkler lines were damaged and leaking. With City Manager approval, the lines were repaired by Scheper's Lawn Sprinkling.

After reviewing the labor, equipment, and material documentation provided by Scheper's Lawn Sprinkling, it is recommended that that the City Council approve the emergency repair of the broken sprinkler lines in the amount of $9,000.

BUDGET IMPACT

Adequate funds exist in account 496-901-90131-973.002

ATTACHMENTS

Schepers' Invoice
Resolution

Schepers' Lawn Sprinkling
2081 Pine Ridge Drive
Jenison, MI 49428
(616) 669-2210

Billing Address
Wyoming Police Department
2300 De Hoop Avenue
Wyoming, MI 49509 USA

Job Address
Wyoming Police Department
2300 De Hoop Avenue
Wyoming, MI 49509 USA

Invoice 189086266
Invoice Date 4/1/2026
Completed Date 4/1/2026
Payment Term Due Upon Receipt

Description of work

Rebuilt system after installation of sidewalk

TASK	DESCRIPTION	QTY	PRICE	TOTAL
RB-5004-REN	RainBird 4" Rotor Head 5004	22.00	$31.00	$682.00
ASSY-MP-06-REN	Rotary Nozzles (MP) & 6" Spray	18.00	$35.00	$630.00
BOX-NDS-10-REN	10" NDS Valve Box w/lid	6.00	$37.00	$222.00
ELEC-CONN-GP-REN	Wire Connector, Grease Pak, Splice Kit (Orange), Electrical Direct Burial Connectors	6.00	$4.00	$24.00
VLV-RB-150PGA-REN	RainBird 1 1/2" Valve 150-PGA	3.00	$164.00	$492.00
PIPE-PVC-200-200-REN	2" PVC Pipe per ft (Class 200)	4.00	$4.00	$16.00
FIT-PVC-150-200-REN	1 1/2" - 2" PVC Fittings, Glue, & Tape	4.00	$21.00	$84.00
FIT-POLY-100-PK-REN	1" Poly Fittings, Clamps, Tape, & Saddles	22.00	$14.00	$308.00

FIT-POLY-125-150-REN	1 1/4" & 1 1/2" Poly Fittings	4.00	$18.00	$72.00
PIPE-POLY-100-REN	1" Poly Pipe per ft (NSF)	790.00	$2.00	$1,580.00
PIPE-POLY-125-REN	1 1/4" Poly Pipe per ft (NSF)	150.00	$3.00	$450.00
TH60	Tech + Helper 60 Minutes	24.00	$185.00	$4,440.00

SUB-TOTAL	$9,000.00
TOTAL DUE	$9,000.00
PAYMENT	$0.00
BALANCE DUE	$9,000.00

Thank you for your business!

Please note: Invoices over 30 days past due will be charged a 1.5% finance fee per month.

RESOLUTION NO._____

RESOLUTION TO REIMBURSE THE OTTAWA COUNTY ROAD COMMISSION FOR EXPENSES RELATED TO PROVIDING SUPPLEMENTAL WATER TO OLIVE AND BLENDON TOWNSHIPS

WHEREAS:

1. As detailed in the attached staff report, it was necessary for the City of Grand Rapids to provide supplemental water to Olive and Blendon Townships as a result of the third water transmission main project.
2. Ottawa County Road Commission paid the City of Grand Rapids directly for this water usage at the City of Grand Rapids water rate, which is higher than the City of Wyoming water rate.
3. It is recommended City Council authorize a reimbursement payment to the Ottawa County Road Commission based on the difference between the water rates as charged by the City of Grand Rapids and City of Wyoming.

NOW, THEREFORE, BE IT RESOLVED:

1. City Council authorizes payment to the Ottawa County Road Commission in the amount of $82,508.40.

Moved by Councilmember:
Seconded by Councilmember:
Motion Carried Yes
No

I certify that the foregoing Resolution was adopted by the City Council for the City of Wyoming, Michigan at a regular session held on: June 1, 2026.

_____
Kelli A. VandenBerg, Wyoming City Clerk

ATTACHMENTS:
Staff Report

CITY OF WYOMING | PUBLIC WORKS

Drinking Water Plant | 16700 New Holland St., Holland, MI 49424
616.399.6511 | wyomingmi.gov

STAFF REPORT

Date: May 20, 2026

Subject: Supplemental Water Payment

From: Aaron Vis, Director of Public Works

Meeting Date: June 1, 2026

RECOMMENDATION:

It is recommended that the City Council authorize payment to the Ottawa County Road Commission in the amount of $82,508.40 as reimbursement for a portion of their payment to the City of Grand Rapids to provide supplemental water to Olive and Blendon Townships as part of the third water transmission main construction project.

ALIGNMENT WITH STRATEGIC PLAN:

- Pillar 3 - Stewardship
  - Goal 3 – Improve city infrastructure and service reliability
    - Objective 1 – Complete 3rd transmission main

DISCUSSION:

During the past winter, the 54-inch water transmission main was taken offline to connect it to the new 60-inch third water transmission main. As a result, the City of Wyoming was unable to supply drinking water to Olive and Blendon Townships. During this period, water for these townships was provided instead through an interconnect with the City of Grand Rapids.

The Ottawa County Road Commission has been paying the resulting water invoices directly to the City of Grand Rapids. Because Grand Rapids' water rate is higher than the rate normally charged by the City of Wyoming to Ottawa County, the cost difference should be covered by the third water transmission main project. As shown on the attached invoice from the Ottawa County Road Commission, this amount totals $82,508.40.

BUDGET IMPACT:

Adequate funds exist in the appropriate accounts associated with the third water transmission main project.

Ottawa County Public Utilities

A department of the Ottawa County Road Commission
14110 Lakeshore Drive
Grand Haven, Michigan 49417

CITY OF WYOMING
1155 - 28TH STREE SW
WYOMING, MI 49509

Invoice Date: May 19, 2026

Reimbursement for additional commondity costs associated with connecting the Olive-Blendon Water System to Grand Rapids City water system during construction of the third transmission main.

	Olive/Blendon Flows in gallons	GR Billing Cost	WY Billing Cost	Difference
25-Dec	8,078,000	$15,551.23	$9,214.57	$6,336.66
26-Jan	26,095,000	$48,016.24	$29,766.57	$18,249.67
26-Feb	23,078,000	$41,342.94	$26,325.07	$15,017.87
26-Mar	23,140,000	$41,454.01	$26,395.80	$15,058.21
26-Apr	18,156,000	$32,525.46	$20,710.55	$11,814.91
26-May	24,635,000	$44,132.22	$28,101.14	$16,031.08
				$82,508.40

	GR Billing Cost	WY Billing Cost	
2025	$1,925.1337/gal	$1,140.70/mg	2025/2026
2026	$1,791.4439/gal		

Total Amount Due $82,508.40

06/01/26
Finance/LAJ

RESOLUTION NO._____

RESOLUTION TO CONCUR WITH DISPOSAL SERVICES FOR THE THIRD TRANSMISSION MAIN AND TO AUTHORIZE PAYMENT

WHEREAS:

1. As detailed in the attached staff report, Liquid Industrial By-products provided disposal services of highly chlorinated water used to disinfect the third transmission main.
2. It is recommended City Council concur with the disposal services and authorize payment to Liquid Industrial By-products in the total amount of $29,325.92.

NOW, THEREFORE, BE IT RESOLVED:

1. City Council concurs with the disposal services for the third transmission main.
2. City Council authorizes payment to Liquid Industrial By-products.

Moved by Councilmember:
Seconded by Councilmember:
Motion Carried Yes
No

I hereby certify that the foregoing Resolution was adopted by the City Council for the City of Wyoming, Michigan at a regular session held on: June 1, 2026.

_____
Kelli A. VandenBerg, Wyoming City Clerk

ATTACHMENTS:
Staff Report
Invoice

CITY OF WYOMING | PUBLIC WORKS

Drinking Water Plant | 16700 New Holland St., Holland, MI 49424
616.399.6511 | wyomingmi.gov

STAFF REPORT

Date: May 21, 2026

Subject: Disposal Services for Third Transmission Main

From: Jaime Fleming, Superintendent

CC: Aaron Vis, Director of Public Works

Meeting Date: June 1, 2026

RECOMMENDATION:

It is recommended that the City Council concur with services provided by Liquid Industrial By-products for disposal of highly chlorinated water used to disinfect the Third Transmission Main for a total cost of $29,325.92.

ALIGNMENT WITH STRATEGIC PLAN:

- PILLAR 3 – Stewardship
    - GOAL 2 – Improve city infrastructure and reliability.
        - OBJECTIVE 1 – Complete third transmission main.

DISCUSSION:

Construction of the Third Transmission Main requires the disinfection of the newly installed pipe and the existing piping impacted by construction activities. The disinfection process involves introducing highly chlorinated water so that the “slug” of disinfectant slowly moves through the pipe, maintaining contact with the inner surface long enough to inactivate pathogens such as bacteria and viruses. The concentration of chlorine in the disinfection slug is 100-150 parts per million – which is fifty to seventy-five times the average concentration of normal operation. While the total amount of high concentration water and the timing for it to reach the discharge point from the pipe can be mathematically derived, these are theoretical calculations. Fluid dynamics within the pipe and other factors can create highly variable conditions in the field.

Since the transmission mains are located mostly in rural areas without sanitary sewer, water drained from them for construction or maintenance must be discharged to the natural environment. Discharge of water from Wyoming’s transmission mains into the environment is regulated by an NPDES permit. The permit allows average concentration water to be discharged using best management practices that attenuate the chlorine concentration. However, water from disinfection activities is subject to strict regulatory requirements to

neutralize the chlorine concentration to nearly zero and limit the flow rate of water into the environment. Regulatory compliance under these conditions needs continuous control and oversight by City staff and restricts how quickly the dewatering can occur.

To expedite the disinfection process of the recently completed portion of the Third Transmission Main and ensure that the existing mains could be placed into service as soon as possible, staff determined that hauling this highly chlorinated water offsite to the City's wastewater treatment plant was the best and quickest method of disposal. This strategy minimized the need for staff oversight and eliminated the regulatory requirements associated with discharging to the natural environment. DWP staff contacted three local companies to perform this service, and Liquid Industrial By-products provided the lowest price quote and were available to perform the work on short notice.

Initial calculations determined that the amount and cost of transporting the highly chlorinated water was below the threshold requiring Council approval. As mentioned, there is significant uncertainty in calculating the "slug" volume, and the actual volume and disposal costs were higher than estimated. Therefore, staff are requesting Council concur with the services provided by Liquid Industrial By-products for disposal of highly chlorinated water used to disinfect the Third Transmission Main for a total cost of $29,325.92.

BUDGET IMPACT:

Adequate funds exist in the appropriate Water Fund accounts.

Attachments:
Invoice

LIQUID INDUSTRIAL BY-PRODUCTS

11325 E. Lakewood Blvd. Holland, MI 49424
616 396 5994 • info@liquidindustrial.com • www.liquidindustrial.com

BILL TO
CITY OF WYOMING
16700 NEW HOLLAND ST
HOLLAND, MI 49424

Invoice

(616) 399-7848

INVOICE DATE	INVOICE #
05/17/2026	111720
PROJECT	**PO Number**	**DUE DATE**
MOVE MATERIAL FROM ZEELAND TO CITY OF WY	GET PO#:	**06/16/2026**

Date	Item	Description	Manifest	Qty	Unit	Rate	Amount
05/04/2026							
	FLAT	FLAT TRUCKING FEE - FRAC TANK #1976 DELIVERY	I00017548	1.00	CHG	250.000	250.00
	FS	FUEL SURCHARGE		1.00	CHG	123.750	123.75
05/04/2026							
	FLAT	FLAT TRUCKING FEE - FRAC TANK #W281 DELIVERY	I00017549	1.00	CHG	250.000	250.00
	FS	FUEL SURCHARGE		1.00	CHG	123.750	123.75
05/07/2026							
	TL95	TRUCKING & LABOR (5 LOADS)	I00017527	10.75	HRS	150.000	1,612.50
	FS	FUEL SURCHARGE		1.00	CHG	798.190	798.19
05/08/2026							
	TL95	TRUCKING & LABOR (4 LOADS)	I00017528	7.00	HRS	150.000	1,050.00
	FS	FUEL SURCHARGE		1.00	CHG	519.750	519.75
05/08/2026							
	TL95	TRUCKING & LABOR (3 LOADS)	I00017529	7.50	HRS	150.000	1,125.00
	FS	FUEL SURCHARGE		1.00	CHG	556.880	556.88
05/08/2026							
	TL95	TRUCKING & LABOR (2 LOADS)	I00017532	4.75	HRS	150.000	712.50

THANK YOU!!! WE REALLY APPRECIATE YOUR BUSINESS! PLEASE PAY FROM THIS INVOICE
INVOICES UNPAID BY 10 DAYS AFTER DUE DATE WILL BE CHARGED A FINANCE CHARGE COMPUTED BY A PERIODIC RATE OF 1.5% PER MONTH WHICH IS AN ANNUAL PERCENTAGE RATE OF 18%

LIQUID INDUSTRIAL BY-PRODUCTS

11325 E. Lakewood Blvd. Holland, MI 49424
616 396 5994 • info@liquidindustrial.com • www.liquidindustrial.com

BILL TO
CITY OF WYOMING
16700 NEW HOLLAND ST
HOLLAND, MI 49424

Invoice

(616) 399-7848

INVOICE DATE	INVOICE #
05/17/2026	111720
PROJECT	**PO Number**	**DUE DATE**
MOVE MATERIAL FROM ZEELAND TO CITY OF WY	GET PO#:	**06/16/2026**

	FS	FUEL SURCHARGE		1.00	CHG	352.690	352.69
05/08/2026							
	TL95	TRUCKING & LABOR (2 LOADS)	I00017533	6.00	HRS	150.000	900.00
	FS	FUEL SURCHARGE		1.00	CHG	445.500	445.50
05/08/2026							
	TL95	TRUCKING & LABOR (1 LOAD)	I00017535	2.50	HRS	150.000	375.00
	FS	FUEL SURCHARGE		1.00	CHG	185.630	185.63
05/09/2026							
	TL105	TRUCKING & LABOR - SATURDAY RATE (3 LOADS)	I00017536	5.25	HRS	210.000	1,102.50
	FS	FUEL SURCHARGE		1.00	CHG	545.740	545.74
05/09/2026							
	TL105	TRUCKING & LABOR - SATURDAY RATE (6 LOADS)	I00017537	6.00	HRS	210.000	1,260.00
	FS	FUEL SURCHARGE		1.00	CHG	623.700	623.70
05/09/2026							
	TL105	TRUCKING & LABOR - SATURDAY RATE (3 LOADS)	I00017538	5.25	HRS	210.000	1,102.50
	FS	FUEL SURCHARGE		1.00	CHG	545.740	545.74
05/09/2026							

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	TL105	TRUCKING & LABOR - SATURDAY RATE (2 LOADS)	I00017540	4.00	HRS	210.000	840.00
	FS	FUEL SURCHARGE		1.00	CHG	415.800	415.80
05/09/2026							
	TL105	TRUCKING & LABOR - SATURDAY RATE (4 LOADS)	I00017544	7.75	HRS	210.000	1,627.50
	FS	FUEL SURCHARGE		1.00	CHG	805.610	805.61
05/11/2026							
	TL95	TRUCKING & LABOR (6 LOADS)	I00017545	11.00	HRS	150.000	1,650.00
	FS	FUEL SURCHARGE		1.00	CHG	816.750	816.75
05/11/2026							
	TL95	TRUCKING & LABOR (5 LOADS)	I00017542	9.50	HRS	150.000	1,425.00
	FS	FUEL SURCHARGE		1.00	CHG	705.380	705.38
05/11/2026							
	TL95	TRUCKING & LABOR (1 LOAD)	I00017543	2.25	HRS	150.000	337.50
	FS	FUEL SURCHARGE		1.00	CHG	167.060	167.06
05/11/2026							
	TL95	TRUCKING & LABOR (2 LOADS)	I00017561	4.00	HRS	150.000	600.00
	FS	FUEL SURCHARGE		1.00	CHG	297.000	297.00
05/11/2026							

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05/17/2026	111720
PROJECT	**PO Number**	**DUE DATE**
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	TL95	TRUCKING & LABOR (1 LOAD)	I00017562	3.00	HRS	150.000	450.00
	FS	FUEL SURCHARGE		1.00	CHG	222.750	222.75
05/11/2026							
	TL95	TRUCKING & LABOR (1 LOAD)	I00017563	2.75	HRS	150.000	412.50
	FS	FUEL SURCHARGE		1.00	CHG	204.190	204.19
05/11/2026							
	TL95	TRUCKING & LABOR (1 LOAD)	I00017564	2.75	HRS	150.000	412.50
	FS	FUEL SURCHARGE		1.00	CHG	204.190	204.19
05/12/2026							
	TL95	TRUCKING & LABOR (1 LOAD)	I00017567	2.25	HRS	150.000	337.50
	FS	FUEL SURCHARGE		1.00	CHG	167.060	167.06
05/12/2026							
	TL95	TRUCKING & LABOR (1 LOAD)	I00017568	3.25	HRS	150.000	487.50
	FS	FUEL SURCHARGE		1.00	CHG	241.310	241.31
05/14/2026							
	FLAT	FLAT TRUCKING FEE - FRAC TANK #W281 RETRIEVAL	I00017587	1.00	CHG	250.000	250.00
	FS	FUEL SURCHARGE		1.00	CHG	123.750	123.75
	FTR	FRAC TANK RENTAL (5/4/26 TO 5/14/26)		11.00	DAYS	45.000	495.00

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05/14/2026	FWO	FRAC TANK WASHOUT		1.00	CHG	100.000	100.00
	FLAT	FLAT TRUCKING FEE - FRAC TANK #1976 RETRIEVAL	I00017588	1.00	CHG	250.000	250.00
	FS	FUEL SURCHARGE		1.00	CHG	123.750	123.75
	FTR	FRAC TANK RENTAL (5/4/26 TO 5/14/26)		11.00	DAYS	45.000	495.00
	FWO	FRAC TANK WASHOUT		1.00	CHG	100.000	100.00

Total **29,325.92**

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06/01/26
Finance/LAJ

RESOLUTION NO._____

RESOLUTION TO ACCEPT A QUOTE FOR
PROFICIENCY TESTING AND ANALYTICAL STANDARDS

WHEREAS:

1. As detailed in the attached staff report, quotes were requested for the purchase of proficiency testing and analytical standards for the Drinking Water Plant and Wastewater Treatment Plant laboratories.
2. It is recommended City Council award the low quote received from SPEX CertiPrep LLC through December 31, 2026.
3. The City anticipates spending an estimated $15,000.00 for the proficiency testing products and analytical standards.

NOW, THEREFORE, BE IT RESOLVED:

1. City Council authorizes the purchase of proficiency testing and analytical standards from SPEX CertiPrep LLC.
2. City Council authorizes the City Manager to sign the contract.
3. City Council waives the provisions of 2-252, 2-253, 2-254 and 2-256 of the City Code regarding publication and posting of bid notices, notification of bidders and the bid opening procedure.

Moved by Councilmember:
Seconded by Councilmember:
Motion Carried Yes
No

I certify that the foregoing Resolution was adopted by the City Council for the City of Wyoming, Michigan at a regular session held on: June 1, 2026.

_____
Kelli A. VandenBerg, Wyoming City Clerk

ATTACHMENT:
Staff Report
Contract/Proposal

CITY OF WYOMING | PUBLIC WORKS

Wastewater Treatment Plant | 2350 Ivanrest Ave. SW, Wyoming, MI 49509
616.261.3550 | wyomingmi.gov

Staff Report

Date: May 20, 2026

Subject: Proficiency Testing and Analytical Standards

From: Peter Minnich, Laboratory Services Manager

CC: Aaron Vis, Director of Public Works

Meeting Date: June 1, 2026

RECOMMENDATION:

It is recommended that the City Council authorize the purchase of proficiency testing and analytical standards for the Drinking Water Plant and Wastewater Treatment Plant laboratories from SPEX CertiPrep LLC up to an estimated amount of $15,000.00.

ALIGNMENT WITH STRATEGIC PLAN:

- PILLAR 3 – STEWARDSHIP
  - GOAL 3 – Improve city infrastructure and service reliability

DISCUSSION:

The Utility Plant laboratories are required by regulation to participate in proficiency testing to verify the validity of the analytical methodologies. These proficiency testing samples are blind samples prepared by an independent provider and must be purchased from vendors approved by the U.S. Environmental Protection Agency (U.S. EPA). Successful analysis of these samples demonstrates analyst competency, method performance, and the accuracy and consistency of laboratory instrumentation.

On March 17, 2026, quotes were requested from the three U.S. EPA-approved vendors that supply proficiency testing products suitable for the utility laboratories. SPEX CertiPrep LLC submitted the lowest quote for proficiency testing needs and has been the City's selected provider for more than a decade. Their proficiency testing supplies are specially formulated for compatability with the analytical methods we employ, are provided in duplicate, and are supported by consistently reliable customer service. SPEX CertiPrep LLC is uniquely positioned to meet our proficiency testing needs.

SPEX CertiPrep LLC also offers chemical standards needed to properly calibrate instrumentation and perform analysis. On April 21, 2026, SPEX CertiPrep LLC provided a quote for analytical standards. The estimated annual amount for proficiency testing and analytical standards is $15,000.00.

TABULATION:

	SPEX CertiPrep LLC	Phenova	ERA
Wastewater Treatment Plant			
Quarterly Quality Control Needs	$ 3,588.00	$ 4,720.00	$ 4,773.60
Annual Quality Control Needs	$ 785.00	$ 1,180.00	$ 983.70
Drinking Water Plant			
Quarterly Quality Control Needs	$ 3,952.00	$ 3,576.00	$ 4,064.40
Annual Quality Control Needs	$ 1,486.00	$ 1,675.00	$ 1,608.80
Total	**$ 9,811.00**	**$ 11,151.00**	**$ 11,430.50**

BUDGET IMPACT:

Funds are available in the Water Fund Lab Services account 591-537-55310-740.000 and the Sewer Fund Lab Services account 590-536-54310-740.000.

CITY OF WYOMING

CITY PURCHASING CONTRACT

CITY OF WYOMING, MICHIGAN

(MORE THAN $7,500)

This Contract is made as of the Effective Date between the City and the Supplier.

City means the City of Wyoming, a Michigan municipal corporation of 1155 28th St SW, Wyoming, MI 49509.

Effective Date means: May 19, 2026~~202_~~.

Items means the parts, equipment, or other items the City is purchasing as stated in the Proposal.

Proposal means Supplier's Bid/Proposal attached as Exhibit B.

Standard Terms means "City Contract Standard Terms and Conditions" is Exhibit A, including the Risk Allocation and Insurance Provisions.

Supplier means: SPEX CertiPrep LLC
[Name of supplying entity]
A Delaware limited liability company
[State and type of entity, *e.g.*, corporation, limited liability company, etc.]

203 Norcross Avenue
[Supplier's street address]
Metuchen, NJ 08840
[Supplier's city, state & zip]

TERMS AND CONDITIONS

In exchange for the consideration in and referred by this Contract, the parties agree:

1. Supplier will supply the Items as detailed in the Proposal.
2. City will pay the Supplier in accordance with the Proposal.
3. Supplier represents and warrants, except for those listed in this paragraph as inapplicable or that are modified by this paragraph, Supplier is complying with and will comply with the Standard Terms. Inapplicable conditions are as follows:
   Supplier's changes of Terms and Conditions have been adopted.
4. This is the only agreement between the parties regarding the Purchase that is the subject of the Proposal and there are no other agreements, representations, or warranties except as are stated in the Proposal. This contract can be amended only in writing signed by both City and Supplier.

City and Supplier have signed this Contract as of the Effective Date.

City of Wyoming

By: _____
John Shay, City Manager

Approved as to form:

_____
Gregory T. Stremers, City Attorney

Supplier: SPEX CertiPrep LLC

By: _____
[Signature officer, director, or principal of Supplier]
Daniel Roushia
[Typed/Printed Name & Title of Person Signing for Supplier]

Date signed: May 19, ~~20__~~2026

CITY OF WYOMING

EXHIBIT A
CITY CONTRACT STANDARD TERMS AND CONDITIONS

These Terms and Conditions apply to this contract. Supplier attests it complies with and promises it will comply with these Terms and Conditions.

1. Legal Compliance. Supplier and all Supplier's personnel must comply with all applicable (i) laws, rules, regulations, codes, and ordinances, (ii) license and permit requirements, and (iii) orders of any governmental agency, official or court of competent jurisdiction. This includes, for example, complying with federal OSHA ~~and Michigan MIOSHA~~ safe practices, and with applicable federal and state labor laws, rules, and regulations.

2. Qualifications. Supplier represents and promises that:

A. Supplier and Supplier's personnel must have and maintain all licenses, registrations, certifications, memberships, or other approvals needed to perform the Work and supply materials required by the contract.

B. Supplier and its principals, owners, officers, shareholders, key employees, directors, members and partners: (i) are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by a federal department or agency; (ii) have not within the last 3-years been convicted of or have a judgment against them for fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a contract or transaction with a governmental entity; (iii) have not within the last 3 years violated federal or state antitrust statutes or committed embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(iv) are not presently indicted for or otherwise criminally charged by a governmental entity with commission of any of the offenses enumerated in this certification; and (v) have not within the last 3-years had one or more contracts or transactions with a governmental entity terminated for cause or default.

C. If the contract is for a HUD CDBG or another federal or state funded project, neither Supplier nor any of its subcontractors on the HUD list of debarred and suspended participants (https://www.hud.gov/program_offices/general_counsel/limited_denial_participation_hud_funding_disqualifications). If grant funds are withdrawn or cancelled for any reason this Contract is nullified. Unless waived by City's purchasing director, Supplier and all subcontractors will register on the Federal SAM Registry available at: https://usfcr.com. Supplier and all subcontractors are not on and will remain off the Federal System for Award Management list of persons and entities ineligible for federal contracts.

D. Supplier is not an "Iran linked business" under Michigan's Iran economic sanctions act, 2012 PA 517.

3. Nondiscrimination and Respect. City is committed to fairness, impartiality, courtesy, respect, and nondiscrimination in all City programs, benefits, and actions, including City contracts and activities that contractors or others engage in for or on behalf of City, Accordingly:

A. Supplier in (i) employment actions, (ii) soliciting, bidding or contracting with subcontractors, or (iii) soliciting, bidding or contracting for materials will not discriminate based on race, color, religion, national origin, age, sex, gender, gender identity or expression, height, weight, marital status, familial status, mental or physical disability, genetic information, or other reason prohibited by law that is unrelated to the ability to perform the duties of a job or position.

B. Noncompliance with this provision is a material breach of this Contract that can result in (i) withholding payments to Supplier, (ii) Contract cancellation, termination, or suspension, in whole or in part, and (iii) Supplier's ineligibility for future City contracts.

C. Supplier must retain and, upon request, provide City access to and copies of all information and reports required by this provision that a state or federal agency determine are pertinent to ascertain compliance. If information required of Supplier is in the sole possession of another who fails or refuses to furnish it, Supplier must so certify to City.

4. Ethical Standards. To the best of Supplier's knowledge after reasonable inquiry:

A. Supplier and Supplier's personnel, as well as any parent, affiliate, or subsidiary organization of Supplier has not engaged in and shall refrain from: (i) attempting to or appearing to influence any City elected or appointed officer or employee by a direct or indirect offer of anything of value, or (ii) paying or agreeing to pay a person, other than its personnel, any consideration contingent upon the award of the contract.

B. No owner, director, officer, member, partner, or key employee of Supplier or of any parent, affiliate, or subsidiary organization or subcontractor of Supplier is a spouse, parent, child, grandchild, or sibling of the mayor, city council member, or another City elected or appointed officer except as already disclosed in writing to City when submitting its proposal.

C. Supplier will immediately notify City of any subsequently discovered violation of the standards in this section.

5. Media Releases. Media or other releases (including promotional literature and commercial advertisements) pertaining to the contract or the project to which it relates shall not be made without the City Manager's prior written approval and only in accordance with the written terms provided in that approval.

6. Payment to Supplier.

A. Supplier and all subcontractors, suppliers and consultants shall, before beginning the Work, submit by email to City's Finance Department at Acct_Info@wyomingmi.gov a completed IRS W-9 form (available at www.IRS.gov).

B. Payments to Supplier will be made in accordance with the Proposal. If no other terms are provided, payment of an invoice to City will generally be made within 30 days after and invoice all required information is submitted to City.

C. Payment disputes will be resolved as provided in §13. City will pay undisputed amounts and the disputed amount will be held in a non-interest-bearing account until the dispute is resolved.

7. Intellectual Property. Supplier guarantees the sale or use of ~~articles, software, copies, records, or other intellectual property~~ the items provided under or used to perform the contract will not infringe any U.S. copyright, patent, trademark, or other intellectual property rights. Supplier will, without expense to City, defend every action brought against City or City's officers or employees for any alleged infringement of intellectual property rights by reason of their sale or use as part of the contract and will pay all costs, damages, and profits recoverable in any action. The foregoing indemnity shall not apply to the extent that an infringement is caused, in whole or in part, by: (i) use of an item in combination with other equipment, products or components not supplied by Supplier where the item would not itself be infringing, (ii) compliance with City's designs, specifications or instructions, (iii) use of the item in an application or environment for which it was not designed or (iv) modifications of the item by anyone other than Supplier without Supplier's prior written approval.

8. Information, Quality, and Related Requirements.

A. Unless otherwise stated in the Proposal, all items shall be new, ~~the best of their respective kind,~~ and free from defects in materials and workmanship for one (1) year from the date of shipment. The warranties set forth in this Section 8(A) shall not apply to (i) consumables; (ii) items supplied by Supplier that are obtained by Supplier from an original manufacturer or third party supplier: or (iii) defects or non-conformities caused, in whole or in part, as the result of (a) normal wear and tear, (b) accident, disaster or event of force majeure, (c) abuse, neglect, misuse, fault or negligence of or by City, (d) use of the items in a manner for which they were not designed, (e) causes external to the items such as, but not limited to, power failure or electrical power surges, (f) improper storage

and handling of the items, (g) use of the items in combination with equipment, products or components not supplied by Supplier, (h) ordinary maintenance, (i) alterations, repairs or installations that have not been performed by Supplier or its authorized representative or (x) failure to maintain items in accordance with item documentation and instructions. SUPPLIER DISCLAIMS ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, ORAL OR WRITTEN, WITH RESPECT TO THE ITEMS, INCLUDING WITHOUT LIMITATION ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

B. Supplier shall provide City all manufacturer parts lists, assembly, and maintenance information, and all other documents provided by the manufacturer for the items, and, upon written request of the City, ensure all related warranties are held by or assigned to City.

C. ~~Supplier's failure to meet specified delivery schedules or promptly replace rejected materials renders Supplier liable for all costs in excess of the bid price(s) when alternate procurement is necessary. Excess costs will include administrative costs.~~ Prices shall be delivered F.O.B. ~~destination freight prepaid~~origin to any location specified in the specifications. ~~and included in the Proposal pricing~~ Pricing does not include freight charges unless otherwise ~~specified in the RFP or expressly stated in the Proposal~~agreed upon in writing by the parties.

9. Taxes. City is generally exempt from federal and state taxes, including state sales and use taxes. A copy of City's certificate of tax exemption can be requested by contacting City's Finance Department. Invoices must be separated to show the amount

added for taxes of any kind if applicable. Taxes, wherever indicated and applicable to any purchase, will not be subject to trade or cash discounts.

10. Records. Because City is a public entity that receives funds from other governmental agencies: (i) City is required to retain, be able to obtain, and/or audit records related to City contracts and (ii) Michigan's Freedom of Information Act generally requires that City disclose to those requesting them copies of all requested documents relating to this contract. Supplier shall retain copies of all records related to this contract for at least 7 years after completion of the contract. Supplier shall~~, within 5 City business days of a City request,~~ allow inspection, auditing and copying of all retained records, subject to reasonable prior written notice, at a mutually convenient time and in a manner to minimize disruption to Supplier's business.

11. Assignment/Beneficiaries. None of Supplier's rights or duties may be assigned or delegated without City's prior written consent, except to an entity that controls, is controlled by or is under common control with Supplier or that purchases all or substantially all of the assets and/or equity interests of the Supplier. For purposes of this Section 11, "control" shall mean the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a person or an entity, whether through ownership of voting securities or other interests, by contract or otherwise. This contract will be binding on Supplier's successors and permitted assigns. No other persons are intended to be beneficiaries of this contract.

12. Independent Contractor. Supplier and Supplier's personnel are wholly independent of City. None of them shall be or be represented as City officers or employees. Supplier is solely responsible Supplier's personnel's acts, omissions, and statements. Supplier is solely responsible for any compensation and benefits to be provided Supplier's personnel for Work under the contract. Except for payment of the contract price, City has no responsibility to supervise, compensate or insure Supplier or Supplier's personnel.

13. Disputes/Remedies. The following applies to all disputes under this contract:

A. In case of Supplier's default, City may terminate the agreement and procure the items from other sources~~ and hold Supplier responsible for excess costs occasioned by the default. Such action will only be (i) when time is off the essence due to impending weather conditions, upcoming seasonal changes, permit durational limits, scheduled events, conflicts with other projects, or other circumstances City reasonably determines makes time of the essence and (ii) after written notice to Supplier with an opportunity to appeal the decision to the City Manager~~.

B. Before filing a lawsuit, a party must first notify the other party in writing stating the provision involved, stating the actions or failure to act that did not comply with the provision, and proposing the action to be taken to address the alleged non-compliance. The party receiving that notice shall, within 14 days, respond in writing detailing any reasons why it disagrees that it has failed to comply with the contract or stating what actions it has taken or is taking to address the noncompliance and prevent recurrence. Both parties shall meet within 14 days after the date of the response in an effort to resolve any continuing dispute.

C. A party need not undertake the procedure provided in subsection 13.B if it has previously done so with respect to any noncompliance with the same contract provision.

D. Jurisdiction and venue for any dispute shall be solely in state courts in Kent County, Michigan.

E. In addition to any other remedies to which a party may be entitled, the prevailing party shall be entitled to recover all actual reasonable costs, including for example and without limitation, filing fees, expert consultation and witness fees and expenses, attorneys' fees, discovery expenses, copying costs, exhibit preparation costs, and any other actual reasonable costs incurred to investigate, bring, maintain or defend any action from its first discovery or first notice of it through all collection and appellate proceedings.

14. Risk Allocation. Supplier is solely responsible for (i) the means and methods of providing the items under the contract, (ii) the conduct of its officers, employees, subcontractors, and consultants, and (iii) for any injuries or property damage suffered by Supplier or Supplier's officers, employees, and agents to the extent caused by the negligence or willful misconduct of Supplier.

A. Supplier shall hold City and City's officers and employees harmless from, indemnify them for, and defend them against any

claims made by persons other than the City ~~as a result of~~to the extent arising from the negligent or willful actions, errors, or omission of Supplier or Supplier's officers, employees, and agents while providing the items under this Contract.

15. Insurance.

A. Supplier shall maintain the following insurance:

REQUIRED LIMITS	ADDITIONAL REQUIREMENTS
COMMERCIAL GENERAL LIABILITY	
Minimal Limits: $2,000,000 Each Occurrence Limit $2,000,000 Personal & Advertising Injury Limit $2,000,000 General Aggregate Limit $2,000,000 Products/Completed Operations	Coverage shall include the following extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent Suppliers Coverage; and (D) Broad Form General Liability Extensions or equivalent, if not already included. Coverage afforded shall be primary and any other insurance that may be in effect shall be secondary and/or excess.
AUTOMOBILE LIABILITY INSURANCE	
Minimal Limits (include hired and non-owned automobile coverage): $2,000,000 per person $2,000,000 per occurrence	Coverage afforded shall be primary and any other insurance that may be in effect shall be secondary and/or excess.
WORKERS' COMPENSATION/ EMPLOYERS' LIABILITY	
Minimal Limits: $500,000 per occurrence	Coverage shall be in accordance with all applicable Michigan statutes. Waver of subrogation, except where waiver is prohibited by law.
ENVIRONMENTAL/POLLUTION LIABILITY	
Coverage is required if any of the items being purchased are hazardous or toxic substances or materials or contain hazardous or toxic substances or materials. Amount required $2,000,000.	Coverage shall include, but not be limited to, loading/unloading, transportation, storage, and removal of all hazardous waste/material. If this policy is claims made form, then the Supplier keep the policy in force, or purchase "tail" coverage, for a minimum of 3 years after the termination of this contract. Coverage afforded shall be primary and any other insurance that may be in effect shall be secondary and/or excess.

16. General Terms.

A. These terms and conditions may not be amended or modified except in writing signed by Supplier and City. These terms and conditions shall not be affected by any course of dealing. The captions are for reference and will not affect the interpretation of these terms and conditions.

B. This contract is made in Kent County, Michigan and shall be governed by and interpreted in accordance with Michigan law.

C. Reference by office to a City officer includes that City officer's designee(s).

D. This Agreement may be executed in counterparts, each of which shall be deemed to be an original and all of which together shall constitute a single instrument. Counterpart signature pages transmitted via facsimile or email (in pdf or similar format) or via DocuSign or similar electronic signature software shall be deemed to be original signature pages for all purposes.

Exhibit B

Proposal

SPEX | NSI | HPS | CHIRON
Analytical Reference Materials & PT by ZeptoMetrix®

SPEX CertiPrep LLC
203 Norcross Avenue
Metuchen, NJ 08840
732-549-7144
1-800-522-7739

Analytical.cs@zeptometrix.com

Sales Quote D496CT

Ref Nbr:

Sales Quote Date 03-20-26

Quote Expiration: 12-31-26

Page No: 1

Bill To 44063

CITY OF WYOMING WTP
16700 NEW HOLLAND
HOLLAND, MI 49424-5554
UNITED STATES

Ship To 44063*1

CITY OF WYOMING WTP
16700 NEW HOLLAND
HOLLAND, MI 49424-5554
UNITED STATES

Terms: Net 30

Freight Terms:

Ln	Part Number	Quote Qty	Price UM	Unit Price	Extended Price
1	MIC-QC2 WP Microbiological QC MIC-QC2 - Quantitative Coliforms/E.coli/Fecal Coliform	4	EA	152.00	608.00
2	QCI-026 Demand - QC Sample (WP) Demand QC Sample, (WP) in Water, 21mL	4	EA	65.00	260.00
3	QCI-029 Oil and Grease -QC Sample Oil and Grease in n-propanol, 3.2mL, QC Sample(WP)	4	EA	58.00	232.00
4	QCI-031 Amenable & Total Cyanide NPWQC in Water 20mL *ECCN*	4	EA	65.00	260.00
5	QCI-034 Trace Metals - NPW QC Trace Metals, NPW QC SAMPLE, 21 mL Set	4	EA	73.00	292.00
6	QCI-035 pH - QC Sample (WP) Wastewater pH CRM, 250mL	4	EA	49.00	196.00
7	QCI-079 Residue in Water - QC Residue CRM	4	EA	71.00	284.00
8	QCI-087 Mercury - QC sample (WP) Mercury QC Concentrate CRM, 20mL	4	EA	54.00	216.00
9	QCI-138 Simple Nutrients - QC Simple Nutrients QC Concentrate CRM	4	EA	58.00	232.00

Seller accepts the purchaser's order subject to and conditioned on the purchaser's agreement to the terms and conditions set forth herin, without addition or modification, and on the included terms and conditions of sale. The seller herby rejects all additional, contrary or different terms and conditions, unless specifically accepted and agreed to by the seller in writing.

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Freight Terms:

Ln	Part Number	Quote Qty	Price UM	Unit Price	Extended Price
10	QCI-139 Complex Nutrients - QC Complex Nutrients QC Concentrate CRM	4	EA	58.00	232.00
11	SQCO-019 Nutrients in Soil - QC Nutrients in Soil	4	EA	194.00	776.00
12	MIC-QC3 WS Standard Plate Count WS Standard Plate Count, QC Sample - 1 vial	4	EA	142.00	568.00
13	MIC-QC4 WS Micro 10pc E. coli MIC-QC4 - Drinking Water Coliforms 10 Sample Set	4	EA	274.00	1096.00
14	MIC-QC6 WS Quantitative Coliform MIC-QC6 - Drinking Water Quantitative Coliforms	4	EA	152.00	608.00
15	QCI-012 Residual Free Chlorine Residual Free Chlorine (WS) - QC Sample in Water	4	EA	67.00	268.00
16	QCI-014 ORGANIC STANDARD TURBIDITY STANDARD	4	EA	66.00	264.00
17	QCI-041 Inorganics-QCSample(WS) Inorganics QC Sample, (WS) 500 mL	4	EA	98.00	392.00
18	QCI-083 pH - QC Sample (WS) Drinking Water pH QC, 250mL				

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Terms: Net 30

Freight Terms:

Ln	Part Number	Quote Qty	Price UM	Unit Price	Extended Price
		4	EA	51.00	204.00
19	QCI-141 Orthophosphate-P, 21 mL Orthophosphate-P QC Concentrate , 21 mL Ampule	4	EA	59.00	236.00
20	QCI-145 Hardness QC , 250 mL Hardness QC , 250 mL Bottle	4	EA	79.00	316.00
21	MIC-003 Coliforms/E.coli Coliforms/E.coli, 2 pack	1	PK	156.00	156.00
22	PEI-026 Demand Demand, 2 pack	1	PK	72.00	72.00
23	PEI-029 Oil and Grease Oil and Grease, 2 pack	1	PK	66.00	66.00
24	PEI-031 Amenable & Total Cyanide Amenable and Total Cyanide, 2 pack	1	PK	71.00	71.00
25	PEI-034 Trace Metals Trace Metals, 2 pack	1	PK	90.00	90.00
26	PEI-035 NPW - pH NPW - pH PE Sample, 2x250mL	1	PK	60.00	60.00
27	PEI-079 Residue Residue, 2 pack				

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Freight Terms:

Ln	Part Number	Quote Qty	Price UM	Unit Price	Extended Price
		1	PK	80.00	80.00
28	PEI-087 Mercury Mercury, 2 pack	1	PK	62.00	62.00
29	PEI-138 Simple Nutrients Simple Nutrients, 2 pack	1	PK	66.00	66.00
30	PEI-139 Complex Nutrients Complex Nutrients, 2 pack	1	PK	62.00	62.00
31	PEI-012 Residual Free Chlorine Residual Free Chlorine Drinking Water Inorganic Standard	1	EA	71.00	71.00
32	PEI-014 Turbidity Turbidity Drinking Water Inorganic Standard	1	EA	71.00	71.00
33	PEI-016 Trace Metals Trace Metals Drinking Water Inorganic Standard	1	EA	91.00	91.00
34	PEI-017 Inorg Disinfect Byproduct Inorganic Disinfection By-Products Drinking Water Inorganic Std	1	EA	93.00	93.00
35	PEI-041 Inorganics Inorganics Drinking Water Inorganic Standard	1	EA	103.00	103.00
36	PEI-083 pH pH Drinking Water Inorganic Standard				

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Freight Terms:

Ln	Part Number	Quote Qty	Price UM	Unit Price	Extended Price
		1	EA	60.00	60.00
37	PEI-140 Nitrite Nitrite Drinking Water Inorganic Standard	1	EA	66.00	66.00
38	PEI-141 Orthophosphate Orthophosphate Drinking Water Inorganic Standard	1	EA	66.00	66.00
39	PEI-145 Hardness Hardness Drinking Water Inorganic Standard	1	EA	86.00	86.00
40	PEO-002 Trihalomethanes Trihalomethanes Drinking Water Organic Standard, 2 pack	1	PK	88.00	88.00
41	PEO-098 Org Disinfect Byproduct Organic Disinfection By-Products Drinking Water, 2 pack	1	PK	104.00	104.00
42	MIC-001 Microbiological PT Microbiological PT Drinking Water Standard THIS PRODUCT CANNOT SHIP ON FRIDAYS AND MUST SHIP OVERNIGHT	1	EA	288.00	288.00
43	MIC-002 Standard Plate Count Standard Plate Count Microbiological Drinking Water Standard	1	EA	147.00	147.00
44	MIC-006 Quantitative Coliforms Quantitative Coliforms Microbiological Drinking Water Standard	1	EA	152.00	152.00

LINES 21-30 FOR DMRQA-46

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Freight Terms:

Ln	Part Number	Quote Qty	Price UM	Unit Price	Extended Price
	LINES 31-41 FOR WS-146 **LINES 42-44 FOR MS-259** To Provide the best service for your order, your product may be manufactured and delivered from one of our specialty chemical companies in Raleigh/NC, Charleston/SC, or in Metuchen/NJ.				

Quote To: Peter Minnich
Email: peter.minnich@wyomingmi.gov

Total $9,811.00

Seller accepts the purchaser's order subject to and conditioned on the purchaser's agreement to the terms and conditions set forth herin, without addition or modification, and on the included terms and conditions of sale. The seller herby rejects all additional, contrary or different terms and conditions, unless specifically accepted and agreed to by the seller in writing.

TERMS AND CONDITIONS OF SALE OF ZEPTOMETRIX LLC, SPEX CERTIPREP LLC, NSI LAB SOLUTIONS, LLC AND HIGH PURITY STANDARDS, LLC

UNLESS OTHERWISE EXPRESSLY AGREED TO IN A WRITING SIGNED BY AUTHORIZED REPRESENTATIVES OF ZEPTOMETRIX LLC, SPEX CERTIPREP LLC, NSI LAB SOLUTIONS, LLC OR HIGH PURITY STANDARDS, LLC (EACH, A "SELLER"), AS THE CASE MAY BE, AND BUYER, ALL SALES OF SELLER'S PRODUCTS ARE SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS:

1. GENERAL. Seller accepts orders for products from the person or entity placing such order ("Buyer") for products listed on a Seller quote, invoice or Seller website or otherwise sold by Seller ("Products") on the express condition that Buyer agrees to accept and be bound by the terms and conditions set forth herein ("Terms"). Buyer represents (i) he or she is at least 18 years of age, and (ii) to the extent Buyer is placing the order as an employee or representative of a company or other entity, that he or she is authorized to place such order and the term "Buyer" shall then also include such company or entity. These Terms include all writings incorporated herein by reference, any quotation or proposal issued to Buyer by Seller, and any terms, conditions and restrictions on use which accompany Products and/or as available on Seller's website, all of which taken together are the complete and exclusive statement of the contract between Seller and Buyer with respect to Buyer's purchase of Seller's Products (the "Agreement"). Any of the following constitutes Buyer's acceptance of the Agreement: (a) written acknowledgement of these Terms; (b) acceptance of any shipment or delivery of Products; (c) payment for any Products; or (d) any other act or expression of acceptance by Buyer. Any provisions contained in any writing, document or EDI issued by Buyer that are in addition to or inconsistent with the Agreement are expressly rejected and if any of the terms and conditions in this Agreement differ from or are in addition to the terms and/or conditions of Buyer's offer, this document shall be construed as a counteroffer and shall not be effective as an acceptance of Buyer's document. Course of dealing, course of performance, usage of trade and/or verbal agreements not reduced to writing and signed by an authorized representative of Seller shall not be applied to the interpretation of the Agreement.

2. PRICE. All prices provided in a written quote by Seller are valid for the time period stated on the quote, or for thirty (30) days from the date of the quote in the event no time period is stated; otherwise, prices are as published by Seller at the time of Seller's acceptance of Buyer's order. Published prices may be changed by Seller at any time without notice. If no price has been specified or quoted by Seller, then the price will be Seller's list price in effect at the time of shipment. Prices are subject to adjustment at any time on account of changes in specifications, quantities or shipping arrangements, increases in the cost of raw materials or cost of production, imposition of tariffs, other terms or conditions which are not part of Seller's original price quotation or due to other causes not within the control of Seller.

3. TAXES AND OTHER CHARGES. Prices exclude all sales, use, excise, value added, and other taxes charged and duties imposed with respect to the sale, delivery, or use of any Products. All such taxes and duties must be paid by Buyer unless otherwise exempt. Prices also exclude costs for freight, insurance, Seller's standard handling charges and, where appropriate, ancillary charges that are specific to certain Products (such as hazardous packaging charges) or needs of Buyer, said foregoing costs and charges to be added to Buyer's invoice. If Buyer claims any tax exemption, Buyer must provide a valid certificate or letter of exemption for each claimed exemption.

4. TERMS OF PAYMENT. Seller shall invoice Buyer upon shipment of Products. Invoices shall be paid in full in U.S. dollars within thirty (30) days of the invoice date. If Buyer disputes in good faith any portion of an

invoiced amount, it shall notify Seller thereof in writing within ten (10) days of receipt of the applicable invoice; such notice shall identify the specific cause or nature of the dispute and the amount disputed. Buyer shall pay that portion of the invoice not in dispute in accordance with the payment terms in this Paragraph 4 (Terms of Payment). The Parties shall work in good faith to promptly resolve any disputed invoice amounts; however, if such dispute cannot be resolved within thirty (30) days from date of Buyer's dispute notice, Seller may exercise any of its rights under this Agreement or arising under applicable laws. A monthly service charge of one and one-half percent (1½%) per month (except where local laws prohibit such rate, in which case the rate will be the highest rate allowed under law) will be added to unpaid balances extending beyond thirty (30) days. Seller reserves the right to require from Buyer full or partial payment in advance, or other security that is satisfactory to Seller, at any time that Seller believes in good faith that Buyer's financial condition does not justify the terms of payment specified. Buyer shall perform its obligations under the Agreement without setoff, deduction, recoupment, or withholding of any kind for amounts owed or payable to Seller whether under the Agreement, any purchase order or invoice, applicable law, or otherwise, or whether relating to Seller's breach, bankruptcy, or otherwise. If the Buyer fails to pay the purchase price as it becomes due or wrongfully rejects acceptance of the Products hereunder or any part thereof or otherwise breaches the terms of an order or these Terms and Conditions, then the Seller shall have the right to recover, in addition to the purchase price of the said Products, all costs incurred by said Seller to collect that same. Said collection costs shall include but not be limited to all court costs and attorneys' fees. In addition to the foregoing and all other remedies which the Seller may have hereunder or at law or in equity, all of which shall be cumulative and not exclusive, the Seller without notice (a) may defer shipment hereunder and under any other contract until such default, breach or repudiation is removed and/or (b) may cancel any undelivered portion of this and/or any other contract in whole or in part.

5. DELIVERY. Products shall be packaged and shipped in a manner to preserve and protect from damage and/or degradation, in accordance with acceptable commercial practices and in compliance with all applicable laws. The Products will be shipped to the destination specified by Buyer, F.C.A. (Incoterms 2010) Seller's facility. Title to and risk of loss of Products shall pass to Buyer at the place and time Seller delivers Products to the carrier. Seller will have the right, at its election, to make partial shipments of the Products and to invoice each shipment separately. Seller reserves the right to withhold shipments in whole or in part if Buyer fails to make any payment to Seller on undisputed invoices when due or otherwise fails to perform its obligations hereunder. All delivery dates are approximate only, and Seller will not be liable for any loss or damage resulting from any delay in delivery or failure to deliver which is due to any unforeseen condition, force majeure events or any cause beyond Seller's reasonable control, including without limitation, labor disputes, lockouts or labor shortages, embargo, acts of war, insurrections, riots, terrorism, civil commotion, damage to factory, governmental law and regulation, inability to obtain labor and/or materials, acts of God or the public enemy, fires, floods, severe weather, earthquakes, delays caused by any civil, governmental or military authority (including government priority, preference or allocation), delays of suppliers in furnishing parts, components, materials, services or finished products, epidemics or pandemics. In the event of a delay due to any cause beyond Seller's reasonable control, Seller reserves the right to terminate the order or to reschedule the shipment within a reasonable period of time, and Buyer will not be entitled to refuse delivery or otherwise be relieved of any obligations as the result of such delay. Seller endeavors to comply with all regulations regarding

shipments of hazardous Products. Some of the Products sold by Seller are considered hazardous by the Department of Transportation (DOT), the International Air Transportation Association (IATA), the U.S. Postal Service, Federal Express or United Parcel Service and, as such, must be shipped under the restrictions imposed by these agencies and carriers. Whenever possible, Seller ships in accordance with the method specified or implied on Buyer's order. Seller reserves the right to alter that procedure to comply with the above indicated regulations. Also because of such compliance Seller charges for the required special packaging and appropriate shipping documents. The amount will vary with the quantity and mix of Products as well as method of shipment. Upon Buyer's request, Seller's sales staff will quote the fee for a proposed purchase. Buyer must inspect Products within five (5) calendar days of receipt. If any damage is discovered, Buyer is responsible for filing any and all claim(s) with the carrier unless Seller in writing otherwise agrees to do so. Buyer shall not file warranty claims for damages incurred in shipping and handling. Seller reserves the right to stop delivery of Products in transit and to withhold shipments in whole or in part if Buyer fails to make any payment to Seller when due or otherwise fails to perform its obligations hereunder. Products as to which delivery is delayed due to any cause within Buyer's control may be placed in storage by Seller at Buyer's risk and expense and for Buyer's account.

6. CHANGES; CANCELLATION. Any order accepted by Seller may be modified or cancelled by Buyer only if expressly agreed to in writing by an authorized representative of Seller. Orders placed by Buyer may not be canceled after shipment except upon Seller's written consent, and subject to Buyer's payment of Seller's cancellation and/or restocking charges. Seller reserves the right to cancel any sale hereunder without liability to Buyer (except for refund of monies already paid) if the manufacture or sale of the subject Product(s) is or becomes technically or economically impractical or if the manufacturer ceases to manufacture the Product(s) for any other reason. Orders for custom, special order or private labeled Products cannot be canceled.

7. INCORRECT, SHORT OR DAMAGED ORDER. (a) Buyer may request a refund or replacement of those Products that are damaged as a result of inadequate packaging by Seller as required under Paragraph 5 (Delivery), or may have corrected any shortages or orders that are incorrectly fulfilled by Seller ("Rejected Order"); provided, however, that Buyer contacts Seller's customer service within ten (10) days from Buyer's receipt of Products and furnishes written evidence or documentation as may be reasonably requested by Seller. If Seller is not contacted within the ten (10) day period, the Products and order will be deemed accepted, such acceptance not to affect Buyer's Product Warranty rights in Paragraph 9 (Product Warranty). (b) If Buyer timely notifies Seller of any Rejected Order, Seller shall, in its sole discretion, (i) replace damaged Products, or correct any shortages or incorrectly filled orders, as the case may be; or (ii) credit or refund the price for the Rejected Order, together with any reasonable shipping and handling expenses incurred by Buyer in connection therewith. (c) BUYER ACKNOWLEDGES AND AGREES THAT THE REMEDIES SET FORTH IN THIS PARAGRAPH 7 ARE BUYER'S SOLE AND EXCLUSIVE REMEDIES AND SELLER'S LIMIT OF LIABILITY FOR A REJECTED ORDER.

8. RETURN. Authorization for Product returns for situations not covered by Paragraph 7 must be preapproved by Seller customer service and a return authorization number issued in order to transact any return. Not all requests for return will be granted: for example, Products which cannot be resold will not be authorized for return absent non-conformance to specifications. Products authorized for return must arrive at Seller's facilities in a state satisfactory for resale to be eligible for credit. A restocking charge of

20% of the applicable Product invoice amount for a returned order may be charged on returns that are not the result of any Seller error, fault, or Product non-conformity with specifications.

9. PRODUCT WARRANTY. Seller warrants to Buyer that all Products purchased by Buyer shall materially conform to Seller's published specifications and be free from defects in materials and workmanship for the Product's Warranty Period ("Product Warranty"). Services shall be performed in a professional, workmanlike manner ("Service Warranty").

The term "Warranty Period" for ZeptoMetrix Products means until a Product's stated expiration date, or if no expiration date is stated, then one (1) year from the date of manufacture.

The term "Warranty Period" for SPEX CertiPrep LLC Products means:

(a) Chemical products: one (1) year from the date of shipment or as stated on Product label.
(b) Repairs, replacements, or parts: the greater of thirty (30) days and the remaining original warranty period for the Product that was repaired or replaced.
(d) Installation services: ninety (90) days.

The term "Warranty Period" for NSI Lab Solutions, LLC Products and High Purity Standards, LLC Products, as used herein, means (a) for Products having an expiration date, until a Product's stated expiration date, or, if no expiration date is stated, then one (1) year from date of manufacture or (b) for Products not having an expiration date, for the period of time set forth in the Product documentation, Seller's published specifications, Product label or package inserts or if a period of time is not specified in Seller's Product documentation, Seller's published specifications, Product label or package inserts, then for one (1) year from the date of shipment to Buyer.

The Product Warranty shall not be effective if Seller determines, in its sole discretion, that non-conformance with applicable Product specifications or the Product defect is a result, in whole or in part, of: (i) a failure to handle, use, store, or transfer the Product in accordance with its intended use and any certificate of analysis or package insert accompanying the Product; (ii) any alteration, maintenance, repair or modification of the Product that is not performed by Seller or its authorized representative; (iii) accident, abuse, neglect, misuse of the Product, or negligence, in each of the foregoing cases, by a party other than Seller; (iv) normal wear and tear, (v) accident, disaster or event of force majeure, (vi) causes external to the Product, such as, but not limited to, power failure or electrical power surges, (vii) use of the Product in combination with equipment or software not supplied by Seller, or (viii) failure to maintain the Product in accordance with Seller's written instructions.

Notwithstanding the foregoing, (a) Products supplied by Seller that are obtained by Seller from an original manufacturer or third party supplier are not warranted by Seller, but Seller agrees to assign to Buyer any warranty rights in such Product that Seller may have from the original manufacturer or third party supplier, to the extent such assignment is allowed by such original manufacturer or third party supplier and (b) Consumables are expressly excluded from the Product Warranty. If Seller determines that Products for which Buyer has requested a warranty remedy are not covered by the warranty hereunder, Buyer shall pay or reimburse Seller for all costs of investigating and responding to such request at Seller's then prevailing time and materials rates. If Seller provides repair services or replacement parts that are not covered by this warranty, Buyer shall pay Seller therefor at Seller's then prevailing time and materials

rates. All defective Products or parts replaced pursuant to the above warranty become the property of the Seller.

10. DISCLAIMER. THE FOREGOING PRODUCT WARRANTY STATEMENT IN PARAGRAPH 9 (PRODUCT WARRANTY) EXTENDS ONLY TO BUYER AS THE ORIGINAL PURCHASER OF SELLER'S PRODUCT, AND MAY NOT BE TRANSFERRED EXCEPT AS EXPRESSLY STATED IN THESE TERMS. SELLER DISCLAIMS ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, ORAL OR WRITTEN, STATUTORY OR OTHERWISE WITH RESPECT TO PRODUCTS, INCLUDING WITHOUT LIMITATION, (A) IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE; (B) ANY WARRANTY OF NON-INFRINGEMENT; (C) ANY WARRANTY THAT THE PRODUCTS WILL NOT POSE A SAFETY OR HEALTH RISK; AND (D) ANY WARRANTY THAT THE PRODUCTS WILL ACCOMPLISH ANY PARTICULAR RESULT.

11. EXCLUSIVE REMEDY FOR BREACH OF WARRANTY. Claims for breach of the Product Warranty or Service Warranty, as the case may be, must be submitted in writing by Buyer to Seller customer service within the applicable Warranty Period and include details of such claim, or Buyer shall be deemed to have waived such claim. If a material non-conformity with a Product's specifications is validated to Seller's reasonable satisfaction, Seller will, at Seller's exclusive option, either refund Buyer the applicable Product purchase price, including any related shipping charges, repair the Product or provide replacement conforming Products at no additional charge or cost to Buyer. Where requested, Buyer will return non-conforming Products at Seller's expense in accordance with Seller's instructions. In the event of any breach of the Service Warranty, Seller shall reperform the subject service at no additional cost to Buyer. No repair or replacement will extend the original Warranty Period except as set forth in Section 9. THIS REMEDY FOR BREACH OF THE PRODUCT WARRANTY SHALL BE THE SOLE AND EXCLUSIVE REMEDY AT LAW OR EQUITY AVAILABLE TO BUYER AND THE LIMIT OF LIABILITY OF SELLER.

12. BUYER'S USE OF PRODUCTS. The purchase of Products conveys to Buyer the right for Buyer to use the purchased Products (and components thereof) in compliance with the any certificate of analysis, package insert or other Product documentation that may accompany a Product and, where relevant, a Seller Material Transfer Agreement ("MTA"), which MTA is required for purchase of Products that are live biological materials ("Live Products"). In the event the terms and conditions of an MTA conflict with any terms and conditions of the Agreement, the terms and conditions of the MTA shall govern. IN NO EVENT SHALL LIVE PRODUCTS BE PROPAGATED OR FURTHER TRANSFERRED BY BUYER WITHOUT SELLER'S PRIOR WRITTEN CONSENT. Buyer has the responsibility to verify the hazards and to conduct any further research necessary to learn the hazards involved in using Products purchased from Seller. Buyer also has the duty to warn third parties that Buyer permits to use and/or handle Products of any risks involved in such use or handling. Buyer agrees to properly test, store, use, transfer and dispose of any Products (or components thereof) purchased from Seller in (a) conformity with good laboratory practices; (b) accordance with the practices of a reasonable person who is an expert in the field; (c) strict compliance with all applicable laws, rules, regulations, industry standards and guidelines, including but not limited to applicable regulations promulgated under the Federal Food, Drug and Cosmetic Act (Title 21 C.F.R. §§1-1499), and (d) conformity with any patent, copyright, trademark, or other intellectual or proprietary rights of third parties.

13. TECHNICAL ASSISTANCE. At Buyer's request, SELLER may, at its discretion, furnish technical assistance and information with respect to SELLER's Products, provided that Buyer shall be solely responsible for determining whether Buyer's use of and application for the Products is appropriate for Buyer's purposes

and safe. TO THE EXTENT SELLER OR SELLER PERSONNEL OFFERS SUCH TECHNICAL ASSISTANCE OR INFORMATION, THE DISCLAIMERS IN PARAGRAPH 10 (DISCLAIMER) AND LIMITATIONS OF LIABILITY IN PARAGRAPH 15 (LIMITATION OF LIABILITY) SHALL APPLY. ANY SUGGESTIONS BY SELLER OR SELLER PERSONNEL REGARDING USE, SELECTION, APPLICATION, OR SUITABILITY OF THE PRODUCTS SHALL NOT BE CONSTRUED AS AN EXPRESS WARRANTY UNLESS SPECIFICALLY DESIGNATED AS SUCH IN A WRITING SIGNED BY AN AUTHORIZED REPRESENTATIVE OF SELLER.

14. INDEMNIFICATION. To the extent permitted by applicable law, Buyer agrees to defend and indemnify Seller from and against any third party claims, suits, losses, demands, liabilities, costs and expenses (including reasonable attorney fees and costs and expenses of litigation) ("Losses") arising out of, directly or indirectly, (a) Buyer's use (and any result or data generated from such use), storage, sale or transfer of Seller's Product (or component thereof); (b) any breach by Buyer of its obligations, representations and warranties made herein; or (c) the negligence or willful misconduct of Buyer, or Buyer's employees, representatives or agents, in the performance of its obligations and permitted activities under this Agreement, provided, however, Buyer shall not be required to indemnify Seller to the extent such Losses result from (i) the reckless or willful misconduct of Seller or that of its authorized distributors; or (ii) breach of Seller's obligations, representations and warranties made herein. The Buyer's indemnity obligations shall not apply to Losses arising from a claim that the Buyer's use of a Product or component thereof infringes the intellectual property rights of a third party, if and only to the extent that such claim: (x) has not arisen as a result of a modification, improvement, enhancement or alteration of a Product by Buyer or its customer, or the Product being combined with any other product, compound, process, or technology not provided by Seller; (y) has not arisen as a result of Buyer using the Product outside the scope of use as described in Paragraph 12 (Buyer's Use of Products) or contrary to the terms of the Product documentation, Seller's published specifications or package inserts or (z) has not arisen as a result of or related to Product designs or specifications provided by Buyer. Buyer shall not, without the written consent of Seller: (i) settle or compromise any action, suit or proceeding or consent to the entry of judgment which does not include as an unconditional term thereof plaintiff's written release of Seller from all liability in respect of such action, suit or proceeding; or (ii) settle or compromise any action, suit or proceeding in any manner which may materially and adversely affect Seller other than as a result of money damages or other money payments.

15. LIMITATION OF LIABILITY. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL SELLER, OR ANY OF ITS OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR REPRESENTATIVES BE LIABLE TO BUYER OR ANYONE CLAIMING THROUGH BUYER, FOR ANY SPECIAL, INCIDENTAL, INDIRECT, CONSEQUENTIAL OR PUNITIVE DAMAGES, LOST PROFITS, ECONOMIC LOSS, LOSS OF GOODWILL, OR DAMAGES DUE TO LOSS OF USE OR BUSINESS STOPPAGE, WHETHER IN CONTRACT, WARRANTY, TORT, STRICT LIABILITY OR OTHERWISE, ARISING OUT OF OR RELATED TO THIS AGREEMENT OR THE EXERCISE OF RIGHTS HEREUNDER, REGARDLESS OF ANY NOTICE OF SUCH DAMAGES. NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED HEREIN, IN NO EVENT SHALL SELLER'S AGGREGATE LIABILITY FOR DIRECT DAMAGES ARISING OUT OF OR RELATED TO THE AGREEMENT EXCEED AN AMOUNT EQUAL TO THE AMOUNT PAID BY BUYER TO SELLER FOR THE PRODUCTS SOLD TO BUYER HEREUNDER. BUYER ACKNOWLEDGES AND AGREES THAT SELLER HAS SET ITS PRICES AND ENTERED INTO THE AGREEMENT IN RELIANCE UPON DISCLAIMERS OF WARRANTY AND THE LIMITATIONS OF LIABILITY SET FORTH HEREIN, THAT THE SAME REFLECT AN ALLOCATION OF RISK BETWEEN THE PARTIES (INCLUDING THE RISK THAT A

CONTRACT REMEDY MAY FAIL OF ITS ESSENTIAL PURPOSE AND CAUSE CONSEQUENTIAL LOSS) AND THAT THE SAME FORM AN ESSENTIAL BASIS OF THE BARGAIN BETWEEN THE PARTIES.

16. EXPORT COMPLIANCE. Buyer acknowledges that Products supplied by Seller may be subject to export controls. Export controls may include, but are not limited to, those of the Export Administration Regulations of the U.S. Department of Commerce (15 CFR §§ 730-774) ("EAR"), which may restrict or require licenses for the export of Products from the United States and their re-export from other countries. Buyer shall comply with the EAR and all other applicable laws, regulations, treaties, and agreements relating to the export, re-export, and import of any Product purchased from Seller. Buyer shall not, without first obtaining the required license to do so from the appropriate U.S. government agency, export, re-export, distribute, or supply any Product or component thereof, (i) to any restricted or embargoed country or to a person or entity whose privilege to participate in exports has been denied or restricted by the U.S. government, or (ii) which is classified on the Commerce Control List ("CCL") of the EAR (15 CFR 774, Supp. 1) and requires an export license based on country of destination. As a courtesy and aid to Buyer, Seller may indicate that a Product is on the CCL or otherwise requires an export license; provided, however, that such statement or indication shall not be construed as a representation or warranty by Seller regarding the proper export control classification for such Product. Buyer shall cooperate fully with Seller in any official or unofficial audit or inspection related to applicable export or import control laws or regulations, and shall indemnify and hold Seller harmless from, or in connection with, any violation of this Paragraph 16 by Buyer or its employees, consultants, agents, or customers.

17. MISCELLANEOUS. (a) Buyer may not delegate any duties or assign or transfer any rights under these Terms or the Agreement, voluntarily or involuntarily, whether by sale, merger, consolidation or operation of law, without Seller's prior written consent. Any assignment or transfer in violation of the foregoing shall be voidable by Seller. (b) The Agreement, and all disputes and claims arising out of or related thereto, shall be governed by and construed in accordance with the laws of the State of New York without reference to its conflicts of law provisions. Buyer agrees all disputes and claims related to or arising out of this Agreement shall be venued exclusively in the State of New York. (c) The application to this Agreement of the U.N. Convention on Contracts for the International Sale of Goods is hereby expressly excluded. (d) In the event that any one or more provisions contained herein shall be held by a court of competent jurisdiction to be invalid, illegal, or unenforceable in any respect, the validity, legality, and enforceability of the remaining provisions contained herein shall remain in full force and effect, unless the revision materially changes the bargain. (e) No waiver under this Agreement is effective unless it is in writing and signed by an authorized representative of the party waiving its right. Seller's failure to enforce, or Seller's waiver of, a breach of any provision herein, will not constitute a waiver of any other breach of such provision on any future occasion. (f) Nothing contained in the Agreement shall be construed so as creating any agency, partnership, joint venture or other form of joint enterprise, employment, or fiduciary relationship between the Buyer and Seller. Neither party has or grants any express or implied right under the Agreement to assume or create any obligations on behalf of or in the name of the other, or to bind the other party to any undertaking with any third party. (g) Neither party shall be required to perform or omit to perform any act required or permitted under the Agreement if such performance or omission would violate the provisions of any applicable law, regulations, or court or administrative agency orders; neither party shall be liable to the other party for breach of the Agreement as a result of acting or omitting to act as a result of complying with the foregoing. (h) No waiver, modification, or amendment of the Agreement shall be binding unless in writing and signed by an authorized representative of Seller. (i) The

Parties represent that they have the requisite power, authority, and legal right to accept the Agreement and to perform the obligations hereunder. (j) Purchase of Products does not grant to Buyer any right or license, express or implied, to Seller's intellectual or proprietary property or technology other than the right to use purchased Product as expressly permitted in this Agreement. (k) Buyer shall not use the name, logo, or trademark of Seller or any variation thereof for any purpose without the express prior written consent of Seller; provided, however, that Buyer may reference Seller as source of purchased Products. (l) The obligations set forth in the following Sections of these Terms and Conditions shall survive the expiration or earlier termination of any contract or agreement between Seller and Buyer (including without limitation, the Agreement) and the consummation of any transaction between Seller and Buyer: Sections 4, 9, and 10 through 17.

06/01/26
Finance/LAJ

RESOLUTION NO._____

RESOLUTION TO ACCEPT A QUOTE FOR THE PURCHASE OF
A RAW SEWAGE PUMP

WHEREAS:

1. As detailed in the attached staff report, it is recommended City Council accept a quote from the sole-source provider, Kerr Pump and Supply, Inc., for the purchase of a raw sewage pump for the Wastewater Treatment Plant, in an estimated amount of $59,490.93.

NOW, THEREFORE, BE IT RESOLVED:

1. City Council accepts a quote for the purchase of a raw sewage pump.
2. City Council authorizes the City Manager to sign the contract.
3. City Council waives the provisions of Sections 2-252, 2-253, 2-254 and 2-256 of the City Code regarding publication and posting of bid notices, notification of bidders and the bid opening procedure.

Moved by Councilmember:
Seconded by Councilmember:
Motion Carried Yes
No

I hereby certify that the foregoing Resolution was adopted by the City Council for the City of Wyoming, Michigan at a regular session held on: June 1, 2026.

_____
Kelli A. VandenBerg, Wyoming City Clerk

ATTACHMENTS:
Contract/Quote

CITY OF WYOMING | PUBLIC WORKS

Wastewater Treatment Plant | 2350 Ivanrest Ave. SW, Wyoming, MI 49509
616.261.3550 | wyomingmi.gov

STAFF REPORT

Date: May 21, 2026

Subject: Purchase of a Raw Sewage Pump

From: Dan Kleinheksel, Utility Maintenance Manager

CC: Aaron Vis, Director of Public Works

Meeting Date: June 1, 2026

RECOMMENDATION:

It is recommended the City Council accept the quote from Kerr Pump and Supply, Inc. for the purchase of a Fairbanks Raw Sewage Pump for the Wastewater Treatment Plant in the amount of $59,490.93.

ALIGNMENT WITH STRATEGIC PLAN:

- PILLAR 3 – STEWARDSHIP
  - GOAL 3 – Improve City infrastructure and service reliability

DISCUSSION:

Wastewater from the collection system arrives at the Wastewater Treatment Plant (WWTP) at its lowest elevation in the Raw Sewage Pumphouse. From there, raw sewage pumps lift the wastewater into the primary clarifiers, after which it flows through the remainder of the treatment process by gravity. As such, raw sewage pumps are critical to the wastewater treatment process.

Recently, one of the five raw sewage pumps was disassembled by maintenance staff due to poor performance. Upon inspection, staff discovered significantly worn components and were unable to repair the pump. The raw sewage pump, installed in 2008, and has reached the end of its useful life. To maintain consistency with the remaining pumps and avoid costly modifications to existing infrastructure, it is both practical and cost-effective to replace the aged pump with the same model from Fairbanks.

Because Kerr Pump and Supply is the sole-source provider of Fairbanks pumps and parts, they were contacted to provide a quote for a direct replacement. Kerr Pump and Supply submitted a quote of $59,490.93, which includes a certified performance test. Upon delivery, WWTP maintenance staff will complete the installation of the replacement pump.

BUDGET IMPACT:

Adequate funds exist in Sewer Fund Capital Account #590-590-54400-986.444.

CITY OF WYOMING

CITY PURCHASING CONTRACT

CITY OF WYOMING, MICHIGAN
(MORE THAN $7,500)

This Contract is made as of the Effective Date between the City and the Supplier.

City means the City of Wyoming, a Michigan municipal corporation of 1155 28th St SW, Wyoming, MI 49509.

Effective Date means: June 2, 2026.

Items means the parts, equipment, or other items the City is purchasing as stated in the Proposal.

Proposal means Supplier's Bid/Proposal attached as Exhibit B.

Standard Terms means "City Contract Standard Terms and Conditions" is Exhibit A, including the Risk Allocation and Insurance Provisions.

Supplier means: Kerr Pump and Supply, Inc.
[Name of supplying entity]
A Michigan corporation
[State and type of entity, *e.g.*, corporation, limited liability company, etc.]
12880 Cloverdale
[Supplier's street address]
Oak Park, MI 48237
[Supplier's city, state & zip]

TERMS AND CONDITIONS

In exchange for the consideration in and referred by this Contract, the parties agree:

1. Supplier will supply the Items as detailed in the Proposal.

2. City will pay the Supplier in accordance with the Proposal.

3. Supplier represents and warrants, except for those listed in this paragraph as inapplicable or that are modified by this paragraph, Supplier is complying with and will comply with the Standard Terms. Inapplicable conditions are as follows:

None.

4. This is the only agreement between the parties regarding the Purchase that is the subject of the Proposal and there are no other agreements, representations, or warranties except as are stated in the Proposal. This contract can be amended only in writing signed by both City and Supplier.

City and Supplier have signed this Contract as of the Effective Date.

City of Wyoming

By: _____
John Shay, City Manager

Approved as to form:

_____
Gregory T. Stremers, City Attorney

Kerr Pump and Supply, Inc.

By: Gregory M. Pfeiffer
[Signature officer, director, or principal of Supplier]
Gregory M. Pfeiffer - Executive Vice President/CFO
[Typed/Printed Name & Title of Person Signing for Supplier]

Date signed: May 26, 2026

EXHIBIT A
CITY CONTRACT STANDARD TERMS AND CONDITIONS

These Terms and Conditions apply to this contract. Supplier attests it complies with and promises it will comply with these Terms and Conditions.

1. Legal Compliance. Supplier and all Supplier's personnel must comply with all applicable (i) laws, rules, regulations, codes, and ordinances, (ii) license and permit requirements, and (iii) orders of any governmental agency, official or court of competent jurisdiction. This includes, for example, complying with federal OSHA and Michigan MIOSHA safe practices, and with applicable federal and state labor laws, rules, and regulations.

2. Qualifications. Supplier represents and promises that:

A. Supplier and Supplier's personnel must have and maintain all licenses, registrations, certifications, memberships, or other approvals needed to perform the Work and supply materials required by the contract.

B. Supplier and its principals, owners, officers, shareholders, key employees, directors, members and partners: (i) are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by a federal department or agency; (ii) have not within the last 3-years been convicted of or have a judgment against them for fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a contract or transaction with a governmental entity; (iii) have not within the last 3 years violated federal or state antitrust statutes or committed embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property; (iv) are not presently indicted for or otherwise criminally charged by a governmental entity with commission of any of the offenses enumerated in this certification; and (v) have not within the last 3-years had one or more contracts or transactions with a governmental entity terminated for cause or default.

C. If the contract is for a HUD CDBG or another federal or state funded project, neither Supplier nor any of its subcontractors on the HUD list of debarred and suspended participants (https://www.hud.gov/program_offices/general_counsel/limited_denial_participation_hud_funding_disqualifications). If grant funds are withdrawn or cancelled for any reason this Contract is nullified. Unless waived by City's purchasing director, Supplier and all subcontractors will register on the Federal SAM Registry available at: https://usfcr.com. Supplier and all subcontractors are not on and will remain off the Federal System for Award Management list of persons and entities ineligible for federal contracts.

D. Supplier is not an "Iran linked business" under Michigan's Iran economic sanctions act, 2012 PA 517.

3. Nondiscrimination and Respect. City is committed to fairness, impartiality, courtesy, respect, and nondiscrimination in all City programs, benefits, and actions, including City contracts and activities that contractors or others engage in for or on behalf of City, Accordingly:

A. Supplier in (i) employment actions, (ii) soliciting, bidding or contracting with subcontractors, or (iii) soliciting, bidding or contracting for materials will not discriminate based on race, color, religion, national origin, age, sex, gender, gender identity or expression, height, weight, marital status, familial status, mental or physical disability, genetic information, or other reason prohibited by law that is unrelated to the ability to perform the duties of a job or position.

B. Noncompliance with this provision is a material breach of this Contract that can result in (i) withholding payments to Supplier, (ii) Contract cancellation, termination, or suspension, in whole or in part, and (iii) Supplier's ineligibility for future City contracts.

C. Supplier must retain and, upon request, provide City access to and copies of all information and reports required by this provision that a state or federal agency determine are pertinent to ascertain compliance. If information required of Supplier is in the sole possession of another who fails or refuses to furnish it, Supplier must so certify to City.

4. Ethical Standards. To the best of Supplier's knowledge after reasonable inquiry:

A. Supplier and Supplier's personnel, as well as any parent, affiliate, or subsidiary organization of Supplier has not engaged in and shall refrain from: (i) attempting to or appearing to influence any City elected or appointed officer or employee by a direct or indirect offer of anything of value, or (ii) paying or agreeing to pay a person, other than its personnel, any consideration contingent upon the award of the contract.

B. No owner, director, officer, member, partner, or key employee of Supplier or of any parent, affiliate, or subsidiary organization or subcontractor of Supplier is a spouse, parent, child, grandchild, or sibling of the mayor, city council member, or another City elected or appointed officer except as already disclosed in writing to City when submitting its proposal.

C. Supplier will immediately notify City of any subsequently discovered violation of the standards in this section.

5. Media Releases. Media or other releases (including promotional literature and commercial advertisements) pertaining to the contract or the project to which it relates shall not be made without the City Manager's prior written approval and only in accordance with the written terms provided in that approval.

6. Payment to Supplier.

A. Supplier and all subcontractors, suppliers and consultants shall, before beginning the Work, submit by email to City's Finance Department at Acct_Info@wyomingmi.gov a completed IRS W-9 form (available at www.IRS.gov).

B. Payments to Supplier will be made in accordance with the Proposal. If no other terms are provided, payment of an invoice to City will generally be made within 30 days after and invoice all required information is submitted to City.

C. Payment disputes will be resolved as provided in §13. City will pay undisputed amounts and the disputed amount will be held in a non-interest-bearing account until the dispute is resolved.

7. Intellectual Property. Supplier guarantees the sale or use of articles, software, copies, records, or other intellectual property provided under or used to perform the contract will not infringe any copyright, patent, trademark, or other intellectual property rights. Supplier will, without expense to City, defend every action brought against City or City's officers or employees for any alleged infringement of intellectual property rights by reason of their sale or use as part of the contract and will pay all costs, damages, and profits recoverable in any action.

8. Information, Quality, and Related Requirements.

A. Unless otherwise stated in the Proposal, all items shall be new, the best of their respective kind, and free from defects.

B. Supplier shall provide City all manufacturer parts lists, assembly, and maintenance information, and all other documents provided by the manufacturer for the items, and ensure all related warranties are held by or assigned to City.

C. Supplier's failure to meet specified delivery schedules or promptly replace rejected materials renders Supplier liable for all costs in excess of the bid price(s) when alternate procurement is necessary. Excess costs will include administrative costs. Prices shall be delivered F.O.B. destination freight prepaid to any location specified in the specifications and included in the Proposal pricing unless otherwise specified in the RFP or expressly stated in the Proposal.

9. Taxes. City is generally exempt from federal and state taxes, including state sales and use taxes. A copy of City's certificate of tax exemption can be requested by contacting City's Finance Department. Invoices must be separated to show the amount

added for taxes of any kind if applicable. Taxes, wherever indicated and applicable to any purchase, will not be subject to trade or cash discounts.

10. Records. Because City is a public entity that receives funds from other governmental agencies: (i) City is required to retain, be able to obtain, and/or audit records related to City contracts and (ii) Michigan's Freedom of Information Act generally requires that City disclose to those requesting them copies of all requested documents relating to this contract. Supplier shall retain copies of all records related to this contract for at least 7 years after completion of the contract. Supplier shall, within 5 City business days of a City request, allow inspection, auditing and copying of all retained records.

11. Assignment/Beneficiaries. None of Supplier's rights or duties may be assigned or delegated without City's prior written consent. This contract will be binding on Supplier's successors and permitted assigns. No other persons are intended to be beneficiaries of this contract.

12. Independent Contractor. Supplier and Supplier's personnel are wholly independent of City. None of them shall be or be represented as City officers or employees. Supplier is solely responsible Supplier's personnel's acts, omissions, and statements. Supplier is solely responsible for any compensation and benefits to be provided Supplier's personnel for Work under the contract. Except for payment of the contract price, City has no responsibility to supervise, compensate or insure Supplier or Supplier's personnel.

13. Disputes/Remedies. The following applies to all disputes under this contract:

A. In case of Supplier's default, City may procure the items from other sources and hold Supplier responsible for excess costs occasioned by the default. Such action will only be (i) when time is off the essence due to impending weather conditions, upcoming seasonal changes, permit durational limits, scheduled events, conflicts with other projects, or other circumstances City reasonably determines makes time of the essence and (ii) after written notice to Supplier with an opportunity to appeal the decision to the City Manager.

B. Before filing a lawsuit, a party must first notify the other party in writing stating the provision involved, stating the actions or failure to act that did not comply with the provision, and proposing the action to be taken to address the alleged non-compliance. The party receiving that notice shall, within 14 days, respond in writing detailing any reasons why it disagrees that it has failed to comply with the contract or stating what actions it has taken or is taking to address the noncompliance and prevent recurrence. Both parties shall meet within 14 days after the date of the response in an effort to resolve any continuing dispute.

C. A party need not undertake the procedure provided in subsection 13.B if it has previously done so with respect to any noncompliance with the same contract provision.

D. Jurisdiction and venue for any dispute shall be solely in state courts in Kent County, Michigan.

E. In addition to any other remedies to which a party may be entitled, the prevailing party shall be entitled to recover all actual reasonable costs, including for example and without limitation, filing fees, expert consultation and witness fees and expenses, attorneys' fees, discovery expenses, copying costs, exhibit preparation costs, and any other actual reasonable costs incurred to investigate, bring, maintain or defend any action from its first discovery or first notice of it through all collection and appellate proceedings.

14. Risk Allocation. Supplier is solely responsible for (i) the means and methods of providing the items under the contract, (ii) the conduct of its officers, employees, subcontractors, and consultants, and (iii) for any injuries or property damage suffered by Supplier or Supplier's officers, employees, and agents.

A. Supplier shall hold City and City's officers and employees harmless from, indemnify them for, and defend them against any claims made by persons other than the City as a result of actions, errors, or omission of Supplier or Supplier's officers, employees, and agents while providing the items under this Contract.

15. Insurance.

A. Supplier shall maintain the following insurance:

REQUIRED LIMITS	ADDITIONAL REQUIREMENTS
COMMERCIAL GENERAL LIABILITY	
Minimal Limits: $2,000,000 Each Occurrence Limit $2,000,000 Personal & Advertising Injury Limit $2,000,000 General Aggregate Limit $2,000,000 Products/Completed Operations	Coverage shall include the following extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent Suppliers Coverage; and (D) Broad Form General Liability Extensions or equivalent, if not already included. Coverage afforded shall be primary and any other insurance that may be in effect shall be secondary and/or excess.
AUTOMOBILE LIABILITY INSURANCE	
Minimal Limits (include hired and non-owned automobile coverage): $2,000,000 per person $2,000,000 per occurrence	Coverage afforded shall be primary and any other insurance that may be in effect shall be secondary and/or excess.
WORKERS' COMPENSATION/ EMPLOYERS' LIABILITY	
Minimal Limits: $500,000 per occurrence	Coverage shall be in accordance with all applicable Michigan statutes. Waver of subrogation, except where waiver is prohibited by law.
ENVIRONMENTAL/POLLUTION LIABILITY	
Coverage is required if any of the items being purchased are hazardous or toxic substances or materials or contain hazardous or toxic substances or materials. Amount required $2,000,000.	Coverage shall include, but not be limited to, loading/unloading, transportation, storage, and removal of all hazardous waste/material. If this policy is claims made form, then the Supplier keep the policy in force, or purchase "tail" coverage, for a minimum of 3 years after the termination of this contract. Coverage afforded shall be primary and any other insurance that may be in effect shall be secondary and/or excess.

16. General Terms.

A. These terms and conditions may not be amended or modified except in writing signed by Supplier and City. These terms and conditions shall not be affected by any course of dealing. The captions are for reference and will not affect the interpretation of these terms and conditions.

B. This contract is made in Kent County, Michigan and shall be governed by and interpreted in accordance with Michigan law.

C. Reference by office to a City officer includes that City officer's designee(s).

Exhibit B

Proposal

PENTAIR FLOW TECHNOLOGIES
Fairbanks Nijhuis
+1.913.371.5000 main
+1.913.371.4025 fax

3601 Fairbanks Avenue
P.O. Box 6999
Kansas City, KS 66106
United States
www.fairbanksnijhuis.com

February 24, 2022

To Whom It May Concern:

RE: Kerr Pump and Supply Inc - Pentair representation in Michigan

This letter is to confirm that Kerr Pump and Supply Inc, located at 12880 Cloverdale St, Oak Park, MI 48237, is the distributor of record for Pentair's Fairbanks Nijhuis, Aurora, and Hydromatic products and aftermarket components for the municipal market for the entire state of Michigan.

Please send all Pentair municipal orders and inquiries directly to them at the address shown.
If you have any questions, then please contact Kerr directly, or contact me by email at ed.guffee@pentair.com.

Regards,

Ed Guffee
National Sales Manager
Pentair Engineered Water & Wastewater

KERR PUMP AND SUPPLY

EXHIBIT B

Quote Date	PO Number	Quoted By	Quote Number
5/11/2026	FOR QUOTE	Jeff Urquhart Inside Sales Engineer	QTE248396

Bill To:

WYOMING, CITY OF
accountspayable@wyomingmi.gov
1155 28TH STREET S.W.
WYOMING, MI 49509-0905

Ship To:

WYOMING, CITY OF
2660 BURLINGAME
WYOMING, MI 49508

PO Number	Ship Method	Salesperson	Exp Ship	Pay Terms	Customer No.
FOR QUOTE	UPS - PREPAID & ADD	31		PROGRESS PAYMENTS	WYOMI002

Item	Description	Quantity	B/O	U of M	Unit Price	Extended Price
CONFIGURE PUMP	REPLACEMENT FOR FAIRBANKS SN1302602 16 B5711 16" X 16x CCW Impeller L16A1CT Impeller Material 0220 F Impeller Design: L16A1AM Dynamic Balance Standard Special Instructions Construction Wear Rings Impeller 300-350 BHN SST Fronthead 410-484 BHN SST Impeller Fastener 316 Stainless Steel Shaft Sleeve 410-484 BHN SST Shaft Seal Packed Capacity (GPM) 7300 TDH (ft) 39 PUMP ONLY 100 HP TEFC 447VP FRAME 4-1/2 SHAFT EXTENSION WITH 2-1/8" SHAFT DIAMETER SEPARATE	1	0	EA	$49,957.00	$49,957.00
FREIGHT	FREIGHT	1	0	EA	$2,500.00	$2,500.00
TESTING	CERTIFIED PERFORMANCE TEST	1	0	EA	$7,033.93	$7,033.93

KERR PUMP AND SUPPLY

EXHIBIT B

PO Number	Ship Method	Salesperson	Exp Ship	Pay Terms	Customer No.
FOR QUOTE	UPS - PREPAID & ADD	31		PROGRESS PAYMENTS	WYOMI002

Item	Description	Quantity	B/O	U of M	Unit Price	Extended Price
	DUE TO CURRENT ECONOMIC UNCERTAINTY, QUOTED PRICES ARE EFFECTIVE AT THE TIME OF QUOTATION ONLY. KERR PUMP & SUPPLY MAY, AT ANY TIME PRIOR TO SHIPMENT AND WITH DUE NOTICE TO THE BUYER, ADJUST PRICING TO ACCOMMODATE PRICE INCREASES RELATED TO TARIFFS. KERR PUMP & SUPPLY IS NOT OBLIGATED TO DELIVER THE GOODS AND/OR SERVICES UNTIL AN AGREEMENT ON THE NEW PRICE HAS BEEN REACHED					
	ESTIMATED SHIPMENT: 32-38 WEEKS ARO EXW: FACTORY					

PRICES DO NOT INCLUDE TAXES WHICH MAY APPLY AT TIME OF SHIPMENT. ALL PRICING IS QUOTED NET, EXWORKS, FREIGHT COLLECT OR PREPAY AND ADD.
ALL ORDERS ARE SUBJECT TO CREDIT APPROVAL. STANDARD PAYMENT TERMS ARE 100% N30 BASED UPON CREDIT LIMIT. PAYMENT TERMS ON ANY ORDER $50,000 AND GREATER SHALL BE 40% UPON RECEIPT OF ORDER, 40% PRIOR TO SHIPMENT AND 20% NET 30. PLEASE NOTE THAT A TRANSACTION FEE OF UP TO 4% WILL BE ADDED TO ALL CREDIT CARD PURCHASES.

Subtotal	$59,490.93
Trade Disc	$0.00
Freight	$0.00
Misc	$0.00
Tax	$0.00
Total	$59,490.93

All quotations and contracts are subject to Kerr Pump and Supply, Inc. Terms and Conditions of Sale dated 1/1/2018, a copy of which can be found on our website kerrpump.com. Placing an order is acceptance of these terms. Shipment time is an approximation based on current inventory and factory production schedules. Quotation is valid for 10 days from Quote date.

EXHIBIT B

WARRANTY: Seller warrants equipment (and its component parts) of its own manufacture against defects in materials and workmanship under normal use and service for one (1) year from the date of installation or start-up, or for eighteen (18) months after the date of shipment, whichever occurs first. Seller does not warrant accessories or components that are not manufactured by Seller; however, to the extent possible, Seller will assign to Buyer its rights under the original manufacturer's warranty, without recourse to Seller. Buyer must give Seller notice in writing of any alleged defect covered by this warranty (together with all identifying details, including the serial number, the type of equipment, and the date of purchase) within thirty (30) days of the discovery of such defect during the warranty period. No claim made more than 30 days after the expiration of the warranty period shall be valid. Guarantees of performance and warranties are based on the use of original equipment manufactured (OEM) replacement parts. Seller assumes no responsibility or liability if alterations, non-authorized design modifications and/or non-OEM replacement parts are incorporated If requested by Seller, any equipment (or its component parts) must be promptly returned to Seller prior to any attempted repair, or sent to an authorized service station designated by Seller, and Buyer shall prepay all shipping expenses. Seller shall not be liable for any loss or damage to goods in transit, nor will any warranty claim be valid unless the returned goods are received intact and undamaged as a result of shipment. Repaired or replaced material returned to customer will be shipped EXW (Domestic Shipments) or FCA (International Shipments)., Seller's factory. Seller will not give Buyer credit for parts or equipment returned to Seller, and will not accept delivery of any such parts or equipment, unless Buyer has obtained Seller's approval in writing.

The warranty extends to repaired or replaced parts of Seller's manufacture for ninety (90) days or for the remainder of the original warranty period applicable to the equipment or parts being repaired or replaced, whichever is greater. This warranty applies to the repaired or replaced part and is not extended to the product or any other component of the product being repaired.

Repair parts of its own manufacture sold after the original warranty period are warranted for a period of one (1) year from shipment against defects in materials and workmanship under normal use and service. This warranty applies to the replacement part only and is not extended to the product or any other component of the product being repaired. Seller may substitute new equipment or improve part(s) of any equipment judged defective without further liability. All repairs or services performed by Seller, which are not covered by this warranty, will be charged in accordance with Seller's standard prices then in effect.

EXHIBIT B

THIS WARRANTY IS THE SOLE WARRANTY OF SELLER AND SELLER HEREBY EXPRESSLY DISCLAIMS AND BUYER WAIVES ALL OTHER WARRANTIES EXPRESSED, IMPLIED IN LAW OR IMPLIED IN FACT, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Seller's sole obligation under this warranty shall be, at its option, to repair or replace any equipment (or its component parts) which has a defect covered by this warranty, or to refund the purchase price of such equipment or part. Under the terms of this warranty, Seller shall not be liable for (a) consequential, incidental, collateral, special or liquidated losses or damages; (b) equipment conditions caused by normal wear and tear, abnormal conditions of use, accident, neglect, or misuse of said equipment; (c) the expense of, and loss or damage caused by, repairs or alterations made by anyone other than the Seller; (d) damage caused by abrasive materials, chemicals, scale deposits, corrosion, lightning, improper voltage, mishandling, or other similar conditions; (e) any loss, damage, or expense relating to or resulting from installation, removal or reinstallation of equipment; (f) any labor costs or charges incurred in repairing or replacing defective equipment or parts, including the cost of reinstalling parts that are repaired or replaced by Seller; (g) any expense of shipment of equipment or repaired or replacement parts; or (h) any other loss, damage or expense of any nature.

The above warranty shall not apply to any equipment which may be separately covered by any alternate or special warranties.

06/01/26
Finance/LAJ

RESOLUTION NO. _____

RESOLUTION FOR SNOWPLOW UNDERBODY SCRAPER REPLACEMENT

WHEREAS:

1. As detailed in the attached staff report, it is recommended City Council authorize the purchase of snowplow underbody scraper replacement from Truck and Trailer Specialties Inc., in the total amount not to exceed $25,000, using MiDEAL cooperative contract pricing.

NOW, THEREFORE, BE IT RESOLVED:

1. City Council authorizes the purchase of snowplow underbody scraper replacement from Truck and Trailer Specialties Inc.
2. City Council waives the provisions of 2-252, 2-253, 2-254 and 2-256 of the City Code regarding publication and posting of bid notices, notification of bidders and the bid opening procedure.

Moved by Councilmember:
Seconded by Councilmember:
Motion Carried Yes
No

I hereby certify that the foregoing Resolution was adopted by the City Council for the City of Wyoming, Michigan at a regular session held on: June 1, 2026.

_____
Kelli A. VandenBerg, Wyoming City Clerk

Attachment:
Staff Report

CITY OF WYOMING | PUBLIC WORKS

2660 Burlingame Ave. SW, Wyoming, MI 49509
616.530.7260 | Fax 616.249.3478 | wyomingmi.gov

STAFF REPORT

Date: May 19, 2026

Subject: Snowplow Underbody Scraper Replacement

From: Jay VanDyke, Assistant Director of Public Works - Maintenance

CC: Aaron Vis, Director of Public Works

Meeting Date: June 1, 2026

RECOMMENDATION:

It is recommended that the City Council approve the use of the MiDEAL cooperative purchasing contract 200000000034 with Truck and Trailer Specialties Inc. for a snowplow underbody scraper replacement for a not to exceed amount of $25,000.

ALIGNMENT WITH STRATEGIC PLAN:

- Pillar 3 – Stewardship
  - Goal 2 – Enhance the efficiency and effectiveness of city operations and services.

DISCUSSION:

Dump truck 529-001 experienced significant damage to its underbody scraper this past winter that is beyond repair. City fleet mechanics were able to weld parts and pieces together to get through the winter; however, the underbody scraper is welded in a fixed position and can only move up and down, not side to side. This creates inefficiencies and safety concerns.

MiDEAL cooperative purchasing agreement #200000000034 is available for the City to utilize with Truck and Trailer Specialties Inc. The total cost for removal of the damaged underbody scraper, purchase of the new scraper, and installation is estimated to be approximately $25,000.

BUDGET IMPACT:

Sufficient funds are available in the appropriate accounts.

06/01/26
Finance/LAJ

RESOLUTION NO._____

RESOLUTION TO PERFORM
PAVEMENT PRESERVATION TREATMENTS

WHEREAS:

1. City Council approved Resolution #28433 on June 2, 2025, authorizing Strawser Construction Inc. to perform pavement preservation treatments using the Kent County Road Commission cooperative bid pricing for the 2025 and 2026 construction seasons.
2. The estimated cost for the pavement preservation treatments was $300,000 for each construction season.
3. As outlined in the attached staff report, the number of residential streets scheduled for the 2026 construction season has increased, resulting in a revised estimated cost of $500,000.

NOW, THEREFORE, BE IT RESOLVED:

1. City Council authorizes Strawser Construction Inc. to perform pavement preservation treatments for the 2026 construction season.

Moved by Councilmember:
Seconded by Councilmember:
Motion Carried Yes
No

I hereby certify that the foregoing Resolution was adopted by the City Council for the City of Wyoming, Michigan at a regular session held on: June 1, 2026.

_____
Kelli A. VandenBerg, Wyoming City Clerk

ATTACHMENTS:
Staff Report

CITY OF WYOMING | PUBLIC WORKS

2660 Burlingame Ave. SW, Wyoming, MI 49509
616.530.7260 | wyomingmi.gov

STAFF REPORT

Date: May 14, 2025

Subject: Pavement Preservation Treatment – Cape Seal

From: Jeff Oonk – City Engineer

CC: Aaron Vis, Director of Public Works

Meeting Date: June 1, 2026

RECOMMENDATION:

It is recommended the City Council authorize spending up to $500,000 for Pavement Preservation Treatments utilizing the Kent County Road Commission cooperative bid at the unit prices shown on the attached contract through September 30, 2026.

ALIGNMENT WITH STRATEGIC PLAN:

- Pillar 3 – Stewardship
  - Goal 2 – Enhance the efficiency and effectiveness of City operations and services.
  - Goal 3 – Improve City infrastructure and service reliability.

DISCUSSION:

On June 2, 2025 City Council approved a 2-year contract with Strawser Construction, Inc. for pavement preservation services (Cape Seal) utilizing the Kent County Road Commission cooperative bid unit pricing. At that time, staff had estimated and received approval for spending approximately $300,000 each year in 2025 and 2026 on Cape Seal. In 2025 approximately $220,000 was spent. The construction process went very smoothly and provided a good result. Due to these favorable results, staff propose to apply Cape Seal to larger number of residential streets in 2026. Completing this group of streets will cost approximately $500,000 using the previously approved unit prices.

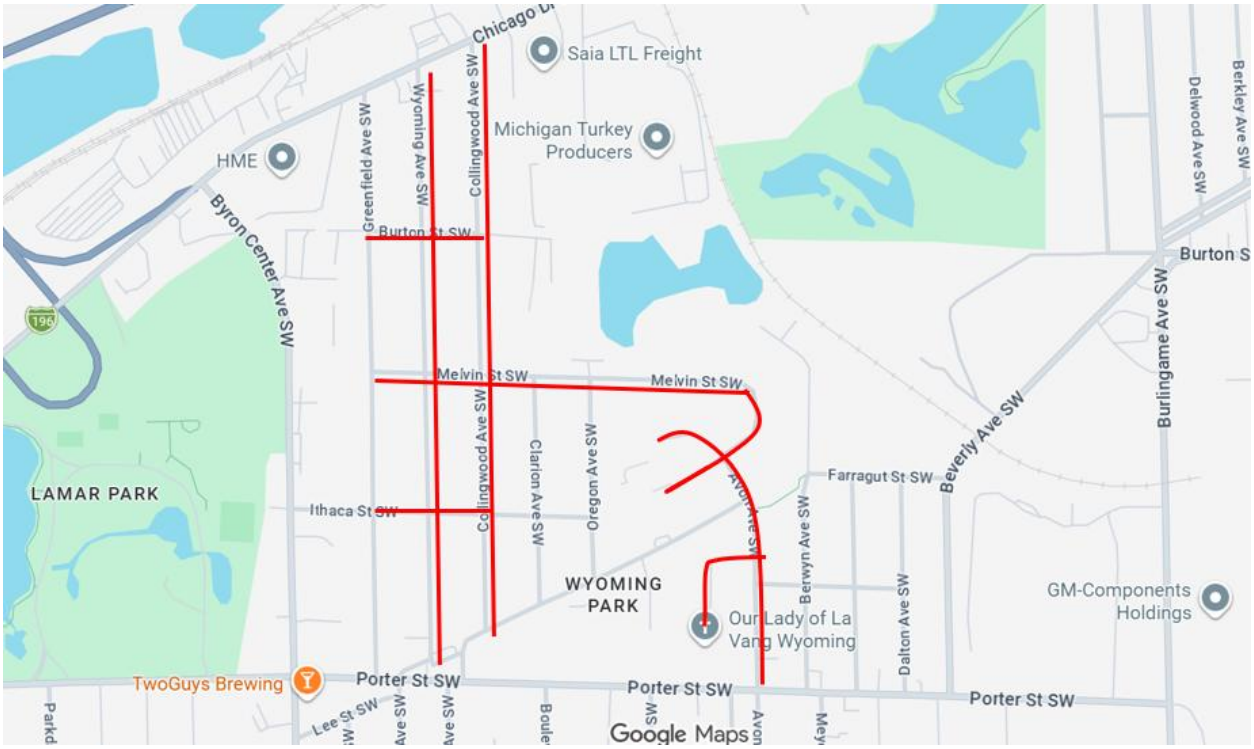
BUDGET IMPACT:

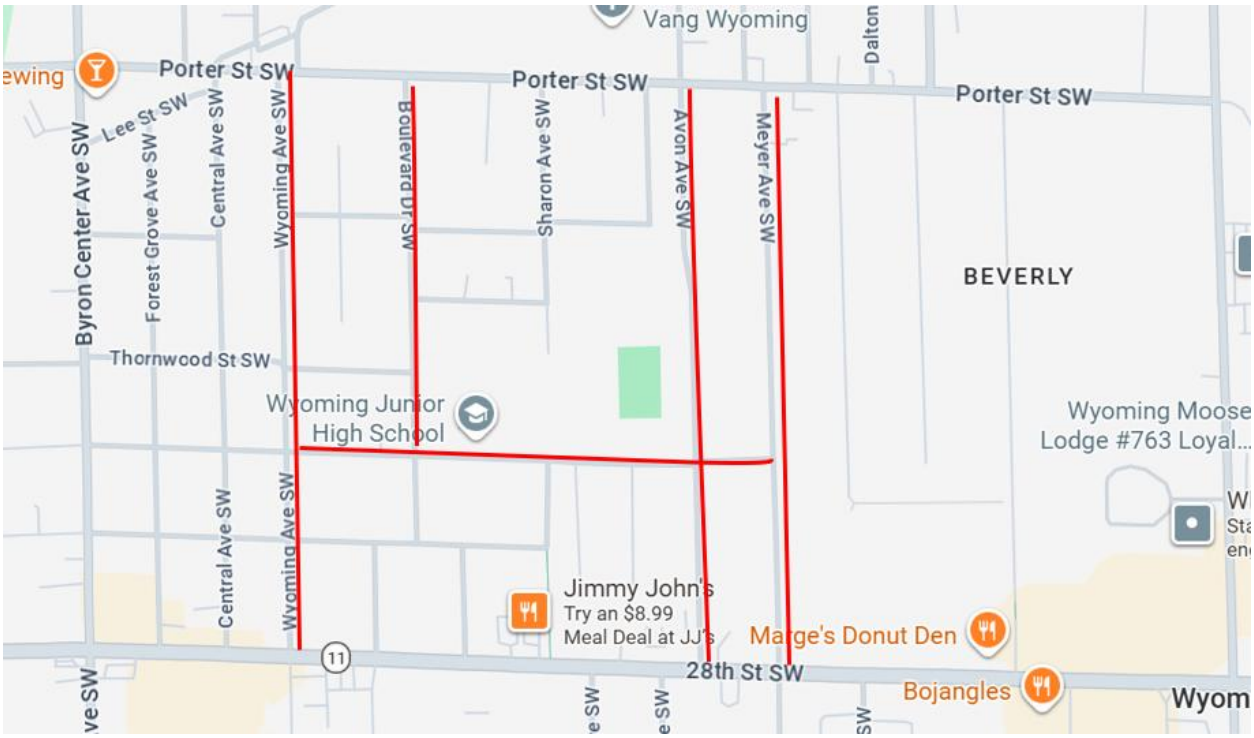
Sufficient funds are available in the Major Streets Fund Account No. 202-441-46300-972.510 and Local Streets Fund Account No. 203-441-46300-972.510.

Attachment(s):
Contract


Before
After

Proposed Streets:





06/01/26
Finance/LAJ

RESOLUTION NO._____

RESOLUTION TO ACCEPT A PROPOSAL FOR CONSTRUCTION OF A DOOR AND RELATED FRAMING FOR THE PAYROLL SUPERVISOR OFFICE

WHEREAS:

1. As detailed in the attached staff report, construction of a door and related framing is required for the payroll supervisor office.
2. It is recommended City Council accept a proposal from Vander Kodde Construction in the total estimated amount of $10,305.00.

NOW, THEREFORE, BE IT RESOLVED:

1. City Council accepts a proposal for construction of a door and related framing for the payroll supervisor office.
2. City Council authorizes the City Manager to sign the contract.
3. City Council waives the provisions of 2-252, 2-253, 2-254 and 2-256 of the City Code regarding publication and posting of bid notices, notification of bidders and the bid opening procedure.

Moved by Councilmember:
Seconded by Councilmember:
Motion Carried Yes
No

I certify that the foregoing Resolution was adopted by the City Council for the City of Wyoming, Michigan at a regular session held on: June 1, 2026.

_____
Kelli A. VandenBerg, Wyoming City Clerk

ATTACHMENTS:
Staff Report
Contract/Proposal

CITY OF WYOMING | FINANCE

1155 28th Street SW, Wyoming, MI 49509
616.530.7225 | wyomingmi.gov

STAFF REPORT

Date: May 26, 2026

Subject: Payroll Supervisor Office Door

From: Jodi Yenchar, Finance Director

Meeting Date: June 1, 2026

RECOMMENDATION:

It is recommended City Council approve the proposal from Vander Kodde Construction in the amount of $10,305.00 for construction of a door and related framing in the Finance Department to create an office for the payroll supervisor.

ALIGNMENT WITH STRATEGIC PLAN:

- PILLAR 3 – STEWARDSHIP
  - GOAL 2 – Enhance the efficiency and effectiveness of city operations and services.

DISCUSSION:

The payroll supervisor's current workspace is an open cubicle in the Finance Department. Given the sensitive nature of the work the payroll team completes, a dedicated space with the option to close a door for private conversations with employees, retirees and their beneficiaries provides increased privacy and improved customer service.

Quotes were requested in March to add a door to the existing scanning room to create an enclosed office for the payroll supervisor. The payroll supervisor's current workspace will be utilized for the Accounting Specialist II position included in the fiscal year 2026-2027 budget approved on May 18, 2026.

The quotes received are as follows:

Vander Kodde Construction	$ 9,940.00
Wieland	$ 9,969.00
BCI Construction	$11,600.00

Vander Kodde Construction submitted the low quote. However, the original quote was only guaranteed for 30 days and expired, a second quote was requested. It is recommended that the second quote from Vander Kodde Construction in the total amount of $10,305.00

be accepted. Accepting the quote from Vander Kodde Construction ensures materials match the existing offices in City Hall that were recently updated by Vander Kodde Construction.

BUDGET IMPACT:

Funds are available in account number 101-191-19100-980.074.

Attachment:
Contract/Proposal

CITY OF WYOMING

CITY STANDARD CONTRACT
CITY OF WYOMING, MICHIGAN
(MORE THAN $8,500)
(NO RFP)

This Contract is made as of the Effective Date between City and Contractor.

City means the City of Wyoming, a Michigan municipal corporation, of 1155 28th St SW, Wyoming, MI 49509.

Contractor means: Vander Kodde Construction
[Name of contracting entity]
A MI Corporation
[State and type of entity, e.g., corporation, limited liability company, etc.]
441 44th St SW
[Contractor's street address]
Grand Rapids, MI 49548
[Contractor's city, state & zip]

Contractor's personnel means Contractor's directors, members, partners, officers, employees, subcontractors, agents and representatives and any other individuals or entities Contractor engages to provide services under the Contract.

Effective Date means: 6/2, 2026 Normally this is the day after the Council meeting at which it is approved.

Goods means any parts, equipment, supplies, materials, or other items or services the City is acquiring from Contractor as itemized or stated in the Proposal.

Proposal means Contractor's Bid/Proposal attached as Exhibit B.

Standard Terms means "City Contract Standard Terms and Conditions" attached as Exhibit A.

Work means the services described and specified the Proposal.

TERMS AND CONDITIONS

In exchange for the consideration in and referred by this Contract, the parties agree:

1. Contractor will perform the Work and supply the Goods as detailed in the Proposal.
2. City will pay the Contractor in accordance with the Proposal.
3. Contractor represents and warrants, except for those specifically waived or modified in this paragraph, Contractor is complying with and will comply with the Standard Terms. Waived or modified conditions are as follows:

None.
[Identify those the City Attorney has agreed may be waived or the City attorney approved modifications or write "None."]

4. If this Contract is for a public improvement project costing $50,000 or more, performance and payment bonds in an amount equal to the Contract amount are required and must be provided before beginning any Work.
5. This is the only agreement between the parties regarding City engagement of Contractor to perform the Work and supply the goods. There are no other agreements, representations, or warranties except as stated in the Proposal. This contract can be amended only in writing signed by both City and Contractor.

City and Contractor have signed this Contract as of the Effective Date.

City of Wyoming

By: _____
John Shay, City Manager

Date signed: _____, 20__

Approved as to form: _____
Gregory T. Stremers, City Attorney

Contractor:

By: _____
[Signature officer, director, or principal of Contractor]
Kyle Vander Kodde, President
[Typed/Printed Name & Title of Person Signing for Contractor]

Date signed: May 7, 2026

EXHIBIT A
CITY CONTRACT STANDARD TERMS AND CONDITIONS

These Terms and Conditions apply to this contract. Contractor attests it complies with and promises it will comply with these Terms and Conditions.

1. Legal Compliance. Contractor and all Contractor's personnel must comply with all applicable (i) laws, rules, regulations, codes, and ordinances, (ii) license and permit requirements, and (iii) orders of any governmental agency, official or court of competent jurisdiction. This includes, for example, complying with federal OSHA and Michigan MIOSHA safe practices, and with applicable federal and state labor laws, rules, and regulations.

2. Permits and Inspections. Unless the Proposal states otherwise, Contractor shall, without expense to City, obtain all licenses and permits required to lawfully perform the Work under the contract and furnish copies of those licenses and permits to City before commencing Work. Contractor shall also ensure all inspections required by local, state, and federal agencies and codes are performed.

3. Grant Compliance. If state or federal grant funds are a source of payment for the project, Contractor promises to comply with grant agreement terms and conditions that apply to the contract. If grant funds are withdrawn or cancelled for any reason this Contract is nullified.

A. If funds for the Work come from the United States Department of Housing and Urban Development (**HUD**), the following apply:

1. Under HUD Fair Labor Standards Act Provisions, the most recent wage determination for Kent County, Michigan will apply to all wages Contractor pays for any Work on the project. For 2025 (it may be updated), that is General Decision Number MI20260088 dated 01/2/2026, https://sam.gov/wage-determination/MI20260088/0.

2. Contractor will be required to prepare and maintain adequate financial records in a form satisfactory to City that reflect all costs and expenses incurred in performing this Contract and records of the use of all amounts paid pursuant to this Contract. Contractor's financial records and reports must conform to the regulations found at 2 CFR Part 200 entitled "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, Final Guidance," https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200.

3. If project costs are $200,000 or more, HUD Section 3 provisions may require training and employment of low- and very low-income persons. See 24 CFR 75.3(a)(iii) (https://www.hud.gov/sites/dfiles/FPM/documents/Section-3-FAQs.pdf).

B. If they are applicable, Contractor shall comply with Davis-Bacon Act, other prevailing wage, Buy American, and any other requirements in grants or other funds used to pay Contractor or for other parts of the project. This includes, for example, employment, recordkeeping, purchasing, sourcing, and other compliance.

4. Qualifications. Contractor represents and promises that:

A. Contractor and Contractor's personnel will have and maintain all licenses, registrations, certifications, memberships, or other approvals needed to perform the Work and supply materials required by the contract.

B. Contractor, any subcontractor, and their respective principals, owners, officers, shareholders, key employees, directors, members and partners: (i) are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by a federal department or agency; (ii) have not within the last 3-years been convicted of or have a judgment against them for fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a contract or transaction with a governmental entity; (iii) have not within the last 3 years violated federal or state antitrust statutes or committed embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property; (iv) are not presently indicted for or otherwise criminally charged by a governmental entity with commission of any of the offenses enumerated in this certification; and (v) have not within the last 3-years had one or more contracts or transactions with a governmental entity terminated for cause or default.

C. If the contract is for a HUD CDBG or another federal or state funded project, neither Contractor nor any of its subcontractors on the HUD list of debarred and suspended participants (https://www.hud.gov/program_offices/general_counsel/limited_denial_participation_hud_funding_disqualifications). Unless waived by City's purchasing director, Contractor and all subcontractors will register on the Federal SAM Registry available at: https://usfcr.com. Contractor and all subcontractors are not on and will remain off the Federal System for Award Management list of persons and entities ineligible for federal contracts.

D. Neither Contractor nor any subcontractor is an "Iran linked business" under Michigan's Iran economic sanctions act, 2012 PA 517.

5. Nondiscrimination and Respect. City is committed to fairness, impartiality, courtesy, respect, and nondiscrimination in all City programs, benefits, and actions, including City contracts and activities that contractors or others engage in for or on behalf of City, Accordingly:

A. Contractor in (i) employment actions, (ii) soliciting, bidding or contracting with subcontractors, or (iii) soliciting, bidding or contracting for materials will not discriminate based on race, color, religion, national origin, age, sex, gender, gender identity or expression, height, weight, marital status, familial status, mental or physical disability, genetic information, or other reason prohibited by law that is unrelated to the ability to perform the duties of a job or position.

B. Contractor will comply with applicable state and federal laws, rules, regulations, and other requirements regarding discrimination.

C. If Contractor will engage with others on City's behalf, Contractor must (i) ensure all persons are treated with fairness, impartiality, courtesy and respect, and in a manner that does not discriminate based on race, color, religion, national origin, age, sex, gender, gender identity or expression, height, weight, marital status, familial status, mental or physical disability, genetic information, or any other reason prohibited by law, and (ii) if any engaged individuals speak English less than very well, Contractor must use language assistance services in communications.

D. Contractor certifies it does not operate any programs promoting DEI that violate any applicable federal anti-discrimination laws.

E. Contractor must include these requirements in subcontracts and supply contracts and reasonably enforce compliance with them.

F. Noncompliance with this provision is a material breach of this Contract that can result in (i) withholding payments to Contractor, (ii) Contract cancellation, termination, or suspension, in whole or in part, and (iii) Contractor's ineligibility for future City contracts.

G. Contractor must retain and, upon request, provide City access to and copies of all information and reports required by this provision that a state or federal agency determine are pertinent to ascertain compliance. If information required of Contractor is in the sole possession of another who fails or refuses to furnish it, Contractor must so certify to City.

6. Ethical Standards. To the best of Contractor's knowledge after reasonable inquiry:

A. Contractor and Contractor's personnel, as well as any parent, affiliate, or subsidiary organization of Contractor has not engaged in and shall refrain from: (i) holding or acquiring an interest that would conflict with this contract; (ii) attempting to or appearing to

influence any City elected or appointed officer or employee by a direct or indirect offer of anything of value; or (iii) paying or agreeing to pay a person, other than its personnel, any consideration contingent upon the award of the contract.

B. No owner, director, officer, member, partner, or key employee of Contractor or of any parent, affiliate, or subsidiary organization or subcontractor of Contractor is a spouse, parent, child, grandchild, or sibling of the mayor, city council member, or another City elected or appointed officer except as already disclosed in writing to City when submitting its proposal.

C. Contractor will immediately notify City of any subsequently discovered violation of the standards in this section.

7. Media Releases. Media or other releases (including promotional literature and commercial advertisements) pertaining to the contract or the project to which it relates shall not be made without the City Manager's prior written approval and only in accordance with the written terms provided in that approval.

8. Payment to Contractor.

A. Contractor and all subcontractors, suppliers and consultants shall, before beginning the Work, submit by email to City's Finance Department at Acct_Info@wyomingmi.gov a completed IRS W-9 form (available at www.IRS.gov).

B. Payments to Contractor will be made in accordance with the Proposal. If no other terms are provided, payment of an invoice to City will generally be made within 30 days after all required information is submitted provided the design professional (if one is identified in the specifications or contract) and authorized City representative agree the Work has been performed, materials or equipment delivered, and other actions taken as provided in the contract and in accordance with any plans and specifications.

C. Payment disputes will be resolved as provided in §16. City will pay undisputed amounts and the disputed amount will be held in a non-interest-bearing account until the dispute is resolved.

9. Intellectual Property. Contractor guarantees the sale or use of articles, software, copies, records, or other intellectual property provided under or used to perform the contract will not infringe any copyright, patent, trademark, or other intellectual property rights. Contractor will, without expense to City, defend every action brought against City or City's officers or employees for any alleged infringement of intellectual property rights by reason of their sale or use as part of the contract and will pay all costs, damages, and profits recoverable in any action.

10. Materials and Equipment Information, Quality, Disposal, and Related Requirements. If the Proposal includes the use, installation, or acquisition of materials, equipment, supplies or other items:

A. Unless otherwise stated in the Proposal, all materials, equipment, supplies, and items shall be new, the best of their respective kind, and free from defects.

B. Specifications provided by City are the minimum acceptable. When specific manufacturer and model numbers are used, they establish a desired design, type of construction, quality, functional capability, and/or performance level. If the Proposal included alternates, City will be the sole judge of equivalency.

C. Contractor shall provide City all manufacturer parts lists, assembly, and maintenance information, and all other documents provided by the manufacturer for such items, and ensure all related warranties are held by or assigned to City.

D. If quantities are listed in the RFP, they are based on estimated needs. City reserves the right to increase or decrease quantities to meet actual needs.

E. Contractor's failure to meet specified delivery schedules a or promptly replace rejected materials renders Contractor liable for all costs in excess of the bid price(s) when alternate procurement is necessary. Excess costs will include administrative costs. Prices shall be delivered F.O.B. destination freight prepaid to any location specified in the specifications and included in the Proposal pricing unless otherwise specified in the RFP or expressly stated in the Proposal.

F. Unless the Proposal expressly states otherwise, Contractor will remove and dispose of all materials, equipment, or other items demolished, removed, or replaced during the Work and cleanup and remove all debris resulting from the Work. Disposal will comply with laws, rules, and regulations applicable to such disposal. Contractor will keep and, upon request, provide City copies of required manifests or other disposal documentation.

11. Restoration. Unless the Proposal states otherwise, Contractor will restore, without expense to City, any property damaged during or as a result of any Work to a condition similar and equal to that existing before such damage. If Contractor fails to make such restoration, City may, after 48-hours' notice to Contractor, make such restoration, and deduct the cost City incurs to do so from amounts due Contractor.

12. Access to Work. City personnel and representatives must always have access to all the Work and be furnished such information and assistance by Contractor as reasonably needed or desired to inspect the Work.

A. Taxes. City is generally exempt from federal and state taxes, including state sales and use taxes. A copy of City's certificate of tax exemption can be requested by contacting City's Finance Department. Invoices must be separated to show the amount added for taxes of any kind if applicable. Taxes, wherever indicated and applicable to any purchase, will not be subject to trade or cash discounts. On construction projects state sales taxes are applicable on materials only.

13. Records. Because City is a public entity that receives funds from other governmental agencies: (i) City is required to retain, be able to obtain, and/or audit records related to City contracts and (ii) Michigan's Freedom of Information Act generally requires that City disclose to those requesting them copies of all requested documents relating to the bid/proposal and any resulting contract. Contractor shall retain copies of all records related to the contract, including, without limitation, the items supplied or used in performance of the contract, and all work under the contract for at least 7 years after completion of the contract. Contractor shall, within 5 City business days of a City request, allow inspection, auditing and copying of all retained records.

14. Assignment/Beneficiaries. None of Contractor's rights or duties may be assigned or delegated without City's prior written consent. This contract will be binding on Contractor's successors and permitted assigns. No other persons are intended to be beneficiaries of this contract.

15. Independent Contractor. Contractor and Contractor's personnel are wholly independent of City. None of them shall be or be represented as City officers or employees. Contractor is solely responsible Contractor's personnel's acts, omissions, and statements. Contractor is solely responsible for any compensation and benefits to be provided Contractor's personnel for Work under the contract. Except for payment of the contract price, City has no responsibility to supervise, compensate or insure Contractor or Contractor's personnel.

16. Disputes/Remedies. Unless the RFP states otherwise provide the following applies to any dispute under this Contract:

A. In case of Contractor's default, City may procure the articles or services from other sources and hold Contractor responsible for any excess costs occasioned by the default. Such action will only be (i) when time is off the essence due to impending weather conditions, upcoming seasonal changes, permit durational limits, scheduled events, conflicts with other projects, or other circumstances City reasonably determines makes time of the essence and (ii) after written notice to Contractor with an opportunity to appeal the decision to the City Manager or the City Manager's designee.

B. Before filing a lawsuit, a party must first notify the party in writing stating the provision involved, stating the actions or failure to act that did not comply with the provision, and proposing the action to be taken to address the alleged non-compliance. The party receiving that notice shall, within 14 days, respond in writing

detailing any reasons why it disagrees that it has failed to comply with the contract or stating what actions it has taken or is taking to address the noncompliance and prevent recurrence. Both parties shall meet within 14 days after the date of the response in an effort to resolve any continuing dispute.

C. A party need not undertake the procedure provided in subsection 16.B if it has previously done so with respect to any noncompliance with the same contract provision.

D. Jurisdiction and venue for any dispute shall be solely in state courts in Kent County, Michigan.

E. In addition to any other remedies to which a party may be entitled, the prevailing party shall be entitled to recover all actual reasonable costs, including for example and without limitation, filing fees, expert consultation and witness fees and expenses, attorneys' fees, discovery expenses, copying costs, exhibit preparation costs, and any other actual reasonable costs incurred to investigate, bring, maintain or defend any action from its first discovery or first notice of it through all collection and appellate proceedings.

F. To resolve discrepancies within this Contract, precedence shall be given in the following order: (i) the contract form and these Terms, (ii) the RFP including specifications, instructions to bidders, and general bid information without conditions or changes, (iii) the Proposal, (iv) the RFP drawings, and (v) City Standard Specifications for Construction\Prequalification at https://www.wyomingmi.gov/About-Wyoming/City-Departments/Public-Works/Engineering/Construction-Specifications. Figure dimensions on drawings take precedence over scale dimensions. Detailed drawings take precedence over general drawings.

17. Risk Allocation.

A. Contractor is solely responsible for (i) the means and methods of the work and services provided under the contract, (ii) the conduct of its officers, employees, subcontractors, and consultants, and (iii) for any injuries or property damage occurring as a result of its Work under and performance of the contract.

B. Contractor shall hold City and City's officers and employees harmless from, indemnify them for, and defend them against any claims made by persons other than the City as a result of Contractor's Work under or performance of this Contract. Contractor shall reimburse the City for or pay in the City's stead costs the City incurs as a result of claims, demands, judgments, administrative actions, or any order to pay any amounts made or entered against the City or City officers or employees as a result of Contractor's Work under or performance of this Contract.

18. Insurance.

A. Contractor shall provide the following insurance:

REQUIRED LIMITS	ADDITIONAL REQUIREMENTS
COMMERCIAL GENERAL LIABILITY	
Minimal Limits: $2,000,000 Each Occurrence Limit $2,000,000 Personal & Advertising Injury Limit $2,000,000 General Aggregate Limit $2,000,000 Products/Completed Operations	Coverage shall include these extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent Contractors Coverage; (D) Broad Form General Liability Extensions or equivalent, if not already included; (E) deletion of all Explosion, Collapse, and Underground (EXU) Exclusions, if applicable. Coverage shall be primary and any other insurance shall be secondary and/or excess.
AUTOMOBILE LIABILITY INSURANCE	
Minimal Limits (include hired and non-owned automobile coverage): $2,000,000 per person $2,000,000 per occurrence	Coverage of shall be primary and any other insurance shall be secondary and/or excess.
WORKERS' COMPENSATION/ EMPLOYERS' LIABILITY	
Minimal Limits: $500,000 per occurrence	Coverage shall be in accordance with all applicable Michigan statutes. Waver of subrogation, except where waiver is prohibited by law.
EXCESS/UMBRELLA INSURANCE	
Required liability limits may be obtained by using an Excess/Umbrella Liability policy in addition to the primary liability policy(ies).	If coverage limits are satisfied by an Excess and/or Umbrella policy, coverage must follow form of the primary liability policy(ies). Coverage shall be primary and any other insurance shall be secondary and/or excess.
OWNERS CONTRACTORS PROTECTIVE	
Coverage is required if the amount stated below is more than $0. Amount required $_____.	The City of Wyoming shall be "Named Insured" on said coverage. A 30 day, 10 day for non-payment of premium, Notice of Cancellation shall be endorsed onto this policy. In lieu of this requirement, a per project aggregate on the Commercial General Liability policy may be acceptable for jobs requiring a $1,000,000 liability limit.
ENVIRONMENTAL/POLLUTION LIABILITY	
Coverage is required if the amount stated below is more than $0. Amount required $_____.	Coverage shall include, but not be limited to, loading/unloading, transportation, storage, and removal of all hazardous waste/material. If this policy is claims made form, then the contractor shall be required to keep the policy in force, or purchase "tail" coverage, for a minimum of 3 years after the termination of this contract. Coverage shall be primary and any other insurance shall be secondary and/or excess.
BUILDERS RISK PROPERTY INSURANCE	
Coverage is required if checked "yes." Yes_____ No_____ Amount required: Full Contract Amount.	Contractor shall procure and maintain during the term of construction a policy of Builders Risk Property Insurance in the full amount of the project. Policy shall be on an All-Risk form and cover all property under a Replacement Cost basis. Policy shall also name the City of Wyoming as Loss Payee.

B. Commercial General Liability, Automobile Liability, Excess/Umbrella Insurance, Environmental Pollution Insurance shall include an endorsement stating the following shall be Insureds or Additional Insureds and certificate holders: (i) City of Wyoming, (ii) all City of Wyoming elected and appointed officers, employees, volunteers, board members, and commission members, (iii) authorities created by the City of Wyoming, (iv) board members, officers, and employees of authorities created by the City of Wyoming, and (v) authorized agents of the foregoing.

19. General Terms.

A. These terms and conditions may not be amended or modified except in writing signed by Contractor and City. These terms and conditions shall not be affected by any course of dealing. The captions are for reference and will not affect the interpretation of these terms and conditions.

B. This contract is made in Kent County, Michigan and shall be governed by and interpreted in accordance with Michigan law.

C. Reference by office to a City officer includes that City officer's designee(s).

EXHIBIT B

May 7, 2026

City of Wyoming
1155 28th St SW
Wyoming, MI 49509

Attn: **Jennifer Brusink**

RE: **SCAN ROOM GLASS WALL PROPOSAL**

Thank you for the opportunity to quote this project, please see below for scope and pricing.

Scope

- Tubelite 1 ¾" x 4 ½" storefront framing in clear anodized finish with mullion placement to match existing frames
- ¼" clear tempered glass
- ¼" frosted tempered glass bottom pane
- Caulking
- 3' x 7'-10" plain sliced red oak, prefinished solid core wood door
- ¼" clear tempered glass
- L9050 06N office lock
- Wall stop
- Final clean

Total Project Cost: $10,305.00

Allowances

- Patching drywall, paint touch up, base trim, and flooring: **$600 (not included in the number above, if this work is needed it will be billed T/M plus 10%)**

Qualifications

- Price is good for **45 days**
- Final lock cylinder and keying by owner
- No HVAC work included

Exclusions

- Unforeseen conditions
- Permit fees
- Bond Fees
- Any work unless specifically called out above

Submitted by,

Kyle Vander Kodde | VANDER KODDE CONSTRUCTION
616-901-0560 | kyle@vanderkoddeconstruction.com

06/01/26
Finance/LAJ

RESOLUTION NO._____

RESOLUTION TO ACCEPT A BID FOR THE
CITY HALL CANOPY PROJECT AND ACCEPT PROPOSALS FOR A
CANOPY STRUCTURE AND TELLER CARRIER SYSTEM

WHEREAS:

1. As detailed in the attached staff report, it is recommended City Council accept the bid from Vander Kodde Construction Co. for select interior wall renovations, exterior site work, and canopy installation for the City Hall canopy project in the total estimated amount of $118,175.00.
2. It is further recommended, City Council accept a proposal from Penchura LLC., in the total estimated amount of $43,222.00 for the purchase of a canopy structure.
3. It is further recommended, City Council accept a proposal from Bavis Fabacraft Inc. in the total estimated amount of $44,572.50 for the purchase of a teller carrier system.
4. It is recommended, City Council approve a 10% contingency for renovations, exterior site work, and canopy installation.
5. It is further recommended, City Council approve a 10% contingency for the purchase of the canopy structure.
6. It is further recommended, City Council approve a 10% contingency for the purchase of the teller carrier system.

NOW, THEREFORE, BE IT RESOLVED:

1. City Council awards the bid for the renovations, exterior site work and canopy installation for the City Hall canopy project to Vander Kodde Construction Co.
2. City Council accepts a proposal from Penchura LLC for the purchase of a canopy structure.
3. City Council accepts a proposal from Bavis Fabacraft Inc. for the purchase of a teller system.
4. City Council does hereby waive the provisions of Sections 2-252, 2-253, 2-254, and 2-256 of the City Code regarding publication and posting of bid notices, notification of bidders and the bid opening procedure for the canopy structure and teller system.
5. City Council approves the contingencies.
6. City Council authorizes the City Manager to sign the contracts.

Moved by Councilmember:
Seconded by Councilmember:
Motion Carried Yes
No

I certify that the foregoing Resolution was adopted by the City Council for the City of Wyoming, Michigan at a regular session held on: June 1, 2026.

_____
Kelli A. VandenBerg, Wyoming City Clerk

ATTACHMENTS:
Staff Report
Tabulation Sheet
Photos
Contracts/Proposals

Resolution No._____

CITY OF WYOMING

Public Works | 2660 Burlingame Ave. SW, Wyoming, MI 49509
616.530.7260 | Fax 616.249.3487 | wyomingmi.gov

Staff Report

Date: May 19, 2026

Subject: City Hall Canopy Project

From: Troy Rinks, Facilities Foreman

CC: Aaron Vis, Director of Public Works

Meeting Date: June 1, 2026

RECOMMENDATION:

It is recommended that the City Council award multiple vendors for work as listed below for the City Hall Canopy Project:

- Accept the lowest proposal to perform select interior wall renovations, exterior site work and canopy installation from Vander Kodde Construction Co. in the amount of $118,175.00 plus approximately 10% in contingency, for a not to exceed amount of $130,000.00.
- Authorize the exterior gullwing canopy structure purchase from Penchura, LLC., in the amount of $43,222.00 plus approximately 10% in contingency, for a not to exceed amount of $48,000.00.
- Authorize the Teller Carrier System purchase, including installation, from Bavis Fabacraft INC., in the amount of $44,572.50, plus approximately 10% in contingency, for a not to exceed amount of $50,000.00.

The overall total project cost, including contingencies, is expected to be less than $228,000.

ALIGNMENT WITH STRATEGIC PLAN:

- Pillar 3 - Stewardship
  - Goal 2 – Enhance the efficiency and effectiveness of city operations and services
    - Objective 5 – Update facilities usage and design plan

DISCUSSION:

The Treasurer's Department handles a high volume of in-person transactions, utility payments, and tax collections. To accommodate residents preferring contactless or

efficient options, the drive-through drop-off lane has become a heavily utilized piece of public infrastructure at City Hall.

Last July, Council members toured the Treasurer's area to better understand the limitations of the existing drive-through and to review proposed improvements. During that visit, staff presented a smaller canopy design, a new mechanical payment carrier system, a replacement payment drawer, and improved drive-up access. Following the meeting, Facilities staff worked with Treasury staff, Engineering staff, and TAG (the City's architect) to finalize the design and specifications.

Bid specifications for the renovations, site work and canopy installation were made publicly available on the City's e-bidder website. Fifty-six registered bidders downloaded the bid, and seven bids were received on April 21, 2026. Results are included on the attached bid tabulation.

Facilities and TAG staff have reviewed the bid documents received. VanderKodde Construction Co. was found to meet the necessary bid specifications and was also the lowest bid. Therefore, it is recommended that City Council award the City Hall Canopy Project bid to VanderKodde Construction Co. in an amount of $118,175.00, plus an approximate 10% contingency for a not to exceed amount of $130,000.

To reduce costs, staff bid out only the construction portion of the project and worked directly with the canopy manufacturer and mechanical carrier system provider to purchase those components separately. A new payment drawer was installed last fall due to increased maintenance issues with the old unit. The new drawer is produced by the same manufacturer as the proposed mechanical carrier system, ensuring seamless integration once the system is installed.

The canopy structure will be purchased directly from Penchura, LLC, for an amount of $43,222.00, and the carrier system will be purchased directly from Bavis Fabacraft INC. for an amount of $44,572.50. Staff are also requesting approximate 10% contingencies for both items.

The overall project costs for these items, including contingencies, is expected to be less than $228,000. Construction will occur later this summer and will be timed to minimize disruptions to the Treasurer's office operations.

BUDGET IMPACT:

Adequate funds exist in the Capital Projects Revolving Fund, Account #800-000-57300-975.000.

ATTACHMENTS:
Bid Tabulation
Photos
Contracts

Bid Tabulation

CITY OF WYOMING

Tabulation of Bids

City Hall Canopy Project Bid - 2337

Opened by the City Clerk on April 21, 2026 at 11:00 AM

Bidder Name	Bid Amount
VanderKodde Construction	$ 118,175.00
JWK Construction, Inc	$ 127,400.00
CarbonSix Construction, Inc	$ 135,300.00
McGraw Construction, Inc	$ 135,980.00
Weiland Construction	$ 144,750.00
Quest Design Build	$ 148,250.00
Orion Construction	$ 174,064.00

Before:



After:



CITY OF WYOMING

PROJECT CONTRACT
CITY OF WYOMING, MICHIGAN

This Contract is made as of the Effective Date between City and Contractor.

City means the City of Wyoming, a Michigan municipal corporation, of 1155 28th St SW, Wyoming, MI 49509.

Contractor means: VANDER KODDE CONSTRUCTION
[Name of contracting entity]

A MI CORPORATION
[State and type of entity, e.g., corporation, limited liability company, etc.]

441 44TH ST SW
[Contractor's street address]

GRAND RAPIDS, MICH. 49548
[Contractor's city, state & zip]

Contractor's personnel means Contractor's directors, members, partners, officers, employees, subcontractors, agents and representatives and any other individuals or entities Contractor engages to provide services under the Contract.

Effective Date means: 5/19/26, 202_.

Goods means any parts, equipment, supplies, materials, or other items or services the City is acquiring from Contractor as itemized or stated in the RFP as modified by the Proposal.

Proposal means Contractor's Bid/Proposal attached as Exhibit B.

RFP means the Request for Bids/Proposals attached as Exhibit A.

Standard Terms means "City Contract Standard Terms and Conditions" portion of the RFP, including the Risk Allocation and Insurance Provisions.

Work means the services described and specified the RFP as modified by the Proposal.

TERMS AND CONDITIONS

In exchange for the consideration in and referred by this Contract, the parties agree:

1. Contractor will perform the Work and supply the Goods as detailed in the RFP as modified by the Proposal.
2. City will pay the Contractor in accordance with the RFP as modified by the Proposal.
3. Contractor represents and warrants, except for those specifically waived or modified in this paragraph, Contractor is complying with and will comply with the Standard Terms. Waived or modified conditions are as follows:

None.
[Identify those the City Attorney has agreed may be waived or the City attorney approved modifications or write "None."

4. If this Contract is for a public improvement project costing $50,000 or more, performance and payment bonds in an amount equal to the Contract amount are required and must be provided before beginning any Work.
5. This is the only agreement between the parties regarding City engagement of Contractor to perform the Work and supply the goods. There are no other agreements, representations, or warranties except as stated in the RFP as modified by the Proposal. This contract can be amended only in writing signed by both City and Contractor.

City and Contractor have signed this Contract as of the Effective Date.

City of Wyoming

By: _____
John Shay, City Manager

Date signed: _____, 20__

Approved as to form:

_____
Gregory T. Stremers, City Attorney

Contractor: Vander Kodde Construction

By: _____
[Signature officer, director, or principal of Contractor]

Tim Vander Kodde V-P
[Typed/Printed Name & Title of Person Signing for Contractor]

Date signed: 4-20, 2026

CITY OF WYOMING | FINANCE

1155 28th Street SW, Wyoming, MI 49509
616.530.7225 | Fax 616.249.3486 | wyomingmi.gov

ADDENDUM - BID/PROPOSAL FOR CITY HALL CANOPY PROJECT

BID DUE: 11:00 AM; Tuesday, April 21, 2026

ADDENDUM #2

Subject: Trax Carrier System Clarification

- The City will purchase the Trax Carrier System, and the contractor will be responsible for coordinating with Bavis Fabacraft for installation.

Subject: Clarification of Signage and Electrical Scope – Sheet A2 Regarding the note on Sheet A2 stating, "provide illuminated open sign," the scope of work is modified as follows:

- Procurement: The illuminated open sign shall be Owner-Furnished (OFOI). The Contractor is not responsible for the purchase or delivery of this unit.
- Electrical Requirement: The Contractor shall furnish and install a dedicated electrical outlet/receptacle at the sign location to facilitate the connection of the sign, notwithstanding any notes suggesting a direct hard-wired connection.

The Addendum shall be part of and be incorporated into this bid/proposal.

Bidders/Proposers must complete this addendum and attach to your bid/proposal. If your bid/proposal has already been submitted, return the addendum to the Clerk's Office in a sealed envelope with the name of the bid/proposal and your company name written on the outside of the envelope.

_____

COMPANY NAME

_____

BUSINESS PHONE CELL PHONE EMAIL ADDRESS (REQUIRED)

_____

NAME (PLEASE PRINT) SIGNATURE (REQUIRED) DATE

CITY OF WYOMING | FINANCE

1155 28th Street SW, Wyoming, MI 49509
616.530.7225 | Fax 616.249.3486 | wyomingmi.gov

ADDENDUM - BID/PROPOSAL FOR CITY HALL CANOPY PROJECT

BID DUE: 11:00 AM; Tuesday, April 21, 2026

ADDENDUM #1

Please see separate sheet below.

The Addendum shall be part of and be incorporated into this bid/proposal.

Bidders/Proposers must complete this addendum and attach to your bid/proposal. If your bid/proposal has already been submitted, return the addendum to the Clerk's Office in a sealed envelope with the name of the bid/proposal and your company name written on the outside of the envelope.

_____

COMPANY NAME

_____

BUSINESS PHONE CELL PHONE EMAIL ADDRESS (REQUIRED)

_____

NAME (PLEASE PRINT) SIGNATURE (REQUIRED) DATE

1. Page 1: This project does not have any new doors or door hardware.
2. Page 2: Existing carpet and base shall remain. No flooring scope of work is required.
3. Page 3: No new door hardware is required for this project.
4. Page 4: Curb with integral bollards to remain. Brick removals/exterior demo on City Hall to be limited to as necessary for track system installation.
5. Page 5: Standard pavement cross section for City is 12 inches of Class II (Sand) then 6 inches of 21AA Modified (natural stone) then the HMA paving.
6. The stone landscape area shall start at the edge of the new concrete paving and extend to the west outside corner of the building - sloping down to the west.
   3" deep stone bed with 1"-2" dia. stone over commercial grade landscape fabric over 6" of compacted sand base. Place 4" perforated PVC pipe on stone bed and cover with 3"-4" dia. stone.
   Connect 4" perforated PVC pipe to new 16"x16"x16" polyethylene yard drain with perforated bottom set in grass at 4 ft. from corner of building.
   The intent is to have the canopy downspout drain toward french drain.

7. Page 7: Approximate saw cut limits at outer edges of curb lines are shown on plan sheet A1. New curb line will be approximately 5 feet from building. Additional saw cuts adjacent to the bollards and guardrail may be necessary to leave that section of curb in place.
8. Existing Voting and Payment Box shall be salvaged. The City may temporarily relocate them or provide alternative options for residents. The light fixture shall be removed (not salvaged). A new light fixture shall be provided on the canopy.
9. Bid bond not required,
10. Performance bond IS required.
11. Davis-Bacon Wages do not apply.

Request for Bids/Proposals

The City of Wyoming, Michigan (**City**) is requesting bids/proposals for the items, services, or project generally referred to as:

City Hall Canopy Project

as more particularly described and detailed in the plans and specifications attached to this Request for Bids/Proposals (the "Work").

DUE DATE AND TIME

The City Clerk will receive bids/proposals for the Work submitted by the date and time stated below in accordance with this Request for Bids/Proposals:

Due date and time:	**Tuesday, April 21, 2026, 11:00 a.m., local time**
Place:	**Wyoming City Clerk's Office** **Wyoming City Hall** **1155 28th Street SW** **Wyoming, MI 49509-0905**

If using United States Post Office for delivery, add PO Box 905 to the mailing address above.

All bids/proposals must include the fully signed Bid/Proposal Form and all other required information submitted in a sealed envelope and plainly labeled: "Bid/Proposal for City Hall Canopy Project."

Proponents are solely responsible for ensuring delivery by the required date and time. Any bid/proposal, even if in route by U.S. Mail or by courier service or if held by the U.S. Postal Service or a courier for pick-up by City staff, that is received in the Clerk's Office after the required date and time, will not be opened and will be returned to the bidder/proponent. **Bids/proposals will not be accepted by e-mail or other electronic delivery.**

Pre-Bid Meeting

A multiple pre-bid meetings are available, attendance is not required.

Date and time: Friday, March 27, 2026, 11:00 a.m., local time and Wednesday, April 1, 2026, 11:00 a.m., local time

Place: Wyoming City Hall North Parking Lot
Wyoming City Hall
1155 28th Street SW
Wyoming, MI 49509

Questions, Interpretations, and Agenda

Questions about or requests for interpretation of this request for bids/proposals, any of the plans and specifications, or any bid/proposal requirements may be directed via e-mail to Troy.Rinks@wyomingmi.gov. No questions or interpretations will be issued later than 4 days before the due date for bids. Questions will not be answered by phone or in other oral communication. City will endeavor, but is not required to, email a copy of any addenda, answers to questions or interpretations that may be of general interest to potential bidders/proponents who have provided a valid email address and requested notification of this specific bid/proposal via City's e-Bidder system. Addenda will also be available on City's website and at City's Purchasing Department, 1155 28th Street SW, Wyoming, MI 49509.

It is the bidder's/proponent's responsibility to make inquiry as to changes or addenda issued. All changes and addenda will become part of the specifications, and all bidders/proponents will be bound by issued changes and addenda.

Bid/Proposal Requirements

All bids/proposals shall remain valid for at least 90 days after submission.

If the bid is for equipment, parts, components, supplies, or services to be provided on an as-needed, or when-ordered basis, bid pricing must remain in effect for the entire contract term.

If it is an annual contract, pricing must be good for 1 year after the date the contract is approved and signed by The City. If the contract term is longer than 1 year, the pricing must be good for the entire contract term. If annual or more frequent price adjustments are proposed, they must be included in the bid/proposal.

Any bidder may withdraw its bid at any time prior to the scheduled time for the bid opening. A written request to withdraw shall be delivered to City's Purchasing Department prior to award.

All proponents are responsible for the following in preparing and submitting a bid/proposal:

1. Reviewing and being familiar with this request for bid/proposal and all plans and specifications, including any issued addenda and any interpretations, and attending any pre-bid meeting. Addenda to and interpretations of this request for bids/proposals will be posted on City's website when issued. No addenda or interpretations will be issued later than 4 days before the due date for bids/proposals.
2. Reviewing the plans and specifications to determine if Davis-Bacon Act or other prevailing wage requirements, low- and moderate-income worker, women and minority owned business, Buy America, or other requirements apply.
3. Reviewing standard terms and conditions and, if provided, the contract that will be signed.
4. If applicable, being familiar with the Work site and Work site conditions.
5. In submitting a bid/proposal, the proponent accepts full responsibility for its conclusions relative to the nature and probable difficulties of performing the work specified, and no additional payments will be made by City due to unanticipated difficulties encountered in performing the actual work.
6. Specifications and plans referred to in this bid/proposal document are for reference only and need not be returned with the bid/proposal. They will, however, be part of the contract documents.

All Bid Proposals Must:

1. Be typed or clearly printed in ink.
2. Be free of erasures or corrections except those initialed by the bidder/proponent.
3. Include the bid/proposal form and all other required forms fully completed and signed, including any detailed pricing information.
4. Be received by the date and time specified on page one of this bid/proposal document.
5. Be in a sealed envelope labeled as required on page one of this bid/proposal document.
6. Include a cover letter that lists all enclosures.
7. Include the original signature(s) of one or more individuals authorized to bind the proponent.
   A. All bids must include the business name as it appears on the records of the Michigan Department of Licensing and Regulatory Affairs Corporation Online Filing System. If the business is using an assumed name, the proper business name must also be provided.
   B. Businesses must also provide the state in which they were organized, *e.g.*, Michigan, Delaware, etc. and the type of entity, *e.g.*, corporation, partnership, limited liability company, limited partnership, or other business form.
   C. Both the bid/proposal and contract must be signed by an individual with the authority to bind the bidder/proponent. If there is a question about signing authority, City may seek verification of that authority.
8. Include any bid bond or other security required by the specifications.
   A. The bid bond (if required) must be signed by the bidder/surety with the signature of an individual(s) authorized to bind the bidder and surety.
   B. Attorneys-in-fact signing bid bonds must file with each bond a certified effective dated copy of their powers-of-attorney.
9. Include prices meeting the following requirements:
   A. Prices must be stated in units of quantity specified in the plans, specifications, and request for bid/proposal. In case of any discrepancy in amounts in the bid/proposal, the quoted unit price will govern.
   B. If a lump sum bid price is requested, the bidder/proponent shall submit a lump sum price for performing each phase of any Work specified in the plans and specifications as a turnkey project. Nothing shall remain to be purchased or supplied other than items the plans and specifications indicate will be separately purchased. If any items,

accessories, or groups of items required to perform the work specified are not specifically indicated in the plans and specifications, the successful bidder/proponent must furnish those items, accessories, or groups of items, and include them in the lump sum bid price submitted.

C. If the proposal is for professional or other services provided under a retainer and there are exceptions to what the retainer covers, those exceptions must be specifically stated. If professional or other services are to be provided on an hourly basis, the hourly rate(s) should be specified, and billing must be in 1/10-hour increments. If the proposal is for a not-to-exceed amount, that must be stated.

D. If the bid or proposal is for a fixed fee or not-to-exceed amount and site visits, meeting attendance, or other items are to be limited, that limitation must be clearly stated.

E. If incidental costs are to be charged in addition to other amounts, those costs to be charged, including any multipliers and mark-ups, must be clearly listed.

F. If travel costs are to be charged in addition to other amounts, the basis for such expenses shall be stated. City reserves the right to require City pre-approval of lodging, transportation, and other travel costs.

G. Bid prices for equipment, goods or other items must include all delivery charges.

10. If required by the specifications, include:

    A. The manufacturer and/or model number(s) of specified equipment.

    B. The warranties or guarantees provided for any work, equipment, and other items.

    C. The number of calendar days required for delivery of any equipment, goods, or other items.

11. Include a proposed schedule for beginning and completing all Work in accordance with the plans and specifications. The schedule may propose specific dates or may be a timeline based on the date(s) of the contract award and notice to proceed. If the bid/proposal is only for the purchase of goods or equipment and does not include any Work, the delivery time must be provided as stated in 10.C above.

12. Identify any part of the specifications, standard terms and conditions, or contract terms which the proponent is unable to meet or which the proponent wishes to see modified. If modifications are requested, the bid/proposal must include the proposed language for the requested modification.

13. Include the names, addresses, and other contact information for, and responsible contacts for each subcontractor or consultant the proponent will use for the Work. City reserves the right to approve or disapprove of all subcontractors and consultants.

14. If the bid/proposal includes Work (and not just for the purchase of goods or equipment), include a list and information for key personnel of the proponent who will be involved in the Work.

15. If the bid/proposal includes Work (and not just for the purchase of goods or equipment), include a list of similar projects, services, or work the proponent has provided within the last 5 years including:

    A. The name(s) of the proponent's client(s) or customer(s),

    B. A description of the work performed,

    C. A description of the overall project,

    D. The date(s) the proponent performed the work, and

    E. The name(s), position(s), and contact information for one or more individual(s) familiar with the proponent's work for each client or customer.

16. If the bid/proposal includes Work (and not just for the purchase of goods or equipment), include a detailed description of the proponent's experience, expertise, personnel, equipment, and other capabilities for performing the work as required by the specifications.

17. Identify and provide e-mail, telephone, and cell phone information for one or more of the proponent's personnel familiars with the bid/proposal and, if the bid/proposal includes Work (and not just for the purchase of goods or equipment), the proponent's work on similar endeavors who is authorized to speak for the proponent.

Consideration of Bids/Proposals

Bid Opening and Tabulation

Bids/proposals will be publicly opened and read immediately following the due date and time stated above. Bids/proposals will be tabulated by City staff working in conjunction with any design professional or other consultant identified in the specifications or contract document(s).

Results of the bid/proposal openings are generally available on City's website www.wyomingmi.gov within 2-3 business days after scheduled bid/proposal opening.

City's Reservation of Rights

City reserves the rights to do any or all of the following:

1. Cancel any bid, order, and/or contract in whole or in part without penalty due to failure of a proponent/contractor to comply with the specifications.
2. Reject any or all bids.
3. Waive any irregularities, nonconformities, or technicalities of any bid.
4. Correct any bid during tabulation so a discrepancy in computing the amount of the bid is resolved by using quoted unit prices.
5. Review the experience, qualifications, and other information about any proponent and any identified subcontractor or consultant submitted as part of the bid/proposal.
6. Inquire of others about any bidder/proponent, identified subcontractor(s) or consultant(s), and their personnel.
7. Require background checks of the personnel of any proponent or identified subcontractor or consultant of any proponent to be undertaken at the expense of the proponent.
8. Negotiate with one or more selected proponent(s).
9. Award the bid and/or contract in a manner and to such proponent as deemed to be in City's best interests.

General Description of Consideration Process

Consideration of bids/proposals typically involves (i) review and tabulation of the bids/proposals and accompanying information, (ii) review of bid alternates and any provided samples, (iii) recommendation from any design professional engaged by City (if identified in the plans and specifications), (iv) contacts of references and those for whom proponents have previously worked, (v) recommendation by the City Manager or the City Manager's designee (often a department director) to the City Council, (vi) finalization of contract documents with and the signature(s) of the recommended proponent, and (vii) City Council award of the contract. City is not obligated to follow and may deviate from this typical process as deemed in City's best interests.

Consideration Factors

While contract price/cost is an important factor in consideration of any bid/proposal, (i) the proponent's experience, expertise, and reputation, (ii) previous City experience with the proponent, (iv) the experience, expertise, reputation, and previous City experience with the proponent's identified subcontractors, consultants, and personnel, and (v) other factors may be as or more important to the award of a bid/proposal and/or contract.

City Contract Standard Terms and Conditions

These Terms and Conditions apply to any contract awarded pursuant to the request for bids/proposals. By submitting a signed bid/proposal, the proponent attests it complies with and promises it will comply with these Terms and Conditions, except to the extent the proponent's bid/proposal identifies any contract term(s) the proponent is unable to meet, or the proponent wishes to see modified and for which it proposes specific modifications.

Because these are contract terms and conditions, the term "Contractor" is used to refer to the proponent to whom the contract is awarded.

1. Legal Compliance. Contractor, all Contractor's subcontractors and suppliers, all Contractor's consultants, and all their respective personnel must comply with all applicable (i) laws, rules, regulations, codes, and ordinances, (ii) license and permit requirements, and (iii) orders of any governmental agency, official or court of competent jurisdiction. This

includes, for example and without limitation, complying with federal Occupational Safety and Health Administration (OSHA) and Michigan Occupational Safety and Health Act (MIOSHA) safe practices, and with applicable federal and state labor laws, rules, and regulations.

2. Permits and Inspections. Unless the plans and specifications or the submitted bid/proposal states otherwise, Contractor shall, without expense to City, obtain all licenses and permits required to lawfully perform the Work under the contract and furnish copies of those licenses and permits to City before commencing Work. Contractor shall also ensure all inspections required by local, state, and federal agencies and codes are performed.

3. Grant Compliance. If state or federal grant funds are identified in the plans and specifications or contract form as a source of payment for any part of the project, Contractor (i) represents it has reviewed the grant agreement and (ii) will comply with any grant agreement terms and conditions that apply to the contract. If grant funds are withdrawn or cancelled for any reason this Contract is nullified.

   A. If some or all of the funds for the Work come from the United States Department of Housing and Urban Development (HUD), the following apply:

      1. Under HUD Fair Labor Standards Act Provisions, the most recent wage determination for Kent County, Michigan will apply to all wages Contractor pays for any Work on the project. For 2025 (it may be updated), that is General Decision Number MI20250088 dated 01/24/2025, https://sam.gov/wage-determination/MI20250088/1.

      2. Contractor will be required to prepare and maintain adequate financial records in a form satisfactory to City that reflect all costs and expenses incurred in performing this Contract and records of the use of all amounts paid pursuant to this Contract. Contractor's financial records and reports must conform to the regulations found at 2 CFR Part 200 entitled "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, Final Guidance," https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200.

      3. If project costs are $200,000 or more, HUD Section 3 provisions may require training and employment of low- and very love-income persons. See 24 CFR 75.3(a)(iii) (https://www.hud.gov/sites/dfiles/FPM/documents/Section-3-FAQs.pdf).

   B. If the Request for Bids/Proposals indicates they are applicable, Contractor shall fully comply with Davis-Bacon Act, other prevailing wage, Buy American, and any other requirements in grants or other funds used to pay Contractor or for other parts of the project. This includes, for example and not for limitation, all employment, recordkeeping, purchasing, sourcing, and other compliance.

4. Qualifications. Contractor represents and promises that:

   A. Contractor, any personnel engaged by Contractor, any subcontractor and consultant of Contractor, and any personnel engaged by such subcontractors and consultants, must have and maintain all licenses, registrations, certifications, memberships, or other approvals needed to perform the Work and supply materials required by the contract.

   B. Contractor, any subcontractor, and their respective principals, owners, officers, shareholders, key employees, directors, members and partners: (i) are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by a federal department or agency; (ii) have not within the last 3-years been convicted of or have a judgment against them for fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a contract or transaction with a governmental entity; (iii) have not within the last 3 years violated federal or state antitrust statutes or committed embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property; (iv) are not presently indicted for or otherwise criminally charged by a governmental entity with commission of any of the offenses enumerated in this certification; and (v) have not within the last 3-years had one or more contracts or transactions with a governmental entity terminated for cause or default.

   C. If the contract is for a HUD Community Development Block Grant (**CDBG**) or other federal and/or state funded project, neither Contractor nor any of its subcontractors on the HUD listing of debarred and suspended participants (https://www.hud.gov/program_offices/general_counsel/limited_denial_participation_hud_funding_disqualifications). Unless waived by City's purchasing director, Contractor and all subcontractors will register on the Federal SAM Registry available at: https://usfcr.com. Contractor and all subcontractors are not on and will remain off the Federal System for Award Management list of persons and entities ineligible for federal contracts.

   D. Neither Contractor nor any of its subcontractors is an "Iran linked business" under Michigan's Iran Economic Sanctions Act, 2012 PA 517.

5. Nondiscrimination and Respect. City is committed to fairness, impartiality, courtesy, respect, and nondiscrimination in all City programs, benefits, and actions, including City contracts and activities that contractors or others engage in for or on behalf of City, Accordingly:

   A. Contractor in (i) employment actions, (ii) soliciting, bidding or contracting with subcontractors, or (iii) soliciting, bidding or contracting for materials will not discriminate based on race, color, religion, national origin, age, sex, gender, gender identity or expression, height, weight, marital status, familial status, mental or physical disability, genetic information, or other reason prohibited by law that is unrelated to the ability to perform the duties of a job or position.

   B. Contractor will comply with applicable state and federal laws, rules, regulations, and other requirements regarding discrimination.

   C. If Contractor will engage with others on City's behalf, Contractor must (i) ensure all persons are treated with fairness, impartiality, courtesy and respect, and in a manner that does not discriminate based on race, color, religion, national origin, age, sex, gender, gender identity or expression, height, weight, marital status, familial status, mental or physical disability, genetic information, or any other reason prohibited by law, and (ii) if any engaged individuals speak English less than very well, Contractor must use language assistance services in communications.

   D. Contractor certifies it does not operate any programs promoting DEI that violate any applicable federal anti-discrimination laws.

   E. Contractor must include these requirements in subcontracts and supply contracts and reasonably enforce compliance with them.

   F. Noncompliance with this provision is a material breach of this Contract that can result in (i) withholding payments to Contractor, (ii) Contract cancellation, termination, or suspension, in whole or in part, and (iii) Contractor's ineligibility for future City contracts.

   G. Contractor must retain and, upon request, provide City access to and copies of all information and reports required by this provision that a state or federal agency determine are pertinent to ascertain compliance. If information required of Contractor is in the sole possession of another who fails or refuses to furnish it, Contractor must so certify to City.

6. Ethical Standards. To the best of Contractor's knowledge after reasonable inquiry:

   A. Contractor and its directors, members, partners, officers and employees, as well as any parent, affiliate, or subsidiary organization or subcontractor of Contractor has not engaged in and shall refrain from: (i) holding or acquiring an interest that would conflict with this contract; (ii) attempting to influence or appearing to influence any City elected or appointed officer or employee by a direct or indirect offer of anything of value; or (iii) paying or agreeing to pay any person, other than its employees and consultants, any consideration contingent upon the award of the contract.

   B. No owner, director, officer, member, partner, or key employee of Contractor or of any parent, affiliate, or subsidiary organization or subcontractor of Contractor is a spouse, parent, child, grandchild, or sibling of the mayor, city council member, or another City elected or appointed officer except as already disclosed in writing to City when submitting its proposal.

   C. Contractor will immediately notify City of any subsequently discovered violation of the standards in this section.

7. Media Releases. Media or other releases (including promotional literature and commercial advertisements) pertaining to the contract or the project to which it relates shall not be made without the City Manager's prior written approval and only in accordance with the written terms provided with that approval.

8. Payment to Contractor.

   A. Contractor and all subcontractors, suppliers and consultants shall, before beginning the Work, submit by email to City's Finance Department at Acct_Info@wyomingmi.gov a completed IRS W-9 form (available at www.IRS.gov).

   B. Payments to Contractor will be made in accordance with the contract and specifications. If no other terms are provided, payment of an invoice to City will generally be made within 30 days after all required information is submitted provided the design professional (if one is identified in the specifications or contract) and authorized City representative agree the Work has been performed, materials or equipment delivered, and other actions taken as provided in the contract and in accordance with any plans and specifications.

C. Payment disputes will be resolved as provided in the contract. Unless other provisions apply, City will pay the undisputed amount, and the disputed amount will be held in a non-interest-bearing account until the dispute is resolved.

9. Intellectual Property. Contractor guarantees the sale or use of articles, software, copies, records, or other intellectual property provided under or used to perform the contract will not infringe any copyright, patent, trademark or other intellectual property rights. Contractor will, without expense to City, defend every action brought against City or City's officers or employees for any alleged infringement of intellectual property rights by reason of their sale or use as part of the contract and will pay all costs, damages, and recoverable profits in any action.

10. Materials and Equipment Information, Quality, Disposal, and Related Requirements. If the plans, specifications, or contract call for the use, installation, or acquisition for City use of any materials, equipment, supplies or other items:

    A. Unless otherwise stated in the plans, specifications, or bid/proposal, all materials, equipment, supplies, and items supplied under the contract shall be new, the best of their respective kind, and free from defects.

    B. Specifications in this request for bids/proposals are the minimum acceptable. When specific manufacturer and model numbers are used, they are to establish a desired design, type of construction, quality, functional capability, and/or performance level. When alternates are bid, they must be identified by manufacturer, stock number, and other information necessary to establish equivalency. City will be the sole judge of equivalency.

    C. City reserves the right to request samples. Contractor shall provide requested samples to City at Contractor's expense within 10 days of bid opening. Samples will not be returned.

    D. Contractor shall provide City all manufacturer parts lists, assembly, and maintenance information, and all other documents provided by the manufacturer for any items provided or installed under the contract, and ensure all related warranties are held by or assigned to City.

    E. If quantities are listed in the request for bids/proposals, the quantities are based on estimated needs. City reserves the right to increase or decrease quantities to meet actual needs.

    F. Failure of Contractor to adhere to delivery schedules as specified or to promptly replace rejected materials shall render the Contractor liable for all costs in excess of the bid price(s) when alternate procurement is necessary. Excess costs will include administrative costs. Prices shall be delivered F.O.B. destination freight prepaid to any location specified in the specifications and included in the bid/proposal pricing unless otherwise specified in the bid or expressly stated in Contractor's proposal/bid.

    G. Unless the specifications or proposal expressly state otherwise, Contractor will remove and dispose of all materials, equipment, or other items demolished, removed, or replaced during the Work and cleanup and remove all debris resulting from the Work. Disposal will comply with laws, rules and regulations applicable to such disposal. Contractor will retain and, upon request, provide the City with copies of any required manifest or other disposal documentation.

11. Restoration. Unless the plans and specifications state otherwise, Contractor will restore, without expense to City, any property damaged during or as a result of any Work to a condition similar and equal to that existing before such damage. If Contractor fails to make such restoration, City may, after 48-hours' notice to Contractor, make such restoration, and deduct the cost City incurs to do so from amounts due Contractor.

12. Access to Work. City personnel, City's design professional(s), and City representatives will always have access to all parts of the Work and be furnished such information and assistance by Contractor as reasonably needed or desired to make a complete and detailed inspection of the Work.

13. Taxes. City is generally exempt from federal and state taxes, including state sales and use taxes. A copy of City's certificate of tax exemption can be requested by contacting City's Finance Department.

    A. Invoices must be separated to show the amount added for taxes of any kind if applicable.

    B. Taxes, wherever indicated and applicable to any purchase, will not be subject to trade or cash discounts.

    C. On construction projects state sales taxes are applicable on materials only.

14. Records. Because City is a public entity that receives funds from other governmental agencies: (i) City is required to retain, be able to obtain, and/or audit records related to City contracts and (ii) Michigan's Freedom of Information Act generally requires that City disclose to those requesting them copies of all requested documents relating to the bid/proposal and any resulting contract. Contractor shall retain copies of all records related to the contract, including, without limitation, the items supplied or used in performance of the contract, and all work under the contract for at least 7 years after completion of the contract. Contractor shall, within 5 City business days of a City request, allow inspection, auditing and copying of all retained records.

15. Assignment/Beneficiaries. Unless otherwise expressly provided in the contract:

    A. None of Contractor's rights or duties may be assigned or delegated without City's prior written consent.

    B. This contract will be binding on Contractor's successors and permitted assigns.

    C. No other individuals or entities are intended to be beneficiaries of this contract.

16. Independent Contractor. Contractor and Contractor's subcontractors and consultants are wholly independent of City. None of their personnel shall be or be represented to be City officers or employees. Contractor is solely responsible for the acts, omissions, and statements of Contractor's personnel and the personnel of Contractor's subcontractors and consultants. Contractor is solely responsible for any compensation and benefits to be provided Contractor's personnel for services or work provided under the contract. Except for payment of the contract price, City has no responsibility to supervise, compensate or insure Contractor, Contractor's subcontractors or consultants or any of their personnel.

17. Disputes/Remedies. Unless the contract or specifications otherwise provide the following applies to any dispute about the bid/proposal, contract award, or any resulting contract:

    A. In case of Contractor's default, City may procure the articles or services from other sources and hold Contractor responsible for any excess costs occasioned by the default. Such action will only be (i) when time is off the essence due to impending weather conditions, upcoming seasonal changes, permit durational limits, scheduled events, conflicts with other projects, or other circumstances City reasonable determines makes time of the essence and (ii) after written notice to Contractor with an opportunity to appeal the decision to the City Manager or the City Manager's designee.

    B. Before filing any lawsuit, a party must first notify the party in writing stating the provision involved, stating the actions or failure to act that did not comply with the provision, and proposing the action to be taken to address the alleged non-compliance. The party receiving that notice shall, within 14 days, respond in writing detailing any reasons why it disagrees that it has failed to comply with the contract or states what actions it has taken or is taking to address the noncompliance and prevent recurrence. Both parties shall meet within 14 days after the date of the response in an effort to resolve any continuing dispute.

    C. A party need not undertake the procedure provided in subsection 17.B if it has previously done so with respect to any noncompliance with the same contract provision.

    D. Jurisdiction and venue for any dispute shall be solely in the state courts in Kent County, Michigan. All parties agree to this jurisdiction and venue.

    E. In addition to any other remedies to which any party may be entitled, the prevailing party shall be entitled to recover all actual reasonable costs, including for example and without limitation, filing fees, expert consultation and witness fees and expenses, attorneys' fees, discovery expenses, copying costs, exhibit preparation costs, and any other actual reasonable costs incurred to investigate, bring, maintain or defend any action from its first discovery or first notice of it through all collection and appellate proceedings.

    F. Discrepancies in Plans and Specifications

        1. Any discrepancies found in the Plans and Specifications must be immediately reported to the contact identified on page 2 of this Request for Bids/Proposals document, who will correct such discrepancies, errors, or omissions in writing.

        2. In resolving discrepancies among two or more sections of the Contract Documents, precedence shall be given in the following order:

            - Contract
            - Bid Proposal on City's Form - without any additions or changes
            - Technical Bid Specifications
            - Instructions to Bidders
            - General Bid Information
            - Drawings
            - City of Wyoming Standard Specifications for Construction\Prequalification Documents https://www.wyomingmi.gov/About-Wyoming/City-Departments/Public-Works/Engineering/Construction-Specifications.

        3. Figure dimensions on Drawings shall take precedence over scale dimensions. Detailed Drawings shall take precedence over general Drawings.

18. General Terms.

A. These terms and conditions may not be amended or modified except in writing signed by Contractor and City. These terms and conditions shall not be affected by any course of dealing.

B. The captions are for reference and will not affect the interpretation of these terms and conditions.

C. The contract is made in Kent County, Michigan.

D. These terms and conditions and the rights and obligations of the parties under them shall be governed by, and interpreted in accordance with, the laws of the state of Michigan.

E. Reference by office to any City officer includes that City officer's designee(s).

Risk Allocation and Insurance

1. Risk Allocation.

A. Contractor is solely responsible for (i) the means and methods of the work and services provided under the contract, (ii) the conduct of its officers, employees, subcontractors and consultants, and (iii) for any injuries or property damage occurring as a result of its Work under and performance of the contract.

B. Contractor shall hold City and City's officers and employees harmless from, indemnify them for, and defend them against any claims made by persons other than the City as a result of Contractor's Work under or performance of this Contract. Contractor shall reimburse the City for or pay in the City's stead any costs the City incurs as a result of claims, demands, judgments, administrative actions, or any order to pay any amounts made or entered against the City or City officers or employees as a result of Contractor's Work under or performance of this Contract.

C. For professional services contracts with a Michigan-licensed architect, professional engineer, landscape architect, or professional surveyor, Contractor's obligation under 1.B shall be limited as provided by 1966 PA 165, MCL 691.991.

2. Insurance.

A. Unless otherwise provided in the specifications, Contractor shall provide the following insurance:

REQUIRED LIMITS	ADDITIONAL REQUIREMENTS
COMMERCIAL GENERAL LIABILITY	
Minimal Limits: $2,000,000 Each Occurrence Limit $2,000,000 Personal & Advertising Injury Limit $2,000,000 General Aggregate Limit $2,000,000 Products/Completed Operations	Coverage shall include the following extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent Contractors Coverage; (D) Broad Form General Liability Extensions or equivalent, if not already included (E) deletion of all Explosion, Collapse, and Underground (EXU) Exclusions, if applicable. Shall include an endorsement stating the following shall be *Insureds or Additional Insureds and certificate holders*: (i) City of Wyoming, (ii) all City of Wyoming elected and appointed officers, employees, volunteers, board members, and commission members, (iii) authorities created by the City of Wyoming, (iv) board members, officers, and employees of authorities created by the City of Wyoming, and (v) all authorized agents of the foregoing. Coverage afforded to the required insureds or additional insured shall be primary and any other insurance that may be in effect shall be secondary and/or excess.
AUTOMOBILE LIABILITY INSURANCE	
Minimal Limits (include hired and non-owned automobile coverage): $2,000,000 per person $2,000,000 per occurrence	Shall include an endorsement stating the following shall be *Insureds or Additional Insureds and certificate holders*: (i) City of Wyoming, (ii) all City of Wyoming elected and appointed officers, employees, volunteers, board members, and commission members, (iii) authorities created by the City of Wyoming, (iv) board members, officers, and employees of authorities created by the City of Wyoming, and (v) all authorized agents of the foregoing.

REQUIRED LIMITS	ADDITIONAL REQUIREMENTS
	Coverage afforded to the required insureds or additional insured shall be primary and any other insurance that may be in effect shall be secondary and/or excess.
WORKERS' COMPENSATION/ EMPLOYERS' LIABILITY INSURANCE	
Minimal Limits: $500,000 per occurrence	Coverage shall be in accordance with all applicable Michigan statutes Waver of subrogation, except where waiver is prohibited by law.
EXCESS/UMBRELLA INSURANCE	
	Required liability limits may be obtained by using an Excess/Umbrella Liability policy in addition to the primary liability policy(ies). If coverage limits are satisfied by an Excess and/or Umbrella policy, coverage must follow form of the primary liability policy(ies). Shall include an endorsement stating the following shall be *Insureds or Additional Insureds and certificate holders*: (i) City of Wyoming, (ii) all City of Wyoming elected and appointed officers, employees, volunteers, board members, and commission members, (iii) authorities created by the City of Wyoming, (iv) board members, officers, and employees of authorities created by the City of Wyoming, and (v) all authorized agents of the foregoing. Coverage afforded to the required insureds or additional insured shall be primary and any other insurance that may be in effect shall be secondary and/or excess.
OWNERS CONTRACTORS PROTECTIVE	
Coverage is required if the amount stated below is more than $0. Amount required $0.	The City of Wyoming shall be "Named Insured" on said coverage. A 30-day, 10 day for non-payment of premium, Notice of Cancellation shall be endorsed onto this policy. In lieu of this requirement, a per project aggregate on the Commercial General Liability policy may be acceptable for jobs requiring a $1,000,000 liability limit.
ENVIRONMENTAL/POLLUTION LIABILITY	
Coverage is required if the amount stated below is more than $0. Amount required $0.	Coverage shall include, but not be limited to, loading/unloading, transportation, storage, and removal of all hazardous waste/material. If this policy is claims made form, then the contractor shall be required to keep the policy in force, or purchase "tail" coverage, for a minimum of 3 years after the termination of this contract. Shall include an endorsement stating the following shall be *Insureds or Additional Insureds and certificate holders*: (i) City of Wyoming, (ii) all City of Wyoming elected and appointed officers, employees, volunteers, board members, and commission members, (iii) authorities created by the City of Wyoming, (iv) board members, officers, and employees of authorities created by the City of Wyoming, and (v) all authorized agents of the foregoing. Coverage afforded to the required insureds or additional insured shall be primary and any other insurance that may be in effect shall be secondary and/or excess.
BUILDERS RISK PROPERTY INSURANCE	
Coverage is required if checked "yes." Yes No X	Contractor shall procure and maintain during the term of construction a policy of Builders Risk Property Insurance in the full amount of the project. Policy shall be on an All Risk form and cover

REQUIRED LIMITS	ADDITIONAL REQUIREMENTS
Amount required: Full Contract Amount.	all property under a Replacement Cost basis. Policy shall also name the City of Wyoming as Loss Payee.

B. Policy(ies), as described above which require City or any of City's personnel to be named or additional insureds, shall be endorsed to state the following: "30 days advance written notice of cancellation, non-renewal, reduction, and/or material change shall be sent to: City of Wyoming, Purchasing Department, 1155 – 28th Street SW, Wyoming, MI 49509-0905." Upon the City's request, Contractor will provide to the City's Purchasing Department copies of all certificates of insurance, policies, and endorsements.

C. Upon the City's request, Contractor must prove that all subcontractors performing Work have the same types and amounts of coverage required of Contractor or that subcontractors are included under Contractor's policy.

D. All insurance providers shall be rated "A" rated or better by the A.M. Best Company.

E. The City reserves the right to amend or require additional types and amounts of coverage or provisions depending on the nature of the Work.

Bonds and Liens

Bid Bond

A bid bond is required for this project

If a bid bond is required, it must be in the amount of 5.0% of the bid amount and in the form of EJCDC bid bond form C-430 or another form acceptable to the City attorney. As an alternative to the bid bond, City will accept a cashier's check to the City in the amount of 5.0% of the bid amount or an irrevocable standby letter of credit in the amount of 5.0% of the bid amount that is in a form and substance acceptable to the City Attorney.

Payment Bond

Payment bonds are required for any contract exceeding $50,000 for the construction, alteration, or repair of any City building, public work or improvement. Payment bonds must be in the full amount of the contract price. Payment bonds must be in the form of EJCDC payment bond form C-615 or another form acceptable to the City attorney. Payment bonds must be provided before any notice to proceed is issued.

If a multi-year contract, the bond amount shall be equal to the total bid for the first contract year and updated annually to reflect the bid price for each subsequent year.

Performance Bond

Performance bonds are required for any contract exceeding $50,000 for the construction, alteration, or repair of any City building, public work or improvement. Performance bonds must be in the full amount of the contract price. Performance bonds must be in the form of EJCDC performance bond form C-610 or another form acceptable to the City attorney. Performance bonds must be provided before any notice to proceed is issued.

If a multi-year contract, the bond amount shall be equal to the total bid for the first contract year and updated annually to reflect the bid price for each subsequent year.

No Liens

Under Michigan law, construction liens cannot be placed on public projects or property on which they are built. Therefore, Contractor must not place, allow to be placed, or suffer to be placed any lien against the project or the property on which it is constructed. If a subcontractor, supplier, or laborer places any lien against the project or the property on which it is constructed, Contractor must, immediately after learning of it, take all steps needed to secure the lien's release and must indemnify City for any costs City incurs to secure release of the lien.

Specific Requirements

City Hall Canopy Project

Scope of Work

The City Hall Canopy involves the construction of steel framed canopy on the north side of the existing Wyoming City Hall. In addition to the construction of the canopy, the drive lanes, curbing and traffic islands shall be modified as shown in the Construction Documents. Once the Canopy is assembled the Bavis Captive Carrier system will be installed to the Canopy structure and routed inside City Hall. Inside the Treasurer's Offices at City Hall, the teller area shall be modified. The interior work shall include the new carrier system, new safe and depository, and a workstation. The existing curtain wall system shall be modified as shown on the Construction Documents.

Pavement and Curb and Gutter – The work will include: Removing a portion of the existing asphalt pavement and curb and gutter. Excavations for and placement of new footings and anchor bolts for the canopy. Replacement of the pavement and curb and gutter in a new alignment. Restoration of lawn and landscaping as affected by the work.

Canopy – The City will purchase and provide the un-assembled canopy kit as supplied from Poligon. Please see the attached drawings for the canopy. The Contractor will protect, assemble and finish to spec the provided canopy as part of the work.

The Canopy has a 10-12 week lead time. Contractor shall plan the work to accommodate the lead time.

City Hall – The work will include installing Bavis Captive carrier system from canopy through the existing wall, terminating at the workstation. Renovating the workstation. Restoring City Hall interior as indicated on the plans.

Progress Schedule and Completion Date

Following the award of the Contract by the City, the Contractor shall prepare a detailed Schedule of Operations that shall indicate the sequence of work. The schedule will be submitted to the City for approval.

Start date:	Identified by Contractor. City of Wyoming is ready for work to begin immediately.
Work hours:	Monday through Friday, 7:30 a.m. – 7:30 p.m. Saturday, 7:30 a.m. – 5:00 p.m.
No work on:	SUNDAYS OR CITY HOLIDAYS
Completion date:	Identified by Contractor.

Safety

The Contractor shall provide to the City of Wyoming a description of the Safety program they will have implemented for the duration of the project. The Safety Program shall comply, at a minimum, with MI-OSHA requirements. The Safety Program shall provide measures for worker safety, building occupant safety and general public safety in the project area.

Traffic Safety

The Contractor shall provide a description of the traffic safety plan they will implement to control traffic in and around the site to prevent injury to the General Public and City Employees.

Acceptance and Payment

See Applications for Payment section 010270 for information.

Subcontractors

Include the names, addresses and other contact information for, and responsible contacts for each subcontractor or consultant the bidder will use for the Work. The City reserves the right to approve or disapprove of all or any subcontractors and consultants.

Warranties

For general work related to the project, the contractor shall warrant the work for 1 year from the date of issuance of the Certificate of Occupancy. It shall be understood that the warranty for specific products shall be for the duration specified within the Construction Documents and Specifications.

Liquidated Damages

Liquidated Damages shall be assessed by the amount indicated in the table below, beginning with the first workday after the completion date as submitted by the Contractor. Excusable delays caused by material and supply delays will be considered, provided the Contractor notifies the City of such delays upon their knowledge.

Original Contract Amount			Liquidated Damages per Workday
$0	to	$49,999	$200
50,000	to	99,999	$400
100,000	to	499,999	600
500,000	to	999,999	900
1,000,000	to	1,999,999	1,300
2,000,000	to	4,999,999	1,550
5,000,000	to	9,999,999	2,650
10,000,000	to	19,999,999	3,000
20,000,000	to	49,999,999	3,800
50,000,000	and above		4,500

Discrepancies in Plans and Specifications

1. Any discrepancies found in the Plans and Specifications must be immediately reported to the contact identified on page 2 of this Request for Bids document, who will correct such discrepancies, errors, or omissions in writing.
2. In resolving discrepancies among two or more sections of the Contract Documents, precedence shall be given in the following order:
   - Contract/Purchase Order
   - Bid Proposal on the City's Form - without any additions or changes
   - Technical Bid Specifications
   - Instructions to Bidders
   - General Bid Information
   - City Contract Standard Terms and Conditions
   - Drawings
   - 2005 City of Wyoming Standard Specifications for Construction
   - Prequalification Documents
3. Figure dimensions on Drawings shall take precedence over scale dimensions. Detailed Drawings shall take precedence over general Drawings.

Bid/Proposal Form

City Hall Canopy

The proponent identified below submits the attached bid/proposal materials, including the price(s) stated on the attached bid form.

By signing this bid/proposal form, the proponent identified below represents, attests and promises, the proponent:

1. Has reviewed and is familiar with all plans and specifications, including any issued addenda and any interpretations, and any information provided at any pre-bid meeting.
2. Has reviewed, meets, and will comply with all the Standard Terms and Conditions except those specifically stated in the materials submitted with this bid/proposal form, including, without limitation, all of the applicable insurance and bonding requirements.
3. If applicable, is familiar with the Work site and Work site conditions.
4. Accepts full responsibility for its conclusions relative to the nature and probable difficulties of performing the work specified, and no additional payments will be made by City due to unanticipated difficulties encountered in performing the actual work.

Is the bidder a:	YES	NO
Section 3 Certified Contractor?	☐	☐

If yes, DUNS #: _____

Are you, or the business owner related to an elected official or employee of the City?	☐	☐

If yes, list individuals' name(s) and relationship(s):

Unless the specifications otherwise state, the following is provided for statistical purposes only.

Is the bidder a:	Yes	No
Woman Owned Company?	☐	☐
Minority Owned Company?	☐	☐

Proponent's Complete Business Name (If Proponent Is DBA Include Full Proponent DBA):

_____

Bid/Proposal Form, Continued

	Pay Item	Units	Bid Unit	Bid Price
1	Bid Amount	LSUM	1	

Total Bid (written out) _____

A full schedule will be required of the winning bidder prior to contract award.

Estimated Start Date: _____ **Estimated Completion Date: _____**

_____
[Proponent's Complete Business Name]

_____
[If Proponent is DBA Include Full Proponent DBA Here]

_____ _____
[Signature for proponent] [2nd signature for proponent]

_____ _____
[Printed name and title of person signing] [Printed name and title of 2nd person signing]

Date signed: _____

_____ _____
[Proponent's street address] [Proponent's business phone]

_____
[City] [State] [Zip]

_____
[Cell phone number(s) of person(s) signing for proponent]

_____
[E-mail address(s) of person(s) signing for proponent]

_____
[Proponent's form of business – *e.g.* partnership, corporation, limited liability company, professional corporation and the state in which it was formed]

PROJECT CONTRACT
CITY OF WYOMING, MICHIGAN

This Contract is made as of the Effective Date between City and Contractor.

City means the City of Wyoming, a Michigan municipal corporation, of 1155 28th St SW, Wyoming, MI 49509.

Contractor means: _____
[Name of contracting entity]

A _____
[State and type of entity, *e.g.*, corporation, limited liability company, etc.]

_____
[Contractor's street address]

_____
[Contractor's city, state & zip]

Contractor's personnel means Contractor's directors, members, partners, officers, employees, subcontractors, agents and representatives and any other individuals or entities Contractor engages to provide services under the Contract.

Effective Date means: _____, 202_.

Goods means any parts, equipment, supplies, materials, or other items or services the City is acquiring from Contractor as itemized or stated in the RFP as modified by the Proposal.

Proposal means Contractor's Bid/Proposal attached as Exhibit B.

RFP means the Request for Bids/Proposals attached as Exhibit A.

Standard Terms means "City Contract Standard Terms and Conditions" portion of the RFP, including the Risk Allocation and Insurance Provisions.

Work means the services described and specified the RFP as modified by the Proposal.

TERMS AND CONDITIONS

In exchange for the consideration in and referred by this Contract, the parties agree:

1. Contractor will perform the Work and supply the Goods as detailed in the RFP as modified by the Proposal.
2. City will pay the Contractor in accordance with the RFP as modified by the Proposal.
3. Contractor represents and warrants, except for those specifically waived or modified in this paragraph, Contractor is complying with and will comply with the Standard Terms. Waived or modified conditions are as follows:

_____
[Identify those the City Attorney has agreed may be waived or the City attorney approved modifications or write "None."

_____

4. If this Contract is for a public improvement project costing $50,000 or more, performance and payment bonds in an amount equal to the Contract amount are required and must be provided before beginning any Work.
5. This is the only agreement between the parties regarding City engagement of Contractor to perform the Work and supply the goods. There are no other agreements, representations, or warranties except as stated in the RFP as modified by the Proposal. This contract can be amended only in writing signed by both City and Contractor.

City and Contractor have signed this Contract as of the Effective Date.

City of Wyoming

By: _____
John Shay, City Manager

Date signed: _____, 20__

Approved as to form:

_____
Gregory T. Stremers, City Attorney

Contractor: _____

By: _____
[Signature officer, director, or principal of Contractor]

_____
[Typed/Printed Name & Title of Person Signing for Contractor]

Date signed: _____, 20__

APPENDIX A

PROJECT SPECIFIC SPECIFICATIONS

GENERAL AND SUPPLEMENTAL CONDITIONS

INTERIOR FINISH SCHEDULE

DIVISION 01 - GENERAL REQUIREMENTS
010000 SPECIAL CONDITIONS
010150 OWNER FURNISHED ITEMS
010200 ALLOWANCES
010270 APPLICATIONS FOR PAYMENT
010950 REFERENCE STANDARDS AND DEFINITIONS
013000 SUBMITTALS
015000 CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS
016310 SUBSTITUTIONS
017000 PROJECT CLOSEOUT
017400 WARRANTIES

DIVISION 02 – EXISTING CONDITIONS
024119 SELECTIVE DEMOLITION

DIVISION 03 - CONCRETE
031000 CONCRETE FORMING AND ACCESSORIES
032000 CONCRETE REINFORCING
033000 CAST-IN-PLACE CONCRETE

DIVISION 04 – MASONRY
042000 UNIT MASONRY

DIVISION 05 – METALS
051200 STRUCTURAL STEEL FRAMING
053100 STEEL DECK
055000 METAL FABRICATIONS

DIVISION 06 - WOOD AND PLASTICS
064020 INTERIOR ARCHITECTURAL WOODWORK

DIVISION 07 - THERMAL AND MOISTURE PROTECTION
071800 BUILDING WRAP
072100 BUILDING INSULATION
072410 EXTERIOR INSULATION AND FINISH SYSTEM
072700 FIRESTOPPING AND SMOKESTOPPING
074213 METAL WALL PANELS
075300 SINGLE-PLY MEMBRANE ROOFING
076200 SHEET METAL FLASHING AND TRIM
079010 JOINT SEALANTS

DIVISION 08 - DOORS AND WINDOWS
081200 ALUMINUM FRAMES
082110 FLUSH WOOD DOORS
083050 ACCESS DOORS
084100 ALUMINUM STOREFRONTS
084400 ALUMINUM CURTAINWALL
087100 DOOR HARDWARE
088000 GLAZING

DIVISION 09 – FINISHES
092550 GYPSUM BOARD ASSEMBLIES
096800 CARPET
099000 PAINTING

DIVISION 12 - FURNISHINGS
123661 SOLID SURFACE COUNTERS AND SILLS

DIVISION 15 - MECHANICAL
REFER TO DRAWINGS

DIVISION 22 – PLUMBING
REFER TO DRAWINGS

DIVISION 26 – ELECTRICAL
REFER TO DRAWINGS

DIVISION 31 – SITE
311000 SITE CLEARING
312000 EARTHWORK

DIVISION 32 – SITE INFRASTRUCTURE
321216 ASPHALT PAVING
321313 CONCRETE PAVING
321373 CONCRETE PAVING JOINT SEALANTS
321723 PAVEMENT MARKINGS
324900 UNDERGROUND IRRIGATION SYSTEM
329000 LANDSCAPING
329200 TURFS AND GRASSES

GEOTECHNICAL REPORT (As Prepared By Materials Testing Consultants

APPENDIX B

PROJECT DRAWINGS

Proposed Canopy and Renovations to: City of Wyoming City Hall - Revised 09.09.26 - 9 total sheets
Poligon Gull Wing - Revised 10/30/2025 - 14 total sheets
Bavis Captive Carrier
Captive Carrier Trans Trax Spec - 1 total sheet
Captive Carrier Horizontal Enclosure - 1 total sheet
Captive Carrier Datasheet - 1 total sheet

STANDARD AIA FORMS

The General Conditions of the Contract for Construction (AIA Document A-201, 2017 Edition of The American Institute of Architects), Article 1 through 15, and as herein added to and amended are a part of the Contract Documents, and shall apply to all Contractors, separate Contractor and/or Subcontractors. Where a portion of the General Conditions is modified or deleted by these Supplementary Conditions, the unaltered portion of the General Conditions shall remain in effect.

Copies of said General Conditions are on file at Architect's office or may be obtained from the American Institute of Architects, 1735 New York Avenue NW, Washington, DC, 20006. General Conditions are hereby added to and amended in certain particulars as follows:

ADD TO ARTICLE 1, CONTRACT DOCUMENTS: AMEND ARTICLE 1 AS FOLLOWS:

1.2.1:

"The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the work by the Contractor, and to make all working parts operational."

1.2.1:

Figures given on drawings govern "scaled" measurements and large scale governs small scale. Discrepancies shall be brought to attention of Architect for interpretation and Architect's decision shall govern.

General Contractor, Subcontractor, and/or other Contractors shall provide all items of work complete, unless definitely indicated on drawings or herein specified to contrary. If drawings and specifications disagree in themselves or with each other's, estimate on and furnish greater quantity, or better quality unless otherwise instructed by Architect.

1.4.1:

If there are any areas where there is a question as to intent, Contractor shall obtain a clarification from Architect before proceeding with work. Any work done by Contractor without such clarification of Contract Documents will be done at Contractor's risk. Removal and replacement of "such" work will be the decision of the Architect and Owner.

AMEND OR ADD TO ARTICLE 3, CONTRACTOR, AND AS FOLLOWS:

3.7.1:

General Contractor shall submit plans and specifications to Building Inspector, and/or any other Department having jurisdiction over work, and shall obtain and pay for examination fees, general Building Permits, and any other fees required by said Departments.

Similarly, each Contractor shall procure all necessary permits and certificates, pay all fees and arrange for all necessary inspections required by State, County or City authorities, and pay all expenses for repairing streets occasioned by execution of his work.

Any work done on the project without securing applicable permits for that work will be done at the Contractor's risk.

It will be the General Contractor's responsibility to coordinate, notify, and schedule with the Special Inspection Agency.If required testing is not performed due to General Contractor's lack of coordination, notification, and scheduling, the General Contractor shall be responsible for the cost of unique or additional testing required to meet special inspection requirements.

3.9.1:

The Contractor shall employ a full-time competent superintendent and necessary assistants who shall be in attendance at the project site during performance of the work. The Superintendent shall represent the Contractor, and communications given to the Superintendent shall be as binding as if given to the Contractor. Important communications shall be confirmed in writing. Other communication shall be similarly confirmed on written request in each case.

3.15.3:

Remove all marks, stains, fingerprints, and other soil or dirt from all painted, enameled, or varnished work, and all other exposed finished surfaces.

3.15.4:

General Contractor and other Contractors are responsible for expediting cleaning, washing, waxing, and Polishing required within technical sections of specifications governing work under their Contract. In addition, General Contractor shall perform final cleaning to remove all foreign matter, spots, soil, and construction dust, so as to put project in a complete and finished condition ready for acceptance, and use intended.

3.15.5:

Contractors shall perform a weekly thorough cleaning to maintain the premises and equipment in a neat, orderly condition. Contractors failing to remove their debris (weekly) from the premise shall be charged the actual cost of cleanup of their specific "mess."

ADD TO ARTICLE 9.3.1 AS FOLLOWS:

9.3.1.3:

Until substantial completion, the Owner shall pay 90% of the amount due to the Contractor on account of progress payments.

ADD TO ARTICLE 11.3.2 AS FOLLOWS:

It is the mutual and individual responsibility and liability of both the Owner and Contractors to provide insurance as required by State stature, and as deemed in their best interest thru consultation and advice as provided by their respective insurance advisor. The insurance values here are for general guidance only.

END OF GENERAL & SUPPLEMENTARY CONDITIONS

Solid Surface
SS-1 Corian “Silver Birch”

Paint
PT-1 Sherwin Williams 7541 “Grecian Ivory”

PT-3 Match existing paint color.

Stain color shall match existing. Provide sample for approval.

Carpet
CPT-1 Shaw Contract Collective V Taupe 5T442 38761– Installation Pattern TBD

Vinyl Base
VB-1 To be selected from full line of Roppe or Shaw vinyl cove bases. 4-1/2” high.

END OF INTERIOR FINISH SCHEDULE & SPECIFICATIONS

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions

and other Division 01 Specification Sections, apply to this Section.

Site and Job Conditions:

Verify all dimensions shown on drawings, and obtain all measurements required prior to commencing Work.

The Owner will not hold nor be held responsible for any unforeseen or unusual sub-surface conditions that the Contractor might encounter, including unusual soil conditions. If such occurs, Architect shall be notified promptly, and a mutual solution will be reached between Owner, Contractor, and Architect.

Contractor is responsible for all plumbing necessary to keep excavations and trenches free from water during the entire progress of this work. Discharge water at an approved location and maintain a temporary site surface drainage system as required. Do not discharge water on adjoining property.

Laying Out of the Work:

Upon entering site for purpose of beginning work, General Contractor shall immediately locate

general reference points and take such action as is necessary to prevent their destruction. He shall lay out his own work, and be responsible for all lines, elevations, and measurements.

Each Contractor and Subcontractor before commencing work shall examine all spaces, surfaces, and areas indicated on drawings to receive this work. Do not proceed until corrections (if any required) have been made. Commencing work signifies this Contractor's acceptance of said spaces, surfaces, areas, and of job conditions.

Verify all dimensions shown on the drawings, and obtain all measurements required for proper execution of work.

Information pertaining to preliminary investigations, location of utilities, existing structures, and existing grades appear on the drawings. While such data has been collected with reasonable care, there is no expressed or implied guarantee that conditions so indicated are entirely representative of those actually existing or that unforeseen developments may not occur. The Contractor must put his own interpretation on results of such investigation and shall satisfy himself as to materials to be excavated, and materials upon which fill or other work may be place. Where underground services, utilities, structures, etc. are located on the drawings, or given at the site, they are based on available records but are not guaranteed to be complete or correct. They are merely given to assist each Contractor.

Coordinating and Expediting:

It shall be the full responsibility of the General Contractor to coordinate and expedite all phases of architectural, structural, and mechanical, including plumbing, heating ventilation, sheet metal trades, and electrical work.

Access Provision:

Access is required for all valves, controls, and other similar items. When it is necessary for those items to be installed above a solid ceiling or behind walls, an access panel shall be

provided whether or not shown on the drawings. The Contractor installing these items shall provide an acceptable access panel and/or the General Contractor shall install the same.

Sleeves - Inserts: Contractors for mechanical, electrical, and/or other trades shall place sleeves and inserts correctly for pipes, conduits, and similar items in forms, walls, partitions, and floors. All said work shall be done in cooperation with other Contractors. All items shall be placed in ample time so as not to delay any operations.

The General Contractor shall see that sleeves and inserts are kept in their proper positions and not displaced by the placing of concrete or other construction work. Locations of chases are indicated on the drawings. The separate Contractor and/or Sub-Contractor of the work involved shall be responsible for inclusion of these items in the work and shall advise the General Contractor.

Delivery and Storage of Materials:

Properly store and protect all delivered material at site. Take steps to prevent damage due to weather and vandalism.

Cutting, Patching and Fitting:

Each Contractor shall be responsible for all cutting and patching necessary for his work unless herein specifically stated to the contrary, or if other arrangements are provided by the General Contractor. All patching shall be done by the Contractor whose work is damaged, and any cost shall be borne by the Contractor responsible or necessitating same at NO ADDED COST TO THE OWNER.

Each Sub-Contractor shall do all fitting of his own work as required to make its several components fit together or to receive the work of other Contractors. Holes cut in exterior walls and roofs for installation of mechanical or electrical equipment shall be waterproofed and watertight.

Permission to patch any areas or items of work does not imply a waiver of the Architects right to require complete removal and replacement in said areas and of said items if, in Architects opinion, said patching does not satisfactorily restore quality and appearance of the work.

Safety Requirements:

Precaution shall be exercised at all times for protection of persons and property. Safety provision of applicable laws, building and construction codes shall be observed. Machinery, equipment, and all safety hazards shall be guarded or eliminated in accordance with safety provision of "Manual of Accident Prevention in Construction" published by the Association of General Contractors of America, and "Federal Safety and Health Regulations for Construction" as issued by Department of Labor and OSHA Codes. General Contractor is solely responsible to ensure all applicable safety rules and regulations are adhered to and is further responsible to ensure that all employees and Contractors are abiding by such rules and regulations.

All persons working on the project shall be familiar with the locations and operation of fire extinguishers.

Regulatory Requirements:

Contractors for all trades shall comply with all current building codes such as MBC, NEC, OSHA, etc., including latest amendments and/or revisions, and all other applicable codes.

Supervision:

General Contractor shall provide a full time competent on-site Superintendent who has the right and responsibility to control all Contractors on the project. The "General Contractor" is further responsible to direct, supervise, manage, and control all aspects of the project including job

site safety. The Architect in his role as "Observer" is responsible to clarify the intent of the design concept. The General Contractor is solely responsible for the method and means of construction.

Coordination of Special Inspections:

General Contractor shall coordinate, notify, and schedule with the Special Inspections Agency. If required testing is not performed due to General Contractor's lack of coordination, notification, and schedule, the General Contractor shall be responsible for the cost of unique or additional testing required to meet special inspection requirements.

Construction Schedules and Progress Meetings:

At the direction of the Architect, the General Contractor shall conduct progress meetings twice a month to determine the degree of completion, resolve any problems, and to expedite progress of the work. Contractors for the major trades shall be represented at these meetings by persons with full authority to act for them in regard to all portions of the work. The General Contractor shall record and issue the written results to all participants.

Modification Procedures:

The Architect will issue as required supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or Contract time.

Change orders will be issued by the Architect after items changed have been approved by the Contractor, and Owner. These Change Order values may be incorporated into the Contract and Applications for Payment upon approval.

Completion:

General Contractor and Sub-Contractor as determined by General Contractor are solely responsible for total completion conformance, and construction methods and procedures, as well as job site safety. Architect will observe, inform, and guide as deemed appropriate the Contractors in understanding the intent of the plans and specifications to the best of his ability.

Guarantee/Warranty:

All Contractors shall guarantee all work for this building to be free from defects of faulty labor and/or materials for a period of one (1) year from date of substantial completion or same, except when longer periods are herein specified.

Final payment is contingent upon Architect's receipt of such guarantees and/or warranties from all Contractors.

END OF SECTION 010000 – SPECIAL CONDITIONS

SECTION 010150 - OWNER FURNISHED ITEMS

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Summary:

To expedite the project, the Owner may purchase certain material and equipment to be incorporated into the project. The designated Contractor is to accept delivery, unload, handle, store, and install the items. Upon delivery, the designated Contractor is to verify product suitability, quantity, quality, and condition as soon as it can be ascertained and shall accept care, custody, and control responsibility as if it were his own purchase.

The Owner will enter into a separate contract with suppliers for owner equipment. These products furnished, installed, and paid for by the Owner, area listed in this Specification Section.

The work included under this Section includes, but is not necessarily limited to, the preparation of site, and building areas to receive these items, the coordinated scheduling of their delivery with the Owner and with on-going work, and the coordination of related work for installation and hook up as specified herein, and as shown on the drawings.

Related Work: Refer to drawings and specifications for equipment, products, and furnishings provided by the Owner and installed by the General Contractor and/or Subcontractor. This work includes, but is not limited to; cabinet wire pulls, selected light fixtures, etc.

Submittals:

Additional information, equipment, cuts, and any/all shop drawings of Owner furnished items will be forwarded to the successful Contractor upon their receipt from the suppliers and after signage of the contract between Owner and Contractor.

Owner Equipment:

The Owner will provide various owner supplied equipment as noted on the drawings and/or delineated. The Owner will design and layout their requirements with the General Contractor and their selected MEP design build team members. The Owner equipment may need electrical raceways including but not limited to conduit, boxes, and miscellaneous power requirements.

Preparation:

Review Owner furnished shop drawings and data and notify Owner and Architect of any discrepancies or problems anticipated prior to delivery and installation.

Make respective areas ready for product installation, including items of coordination and related work, conduits, etc. areas to be level, true, and plumb, clean of debris, and have required openings and clearances.

Coordinate the delivery dates with Owner.
Provide clear access to site and buildings for installers.

Inspection:

Promptly inspect products jointly with the Owner, and record shortages, damaged items, and defective items.

Arrangements for replacement of damaged, defective, or missing items shall be by the Owner. Arrangements for manufacturer's warranties, bonds, services, and inspections of Owner furnished items shall be by the Owner.

Installation:

Installation of Owner furnished items listed within this Specification Section shall be by the Owner. All other items noted on the drawings to be provided 'By Owner" and shall be installed by the General Contractor, and/or his Subcontractors, and this work is to be included in the base bid.

Repair of previously completed site or building work damaged by the Owner furnished items installer during and as a result of their work shall be the responsibility of the Owner/Installer.

Contractor shall protect installed Owner furnished items from exposure to elements and all other forms of damage.

Contractor shall repair and/or replace to the Owner's satisfaction all Owner furnished items damaged by the Contractor after items installation/turnover to Owner.

Contractor shall complete any/all of his work held to facilitate Owner furnished items installation.

END OF SECTION 010150 – OWNER FURNISHED ITEMS

SECTION 010200 - ALLOWANCES

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Summary:

This Section includes administrative and procedural requirements governing allowances.

Selected materials and equipment are specified in the Contract Documents by allowances. In some cases, these allowances include installation. Allowances have been established in lieu of additional requirements, and to defer selection of actual materials and equipment to a later date when additional information is available for evaluation. If necessary, additional requirements will be issued by Change Order.

Selection and Purchase:

At the earliest practical date after award of the Contract, advise the Architect of the date when the final selection and purchase of each product or system described by an allowance must be completed to avoid delaying the work.

At the Architect's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the work.

Products:

Purchase products and systems selected by the Architect from the designated supplier.

Examine products covered by an allowance promptly upon delivery for damage or defects.

Preparation:

Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

Schedule of Allowances:

No Allowances

END OF SECTION 010200 - ALLOWANCES

SECTION 010270 - APPLICATIONS FOR PAYMENT

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Summary:

This Section specifies administrative and procedural requirements governing the Contractor's Applications for Payment.

Coordinate the Schedule of Values and Applications for Payment with the Contractor's construction schedule, submittal schedule, and list of sub-contracts.

Schedule of Values:

Coordination: Coordinate preparation of the schedule of values with preparation of the Contractor's construction schedule.

Submit the schedule of values to the Architect at the earliest possible date but no later than seven (7) days before the date scheduled for submittal of the initial Applications for Payment.

Format and Content:

Use the project manual table of contents as a guide to establish the format for the Schedule of Values. Provide at least one line item for each Specification Section. Round amounts to nearest whole dollar, the total shall equal the Contract Sum.

Application for Payment:

Electronic Emailed Applications for Payment if acceptable to the Owner’s banking institution.

Each Application for Payment shall be consistent with previous applications and payments as certified by the Architect and paid for by the Owner.

Payment-Application Times: Each progress-payment date is indicated in the Agreement. The period of construction Work covered by each Application for Payment is the period indicated in the Agreement.

Payment-Application Times: The date for each progress payment is the 15th day of each month. The period covered by each Application for Payment starts on the day following the end of the preceding period and ends 15 days prior to the date for each progress payment.

Payment-Application Forms: Use AIA Document G702 and Continuation Sheets G703 as the form for Applications for Payment. Provide with each Payment Application form a notarized sworn statement with schedule of values identifying Contractor, trade, contract amount, previous payments, and balance to completion.

Application Preparation: Complete every entry on the form. Include notarization and execution by a person authorized to sign legal documents on behalf of the Contractor. The Architect will return incomplete applications without action.

Entries shall match data on the Schedule of Values and the Contractor's Construction Schedule. Use updated schedules if revisions are made.

Include amounts of Change Orders and Construction Change Directives issued prior to the last day of the construction period covered by the application.

Payment for Stored Materials:

As a means of offsetting escalation on short lead items of material and equipment, and in the interest of obtaining good competitive bids, the Owner will provide payment for contract items stored off, as well as on the site of the work. In order to qualify for payment, the material or equipment must be safely stored, protected, and insured against loss or damage, inspected and dedicated to this project only. Any extra cost of offsite storage is to be included in the proposal.

Materials stored within contract limits shall be in an area designated by the Owner. Materials or equipment lost through theft or mishandling shall be replaced by the Contractor without cost to the Owner.

Transmittal: Submit (3) signed and notarized original copies of each Application for Payment to the Architect by a method ensuring receipt within 24 hours. One copy shall be complete, including waivers of lien and similar attachments, when required.

Waivers of Mechanics Lien: With each Application for Payment, submit waivers of mechanics liens from Sub-Contractors, Sub-subcontractors, and Suppliers for the construction period covered by the previous application.

The Owner reserves the right to designate which entities involved in the work must submit waivers.

Waiver Delays: Submit each Application for Payment with the Contractor's waiver of mechanics lien for the period of construction covered by the application.

Submit final Applications for Payment with or preceded by final waivers from every entity involved with performance of the Work covered by the application that is lawfully entitled to a lien.

Waiver Forms: Submit waivers of lien on forms, and executed in a manner, acceptable to the Owner.

Waiver Accounting: With each application for payment provide an itemized spreadsheet showing waiver amounts totaling previous month distributions.

Initial Application for Payment: Administrative actions and submittals, that must precede or coincide with submittal of the first Application for Payment, include the following:

- List of Subcontractors
- Sworn Statement
- Schedule of Values
- Contractor's Construction Schedule (preliminary if not final)
- Certificates of insurance and insurance policies
- Performance and payment bonds. (if required)
- Data needed to acquire the Owner's insurance

Application for Payment at Substantial Completion: Following issuance of the Certificate of Substantial Completion, submit an Application for Payment.

Administrative actions and submittals that shall precede or coincide with this application include:

- Occupancy permits and similar approvals
- Warranties (guarantees) and maintenance agreements
- Test/adjust/balance records
- Maintenance instructions
- Meter readings
- Startup performance reports
- Change over information related to Owner’s occupancy, use, operation, and maintenance
- Final cleaning

- General Contractor punch list

Final Payment Application: Administrative actions and submittals that must precede or coincide with submittal of the final Application for Payment include the following:

- Completion of Project closeout requirements
- Completion of items specified for completion after Substantial Completion
- Ensure that unsettled claims will be settled
- Ensure that incomplete Work is not accepted and will be completed without undue delay
- Transmittal of required Project Construction Records to the Owner
- Proof that taxes, fees, and similar obligations were paid
- Removal of temporary facilities and services
- Removal of surplus materials, rubbish, and similar elements
- Proof that final punch list items are completed.

END OF SECTION 010270 – APPLICATIONS FOR PAYMENT

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Definitions:

General: Basic contract definitions are included in the conditions of the contract.

"Indicated": The term "indicated" refers to graphic representations, notes, or schedules on the drawings, or other paragraphs or schedules in the specifications, and similar requirements in the contract documents. Terms such as "shown," "noted," "scheduled," and "specified" are used to help the reader locate the reference. Location is not limited.

"Directed": Terms such as "directed," "requested," "authorized," "selected," "approved," "required," and permitted" mean directed by the Architect, requested by the Architect, and similar phrases. "Approved": The term "approved," when used in conjunction with the Architect's action on the Contractor's submittals, applications, and requests, is limited to the Architect's duties and responsibilities as stated in the conditions of the contract.

"Regulations": The term "regulations" includes laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that control performance of the work.

"Furnish": The term "furnish" means supply and deliver to the project site ready for unloading, unpacking, assembly, installation, and similar operations.

"Install": The term "install" describes operations at the project site including the actual unloading, unpacking, assembly, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.

"Provide": The term "provide" means to furnish and install, complete and ready for the intended use. "Installer": An installer is the Contractor or another entity engaged by the Contractor, either as an employee, subcontractor, or contractor of lower tier to perform a particular construction activity, including installation, erection, application, or similar operations. “Installers” are required to be experienced in the operations they are engaged to perform.

"Project Site”: The space available to the Contractor for performing construction activities, either exclusively or in conjunction, with others performing other work as part of the project. The extent of the project site is shown on the drawings, and may or may not be identical with the description of the land on which the project is to be built.

"Testing Agencies": A testing agency is an independent entity engaged to perform specific inspections or tests either at the project site or elsewhere, and to report on if required, to interpret results of those inspections or tests.

“Contract Documents”: The term “Contract Documents” refers to the drawings and specifications that describe, locate, dimension, give physical properties, performance, characteristics, sources of supply, and other pertinent information relating to the elements of the work.

Specification Format and Content:

Specification Format: These specifications are organized into divisions and sections based on CSI's 48- Division format and Master Format’s numbering system

Specification Content: This Specification uses certain conventions regarding the style of language, and the intended meaning of certain terms, words, and phrases when used in particular situations or circumstances. These conventions are explained as follows:

- Abbreviated Language: Language used in specifications and other contract documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated shall be interpolated as the sense requires. Singular words will be interpreted as plural, and plural words interpreted as singular where applicable as the context of the contract documents indicates.
- Streamlined Language: The specifications generally use the imperative mood and streamlined language. Requirements expressed in the imperative mood are to be performed by the Contractor. At certain locations in the text, subjective language is used for clarity to describe responsibilities that must be fulfilled indirectly by the Contractor or by others when so noted. The words "shall be" are implied where a colon (:) is used within a sentence or phrase.

Industry Standards:

Applicability of Standards: Except where the contract documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the contract documents to the extent referenced. Such standards are made a part of the contract documents by reference.

Publication Dates: Comply with the standards in effect as of the date of the contract documents. Conflicting Requirements: Where compliance with two or more standards is specified, and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer to the Architect before proceeding for a decision on requirements that are different but apparently equal, and where it is uncertain which requirement is the most stringent.

Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum acceptable. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate for the context of the requirements. Refer uncertainties to the Architect for a decision before proceeding.

Copies of Standards: Each entity engaged in construction on the project is required to be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the contract documents.

Abbreviations and Names: Trade association names and titles of general standards are frequently abbreviated. Where such acronyms or abbreviations are used in the specifications or other contract documents, they mean the recognized name of the trade association, standards-generating organization, authorities having jurisdiction, or other entity applicable to the context of the text provision. Refer to Gale Research Co.'s "Encyclopedia of Associations," available in most libraries.

Abbreviations and Names: Trade association names and titles of general standards are frequently abbreviated. The following acronyms or abbreviations, as referenced in the contract documents, are defined to mean the associated names. Names and addresses are subject to change and are believed, but are not assured to be accurate and up-to-date as of the date of the contract documents.

END OF SECTION 010950 – REFERENCE STANDARDS AND DEFINITIONS

SECTION 013000 - SUBMITTALS

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Summary:

This Section includes administrative and procedural requirements for submittals required for performance of the work, including the following:

- Contractor's construction schedule
- Daily construction reports
- Shop drawings
- Product data
- Samples

Refer to Submittal Procedures Section 1330 for additional site submittal requirements.

Submittal Procedures:

Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.

Contractor's Construction Schedule:

Bar-Chart Schedule: Prepare a fully developed, horizontal bar chart type Contractor's Construction

Schedule. Submit within thirty (30) days after the date established for "Commencement of the Work." Schedule Updating: Revise the schedule after each meeting, event, or activity where revisions have been recognized or made. Issue the updated schedule concurrently with the report of each meeting.

Shop Drawings:

Contractor shall review shop drawings prior to submittal to Architect. Contractor’s responsibility for changes, errors, and omission in submittals is not relieved by Architect’s review. Begin no work, which requires shop drawing review until Architect has reviewed and returned shop drawings. Architect’s review of shop drawings is for general conformance to design concepts. Contract documents, plans, and specifications are not changed by Architect’s review of the shop drawings.

Submit newly prepared information drawn accurately to scale. Highlight, encircle, or otherwise indicate deviations from the contract documents. Do not reproduce contract documents or copy standard information as the basis of shop drawings. Standard information prepared without specific reference to the project is not a shop drawing.

Shop Drawings include fabrication and installation drawings, setting diagrams, schedules, patterns, templates, and similar drawings. Include the following information:

- Dimensions
- Identification of products and materials included by sheet and detail number
- Compliance with specified standards
- Notation of coordination requirements

• Notation of dimensions established by field measurement

Do not use shop drawings without an appropriate final stamp indicating action taken.

Electronic Submittals:

Transmittal Procedure:

Submittals shall be submitted promptly in accordance with dates in proposals, approved schedules and in such sequence that there is no delay in the Work or the work of any other Contractor.

Submittals regarding material and equipment shall be accompanied by a Transmittal Form on the Contractor's letterhead identifying the material or equipment and any variations from these specifications. A separate form shall be used for each specific item, class of material, equipment, and items specified in separate, discrete sections, for which the submittal is required. Submittals for various items shall be made with a single form when the items taken together constitute a manufacturer's package or are so functionally related that expediency indicates checking or review or the group or package as a whole.

A unique number, sequentially arranged, shall be noted on the transmittal form accompanying each item's submittal. Original submitted numbers shall have the following format "XXXX-Y"; where "XXXX" is the originally assigned submittal number that corresponds to the specification section, and "Y" is a sequential letter assigned for each submittal requested by the specification section, i.e., A, B, or C being the 1st, 2nd, and 3rd submittals for that specification section, specification section 02700. Revised or resubmitted submittals are to include a revision number after the submittal number, i.e. 02700-B Rev3 is the third revision of submittal 02700-B.

Deviation From Contract: If the Contractor proposed to provide material or equipment which does not conform to the specifications and drawings, he shall indicate so on the transmittal form accompanying the submittal file. He shall prepare his reason for a change, including cost differential, and request a change order to cover the deviations.

Submittal Completeness: Submittals which do not have all the information required to be submitted, including deviations, are not acceptable and will be returned without review.

Review Procedure:

When the contract documents require a submittal, the Contractor shall post all information to the

"Box" site in the appropriate folder based on the submittal numbering system stated above. Files shall be in the format of a single PDF for each submittal with the transmittal included as the first page. Submit three (3) samples for items that require physical review (i.e. color selection, finish textures, etc.).

Submit full-size samples, fully fabricated samples cured and finished as specified, and physically identical with the material or product proposed. Samples include partial sections of manufactured or fabricated components, cuts or containers of materials, color range sets, and swatches showing color, texture, and pattern.

Submit Samples for review of size, kind, color, pattern, and texture. Submit samples for a final check of these characteristics with other elements, and a comparison of these characteristics between the final submittal and the actual component as delivered and installed.

Maintain sets of Samples as returned at the project site for quality comparisons throughout the course of construction.

Unless otherwise specified, within 14 calendar days after receipt of the submittal, the Architect/Engineer shall review the submittal. The submittal will be electronically stamped and posted to the Box site and indicated one of the following actions:

If the review indicates that the material, equipment or work method is in general conformance with the design concept and complies with the drawings and specifications, submittal copies will be marked “Furnish as Submitted”. In this event the Contractor may begin to implement the work method or incorporate the material or equipment covered by the submittal.

If the review indicates limited corrections are required, submitted copies will be marked “Furnish as Corrected”. The Contractor may begin implementing the work method by the submittal in accordance with the noted corrections. Where submittal information will be incorporated in O&M data, a corrected copy shall be provided.

If the review reveals that the submittal is insufficient or contains incorrect data, submitted copies will be marked “Revise and Resubmit”. Except at his own risk, the Contractor shall not undertake work covered by this submittal until it has been revised, resubmitted and returned marked either “Furnish as Submitted” or “Furnish as Corrected”.

If the review indicates that the material, equipment or work method is not in general conformance with the drawings and specifications, copies of the submittal will be marked “Rejected”. Submittals with deviations which have not been identified clearly may be rejected. Except at his own risk the Contractor shall not undertake the work covered by such submittals until it has been revised, resubmitted and returned marked either “Furnish as Submitted” or “Furnish as Corrected”.

If the review indicates that the material or equipment is not from an acceptable manufacturer, as indicated in the specifications, copies of the submittal will be marked “Submit Specified Item”. Except at his own risk, the Contractor shall not undertake the work covered by such submittals until it has been revised, resubmitted and returned marked either “Furnish as Submitted” or “Furnish as Corrected”.

Effect of Review of Contractor’s Submittal: Review of drawings, methods of work, or information regarding materials or equipment the Contractor proposes to provide, shall not relieve the Contractor of his responsibility for errors therein and shall not be regarded as an assumption of risks or liabilities by the Architect/Engineer of the Owner, or by an officer or employee thereof, and the Contractor shall have no claim under the contract on account of the failure, or partial failure, of the method of work, material, or equipment so reviewed. A mark of “Furnish as Submitted” or “Furnish as Corrected” shall mean that the Owner has no objection to the Contractor, upon his own responsibility, using the plan or method of work proposed, or providing the materials or equipment proposed.

END OF SECTION 013000 - SUBMITTALS

SECTION 015000 - CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Summary:

This Section includes requirements for construction facilities and temporary controls, including temporary utilities, support facilities, and security and protection.

Temporary utilities include, but are not limited to, the following:

- Water service and distribution
- Temporary electric power and light
- Temporary heat
- Ventilation
- Telephone service
- Sanitary facilities including drinking water
- Storm and sanitary sewer

Support facilities include, but are not limited to the following:

- Field offices and storage sheds
- Temporary roads and paving
- Dewatering facilities and drains
- Temporary enclosures
- Temporary project identification signs and bulletin boards
- Waste disposal services.

Security and protection facilities include, but are not limited to the following:

- Temporary fire protection
- Barricades, warning signs, and lights
- Sidewalk bridge or enclosure fence for the site
- Environmental protection

Quality Assurance:

Regulations: Comply with industry standards and applicable laws and regulations of authorities having jurisdiction including, but not limited to the following:

- Building Code Requirements
- Health And Safety Regulations
- Utility Company Regulations
- Police, Fire Department, And Rescue Squad Rules
- Environmental Protection Regulations

Standards: Comply with NFPA 241 "Standard for Safeguarding Construction, Alterations, and Demolition Operations," ANSI A10 Series Standards for "Safety Requirements for Construction and Demolition," and NECA Electrical Design Library "Temporary Electrical Facilities."

Electrical Service: Comply with NEMA, NECA, and UL Standards and Regulations for temporary electric service. Install service in compliance with NFPA 70 "National Electric Code."

Inspections: Arrange for authorities having jurisdiction to inspect and test each temporary utility before use. Obtain required certifications and permits.

Project Conditions:

Temporary Utilities: Prepare a schedule indicating dates for implementation and termination of each temporary utility. At the earliest feasible time when acceptable to the Owner, change over from use of temporary service to use of permanent service.

Conditions of Use: Keep temporary services and facilities clean and neat in appearance. Operate in a safe and efficient manner. Relocate temporary services and facilities as the work progresses. Do not overload facilities or permit them to interfere with progress.

Take necessary fire-prevention measures. Do not allow hazardous, dangerous, or unsanitary conditions, or public nuisances to develop or persist on-site.

Site Clean Up: Daily and more often if necessary, inspect the site, and pick up all scrap, debris, and waste material. Remove all such items to the place designated for their storage.

Products and Equipment:

Materials:

General: Provide new materials, and if acceptable to the Architect, the Contractor may use undamaged previously used materials in serviceable condition. Provide materials suitable for use intended.

Tarpaulins: Provide waterproof, fire-resistant, UL-labeled tarpaulins with flame-spread rating of 15 or less. For temporary enclosures provide translucent, nylon-reinforced, laminated polyethylene or polyvinyl chloride fire-retardant tarpaulins.

Water: Provide potable water approved by local health authorities.

Equipment:

General: Provide new equipment, and if acceptable to the Architect, the Contractor may use undamaged previously used equipment in serviceable condition. Provide equipment suitable for use intended.

Water Hoses: Provide 3/4-inch (19-mm), heavy-duty, abrasion-resistant flexible rubber hoses 100 feet (30m) long with pressure rating greater than the maximum pressure of the water distribution system. Provide adjustable shutoff nozzles at hose discharge.

Electrical Outlets: Provide properly configured NEMA-polarized outlets to prevent insertion of 110 to 120-volt plugs into higher voltage outlets. Provide receptacle outlets equipped with ground-fault circuit interrupters, reset button, and pilot light for connection of power tools and equipment.

Electrical Power Cords: Provide grounded extension cords. Use hard-service cords where exposed to abrasion and traffic. Provide waterproof connectors to connect separate lengths of electric cords if single lengths will not reach areas where construction activities are in progress. Do not exceed safe length-voltage ratio.

Lamps and Light Fixtures: Provide general service incandescent lamps of wattage required for adequate illumination. Provide guard cages or tempered-glass enclosures where exposed to breakage. Provide exterior fixtures where exposed to moisture.

Heating Units: Provide temporary heating units that have been tested and labeled by UL, FM, or another recognized trade association related to the type of fuel being consumed.

Temporary Office: Provide prefabricated or mobile units or similar job-built construction with lockable entrances, operable windows, and serviceable finishes. Provide heated and air conditioned units on foundations adequate for normal loading.

Temporary Toilet Facilities: Provide self contained, single occupant toilet units of the chemical aerated recirculation or combustion type. Provide units properly vented and fully enclosed with a glass fiber reinforced polyester shell or similar non-absorbent material.

Fire Extinguishers: Provide hand-carried, portable, UL-rated, Class A fire extinguishers for temporary offices and similar spaces. In other locations provide hand-carried, portable, UL-rated, Class ABC, dry- chemical extinguishers or a combination of extinguishers of NFPA-recommended classes for the exposures.

Comply with NFPA 10 and NFPA 241 for classification, extinguishing agent, and size required by location and class of fire exposure.

Installation:

Use qualified personnel for installation of temporary facilities. Locate facilities where they will serve the project adequately, and result in minimum interference with performance of the work.

Relocate and modify facilities as required.

Temporary Utility Installation:

General: Engage the appropriate local utility company to install temporary service or connect to existing service. Where company provides only part of the service, provide the remainder with matching compatible materials & equipment. Comply with company recommendations.

Use Charges: Cost or use charges for temporary facilities are not chargeable to the Owner or Architect. Neither the Owner nor Architect will accept cost or use charges as a basis of claims for Change Orders.

Water Service: Install water service and distribution piping of sizes and pressures adequate for construction until permanent water service is in use.

Temporary Electric Power Service: Provide weatherproof grounded electric power service and distribution system of sufficient size, capacity, and power characteristics during construction period. Include meters, transformers, overload-protected disconnects, automatic ground-fault interrupters, and main distribution switch gear.

Temporary Lighting: When overhead floor or roof deck has been installed provide temporary lighting with local switching.

After installation of the permanent lighting system, it may be used for construction lighting as required.

Complete installation shall be in compliance with all applicable codes. Electrical Contractor's bid will allow removal and salvage for any temporary service when it is no longer required.

Temporary Heat: Provide temporary heat required by construction activities for curing or drying of completed installations or for protection of installed construction from adverse affects of low temperatures or high humidity. Select safe equipment that will not have a harmful

effect on completed installations or elements being installed. Coordinate ventilation requirements to produce the ambient condition required, and minimize consumption of energy.

Heating Facilities: Except where the Owner authorizes use of the permanent system provide vented, self-contained, LP-gas or fuel oil heaters with individual space thermostatic control.

Use of gasoline-burning space heaters, open flame or salamander heating units is prohibited.

Temporary Telephones: Provide temporary telephone service throughout the construction period for all personnel engaged in construction activities. Install telephone on a separate line for each temporary office and first aid station.

Sanitary facilities include temporary toilets, wash facilities, and drinking-water fixtures. Comply with regulations and health codes for the type, number, location, operation, and maintenance of fixtures and facilities. Install where facilities will best serve the project's needs.

Sewers and Drainage: If sewers are available, provide temporary connections to remove effluent that can be discharged lawfully. If sewers are not available or cannot be used, provide drainage ditches, dry wells, stabilization ponds, and similar facilities. If neither sewers nor drainage facilities can be lawfully used for discharge of effluent, provide containers to remove and dispose of effluent off-site in a lawful manner.

Provide earthen embankments and similar barriers in and around excavations, and subgrade construction, sufficient to prevent flooding by runoff of storm water from heavy rains.

Dewatering Facilities and Drains: For temporary drainage and dewatering facilities, and operations not directly associated with construction activities included under individual Sections, comply with dewatering requirements of applicable Division 02 Sections. Where feasible utilize the same facilities. Provide dewatering as required and maintain the site, excavations, and construction free of water. Temporary Enclosures: Provide temporary enclosures for protection of construction in progress, and completed from exposure, foul weather, other construction operations, and similar activities.

Where heat is needed, and the permanent building enclosure is not complete, provide temporary enclosures where there is no other provision for containment of heat. Coordinate enclosure with ventilating and material drying or curing requirements to avoid dangerous conditions and effects.

Project Identification and Temporary Signs: Prepare project identification, and other signs of size indicated. Install signs where indicated to inform the public and persons seeking entrance to the project. Support on posts or framing of preservative-treated wood or steel. Do not permit installation
of unauthorized signs.

Project Identification Signs: The General Contractor shall arrange for a suitably constructed project sign designed by the Architect/Engineer, giving the name of the project, Owner, Architect/Engineer, and General Contractor. No other signs will be permitted on the site without written approval of the Owner. The sign shall be installed within two weeks after the start of construction operations, and shall be maintained in good condition throughout the period of construction. The cost shall be included as part of the General Conditions.

Glass Replacement: The General Contractor shall assume all costs of replacement of glass broken, cracked, and/or damaged by him. Glass scratched through improper cleaning shall be considered damaged, and shall be replaced by the party that caused the damage.

Cleaning Up: The General Contractor shall arrange for all clean up operations. Clean up must be timely as well as thorough in order to meet safety regulations, and permit other Contractors to

perform without hindrance from dirt and debris. The costs of removal of debris from the site shall be part of the General Conditions.

Rodent and Pest Control: Before deep foundation work has been completed, retain a local exterminator or Pest Control Company to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests. Employ this service to perform extermination and control procedures at regular intervals so the project will be free of pests and their residues at Substantial Completion. Perform control operations lawfully using environmentally safe materials.

Environmental Protection: Provide protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations, and minimize the possibility that air, waterways, and subsoil might be contaminated or polluted or that other undesirable effects might result. Avoid use of tools and equipment that produce harmful noise. Restrict use of noise- making tools and equipment to hours that will minimize complaints from persons or firms near the site.

Operation, Termination, and Removal:

Supervision: Enforce strict discipline in use of temporary facilities. Limit availability of temporary facilities to essential and intended uses to minimize waste and abuse.

Maintenance: Maintain facilities in good operating condition until removal. Protect from damage by freezing temperatures and similar elements.

Termination and Removal: Unless the Architect requests that it be maintained longer, remove each temporary facility when the need has ended, when replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete, or if necessary, restore permanent construction that may have been delayed because of interference with the temporary facility. Repair damaged work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired. Substantial Completion: Clean and renovate permanent facilities used during the construction period including, but not limited to the following:

- Replace air filters and clean inside of ductwork and housings.
- Replace significantly worn parts and parts subject to unusual operating conditions.
- Replace lamps burned out or noticeably dimmed by hours of use.

Utility Changeover: The cost of temporary utilities and Utility Company usage charges will be the responsibility of the General Contractors until the following are completed:

Electric usage: The Owner will assume responsibility for electricity consumption when the building has an occupancy permit.

Water/sewerage: The Owner will assume responsibility for water/sewerage usage when the building has an occupancy permit.

Gas usage: The Owner will assume responsibility for gas usage when the building has an occupancy permit.

END OF SECTION 015000 – CONSTRUCTION FACILITIES & TEMPORARY CONTROLS

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Summary:

This Section includes administrative and procedural requirements for handling requests for substitutions made after award of the Contract.

Definitions:

Definitions in this Article does not change or modify the meaning of other terms used in the Contract Documents.

Substitutions: Changes in products, materials, equipment, and methods of construction required by the contract documents proposed by the Contractor after award of the contract are considered to be requests for substitutions. The following are not considered to be requests for substitutions.

Substitutions requested during the bidding period, and accepted by Addendum prior to award of the contract are included in the contract documents, and are not subject to requirements specified in this section for substitutions.

Submittals:

Substitution Request Submittal: The Architect will consider requests for substitution if received within (60) days after commencement of the work. Requests received more than (60) days after commencement of the work may be considered or rejected at the discretion of the Architect.

Submit electronic copies of each request for substitution for consideration. Submit requests in form, and according to procedures required for Change Order proposals.

Identify the product or the fabrication or installation method to be replaced in each request. Include related specification section and drawing numbers.

Provide complete documentation showing compliance with the requirements for substitutions, and the following information, as appropriate:

- Product Data, including drawings and descriptions of products and fabrication and installation procedures.
- Samples, where applicable or requested.
- A statement indicating the substitution's effect on the Contractor's construction schedule compared to the schedule without approval of the substitution. Indicate the effect of the proposed substitution on overall Contract Time.
- Cost information, including a proposal of the net change, if any in the contract sum.
- The Contractor’s certification that the proposed substitution conforms to requirements in the contract documents in every respect, and is appropriate for the applications indicated.

Architect's Action: If necessary, the Architect will request additional information or documentation for evaluation within one week of receipt of a request for substitution. The Architect will notify the Contractor of acceptance or rejection of the substitution within two weeks of receipt of the request, or one week of receipt of additional information or documentation, whichever is later. Acceptance will be in the form of a Change Order.

END OF SECTION 016310 - SUBSTITUTIONS

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Summary:

This Section includes administrative and procedural requirements for contract closeout including, but not limited to, the following:

- Inspection procedures.
- Project record document submittal.
- Operation and maintenance manual submittal.
- Submittal of warranties.
- Final cleaning.

Substantial Completion:

Preliminary Procedures: Before requesting inspection for Certification of Substantial Completion, complete the following. List exceptions in the request.

In the Application for Payment that coincides with, or first follows, the date Substantial Completion is claimed, show 100 percent completion for the portion of the work claimed as substantially complete.

If 100 percent completion cannot be shown, include a list of incomplete items, the value of incomplete construction, and reasons the work is not complete.

Advise the Owner of pending insurance changeover requirements.

Submit specific warranties, workmanship bonds, maintenance agreements, final certifications, and similar documents.

Obtain and submit releases enabling the Owner unrestricted use of the work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases. Submit record drawings, maintenance manuals, final project photographs, damage or settlement surveys, property surveys, and similar final record information.

Deliver tools, spare parts, extra stock, and similar items.

Make final changeover of permanent locks and transmit keys to the Owner. Advise the Owner's personnel of changeover in security provisions.

Complete startup testing of systems and instruction of the Owner's operation and maintenance personnel. Discontinue and remove temporary facilities from the site, along with mockups, construction tools, and similar elements.

Complete final cleanup requirements, including touch up painting.
Touch up, otherwise repair, and restore marred, exposed finishes.

Inspection Procedures: On receipt of a request for inspection, the Architect will either proceed with inspection or advise the Contractor of unfilled requirements. The Architect will prepare the Certificate of Substantial Completion following inspection or advise the Contractor of construction that must be completed or corrected before the certificate will be issued.

Results of the completed inspection will form the basis of requirements for final acceptance.

Final Acceptance:

Preliminary Procedures: Before requesting final inspection for certification of final acceptance and final payment, complete the following. List exceptions in the request.

Submit the final payment request with releases and supporting documentation not previously submitted and accepted. Include insurance certificates for products and completed operations where required.

Submit an updated final statement, accounting for final additional changes to the contract sum.

Submit a certified copy of the Architect's final inspection list of items to be completed or corrected, endorsed, and dated by the Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance and shall be endorsed and dated by the Architect.

Timely Execution of Punch List: Owner retains the right, and Contractors acknowledge and agree with this right, that the Owner at his discretion, may hire an independent Contractor to complete final inspection punch list items if they are not performed within a reasonable time, deducting a cost from retainages prior to forwarding final payment. Normally, a reasonable time is considered to be (30) days after receipt of punch list by the General Contractor.

Record Document Submittals:

General: Do not use record documents for construction purposes. Protect record documents from deterioration and loss in a secure fire-resistant location. Provide access to record documents for the Architect's reference during normal working hours.

Record Drawings: Maintain a clean, undamaged set of black line copies of contract drawings and shop drawings. Mark the set to show the actual installation where the installation varies substantially from the Work as originally shown. Mark which drawing is most capable of showing conditions fully and accurately. Where shop drawings are used, record a cross-reference at the corresponding location on the contract drawings. Give particular attention to concealed elements that would be difficult to measure and record at a later date. Mark new information that is important to the Owner but was not shown on contract drawings or shop drawings.

Mark record sets with red erasable pencil. Use other colors to distinguish between variations in separate categories of the work.

Electronic Drawings: Unless otherwise noted or agreed, the Contractor will scan a complete record set of as built drawings and provide them to the Owner.

Electronic Owner’s Manual: The Contractor shall organize operation and maintenance data into suitable computer files of manageable size. Mark files with appropriate identification including the following types of information:

- Emergency instructions.
- Spare parts list.
- Copies of warranties.
- Wiring diagrams.
- Recommended "turn-around" cycles.
- Inspection procedures.
- Shop Drawings and Product Data.
- Fixture lamping schedule. Schedule is to include fixture type, location(s), lamp replacement model number, and manufacturer.

Closeout Procedures:
Operation and Maintenance Instructions: Arrange for each Installer of equipment that requires regular maintenance to meet with the Owner's personnel to provide instruction in proper operation and maintenance. Provide instruction by manufacturer's representatives if installers

are not experienced in operation and maintenance procedures. Include a detailed review of the following items:

- Maintenance manuals.
- Record documents.
- Spare parts and materials.
- Tools.
- Control sequences.
- Cleaning.
- Warranties and bonds.
- Maintenance agreements and similar continuing commitments.

As part of instruction for operating equipment, demonstrate the following procedures:

- Startup
- Shutdown
- Emergency operations
- Noise and vibration adjustments
- Safety procedures
- Economy and efficiency adjustments
- Effective energy utilization
-

Final Cleaning:

General: The General Conditions require general cleaning during construction. Regular site cleaning is included in Division 01 Section "Construction Facilities and Temporary Controls."

Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to the condition expected in a normal commercial building cleaning and maintenance program. Comply with manufacturer's instructions.

Complete the following cleaning operations before requesting inspection for certification of Substantial Completion.

- Remove labels that are not permanent labels
- Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other substances that are noticeable vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials.
- Clean exposed exterior and interior hard-surfaced finishes to a dust-free condition, free of stains, films, and similar foreign substances. Restore reflective surfaces to their original condition. Leave concrete floors broom clean. Vacuum carpeted surfaces.
- Wipe surfaces of mechanical and electrical equipment. Remove excess lubrication and other substances.
- Clean light fixtures and lamps.
- Clean the site, including landscape development areas, of rubbish, litter, and other foreign substances. Sweep paved areas broom clean; remove stains, spills, and other foreign deposits. Rake grounds that are neither paved nor planted to a smooth, even- textured surface.

END OF SECTION 017000 - PROJECT CLOSEOUT

SECTION 017400 - WARRANTIES

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Summary:

Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the work that incorporates the products. Manufacturer's disclaimers and limitations on product warranties do not relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.

Separate Prime Contracts: Each prime Contractor is responsible for warranties related to its own contract.

Definitions:

Standard product warranties are preprinted written warranties published by individual manufacturers for particular products, and are specifically endorsed by the manufacturer to the Owner.

Special warranties are written warranties required by, or incorporated in the contract documents, either to extend time limits provided by standard warranties or to provide greater rights for the Owner.

Warranty Requirements:

Related Damages and Losses: When correcting failed or damaged warranted construction, remove and replace construction that has been damaged as a result of such failure or must be removed and replaced to provide access for correction of warranted construction.

Reinstatement of Warranty: When work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.

Replacement Cost: Upon determination that work covered by a warranty has failed, replace or rebuild the work to an acceptable condition complying with requirements of the contract documents. The Contractor is responsible for the cost of replacing or rebuilding defective work regardless of whether the Owner has benefited from use of the work through a portion of its anticipated useful service life. Owner's Recourse: Expressed warranties made to the Owner are in addition to implied warranties, and shall not limit the duties, obligations, rights, and remedies otherwise available under the law. Expressed warranty periods shall not be interpreted as limitations on the time in which the Owner can enforce such other duties, obligations, rights, or remedies.

Where the contract documents require a special warranty or similar commitment on the work or part of the work, the Owner reserves the right to refuse to accept the work until the Contractor presents evidence that entities required to countersign such commitments are willing to do so.

Submittals:

Submit written warranties to the Architect prior to the date certified for Substantial Completion. If the Architect's Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion for the work, or a designated portion of the work, submit written warranties upon request of the Architect.

Form of Submittal: At final completion compile (1) copy of each required warranty properly executed by the Contractor or by the Contractor, subcontractor, supplier or manufacturer. Organize the warranty documents into an orderly sequence based on the table of contents of the project manual. Also provide one (1) electronic copy in the form of a flash drive for Owner’s use.

Bind warranties and bonds in heavy-duty commercial-quality durable 3-ring vinyl-covered loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch (115-by-280-mm) paper.

END OF SECTION 017400 - WARRANTIES

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Summary:

Extent of selective demolition is indicated on the drawings. Types of selective demolition work.

Definitions:

Remove: Remove and legally dispose of items except those indicated to be reinstalled, salvaged, or to remain the Owner's property.

Remove and Salvage: Items indicated to be removed and salvaged remain the Owner's property. Remove, clean, and pack or crate items to protect against damage. Identify contents of containers, and deliver to Owner's designated storage area.

Remove and Reinstall: Remove items indicated, clean, service, and otherwise prepare them for reuse, store and protect against damage. Reinstall items in the same locations or in locations indicated. Existing to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by the Architect, items may be removed to a suitable protected storage location during selective demolition, and then cleaned and reinstalled in their original locations.

Submittals:

Submit each item in this Article according to the Conditions of the Contract and Division 01

Specification Sections for information only, unless otherwise indicated.

Schedule indicating proposed sequence of operations for selective demolition work to Owner’s Representative for review prior to start of work. Include coordination for shutoff, capping, and continuation of utility services as required, together with details for dust and noise control protection. Provide detailed sequence of demolition and removal work to ensure uninterrupted progress of Owner’s on-site operations.

Coordinate with Owner’s continuing occupation of portions of existing building, and with Owner’s partial occupancy of completed new addition.

Project Conditions:

Occupancy: Owner will occupy portions of the building immediately adjacent to areas of selective demolition. Conduct selective demolition work in manner that will minimize need for disruption of Owner’s normal operations. Provide a minimum of 72 hours advance notice to Owner of demolition activities that will affect Owner’s normal operations.

Condition of Structures: Owner assumes no responsibility for actual condition of items or structures to be demolished.

Protections: Provide temporary barricades and other forms of protection to protect Owner’s personnel and the general public from injury due to selective demolition work.

Provide protective measures as required to provide free and safe passage of Owner’s personnel and the general public to occupied portions of building.

Protect from damage existing finish work that is to remain in place and becomes exposed during demolition operations.

Construct temporary insulated dustproof partitions where required to separate areas where noisy or extensive dirt or dust operations are performed. Equip partitions with dustproof doors and security locks.

Damages: Promptly repair damages caused to adjacent facilities by demolition work.
Explosives: Use of explosives will not be permitted.

Utility Services: Maintain existing utilities indicated to remain in service and protect them against damage during demolition operations.

Environmental Controls: Use water sprinkling, temporary enclosures, and other methods to limit dust and dirt migration. Comply with governing regulations pertaining to environmental protection.

Inspection:

Prior to commencement of selective demolition work, inspect areas in which work will be performed.

Photograph existing conditions to structure surfaces, equipment or to surrounding properties that could be misconstrued as damage resulting from selective demolition work; file with the Architect prior to starting work.

Preparation:

Provide interior and exterior shoring, bracing, or support to prevent movement, settlement or collapse of areas to be demolished and adjacent facilities to remain.

Cease operations and notify Architect immediately if safety of structure appears to be endangered. Take precautions to support structure until determination is made for continuing operations.

Cover and protect furniture, equipment, and fixtures from soilage or damage when demolition work is performed in areas where such items have not been removed.

Erect and maintain dust-proof partitions and closures as required to prevent spread of dust or fumes to occupied portions of the building.

Where selective demolition occurs immediately adjacent to occupied portions of the building, construct dust-proof partitions of minimum 3-5/8-inch studs, ½-inch drywall (joints untaped) on occupied side.

Locate, identify, stub off, and disconnect utility services that are not indicated to remain.

Demolition:

Perform selective demolition work in systematic manner. Use such methods as required to complete work indicated on Drawings in accordance with demolition schedule and governing regulations.

Demolish concrete and masonry in small sections. Cut concrete and masonry at junctures with construction to remain using power-driven masonry saw or hand tools; do not use power-driven impact tools.

Locate demolition equipment throughout structure and promptly remove debris to avoid imposing excessive loads on supporting walls, floors, or framing.

Provide services for effective air and water pollution controls as required by local authorities having jurisdiction.

Demolish foundation walls to depth of not less than 12 inches below existing ground surface. Demolish and remove below-grade wood or metal construction. Break up and remove below-grade concrete slabs.

For interior slabs on grade, use removal methods that will not crack or structurally disturb adjacent slabs or partitions. Use power saw where possible.

If unanticipated mechanical, electrical, or structural elements conflict with intended function or design are encountered, investigate and measure both nature and extent of the conflict. Submit report to Architect in written accurate detail. Pending receipt of directive from Owner's Representative, rearrange selective demolition schedule as necessary to continue overall job progress without undue delay.

Salvaged Materials:

Salvaged Items: Where indicated on drawings as "Save", "Salvage", "Remove and Reinstall", "Deliver to Owner" carefully remove indicated items, clean, store, and turn over to Owner, and obtain receipt. Historic artifacts, including cornerstones and their contents, commemorative plaques and tablets, antiques, and other articles of historic significance remain the property of Owner. Notify Owner's

Representative if such items are encountered, and obtain acceptance regarding method of removal and salvage for Owner.

Disposal of Demolished Materials:

Remove from building site, debris, rubbish, and other materials resulting from demolition operations.

Transport and legally dispose off site.

If hazardous materials are encountered during demolition operations, comply with applicable regulations, laws, and ordinances concerning removal, handling, and protection against exposure or environmental pollution.

Cleanup and Repair:

Upon completion of demolition work, remove tools, equipment, and demolished materials from site.

Remove protections, and leave interior areas broom clean.

Repair demolition performed in excess of that required. Return elements of construction and surfaces to remain to condition existing prior to start operations. Repair adjacent construction or surfaces soiled or damaged by selective demolition work.

END OF SECTION 024119 – SELECTIVE DEMOLITION

SECTION 031000 - CONCRETE FORMING AND ACCESSORIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section. If differing requirements are identified elsewhere (in these specifications or on drawings or separate instructions), the more stringent requirement shall be met.

1.2 SUMMARY

A. Section Includes:

1. Form-facing material for cast-in-place concrete.

2. Shoring, bracing, and anchoring.
3. Concrete accessories

1.3 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.4 ACTION SUBMITTALS

A. Product Data: For each of the following:

1. Exposed surface form-facing material.

2. Concealed surface form-facing material.
3. Form ties.

4. Waterstops.

5. Form-release agent.

1.5 INFORMATIONAL SUBMITTALS

A. Field quality-control reports.

B. Minutes of preinstallation conference.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Concrete Formwork: Design, engineer, erect, shore, brace, and maintain formwork, shores, and reshores in accordance with ACI 301, to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until structure can support such loads, so that resulting concrete conforms to the required shapes, lines, and dimensions.

1. Design wood panel forms in accordance with APA's "Concrete Forming Design/Construction Guide."

2. Design formwork to limit deflection of form-facing material to 1/240 of center-to-center spacing of supports.

2.2 FORM-FACING MATERIALS

A. As-Cast Surface Form-Facing Material:

1. Provide continuous, true, and smooth concrete surfaces.
2. Furnish in largest practicable sizes to minimize number of joints.

B. Concealed Surface Form-Facing Material: Lumber, plywood, metal, plastic, or another approved material.

1. Provide lumber dressed on at least two edges and one side for tight fit.

2.3 WATERSTOPS

A. Flexible Rubber Waterstops: U.S. Army Corps of Engineers CRD-C 513, with factory-installed metal eyelets, for embedding in concrete to prevent passage of fluids through joints. Factory fabricate corners, intersections, and directional changes.

B. Flexible PVC Waterstops: U.S. Army Corps of Engineers CRD-C 572, with factory-installed metal eyelets, for embedding in concrete to prevent passage of fluids through joints. Factory fabricate corners, intersections, and directional changes.

C. Self-Expanding Butyl Strip Waterstops: Manufactured rectangular or trapezoidal strip, butyl rubber with sodium bentonite or other hydrophilic polymers, for adhesive bonding to concrete, 3/4 by 1 inch.

D. Self-Expanding Rubber Strip Waterstops: Manufactured rectangular or trapezoidal strip, bentonite-free hydrophilic polymer-modified chloroprene rubber, for adhesive bonding to concrete, 3/8 by 3/4 inch.

2.4 RELATED MATERIALS

A. Chamfer Strips: Wood, metal, PVC, or rubber strips, 3/4 by 3/4 inch, minimum.

B. Rustication Strips: Wood, metal, PVC, or rubber strips, kerfed for ease of form removal.

C. Form-Release Agent: Commercially formulated form-release agent that does not bond with, stain, or adversely affect concrete surfaces and does not impair subsequent treatments of concrete surfaces.

D. Form Ties: Factory-fabricated, removable or snap-off, glass-fiber-reinforced plastic or metal form ties designed to resist lateral pressure of fresh concrete on forms and to prevent spalling of concrete on removal.

PART 3 - EXECUTION

3.1 INSTALLATION OF FORMWORK

A. Comply with ACI 301.

B. Construct formwork, so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117 and to comply with the Surface Finish designations specified in Section 033000 "Cast-In-Place Concrete" for as-cast finishes

C. Limit concrete surface irregularities as follows:

1. Surface Finish-1.0: ACI 117 Class D, 1 inch. (concealed concrete only)
2. Surface Finish-2.0: ACI 117 Class B, 1/4 inch. (all exposed concrete)

D. Construct forms tight enough to prevent loss of concrete mortar.

1. Minimize joints.
2. Exposed Concrete: Symmetrically align joints in forms.

E. Construct removable forms for easy removal without hammering or prying against concrete surfaces.

1. Provide crush or wrecking plates where stripping may damage cast-concrete surfaces.
2. Provide top forms for inclined surfaces steeper than 1.5 horizontal to 1 vertical.
3. Install keyways, reglets, recesses, and other accessories, for easy removal.

F. Do not use rust-stained, steel, form-facing material.

G. Set edge forms, bulkheads, and intermediate screed strips for slabs to achieve required elevations and slopes in finished concrete surfaces.

1. Provide and secure units to support screed strips.
2. Use strike-off templates or compacting-type screeds.

H. Provide temporary openings for cleanouts and inspection ports where interior area of formwork is inaccessible.

1. Close openings with panels tightly fitted to forms and securely braced to prevent loss of concrete mortar.
2. Locate temporary openings in forms at inconspicuous locations.

I. Chamfer exterior corners and edges of permanently exposed concrete.

J. At construction joints, overlap forms onto previously placed concrete not less than 12 inches.

K. Form openings, chases, offsets, sinkages, keyways, reglets, blocking, screeds, and bulkheads required in the Work.

1. Determine sizes and locations from trades providing such items.
2. Obtain written approval of Architect prior to forming openings not indicated on Drawings.

L. Construction and Movement Joints:

1. Construct joints true to line with faces perpendicular to surface plane of concrete.
2. Install so strength and appearance of concrete are not impaired, at locations indicated or as approved by Architect.
3. Place joints perpendicular to main reinforcement.
4. Locate joints for beams, slabs, joists, and girders in the middle third of spans.
   a. Offset joints in girders a minimum distance of twice the beam width from a beam-girder intersection.
5. Locate horizontal joints in walls and columns at underside of floors, slabs, beams, and girders and at the top of footings or floor slabs.
6. Space vertical joints in walls as indicated on Drawings.
   a. Locate joints beside piers integral with walls, near corners, and in concealed locations where possible.

M. Provide temporary ports or openings in formwork where required to facilitate cleaning and inspection.

1. Locate ports and openings in bottom of vertical forms, in inconspicuous location, to allow flushing water to drain.
2. Close temporary ports and openings with tight-fitting panels, flush with inside face of form, and neatly fitted, so joints will not be apparent in exposed concrete surfaces.

N. Clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, and other debris just before placing concrete.

O. Retighten forms and bracing before placing concrete, as required, to prevent mortar leaks and maintain proper alignment.

P. Coat contact surfaces of forms with form-release agent, according to manufacturer's written instructions, before placing reinforcement.

3.2 INSTALLATION OF EMBEDDED ITEMS

A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete.

1. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
2. Install anchor rods, accurately located, to elevations required and complying with tolerances in Section 7.5 of AISC 303.
3. Install reglets to receive waterproofing and to receive through-wall flashings in outer face of concrete frame at exterior walls, where flashing is shown at lintels, shelf angles, and other conditions.
4. Clean embedded items immediate prior to concrete placement.

3.3 INSTALLATION OF WATERSTOPS

A. Flexible Waterstops: Install in construction joints and at other joints indicated to form a continuous diaphragm.

1. Install in longest lengths practicable.
2. Locate waterstops in center of joint unless otherwise indicated on Drawings.
3. Allow clearance between waterstop and reinforcing steel of not less than 2 times the largest concrete aggregate size specified in Section 033000 "Cast-In-Place Concrete."
4. Secure waterstops in correct position at 12 inches on center.

5. Field fabricate joints in accordance with manufacturer's instructions using heat welding.
    a. Miter corners, intersections, and directional changes in waterstops.
    b. Align center bulbs.
6. Clean waterstops immediately prior to placement of concrete.
7. Support and protect exposed waterstops during progress of the Work.

B. Self-Expanding Strip Waterstops: Install in construction joints and at other locations indicated on Drawings, according to manufacturer's written instructions, by adhesive bonding, mechanically fastening, and firmly pressing into place.

1. Install in longest lengths practicable.
2. Locate waterstops in center of joint unless otherwise indicated on Drawings.
3. Protect exposed waterstops during progress of the Work.

3.4 FIELD QUALITY CONTROL

A. Special Inspections: Owner will engage a special inspector and qualified testing and inspecting agency to perform field tests and inspections and prepare test reports.

B. Testing Agency: Engage a qualified testing and inspecting agency to perform tests and inspections and to submit reports.

C. Inspections:

1. Inspect formwork for shape, location, and dimensions of the concrete member being formed.
2. Inspect insulating concrete forms for shape, location, and dimensions of the concrete member being formed.

END OF SECTION 031000 CONCRETE FORMING AND ACCESSORIES

SECTION 032000 - CONCRETE REINFORCING
PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section. If differing requirements are identified elsewhere (in these specifications or on drawings or separate instructions), the more stringent requirement shall be met.

1.2 SUMMARY

A. Section Includes:

1. Steel reinforcement bars.

2. Welded-wire reinforcement.

1.3 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.4 ACTION SUBMITTALS

A. Product Data: For the following:

1. Each type of steel reinforcement.

2. Bar supports.

B. Shop Drawings: Comply with ACI SP-066:

1. Include placing drawings that detail fabrication, bending, and placement.

2. Include bar sizes, lengths, materials, grades, bar schedules, stirrup spacing, bent bar diagrams, bar arrangement, location of splices, lengths of lap splices, details of mechanical splice couplers, details of welding splices, tie spacing, hoop spacing, and supports for concrete reinforcement.

C. Construction Joint Layout: Indicate proposed construction joints required to build the structure.

1. Location of construction joints is subject to approval of the Architect.

1.5 INFORMATIONAL SUBMITTALS

A. Welding certificates.

1. Reinforcement to Be Welded: Welding procedure specification in accordance with AWS D1.4/D1.4M

B. Material Test Reports: For the following, from a qualified testing agency:

1. Steel Reinforcement:

a. For reinforcement to be welded, mill test analysis for chemical composition and carbon equivalent of the steel in accordance with ASTM A706/A706M.

C. Field quality-control reports.

1.6 QUALITY ASSURANCE

A. Welding Qualifications: Qualify procedures and personnel in accordance with AWS D1.4/D 1.4M.

PART 2 - PRODUCTS

2.1 STEEL REINFORCEMENT

A. Reinforcing Bars: ASTM A615/A615M, Grade 60, deformed.

B. Low-Alloy Steel Reinforcing Bars: ASTM A706/A706M, deformed.

C. Headed-Steel Reinforcing Bars: ASTM A970/A970M.

D. Plain-Steel Welded-Wire Reinforcement: ASTM A1064/A1064M, plain, fabricated from as- drawn steel wire into flat sheets.

2.2 REINFORCEMENT ACCESSORIES

A. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded-wire reinforcement in place.

1. Manufacture bar supports from steel wire, plastic, or precast concrete in accordance with CRSI's "Manual of Standard Practice," of greater compressive strength than concrete and as follows:

a. For concrete surfaces exposed to view, where legs of wire bar supports contact forms, use CRSI Class 1 plastic-protected steel wire, all-plastic bar supports, or CRSI Class 2 stainless steel bar supports.

B. Tie Wire: ASTM A1064/A1064M, annealed steel, not less than 0.0508 inch in diameter.

2.3 FABRICATING REINFORCEMENT

A. Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."

PART 3 - EXECUTION

3.1 PREPARATION

A. Protection of In-Place Conditions:

1. Do not cut or puncture vapor retarder.
2. Repair damage and reseal vapor retarder before placing concrete.

B. Clean reinforcement of loose rust and mill scale, earth, ice, and other foreign materials that reduce bond to concrete.

3.2 INSTALLATION OF STEEL REINFORCEMENT

A. Comply with CRSI's "Manual of Standard Practice" for placing and supporting reinforcement.

B. Accurately position, support, and secure reinforcement against displacement.

1. Locate and support reinforcement with bar supports to maintain minimum concrete cover.

2. Do not tack weld crossing reinforcing bars.

C. Preserve clearance between bars of not less than 1 inch, not less than one bar diameter, or not less than 1-1/3 times size of large aggregate, whichever is greater.

D. Provide concrete coverage in accordance with ACI 318.

E. Set wire ties with ends directed into concrete, not toward exposed concrete surfaces.

F. Splices: Lap splices as indicated on Drawings or as follows whichever is greater.

1. Bars indicated to be continuous, and all vertical bars shall be lapped per ACI 318.

2. Stagger splices in accordance with ACI 318.

3. Mechanical Splice Couplers: Install in accordance with manufacturer's instructions.

4. Weld reinforcing bars in accordance with AWS D1.4/D 1.4M, where indicated on Drawings.

G. Install welded-wire reinforcement in longest practicable lengths.

1. Support welded-wire reinforcement in accordance with CRSI "Manual of Standard Practice."

2. Lap edges and ends of adjoining sheets at least one mesh spacing plus 2 inches for plain wire and 8 inches for deformed wire.

3. Offset laps of adjoining sheet widths to prevent continuous laps in either direction.

4. Lace overlaps with wire.

3.3 JOINTS

A. Construction Joints: Install so strength and appearance of concrete are not impaired, at locations indicated or as approved by Architect.

1. Place joints perpendicular to main reinforcement.

2. Continue reinforcement across construction joints unless otherwise indicated.

3.4 INSTALLATION TOLERANCES

A. Comply with ACI 117.

3.5 FIELD QUALITY CONTROL

A. Special Inspections: Owner will engage a special inspector and qualified testing and inspecting agency to perform field tests and inspections and prepare test reports.

B. Testing Agency: Engage a qualified testing and inspecting agency to perform tests and inspections and to submit reports.

C. Inspections:

1. Steel-reinforcement placement.
2. Steel-reinforcement mechanical splice couplers.
3. Steel-reinforcement welding.

END OF SECTION 032000

SECTION 033000 - CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

1.2 Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section. If differing requirements are identified elsewhere (in these specifications or on drawings or separate instructions), the more stringent requirement shall be met.

1.3 SUMMARY

A. Section Includes:

1. Cast-in-place concrete, including concrete materials, mixture design, placement procedures, and finishes.

B. Related Requirements:

1. Section 031000 "Concrete Forming and Accessories" for form-facing materials, form liners, insulating concrete forms, and waterstops.

2. Section 032000 "Concrete Reinforcing" for steel reinforcing bars and welded-wire reinforcement.

3. Section 312000 "Earth Moving" for drainage fill under slabs-on-ground.

1.4 DEFINITIONS

A. Cementitious Materials: Portland cement alone or in combination with one or more of the following: blended hydraulic cement, fly ash, slag cement, and other pozzolans materials subject to compliance with requirements.

B. Water/Cement Ratio (w/cm): The ratio by weight of water to cementitious materials.

1.5 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.6 ACTION SUBMITTALS

A. Product Data: For each of the following.

1. Portland cement.
2. Fly ash.
3. Slag cement.
4. Blended hydraulic cement.
5. Aggregates.
6. Admixtures:
   a. Include limitations of use, including restrictions on cementitious materials, supplementary cementitious materials, air entrainment, aggregates, temperature at time of concrete placement, relative humidity at time of concrete placement, curing conditions, and use of other admixtures.
7. Vapor retarders.
8. Liquid floor treatments.
9. Curing materials.
10. Joint fillers.

B. Design Mixtures: For each concrete mixture, include the following:

1. Mixture identification.

2. Minimum 28-day compressive strength.

3. Durability exposure class.

4. Maximum w/cm.

5. Calculated equilibrium unit weight, for lightweight concrete.
6. Slump limit.

7. Air content.

8. Nominal maximum aggregate size.

9. Indicate amounts of mixing water to be withheld for later addition at Project site if permitted.

10. Intended placement method.

11. Submit alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.

C. Shop Drawings:

1. Construction Joint Layout: Indicate proposed construction joints required to construct the structure.

a. Location of construction joints is subject to approval of the Architect.

D. Concrete Schedule: For each location of each Class of concrete indicated in "Concrete Mixtures" Article, including the following:

1. Concrete Class designation.
2. Location within Project.
3. Exposure Class designation.
4. Formed Surface Finish designation and final finish.
5. Final finish for floors.
6. Curing process.
7. Floor treatment if any.

1.7 INFORMATIONAL SUBMITTALS

A. Material Certificates: For each of the following, signed by manufacturers:

1. Cementitious materials.
2. Admixtures.

3. Curing compounds.

4. Vapor retarders.

5. Joint-filler strips.

B. Material Test Reports: For the following, from a qualified testing agency:

1. Portland cement.
2. Fly ash.
3. Slag cement.
4. Blended hydraulic cement.
5. Aggregates.
6. Admixtures:

C. Certified letter stating that they have done a survey of existing conditions.

D. Research Reports: For concrete admixtures in accordance with ICC's Acceptance Criteria AC198.

E. Preconstruction Test Reports: For each mix design.

F. Field quality-control reports.

G. Minutes of preinstallation conference.

1.8 QUALITY ASSURANCE

A. Ready-Mixed Concrete Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C94/C94M requirements for production facilities and equipment.

1. Manufacturer certified in accordance with NRMCA's "Certification of Ready Mixed Concrete Production Facilities."

1.9 PRECONSTRUCTION TESTING

A. Preconstruction Testing Service: Engage a qualified testing agency to perform preconstruction testing on each concrete mixture.

a. Admixture dosage rates.
b. Slump.
c. Air content.
d. Seven-day compressive strength.
e.28-day compressive strength.

1.10 DELIVERY, STORAGE, AND HANDLING

A. Comply with ASTM C94/C94M and ACI 301.

1.11 FIELD CONDITIONS

A. Cold-Weather Placement: Comply with ACI 301 and ACI 306.1.

B. Hot-Weather Placement: Comply with ACI 301 and ACI 305.1.

PART 2 - PRODUCTS

2.1 CONCRETE, GENERAL

A. ACI Publications: Comply with the following unless modified by requirements in the Contract Documents:

1. ACI 301.

2.2 CONCRETE MATERIALS

A. Cementitious Materials:

1. Portland Cement: ASTM C150/C150M, or

2. Blended Cement: ASTM C595

3. Fly Ash: ASTM C618, Class C or F.

4. Slag Cement: ASTM C989/C989M, Grade 100 or 120.

B. Normal-Weight Aggregates: ASTM C33/C33M, Class 1N coarse aggregate or better, graded. Provide aggregates from a single source.

1. Alkali-Silica Reaction: Comply with one of the following:

a. Expansion Result of Aggregate: Not more than 0.04 percent at one-year when tested in accordance with ASTM C1293.

b. Expansion Results of Aggregate and Cementitious Materials in Combination: Not more than 0.10 percent at an age of 16 days when tested in accordance with ASTM C1567.

c. Alkali Content in Concrete: Not more than 4 lb./cu. yd. for moderately reactive aggregate or 3 lb./cu. yd. for highly reactive aggregate, when tested in accordance with ASTM C1293 and categorized in accordance with ASTM C1778, based on alkali content being calculated in accordance with ACI 301.

2. Maximum Coarse-Aggregate Size: as indicated.

3. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.

C. Air-Entraining Admixture: ASTM C260/C260M.

D. Chemical Admixtures: Certified by manufacturer to be compatible with other admixtures that do not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride in steel-reinforced concrete.

1. Water-Reducing Admixture: ASTM C494/C494M, Type A.

2. Retarding Admixture: ASTM C494/C494M, Type B.

3. Water-Reducing and -Retarding Admixture: ASTM C494/C494M, Type D.

4. High-Range, Water-Reducing Admixture: ASTM C494/C494M, Type F.

5. High-Range, Water-Reducing and -Retarding Admixture: ASTM C494/C494M, Type G.

6. Plasticizing and Retarding Admixture: ASTM C1017/C1017M, Type II.

E. Water and Water Used to Make Ice: ASTM C94/C94M, potable or complying with ASTM C1602/C1602M, including all limits listed in Table 2 and the requirements of paragraph 5.4

2.3 FIBER REINFORCEMENT

A. Synthetic Monofilament Micro-Fiber: Monofilament polypropylene micro-fibers engineered and designed for use in concrete, complying with ASTM C1116/C1116M, Type III, 1/2 to 1-1/2 inches long.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. ABC Polymer Industries, LLC.

b. BASF Corporation.

c. Euclid Chemical Company (The); an RPM company.

d. GCP Applied Technologies Inc.

e. Propex Operating Company, LLC.

f. Sika Corporation.

2.4 VAPOR BARRIER/RETARDERS

A. Sheet Vapor Barrier: ASTM E 1745, Class A, except with maximum perm rating of 0.01 or lower. Include manufacturer's recommended adhesive or pressure-sensitive tape.

1. Products: Subject to compliance with requirements, available products that may incorporated into the Work include, but are not limited to, the following:

a. Barrier-Bac; Inteplast Group, Ltd.; Seam Tape and VB-350.

b. Fortifiber Building Systems Group; Moistop Ultra 15.

c. Raven Industries, Inc; VaporBlock VB15.

d. Stego Industries, LLC; Stego Wrap Vapor Barrier (15-Mil).

e. W.R. Meadows, Inc; Perminator 15 mil.

2.5 LIQUID FLOOR TREATMENTS

A. Penetrating Liquid Floor Treatment: Clear, chemically reactive, waterborne solution of inorganic silicate or siliconate materials and proprietary components; odorless; that penetrates, hardens, and densifies concrete surfaces.

2.6 CURING MATERIALS

A. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. when dry.

B. Moisture-Retaining Cover: ASTM C171, polyethylene film burlap-polyethylene sheet.

1. Color:

a. Ambient Temperature Below 50 deg F: Black.

b. Ambient Temperature between 50 deg F and 85 deg F: Any color.

c. Ambient Temperature Above 85 deg F: White.

C. Curing Paper: Eight-feet-wide paper, consisting of two layers of fibered kraft paper laminated with double coating of asphalt.

D. Water: Potable or complying with ASTM C1602/C1602M.

E. Clear, Waterborne, Membrane-Forming, Dissipating Curing Compound: ASTM C309, Type 1, Class B.

F. Clear, Waterborne, Membrane-Forming, Nondissipating Curing Compound: ASTM C309, Type 1, Class B, certified by curing compound manufacturer to not interfere with bonding of floor covering.

G. Clear, Waterborne, Membrane-Forming, Curing and Sealing Compound: ASTM C1315, Type 1, Class A.

2.7 RELATED MATERIALS

A. Expansion- and Isolation-Joint-Filler Strips: ASTM D1751, asphalt-saturated cellulosic fiber or ASTM D1752, cork or self-expanding cork.

B. Floor Slab Protective Covering: Eight-feet-wide cellulose fabric.

2.8 CONCRETE MIXTURES, GENERAL

A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, in accordance with ACI 301.

1. Use a qualified testing agency for preparing and reporting proposed mixture designs, based on laboratory trial mixtures.

B. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than portland cement in concrete as indicated on drawings.

C. Admixtures: Use admixtures in accordance with manufacturer's written instructions.

1. Use water-reducing high-range water-reducing or plasticizing admixture in concrete, as required, for placement and workability.

2. Use water-reducing and -retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.

3. Use water-reducing admixture in pumped concrete, concrete for heavy-use industrial slabs concrete for parking structure slabs, and concrete with a w/cm below 0.50.

2.9 CONCRETE MIXTURES

A. As indicated on drawings.

2.10 CONCRETE MIXING

A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete in accordance with ASTM C94/C94M and ASTM C1116/C1116M, and furnish batch ticket information.

B. Project-Site Mixing: Measure, batch, and mix concrete materials and concrete in accordance with ASTM C94/C94M. Mix concrete materials in appropriate drum-type batch machine mixer.

1. For mixer capacity of 1 cu. yd. or smaller, continue mixing at least 1-1/2 minutes, but not more than five minutes after ingredients are in mixer, before any part of batch is released.

2. For mixer capacity larger than 1 cu. yd., increase mixing time by 15 seconds for each additional 1 cu. yd..

3. Provide batch ticket for each batch discharged and used in the Work, indicating Project identification name and number, date, mixture type, mixture time, quantity, and amount of water added. Record approximate location of final deposit in structure.

PART 3 - EXECUTION

3.1 INSTALLATION OF EMBEDDED ITEMS

A. Place and secure anchorage devices and other embedded items required for adjoining Work that is attached to or supported by cast-in-place concrete.

1. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.

2. Install anchor rods, accurately located, to elevations required and complying with tolerances in Section 7.5 of ANSI/AISC 303.

3. Install reglets to receive waterproofing and to receive through-wall flashings in outer face of concrete frame at exterior walls, where flashing is shown at lintels, shelf angles, and other conditions.

3.2 INSTALLATION OF VAPOR BARRIER

A. Sheet Vapor Barrier: Place, protect, and repair sheet vapor retarder in accordance with ASTM E1643 and manufacturer's written instructions.

1. Install vapor retarder with longest dimension parallel with direction of concrete pour.

2. Face laps away from exposed direction of concrete pour.

3. Lap vapor retarder over footings and grade beams not less than 6 inches, sealing vapor retarder to concrete.

4. Lap joints 6 inches and seal with manufacturer's recommended tape.

5. Terminate vapor retarder at the top of floor slabs, grade beams, and pile caps, sealing entire perimeter to floor slabs, grade beams, foundation walls, or pile caps.

6. Seal penetrations in accordance with vapor retarder manufacturer's instructions.

7. Protect vapor retarder during placement of reinforcement and concrete.

a. Repair damaged areas by patching with vapor retarder material, overlapping

damages area by 6 inches on all sides, and sealing to vapor retarder.

3.3 JOINTS

A. Construct joints true to line, with faces perpendicular to surface plane of concrete.

B. Construction Joints: Coordinate with floor slab pattern and concrete placement sequence.

1. Install so strength and appearance of concrete are not impaired, at locations indicated on Drawings or as approved by Architect.

2. Place joints perpendicular to main reinforcement.

a. Continue reinforcement across construction joints unless otherwise indicated.

b. Do not continue reinforcement through sides of strip placements of floors and slabs.

3. Form keyed joints as indicated. Embed keys at least 1-1/2 inches into concrete.

C. Control Joints in Slabs-on-Ground: Form weakened-plane control joints, sectioning concrete into areas as indicated and as follows:

1. Grooved Joints: Form control joints after initial floating by grooving and finishing each edge of joint to a radius of 1/8 inch. Repeat grooving of control joints after applying surface finishes. Eliminate groover tool marks on concrete surfaces.

2. Sawed Joints: Form control joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/8-inch-wide joints into concrete when cutting action does not tear, abrade, or otherwise damage surface and before concrete develops random cracks.

D. Isolation Joints in Slabs-on-Ground: After removing formwork, install joint-filler strips at slab junctions with vertical surfaces, such as column pedestals, foundation walls, grade beams, and other locations, as indicated.

1. Extend joint-filler strips full width and depth of joint, terminating flush with finished concrete surface unless otherwise indicated on Drawings.

2. Terminate full-width joint-filler strips not less than 1/2 inch or more than 1 inch below finished concrete surface, where joint sealants, specified in Section 079200 "Joint Sealants," are indicated.

3. Install joint-filler strips in lengths as long as practicable. Where more than one length is required, lace or clip sections together.

E. Doweled Joints:

1. Install dowel bars and support assemblies at joints where indicated on Drawings.

2. Lubricate or asphalt coat one-half of dowel bar length to prevent concrete bonding to one side of joint.

3.4 CONCRETE PLACEMENT

A. Before placing concrete, verify that installation of formwork, reinforcement, embedded items, and vapor retarder is complete and that required inspections are completed.

1. Immediately prior to concrete placement, inspect vapor retarder for damage and deficient installation, and repair defective areas.

2. Provide continuous inspection of vapor retarder during concrete placement and make necessary repairs to damaged areas as Work progresses.

B. Notify Architect and testing and inspection agencies 24 hours prior to commencement of concrete placement.

C. Do not add water to concrete during delivery, at Project site, or during placement unless approved by Architect in writing, but not to exceed the amount indicated on the concrete delivery ticket.

1. Do not add water to concrete after adding high-range water-reducing admixtures to mixture.

D. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete is placed on concrete that has hardened enough to cause seams or planes of weakness.

1. If a section cannot be placed continuously, provide construction joints as indicated.

2. Deposit concrete to avoid segregation.

3. Deposit concrete in horizontal layers of depth not to exceed formwork design pressures and in a manner to avoid inclined construction joints.

4. Consolidate placed concrete with mechanical vibrating equipment in accordance with ACI 301.

a. Do not use vibrators to transport concrete inside forms.

b. Insert and withdraw vibrators vertically at uniformly spaced locations to rapidly penetrate placed layer and at least 6 inches into preceding layer.

c. Do not insert vibrators into lower layers of concrete that have begun to lose plasticity.

d. At each insertion, limit duration of vibration to time necessary to consolidate concrete, and complete embedment of reinforcement and other embedded items without causing mixture constituents to segregate.

E. Deposit and consolidate concrete for floors and slabs in a continuous operation, within limits of construction joints, until placement of a panel or section is complete.

1. Do not place concrete floors and slabs in a checkerboard sequence.

2. Consolidate concrete during placement operations, so concrete is thoroughly worked around reinforcement and other embedded items and into corners.

3. Maintain reinforcement in position on chairs during concrete placement.

4. Screed slab surfaces with a straightedge and strike off to correct elevations.

5. Level concrete, cut high areas, and fill low areas.

6. Slope surfaces uniformly to drains where required.

7. Begin initial floating using bull floats or darbies to form a uniform and open-textured surface plane, before excess bleedwater appears on the surface.

8. Do not further disturb slab surfaces before starting finishing operations.

3.5 FINISHING FORMED SURFACES

A. As-Cast Surface Finishes:

1. ACI 301 Surface Finish SF-1.0: As-cast concrete texture imparted by form-facing material.

a. Patch voids larger than 1-1/2 inches wide or 1/2 inch deep.

b. Remove projections larger than 1 inch.

c. Tie holes do not require patching.

d. Surface Tolerance: ACI 117 Class D.

e. Apply to concrete surfaces not exposed to public view.

2. ACI 301Surface Finish SF-2.0: As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams.

a. Patch voids larger than 3/4 inch wide or 1/2 inch deep.

b. Remove projections larger than 1/4 inch.

c. Patch tie holes.

d. Surface Tolerance: ACI 117 Class B.

e. Locations: Apply to concrete surfaces exposed to public view, to receive a rubbed finish, or to be covered with a coating or covering material applied directly to concrete.

B. Related Unformed Surfaces:

1. At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a color and texture matching adjacent formed surfaces.

2. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces unless otherwise indicated.

3.6 FINISHING FLOORS AND SLABS

A. Comply with ACI 302.1R recommendations for screeding, straightening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.

B. Scratch Finish:

1. While still plastic, texture concrete surface that has been screeded and bull-floated or darbied.

2. Use stiff brushes, brooms, or rakes to produce a profile depth of 1/4 inch in one direction.

3. Apply scratch finish to surfaces to receive concrete floor toppings to receive mortar setting beds for bonded cementitious floor finishes.

C. Float Finish:

1. When bleedwater sheen has disappeared and concrete surface has stiffened sufficiently to permit operation of specific float apparatus, consolidate concrete surface with power- driven floats or by hand floating if area is small or inaccessible to power-driven floats.

2. Repeat float passes and restraightening until surface is left with a uniform, smooth, granular texture and complies with ACI 117 tolerances for conventional concrete.

3. Apply float finish to surfaces to receive trowel finish and to be covered with fluid-applied or sheet waterproofing, built-up or membrane roofing, or sand-bed terrazzo.

D. Trowel Finish:

1. After applying float finish, apply first troweling and consolidate concrete by hand or power-driven trowel.

2. Continue troweling passes and restraighten until surface is free of trowel marks and uniform in texture and appearance.

3. Grind smooth any surface defects that would telegraph through applied coatings or floor coverings.

4. Do not add water to concrete surface.

5. Do not apply hard-troweled finish to concrete, which has a total air content greater than 3 percent.

6. Apply a trowel finish to surfaces exposed to view or to be covered with resilient flooring, carpet, ceramic or quarry tile set over a cleavage membrane, paint, or another thin-film- finish coating system.

7. Finish surfaces to the following tolerances, in accordance with ASTM E1155, for a randomly trafficked floor surface.

E. Trowel and Fine-Broom Finish: Apply a first trowel finish to surfaces indicated on Drawings or where ceramic or quarry tile is to be installed by either thickset or thinset method. While concrete is still plastic, slightly scarify surface with a fine broom perpendicular to main traffic route.

1. Coordinate required final finish with Architect before application.

2. Comply with flatness and levelness tolerances for trowel-finished floor surfaces.

F. Broom Finish: Apply a broom finish to exterior concrete platforms, steps, ramps, and locations indicated on Drawings.

1. Immediately after float finishing, slightly roughen trafficked surface by brooming with fiber-bristle broom perpendicular to main traffic route.

2. Coordinate required final finish with Architect before application.

3.7 INSTALLATION OF MISCELLANEOUS CONCRETE ITEMS

A. Filling In:

1. Fill in holes and openings left in concrete structures after Work of other trades is in place unless otherwise indicated.

2. Mix, place, and cure concrete, as specified, to blend with in-place construction.

3. Provide other miscellaneous concrete filling indicated or required to complete the Work. B. Curbs: Provide monolithic finish to interior curbs by stripping forms while concrete is still green and by steel-troweling surfaces to a hard, dense finish with corners, intersections, and terminations slightly rounded.

C. Equipment Bases and Foundations:

1. Coordinate sizes and locations of concrete bases with actual equipment provided.

2. Construct concrete bases a minimum of 4 inches high unless otherwise indicated on Drawings, and extend base not less than 6 inches in each direction beyond the maximum dimensions of supported equipment unless otherwise indicated on Drawings, or unless required for seismic anchor support.

3. Minimum Compressive Strength: to match concrete surface it is placed on at 28 days.

4. Prior to pouring concrete, place and secure anchorage devices.

a. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.

b. Cast anchor-bolt insert into bases.

c. Install anchor bolts to elevations required for proper attachment to supported equipment.

D. Steel Pan Stairs: Provide concrete fill for steel pan stair treads, landings, and associated items.

1.Cast-in inserts and accessories, as shown on Drawings.

2. Screed, tamp, and trowel finish concrete surfaces.

3.8 CONCRETE CURING

A. Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.

1. Comply with ACI 301 and ACI 306.1 for cold weather protection during curing. 2. Comply with ACI 301 and ACI 305.1 for hot-weather protection during curing.

B. Evaporation Retarder: Apply evaporation retarder to unformed concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply in accordance with manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.

C. Curing Formed Surfaces: Comply with ACI 308.1 as follows:

1. Cure formed concrete surfaces, including underside of beams, supported slabs, and other similar surfaces.

2. Cure concrete containing color pigments in accordance with color pigment manufacturer's instructions.

3. If forms remain during curing period, moist cure after loosening forms.

4. If removing forms before end of curing period, continue curing for remainder of curing period, as follows:

a. Continuous Fogging: Maintain standing water on concrete surface until final setting of concrete.

b. Continuous Sprinkling: Maintain concrete surface continuously wet.

c. Absorptive Cover: Pre-dampen absorptive material before application; apply additional water to absorptive material to maintain concrete surface continuously wet.

d. Water-Retention Sheeting Materials: Cover exposed concrete surfaces with sheeting material, taping, or lapping seams.

e. Membrane-Forming Curing Compound: Apply uniformly in continuous operation by power spray or roller in accordance with manufacturer's written instructions.

1) Recoat areas subject to heavy rainfall within three hours after initial application.

2) Maintain continuity of coating and repair damage during curing period.

D. Curing Unformed Surfaces: Comply with ACI 308.1 as follows:

1. Begin curing immediately after finishing concrete.

2. Interior Concrete Floors:

a. Floors to Receive Floor Coverings Specified in Other Sections: Contractor has option of the following:

1) Absorptive Cover: As soon as concrete has sufficient set to permit application without marring concrete surface, install prewetted absorptive cover over entire area of floor.

a) Lap edges and ends of absorptive cover not less than 12-inches.

b) Maintain absorptive cover water saturated, and in place, for duration of curing period, but not less than seven days.

2) Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture- retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive.

a) Immediately repair any holes or tears during curing period, using cover material and waterproof tape.

b) Cure for not less than seven days.

3) Ponding or Continuous Sprinkling of Water: Maintain concrete surfaces continuously wet for not less than seven days, utilizing one, or a combination of, the following:

a) Water.

b) Continuous water-fog spray.

b. Floors to Receive Penetrating Liquid Floor Treatments: Contractor has option of the following:

1) Absorptive Cover: As soon as concrete has sufficient set to permit application without marring concrete surface, install prewetted absorptive cover over entire area of floor.

a)Lap edges and ends of absorptive cover not less than 12 inches.

b)Maintain absorptive cover water saturated, and in place, for duration of curing period, but not less than seven days.

2) Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture- retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive.

a) Immediately repair any holes or tears during curing period, using cover material and waterproof tape.

b) Cure for not less than seven days.

3) Ponding or Continuous Sprinkling of Water: Maintain concrete surfaces continuously wet for not less than seven days, utilizing one, or a combination of, the following:

a) Water.

b) Continuous water-fog spray.

3.9 TOLERANCES

A. Conform to ACI 117 (UNO).

3.10 APPLICATION OF LIQUID FLOOR TREATMENTS

A. Penetrating Liquid Floor Treatment: Prepare, apply, and finish penetrating liquid floor treatment in accordance with manufacturer's written instructions.

1. Remove curing compounds, sealers, oil, dirt, laitance, and other contaminants and complete surface repairs.

2. Do not apply to concrete that is less than 14 days' old.

3. Apply liquid until surface is saturated, scrubbing into surface until a gel forms; rewet; and repeat brooming or scrubbing.

4. Rinse with water; remove excess material until surface is dry.

5. Apply a second coat in a similar manner if surface is rough or porous.

B. Sealing Coat: Uniformly apply a continuous sealing coat of curing and sealing compound to hardened concrete by power spray or roller in accordance with manufacturer's written instructions.

3.11 FIELD QUALITY CONTROL

A. Special Inspections: Owner will engage a special inspector to perform field tests and inspections and prepare testing and inspection reports.

B. Testing Agency: Owner will engage a qualified testing and inspecting agency to perform tests and inspections and to submit reports.

1. Testing agency shall immediately report to Architect, Contractor, and concrete manufacturer any failure of Work to comply with Contract Documents.

2. Testing agency shall report results of tests and inspections, in writing, to Owner, Architect, Contractor, and concrete manufacturer within 48 hours of inspections and tests.

a. Test reports shall include reporting requirements of ASTM C31/C31M, ASTM C39/C39M, and ACI 301, including the following as applicable to each test and inspection:

1) Project name.

2) Name of testing agency.

3) Names and certification numbers of field and laboratory technicians performing inspections and testing.

4) Name of concrete manufacturer.

5) Date and time of inspection, sampling, and field testing.

6) Date and time of concrete placement.

7) Location in Work of concrete represented by samples.

8)Date and time sample was obtained.

9) Truck and batch ticket numbers.

10) Design compressive strength at 28 days.

11) Concrete mixture designation, proportions, and materials.

12) Field test results.

13) Information on storage and curing of samples before testing, including curing method and maximum and minimum temperatures during initial curing period.

14) Type of fracture and compressive break strengths at seven days and 28 days. C. Batch Tickets: For each load delivered, submit three copies of batch delivery ticket to testing agency, indicating quantity, mix identification, admixtures, design strength, aggregate size,
design air content, design slump at time of batching, and amount of water that can be added at Project site.

D. Inspections:

1. Headed bolts and studs.
2. Verification of use of required design mixture.
3. Concrete placement, including conveying and depositing.
4. Curing procedures and maintenance of curing temperature.
5. Verification of concrete strength before removal of shores and forms from beams and slabs.
6. Batch Plant Inspections: On a random basis, as determined by Architect.

E. Concrete Tests: Testing of composite samples of fresh concrete obtained in accordance with ASTM C 172/C 172M shall be performed in accordance with the following requirements:

1. Testing Frequency: Obtain one composite sample for each day's pour of each concrete mixture exceeding 5 cu. yd., but less than 25 cu. yd., plus one set for each additional 50 cu. yd. or fraction thereof.

a. When frequency of testing provides fewer than five compressive-strength tests for each concrete mixture, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.

2. Slump: ASTM C143/C143M:

a. One test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture.

b. Perform additional tests when concrete consistency appears to change.

3. Slump Flow: ASTM C1611/C1611M:

a. One test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture.

b. Perform additional tests when concrete consistency appears to change.

4. Air Content: ASTM C231/C231M pressure method, for normal-weight concrete;

a. One test for each composite sample, but not less than one test for each day's pour of each concrete mixture.

5. Concrete Temperature: ASTM C1064/C1064M:

a. One test hourly when air temperature is 40 deg F and below or 80 deg F and above, and one test for each composite sample.

6. Unit Weight: ASTM C567/C567M fresh unit weight of structural lightweight concrete.

a. One test for each composite sample, but not less than one test for each day's pour of each concrete mixture.

7. Compressive-Strength Tests: ASTM C39/C39M.

a. Test one set of two laboratory-cured specimens at seven days and one set of two specimens at 28 days.

b. Test one set of two field-cured specimens at seven days and one set of two specimens at 28 days.

c. A compressive-strength test shall be the average compressive strength from a set of two specimens obtained from same composite sample and tested at age indicated.

8. When strength of field-cured cylinders is less than 85 percent of companion laboratory- cured cylinders, Contractor shall evaluate operations and provide corrective procedures for protecting and curing in-place concrete.

9. Strength of each concrete mixture will be satisfactory if every average of any three consecutive compressive-strength tests equals or exceeds specified compressive strength, and no compressive-strength test value falls below specified compressive strength by more than 500 psi if specified compressive strength is 5000 psi, or no compressive strength test value is less than 10 percent of specified compressive strength if specified compressive strength is greater than 5000 psi.

10. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Architect but will not be used as sole basis for approval or rejection of concrete.

11. Additional Tests:

a. Testing and inspecting agency shall make additional tests of concrete when test

results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Architect.

b. Testing and inspecting agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C42/C42M or by other methods as directed by Architect.

1) Acceptance criteria for concrete strength shall be in accordance with ACI 301 section 1.6.6.3.

12. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

13. Correct deficiencies in the Work that test reports and inspections indicate do not comply with the Contract Documents.

F. Measure floor and slab flatness and levelness in accordance with ASTM E1155 within 24 hours of completion of floor finishing and promptly report test results to Architect.

3.12 PROTECTION

A. Protect concrete surfaces as follows:

1. Protect from petroleum stains.
2. Diaper hydraulic equipment used over concrete surfaces.
3. Prohibit vehicles from interior concrete slabs.
4. Prohibit use of pipe-cutting machinery over concrete surfaces.
5. Prohibit placement of steel items on concrete surfaces.
6. Prohibit use of acids or acidic detergents over concrete surfaces.
7. Protect liquid floor treatment from damage and wear during the remainder of construction period. Use protective methods and materials, including temporary covering, recommended in writing by liquid floor treatments installer.
8. Protect concrete surfaces scheduled to receive surface hardener or polished concrete finish using Floor Slab Protective Covering.

END OF SECTION 033000 CAST-IN-PLACE CONCRETE

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Summary:

This Section includes the following:

Brick unit masonry
Reinforced unit masonry

Related Sections:

Division 05, Section “Structural Steel Framing”
Division 06, Section “Rough Carpentry”
Division 07, Section “Flashing and Sheet Metal”
Division 07, Section “Joint Sealants”

Performance Requirements:

Provide Unit Masonry that develops the following installed compressive strength (fm) at 28 days.

For Brick Unit Masonry: As follows, based on gross area: fm = 1500 psi (10.3 Mpa).

Project Conditions:

Cold-Weather Requirements: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen subgrade or setting beds. Remove and replace unit masonry damaged by frost or freezing conditions. Comply with the following requirements:

Cold-Weather Construction: When the ambient temperature is within the limits indicated, use the following procedures:

40 to 32 deg F (4 to 0 deg C): Heat mixing water or sand to produce mortar temperatures between 40 and 120 deg F (4 and 49 deg C).

32 to 25 deg F (0 to -4 deg C): Heat mixing water and sand to produce mortar temperatures between 40 and 120 deg F (4 and 49 deg C). Heat grout materials to produce grout temperatures between 40 and 120 deg F (4 and 49 deg C). Maintain mortar and grout above freezing until used in masonry.

25 to 20 deg F (-4 to -7 deg C): Heat mixing water and sand to produce mortar temperatures between 40 and 120 deg F (4 and 49 deg C). Heat grout materials to produce grout temperatures between 40 and 120 deg F (4 and 49 deg C). Maintain mortar and grout above freezing until used in masonry. Heat masonry units to 40 deg F (4 deg C) if grouting.
Use heat on both sides of walls under construction.

20 deg F (-7 deg C) and Below: Heat mixing water and sand to produce mortar temperatures between 40 and 120 deg F (4 and 49 deg C). Heat grout materials to produce grout temperatures between 40 and 120 deg F (4 and 49 deg C). Maintain mortar and grout above freezing until used in masonry. Heat masonry units to 40 deg F (4 deg C). Provide enclosures and use heat on both sides of walls under construction to maintain temperatures above 32 deg F (0 deg C) within the enclosures.

Cold-Weather Protection: When the mean daily temperature is within the limits indicated, provide the following protection:

0 to 25 deg F (4 to -4 deg C): Cover masonry with a weather-resistant membrane for 48 hours after construction.

25 to 20 deg F (-4 to -7 deg C): Cover masonry with insulating blankets or provide enclosure and heat for 48 hours after construction to prevent freezing. Install wind breaks when wind velocity exceeds 15 mi./h (25 km/h).

20 deg F (-7 deg C) and Below: Provide enclosure and heat to maintain temperatures above 32 deg F (0 deg C) within the enclosure for 48 hours after construction.

Cold-Weather Cleaning: Use liquid cleaning methods only when air temperature is 40 deg F (4 deg C) and above and will remain so until masonry has dried out, but not less than 7 days after completion of cleaning.

Products:

Face Brick:

Face Brick (Match Existing) as noted on the drawings:

Belden “Modular Ebony Black A” as provided by Belden Brick & Supply

Modular**:** 3-1/2 to 3-5/8 inches (89 to 92 mm) thick by 2-1/4 inches (57 mm) high by 7- 1/2 to 7-5/8 inches (190 to 194 mm) long. (Unless noted otherwise.)

ASTM International (ASTM)

ASTM C144 Standard Specification for Aggregate for Masonry Mortar.

STM C150 Standard Specification for Portland Cement.

STM C482 Standard Test Method for Bond Strength of Ceramic Tile to Portland Cement. STM C503 Standard Specification for Marble Dimension Stone.

STM C794 Standard Test Method for Adhesion-in-Peel of Elastomeric Joint Sealants.
STM C847 Standard Specification for Metal Lath.

ASTM C920 Standard Specification for Elastomeric Joint Sealants.

STM C955 Standard Specification for Load Bearing (Transverse and Axial) Steel Studs,

Runners (Tracks), and Bracing or Bridging for Screw Application of Gypsum Board and Metal Plaster Bases.

Veneer Units.

STM C1780-14 - Standard Practice for Installation Methods for Adhered Manufactured

Stone Masonry Veneer.

STM D1248 Standard Test Method for Staining of Porous Substances by Joint Sealants.

STM D4397 Standard Specification for Polyethylene Sheeting for Construction, Industrial and Agricultural Applications.

STM E84 Standard Test Method for Surface Burning Characteristics of Building Materials.

Thick Set Brick Veneer: to match face brick #2.
Modular Application

Mortar and Grout Materials:

Portland Cement: ASTM C 150/C150M, Type I or II, except Type III may be used for cold-weather

construction. Provide natural color or white cement as required to produce mortar color indicated.

Hydrated Lime: ASTM C 207, Type S.

Aggregate for Mortar: ASTM C 144; except for joins less than 1/4 inch (6.5 mm), use aggregate graded with 100 percent passing the No. 16 (1.18 mm) sieve.

Aggregate for Grout: ASTM C 404.

Mortar Pigments: Natural and synthetic iron oxides and chromium oxides, compounded for use in mortar mixes. Use only pigment with a record of satisfactory performance in masonry mortars. Cold-Weather Admixture: Nonchloride, noncorrosive, accelerating admixture complying with ASTM C 494, Type C, and recommended by the manufacturer for use in masonry mortar of composition indicated.

Water: Potable. (Fresh, clean, and free of alkaline)

Ties and Anchors, General:

Provide ties and anchors specified in subsequent articles that comply with requirements for metal and size of this Article, unless otherwise indicated.

Galvanized Carbon-Steel Wire: ASTM A 82/A82M, with ASTM A 153/A153M, Class B-2 coating for wire ties and anchors in exterior walls.

Note: Provide masonry ties that allow for minimum of one inch vertical wall movement of brick veneer.

Miscellaneous Anchors:

Anchor Bolts: Steel bolts complying with ASTM A 307, Grade A (ASTM F 568), Property Class 436; with ASTM A 563 hex nuts and, where indicated, flat washer; hot-dip galvanized to comply with ASTM A 153/A153M, Class C; of diameter and length indicated and in the following configurations: (Headed bolts.)

Embedded Flashing Materials:

Laminated Flashing: Manufacturer's standard laminated flashing of type indicated below:

Copper-Fabric Laminate: Copper sheet of weight indicated below, bonded with asphalt between two (2) layers of glass-fiber cloth. Use where flashing is fully concealed in masonry.

Weight: 5-oz./sq. ft. (1.5 kg/sq. m.)

Vinyl Sheet Flashing: Flexible sheet flashing especially formulated from virgin polyvinyl chloride with plasticizers and other modifiers to remain flexible and waterproof in concealed masonry application, black in color and of thickness indicated below: Use where flashing is fully concealed in masonry.

Thickness: 30 mils (0.8 mm).

Stainless Steel Flashing: Fabricate stainless steel throughout metal flashing where shown on the drawings embedded in masonry and cavity walls, with ribs at 3 inch intervals along the length of the integral mortar bond. Provide expansion strips of stainless steel to match profiles.

Thickness: 0.018 gauge

Miscellaneous Masonry Accessories:

Compressible Filler: Premolded filler strips complying with ASTM D 1056, Type 2, Class A, Grade 1; compressible up to 35 percent; of width and thickness indicated; formulated from the following material:

Polyvinyl chloride.

Bond-Breaker Strips: Asphalt-saturated, organic roofing felt complying with ASTM D 226/D226M, Type I (No. 15 asphalt felt).

Vinyl Weep Hole/Vent: Vinyl cellular composition, 3/8 inch (9 mm) outside dimension by 4" high. Color as selected by Architect from manufacturer's full range of colors.

Thru Wall Flashing: Perm-A-Barrier by Grace or Plastiwrap 40 by Progress Unlimited, Inc. at all head and sill conditions, and any other concealed locations requiring flashing.

Cavity Wall Dampproofing: Provide Perm-A-Barrier by Grace Masonry on all cavity walls except block cavity walls to have two-coat spray dampproofing at exterior surface of inside wythe of exterior masonry walls above grade, to prevent water vapor penetration through the wall.

Cavity Wall Drainage Material-Mortar Net: At base of cavity walls, furnish and install mortar net by Mortar Net USA, Ltd. Height shall be 10" and thickness shall be 2", unless noted otherwise on drawings. No pea gravel shall be allowed in cavity wall.

Insulation:

Loose-Granular Perlite Insulation: ASTM C 549, Type II (surface treated for water repellency and limited moisture absorption) or IV (surface treated for water repellency and to limit duct generation).

Mortar and Grout Mixes:

Do not use admixtures, including pigments, air-entraining agents, accelerators, retardants, water- repellent agent, antifreeze compounds, or other admixtures, unless otherwise indicated.

Do not use calcium chloride in mortar or grout.
Mortar for Unit Masonry:

Comply with ASTM C 270, Proportion Specification, for job-mixed mortar, and ASTM C 1142 for ready-mixed mortar, of types indicated below:

Limit cementitious materials in mortar to Portland cement and lime.
For masonry below grade, in contact with earth, and where indicated, use Type "M".

For reinforced masonry and where indicated, use Type "S".

For exterior, above-grade, load-bearing, and nonload-bearing walls and parapet walls; for interior load-bearing wall; for interior nonload-bearing partitions, and for other applications where another type is not indicated, use Type "N".

Pigmented Mortar: Select and proportion pigments with other ingredients to produce color required. olored-Aggregate Mortar: Produce required mortar color by using colored aggregates combined with selected cementitious materials.

Mix to match Architect's sample.

Grout for Unit Masonry: Comply with ASTM C 476. Use grout of consistency indicated or, if not otherwise indicated, of consistency (fine or coarse) at time of placement that will completely fill spaces intended to receive grout.

Source Quality Control:

The Owner will employ and pay a qualified independent testing agency to perform the testing as required for source quality control. Retesting of materials failing to meet specified requirements shall be done at Contractor's expense.

Examination:

Examine conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of unit masonry. Do not proceed with installation until unsatisfactory conditions have been corrected.

Laying Masonry Walls:

Lay up masonry plumb, level and true in full beds of mortar with fill shaved heads. All joints between masonry and other material required shall be filled with mortar as each course is laid. Weep holes and embedded flashing shall be provided at shelf angles, lintels, and other obstructions to downward flow of water in the wall and where indicated. Weep holes at intervals not to exceed 24 inches O.C. Provide control and joints where indicated or as instructed by Architect.

Repairing, Pointing, and Cleaning:

Remove and replace masonry units that are loose, chipped, broken, stained, or otherwise damaged or if units do not match adjoining units. Install new units to match adjoining units; install in fresh mortar or grout, pointed to eliminate evidence of replacement.

Pointing: During the tooling of joints, enlarge voids and holes, except weep holes, and completely fill with mortar. Point-up joints, including corners, openings, and adjacent construction, to provide a neat, uniform appearance. Prepare joints for application of sealant.

Final Cleaning: After mortar is thoroughly set and cured, clean exposed masonry as follows:

Remove large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels.

Test cleaning methods on sample wall panel; leave one-half of panel uncleaned for comparison purposes. Obtain Architect's approval of sample cleaning before proceeding with cleaning of masonry.

Protect adjacent stone and non-masonry surfaces from contact with cleaner by covering with liquid strippable masking agent, polyethylene film, or waterproof masking tape.

Wet wall surfaces with water prior to application of cleaners; remove cleaners promptly by rinsing thoroughly with clear water.

Clean brick by bucket and brush hand-cleaning method described in BIA Technical Note No. 20 Revised.

Protection: Provide final protection and maintain conditions that ensure unit masonry is without damage and deterioration at time of Substantial Completion.

END OF SECTION 042000 – UNIT MASONRY

Note:

Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section. If differing requirements are identified elsewhere (in these specifications or on drawings or separate instructions), the more stringent requirement shall be met.

Summary:

This Section includes the following:

- Structural steel.
- Architecturally exposed structural steel.
- Grout.

Related Sections include the following:

- "General and Supplementing Conditions of the Contract" for independent testing agency procedures and administrative requirements.
- Division 05 Section "Metal Fabrications" for steel lintels or shelf angles not attached to structural-steel frame, miscellaneous steel fabrications, and other metal items not defined as structural steel.
- Division 09 Sections "Painting" for surface preparation and priming requirements.

Definitions:

Structural Steel: Elements of structural-steel frame, as classified by AISC's "Code of Standard Practice for Steel Buildings and Bridges," that support design loads.

Architecturally Exposed Structural Steel: Structural steel designated as architecturally exposed structural steel in the Contract Documents.

Performance Requirements:

Connections: Provide details of simple shear connections required by the Contract Documents to be selected or completed by structural-steel fabricator to withstand ASD-service loads indicated and comply with other information and restrictions indicated.

Select and complete connections using schematic details indicated AISC's "Manual of Steel Construction, Allowable Stress Design," Part 4.

Engineering Responsibility: Fabricator's responsibilities include using a qualified professional engineer to prepare structural analysis data for structural-steel connections.

Submittals:

Product Data: For each type of product indicated.

Shop Drawings: Show fabrication of structural-steel components.

Include details of cuts, connections, splices, camber, holes, and other pertinent data.

Include embedment drawings.

Indicate welds by standard AWS symbols, distinguishing between shop and field welds, and show size, length, and type of each weld.

Indicate type, size, and length of bolts, distinguishing between shop and field bolts.

Identify pretensioned and slip-critical high-strength bolted connections.

Welding certificates.

Qualification Data: For Installer, fabricator and testing agency.

Mill Test Reports: Signed by manufacturers certifying that the following products comply with requirements:

- Shop primers.
- Nonshrink grout.

Source quality-control test reports.

Quality Assurance:

Shop-Painting Applicators: Qualified according to SSPC-QP 3, "Standard Procedure for Evaluating Qualifications of Shop Painting Applicators."

Welding: Qualify procedures and personnel according to AWS D1.1, "Structural Welding Code--Steel." Comply with applicable provisions of the following specifications and documents:

- AISC's "Code of Standard Practice for Steel Buildings and Bridges."
- AISC's "Seismic Provisions for Structural Steel Buildings" and "Supplement No. 2."
- AISC's "Specification for Structural Steel Buildings--Allowable Stress Design and Plastic Design."
- AISC's "Specification for the Design of Steel Hollow Structural Sections."
- AISC's "Specification for Allowable Stress Design of Single-Angle Members."
- RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts.

Delivery, Storage, And Handling:

Store materials to permit easy access for inspection and identification. Keep steel members off ground and spaced by using pallets, dunnage, or other supports and spacers. Protect steel members and packaged materials from erosion and deterioration.

Store fasteners in a protected place. Clean and relubricate bolts and nuts that become dry or rusty before use.

Do not store materials on structure in a manner that might cause distortion, damage, or overload to members or supporting structures. Repair or replace damaged materials or structures as directed.

Coordination:

Furnish anchorage items to be embedded in or attached to other construction without delaying the Work. Provide setting diagrams, sheet metal templates, instructions, and directions for installation.

Products

Structural-Steel Materials:

- W-Shapes: ASTM A 992/A 992M.
- Channels, Angles, S-Shapes: [ASTM A 36/A 36M].
- Plate and Bar: ASTM A 36/A 36M.

- Cold-Formed Hollow Structural Sections: ASTM A 500/A500M, Grade B, structural tubing.
  - Steel Pipe: ASTM A 53/A 53M, Type E or S, Grade B.
- Weight Class: as indicated.
- Finish: as indicated.

Welding Electrodes: Comply with AWS requirements.

Bolts, Connectors, And Anchors:

High-Strength Bolts, Nuts, and Washers: ASTM A 325, Type 1, heavy hex steel structural bolts; ASTM A 563 heavy hex carbon-steel nuts; and ASTM F 436 hardened carbon-steel washers.

Finish: Plain.

Direct-Tension Indicators: Squirter DTI's by Applied Bolting Technology.

Headed Anchor Rods: ASTM F 1554, Grade 36, weldable, straight.

Nuts: ASTM A 563 hex carbon steel.

Plate Washers: ASTM A 36/A 36M carbon steel.
Washers: ASTM F 436 hardened carbon steel.
Finish: Plain, unless noted.

Shear Connectors: ASTM A 108, Grades 1015 through 1020, headed-stud type, cold-finished carbon steel; AWS D1.1, Type B.

Threaded Rods: ASTM A 36/A 36M.
Nuts: ASTM A 563 hex carbon steel.

Washers: ASTM F 436 hardened carbon steel.
Finish: Plain.

Clevises and Turnbuckles: ASTM A 108, Grade 1035, cold-finished carbon steel.
Eye Bolts and Nuts: ASTM A 108, Grade 1030, cold-finished carbon steel.

Sleeve Nuts: ASTM A 108, Grade 1018, cold-finished carbon steel.

Primer:

Primer: Fabricator's standard lead- and chromate-free, nonasphaltic, rust-inhibiting primer.

Zinc Primer: One of the following:

- Sherwin Williams – Zinc Clad 5
- Tnemec – Tnemec Zinc 90E-92 or approved equal.
- Galvanizing Repair Paint: MPI#18, MPI#19, or SSPC-Paint 20.

Grout:

Nonmetallic, Shrinkage-Resistant Grout: ASTM C 1107/C1107M, factory-packaged, nonmetallic aggregate grout, noncorrosive, nonstaining, mixed with water to consistency suitable for application and a 30-minute working time.

Fabrication:

Structural Steel: Fabricate and assemble in shop to greatest extent possible. Fabricate according to

AISC's "Code of Standard Practice for Steel Buildings and Bridges" and AISC's "Specification for Structural Steel Buildings--Allowable Stress Design and Plastic Design."

Camber structural-steel members where indicated.

Identify high-strength structural steel according to ASTM A 6/ A 6M and maintain markings until structural steel has been erected.

Mark and match-mark materials for field assembly.

Complete structural-steel assemblies, including welding of units, before starting shop-priming operations.

Architecturally Exposed Structural Steel: Comply with fabrication requirements, including tolerance limits, of AISC's "Code of Standard Practice for Steel Buildings and Bridges" for structural steel identified as architecturally exposed structural steel.

Fabricate with exposed surfaces smooth, square, and free of surface blemishes including pitting, rust, scale, seam marks, roller marks, rolled trade names, and roughness.

Remove blemishes by filling or grinding or by welding and grinding, before cleaning, treating, and shop priming.

Thermal Cutting: Perform thermal cutting by machine to greatest extent possible.
Plane thermally cut edges to be welded to comply with requirements in AWS D1.1.

Bolt Holes: Cut, drill, mechanically thermal cut, or punch standard bolt holes perpendicular to metal surfaces.

Finishing: Accurately finish ends of columns and other members transmitting bearing loads.

Cleaning: Clean and prepare steel surfaces that are to remain unpainted according to SSPC-SP 2, "Hand Tool Cleaning."

Shear Connectors: Prepare steel surfaces as recommended by manufacturer of shear connectors. Use automatic end welding of headed-stud shear connectors according to AWS D1.1 and manufacturer's written instructions.

Steel Wall-Opening Framing: Select true and straight members for fabricating steel wall-opening framing to be attached to structural steel. Straighten as required to provide uniform, square, and true members in completed wall framing.

Welded Door Frames: Build up welded door frames attached to structural steel. Weld exposed joints continuously and grind smooth. Plug-weld fixed steel bar stops to frames. Secure removable stops to frames with countersunk, cross-recessed head machine screws, uniformly spaced not more than 10 inches o.c., unless otherwise indicated.

Holes: Provide holes required for securing other work to structural steel and for passage of other work through steel framing members.

Cut, drill, or punch holes perpendicular to steel surfaces, subject to engineer’s approval.

Do not thermally cut bolt holes or enlarge holes by burning.

Base-Plate Holes:Cut, drill, mechanically thermal cut, or punch holes perpendicular to steel surfaces.

Weld threaded nuts to framing and other specialty items indicated to receive other work.

Shop Connections:

High-Strength Bolts snug tightened unless indicated: Shop install high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts" for type of bolt and for snug tightened joint.

High-Strength Bolts pretensioned and slip critical: Shop install high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts" for type of bolt, type of joint specified, and as follows:

- Prepare surface as required for type of joint specified.
- Install bolts with “Squirter DTI’s” direct tension indicating washers.
- Tighten connection with all needed washers as indicated in “Squirter DTI’s” installation instructions.

Weld Connections: Comply with AWS D1.1 for welding procedure specifications, tolerances, appearance, and quality of welds and for methods used in correcting welding work.

Remove backing bars or runoff tabs, back gouge, and grind steel smooth.

Assemble and weld built-up sections by methods that will maintain true alignment of axes without exceeding tolerances of AISC's "Code of Standard Practice for Steel Buildings and Bridges" for mill material.

Verify that weld sizes, fabrication sequence, and equipment used for architecturally exposed structural steel will limit distortions to allowable tolerances. Prevent weld show-through on exposed steel surfaces.

Grind butt welds flush.

Grind or fill exposed fillet welds to smooth profile. Dress exposed welds.

Shop Priming:

Shop prime steel surfaces except the following:

- Surfaces embedded in concrete or mortar. Extend priming of partially embedded members to a depth of 2 inches.
- Surfaces to be field welded.
- Surfaces to be high-strength bolted with slip-critical connections.
- Surfaces to receive sprayed fire-resistive materials.
- Galvanized surfaces.

Surface Preparation: Clean surfaces to be painted. Remove loose rust and mill scale and spatter, slag, or flux deposits. Prepare surfaces according to the following specifications and standards:

- SSPC-SP 2, "Hand Tool Cleaning."
- SSPC-SP 3, "Power Tool Cleaning."
- SSPC-SP 5/NACE No. 1, "White Metal Blast Cleaning." SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning."
- SSPC-SP 7/NACE No. 4, "Brush-Off Blast Cleaning."
- SSPC-SP 8, "Pickling."
- SSPC-SP 10/NACE No. 2, "Near-White Blast Cleaning."
- SSPC-SP 11, "Power Tool Cleaning to Bare Metal."
- SSPC-SP 14/NACE No. 8, "Industrial Blast Cleaning."

Zinc Primed Surface Preparation: Clean surfaces to be painted. Remove loose rust and mill scale and spatter, slag, or flux deposits. Prepare surfaces according to SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning.”

Priming: Immediately after surface preparation, apply primer according to manufacturer's written instructions and at rate recommended by SSPC to provide a dry film thickness of not less than 1.5 mils. Use priming methods that result in full coverage of joints, corners, edges, and exposed surfaces.

Stripe paint corners, crevices, bolts, welds, and sharp edges.

Apply two coats of shop paint to inaccessible surfaces after assembly or erection. Change color of second coat to distinguish it from first.

Zinc Priming: Immediately after surface preparation, apply primer according to manufacturer's written instructions and at rate recommended by SSPC to provide a dry film thickness of not less than 4.0 mils (DFT). Use priming methods that result in full coverage of joints, corners, edges, and exposed surfaces.

Stripe paint corners, crevices, bolts, welds, and sharp edges.

Apply two coats of shop paint to inaccessible surfaces after assembly or erection. Change color of second coat to distinguish it from first.

Painting: Apply a 1-coat, nonasphaltic primer complying with SSPC-PS Guide 7.00, "Painting System Guide 7.00: Guide for Selecting One-Coat Shop Painting Systems," to provide a dry film thickness of not less than 1.5 mils.

Source Quality Control:

Owner will engage an independent testing and inspecting agency to perform shop tests and inspections and prepare test reports.

Provide testing agency with access to places where structural-steel work is being fabricated or produced to perform tests and inspections.

Correct deficiencies in Work that test reports and inspections indicate does not comply with the Contract Documents.

Bolted Connections: Shop-bolted connections will be tested and inspected according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."

Welded Connections: In addition to visual inspection, shop-welded connections will be tested and inspected according to AWS D1.1 and the following inspection procedures, at testing agency's option:

- Liquid Penetrant Inspection: ASTM E 165.
- Magnetic Particle Inspection: ASTM E 709; performed on root pass and on finished weld.

  Cracks or zones of incomplete fusion or penetration will not be accepted.
- Ultrasonic Inspection: ASTM E 164.
- Radiographic Inspection: ASTM E 94.

Installation

Examination:

Verify elevations of concrete- and masonry-bearing surfaces and locations of anchor rods, bearing plates, and other embedments, with steel erector present, for compliance with requirements. Proceed with installation only after unsatisfactory conditions have been corrected.

Preparation:

Provide temporary shores, guys, braces, and other supports during erection to keep structural steel secure, plumb, and in alignment against temporary construction loads and loads equal in intensity to design loads. Remove temporary supports when permanent structural steel, connections, and bracing are in place, unless otherwise indicated.

Do not remove temporary shoring supporting composite deck construction until cast-in-place concrete has attained its design compressive strength.

Erection:

Set structural steel accurately in locations and to elevations indicated and according to AISC's "Code of Standard Practice for Steel Buildings and Bridges" and "Specification for Structural Steel Buildings- - Allowable Stress Design and Plastic Design."

Base and Bearing Plates: Clean concrete- and masonry-bearing surfaces of bond-reducing materials, and roughen surfaces prior to setting base[and bearing] plates. Clean bottom surface of base and bearing plates.

Set base and bearing plates for structural members on wedges, shims, or setting nuts as required. Weld plate washers to top of base plate.

Snug-tighten anchor rods after supported members have been positioned and plumbed.

Do not remove wedges or shims but, if protruding, cut off flush with edge of base or bearing plate before packing with grout.

Promptly pack grout solidly between bearing surfaces and base [or bearing] plates so no voids remain.Neatly finish exposed surfaces; protect grout and allow to cure.

Comply with manufacturer's written installation instructions for shrinkage-resistant grouts.

Maintain erection tolerances of structural steel and architecturally exposed structural steel within AISC's "Code of Standard Practice for Steel Buildings and Bridges."

Align and adjust various members forming part of complete frame or structure before permanently fastening. Before assembly, clean bearing surfaces and other surfaces that will be in permanent contact with members. Perform necessary adjustments to compensate for discrepancies in elevations and alignment.

Level and plumb individual members of structure.

Make allowances for difference between temperature at time of erection and mean temperature when structure is completed and in service.

Splice members only where indicated.

Remove erection bolts on welded, architecturally exposed structural steel; fill holes with plug welds; and grind smooth at exposed surfaces.

Do not use thermal cutting during erection unless approved by Architect. Finish thermally cut sections within smoothness limits in AWS D1.1.

Do not enlarge unfair holes in members by burning or using drift pins. Ream holes that must be enlarged to admit bolts.

Shear Connectors: Prepare steel surfaces as recommended by manufacturer of shear connectors. Use automatic end welding of headed-stud shear connectors according to AWS D1.1 and manufacturer's written instructions.

Field Connections:

High-Strength Bolts snug tightened unless indicated: Shop install high-strength bolts according to

RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts" for type of bolt and for snug tightened joint.

High-Strength Bolts slip critical: Shop install high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts" for type of bolt, type of joint specified, and as follows:

- Prepare surface as required for type of joint specified.
- Install bolts with “Squirter DTI’s” direct tension indicating washers.
- Tighten connection with all needed washers as indicated in “Squirter DTI's” installation instructions.

Weld Connections: Comply with AWS D1.1 for welding procedure specifications, tolerances, appearance, and quality of welds and for methods used in correcting welding work.

Comply with AISC's "Code of Standard Practice for Steel Buildings and Bridges" and "Specification for Structural Steel Buildings--Allowable Stress Design and Plastic Design” for bearing, adequacy of temporary connections, alignment, and removal of paint on surfaces adjacent to field welds. Remove backing bars or runoff tabs, back gouge, and grind steel smooth.

Assemble and weld built-up sections by methods that will maintain true alignment of axes without exceeding tolerances of AISC's "Code of Standard Practice for Steel Buildings and Bridges" for mill material.

Verify that weld sizes, fabrication sequence, and equipment used for architecturally exposed tructural steel will limit distortions to allowable tolerances. Prevent weld show-through on exposed steel surfaces.

Grind smooth all welds.

Field Quality Control:

Testing Agency: Owner will engage a qualified independent testing and inspecting agency to inspect field welds and high-strength bolted connections.

Bolted Connections: Shop-bolted connections will be tested and inspected according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."

Welded Connections: Field welds will be visually inspected according to AWS D1.1.

In addition to visual inspection, full penetration field welds will be tested according to AWS D1.1 and the following inspection procedures, at testing agency's option:

- Liquid Penetrant Inspection: ASTM E 165.
- Magnetic Particle Inspection: ASTM E 709; performed on root pass and on finished weld.

Cracks or zones of incomplete fusion or penetration will not be accepted.

- Ultrasonic Inspection: ASTM E 164.
- Radiographic Inspection: ASTM E 94.

In addition to visual inspection, test and inspect field-welded shear connectors according to requirements in AWS D1.1 for stud welding and as follows (or as indicated on drawings):

- Perform bend tests if visual inspections reveal either a less-than- continuous 360-degree flash or welding repairs to any shear connector.
- Conduct tests on additional shear connectors if weld fracture occurs on shear connectors already tested, according to requirements in AWS D1.1.

Correct deficiencies in Work that test reports and inspections indicate does not comply with the Contract Documents.

Repairs And Protection:

Repair damaged galvanized coatings on galvanized items with galvanized repair paint according to ASTM A 780/A780M and manufacturer's written instructions.

Touchup Painting: After installation, promptly clean, prepare, and prime or reprime field connections, rust spots, and abraded surfaces of prime-painted joists and accessories, bearing plates, and abutting structural steel.

Clean and prepare surfaces by SSPC-SP 2 hand-tool cleaning or SSPC-SP 3 power-tool cleaning. Apply a compatible primer of same type as shop primer used on adjacent surfaces.

Touchup Painting: Cleaning and touchup painting are specified in Division 09 Section “Painting”.

END OF SECTION 051200 – STRUCTURAL STEEL

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Summary:

This section includes roof and floor deck and accessories.

Related Sections include the following:

- Division 05 Section “Structural Steel”.
- Division 05 Section “Steel Deck”.
- Division 05 Section “Metal Fabrications”.

Submittals:

Submit each item in this Article according to the Conditions of the Contract and Division 01 Specification Sections.

Product data for each type of deck, accessory, and product specified. Shop drawings showing layout and types of deck panels, anchorage details, reinforcing channels, pans, deck openings, special jointing, accessories, and attachments to other construction.

For steel deck indicated to comply with certain design loadings, include structural analysis data sealed and signed by the qualified professional Engineer who was responsible for its preparation.

Product certificates signed by Manufacturers of steel deck certifying that their products comply with specified requirements.

Welding certificates.

Field quality-control test and inspection reports.

Research/Evaluation Report: For steel deck.

Quality Assurance:

Installer Qualifications: Engage an experienced Installer who has completed steel deck installation similar in material, design, and extent to that indicated for this Project and with a record of successful in-service performance.

Welding Standards: Comply with applicable provisions of ANSI/AWS D1.1/D1.1M "Structural Welding Code-Steel" and ANSI/AWS D1.3/D1.3M "Structural Welding Code--Sheet Steel."

Certify that each welder has satisfactorily passed AWS qualification tests for welding processes involved, and if pertinent has undergone recertification.

Fire-Test-Response Characteristics: Where indicated, provide steel deck units identical to those tested for fire resistance per ASTM E 119 by a testing and inspecting agency acceptable to authorities having jurisdiction.

Fire-Resistance Ratings: Indicated by design designations of applicable testing and inspecting agency.

Steel deck units shall be identified with appropriate markings of applicable testing and inspecting agency.

AISI Specification: Comply with calculated structural characteristics of steel deck according to AISI’s “North American Specification for the Design of Cold-Formed Steel Structural Members”.

Products and Manufacturers:

Subject to compliance with requirements, provide products by one of the following:

ASC Pacific Inc.

Canam Steel Corp.; The Canam Manac Group

Consolidated Systems, Inc.

DACS, Inc.

D-Mac Industries, Inc.

Epic Metals Corp.

Marlyn Steel Decks, Inc.

New Millennium Building Systems, LLC
Nucor Corp.; Vulcraft Division

Roof Deck, Inc.

Valley Joist; Division of EBSCO Industries, Inc.

Verco Manufacturing Co.

Wheeling Corrugating Co., Div. of Wheeling-Pittsburgh Steel Corp.

Steel Deck:

Refer to drawings for locations, deck profile, depth and span conditions.

Accessories: Provide accessory materials for steel deck that comply with requirements indicated, and recommendations of the steel deck manufacturer.

Examine supporting framing and field conditions for compliance with requirements for installation tolerances, and other conditions affecting performance of steel deck.

Do not place deck panels on concrete supporting structure until concrete has cured, and is dry. Locate decking bundles to prevent overloading of supporting members.

Install deck panels and accessories according to applicable specifications and commentary of SDI Publication No. 28, manufacturer's recommendations, and requirements of this Section.

Mechanical fasteners may be used in lieu of welding to fasten deck. Locate mechanical fasteners, and install according to deck manufacturer's instructions.

Roof Deck:

Fabric steel roof deck panels without top-flange stiffening grooves, to comply with “SDI Specification and Commentary for Steel Roof Deck”, in SDI Publication No. 30, and with the following:
Prime-Painted Steel Sheet: ASTM A 1008/A 1008M, Structural Steel (SS), Grade 33 minimum, shop primed with manufacturer’s standard baked-on, rust inhibitive primer.

Fasten roof deck panels to steel supporting members by arc spot (puddle) welds of the surface diameter indicated or arc seam welds with an equal perimeter, but not less than 1-1/2 inches (38 mm) long, and as follows:

Weld Diameter: 5/8 inch (16 mm), nominal. (Unless noted otherwise on drawings).

Weld Spacing: Space and locate welds as indicated. (Max. 12” on center, including at sidelaps).

Weld Washers: Install weld washers at each weld location, as required for deck gauge.

Side Lap and Perimeter Edge Fastening: Fasten side laps and perimeter edges of panels between supports, at intervals not exceeding 36 inches (910 mm), using one of the following methods:
Mechanically fasten with self-drilling No. 10 (4.8-mm-) diameter or larger carbon steel screws.

End Bearing: Install deck ends over supporting framing with a minimum end bearing of 1-1/2 inches (38 mm), with end joints as follows:

End Joints: Lapped 2 inches (51 mm) minimum. (4" over joist supports).

Roof Sump Pans and Sump Plates: Install over openings provided in roof decking, and weld flanges to top of deck. Space welds not more than 12 inches (305 mm) apart with at least one weld at each corner.

Accessories:

Provide manufacturer's standard accessory materials for deck that comply with requirements indicated.

Mechanical Fasteners: Corrosion-resistant, low-velocity, power-actuated or pneumatically driven carbon-steel fasteners; or self-drilling, self-threading screw.

Side-Lap Fasteners: Corrosion-resistant, hexagonal washer head; self-drilling, carbon-steel screws, No. 10 minimum diameter.

Flexible Closure Strips: Vulcanized, closed-cell, synthetic rubber.

Miscellaneous Sheet Metal Deck Accessories: Steel sheet, minimum yield strength of 33,000 psi, not less than 0.0359-inch design uncoated thickness, of same material and finish as deck; of profile indicated or required for application.

Repair Paint: Manufacturer's standard rust-inhibitive primer of same color as primer.

Roof Sump Pans and Sump Plates: Install over openings provided in roof deck and weld mechanically fastens flanges to top of deck. Space mechanical fasteners not more than 12 inches apart with at least one fastener at each corner.

Install reinforcing channels or zees in ribs to span between supports and mechanically fasten.

Recessed Sump Pans: Single-piece steel sheet, 0.0747 inch thick, of same material of 94 percent zinc dust by weight.

Flat Sump Plate: Single-piece steel sheet, 0.747 inch thick, of same material and finish as deck. For drains, cut holes in the field.

Installation:

Install deck panel and accessories according to applicable specifications and commentary in SDI Publication No. 30, manufacturer's written instructions, requirements in this Section, and as indicated.

Place deck panels on supporting frame and adjust to final position with ends accurately aligned and bearing on supporting frame before being permanently fastened. Do not stretch or contract side-lap interlocks.

Place deck panels flat and square and fasten to supporting frame without warp or deflection.

Cut and neatly fit deck panels and accessories around openings and other work projecting through or adjacent to deck.

Provide additional reinforcement and closure pieces at openings as required for strength, continuity of deck and support of other work.

Comply with AWS requirements and procedures for manual shielded metal arc welding, appearance and quality of welds and methods used for correcting welding work.

Mechanical fasteners may be used in lieu of welding to fasten deck. Locate mechanical fasteners and install according to deck manufacturer's written instruction.

End Bearing: Install deck ends over supporting frame with a minimum end bearing of 1-1/2 inches.

Miscellaneous Roof-Deck Accessories: Install ridge and valley plates, finish strips, end closures and reinforcing channels according to deck manufacturer's written instruction. Mechanically fasten to substrate to provide a complete deck installation.

Weld cover plates at changes in direction of roof-deck panels, unless otherwise indicated.

Pour Stops and Girder Fillers: Weld steel sheet pour stops and girder fillers to supporting structure according to SDI recommendations, unless otherwise indicated.

Field Quality Control:

Testing Agency: Owner will engage a qualified independent testing and inspecting agency to perform field tests and inspections and prepare test reports.

Field welds will be subject to inspection.

Testing agency will report inspection results promptly and in writing to Contractor and Architect. Remove and replace work that does not comply with specified requirements.

Additional inspecting, at Contractor's expense, will be performed to determine compliance of corrected work with specified requirements.

Galvanizing Repairs: Prepare and repair damaged galvanized coatings on both surfaces with galvanized repair paint according to ASTM A 780/A780M and the manufacturer's recommendations.

Repair Painting: Wire brush and clean rust spots, welds and abraded areas on both surfaces of prime-painted deck immediately after installation and apply repair paint.

END OF SECTION 053100 – STEEL DECK

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Summary:

Related Sections include the following:

- Division 05 Section “Structural Steel”.
- Division 05 Section “Steel Joist”.
- Division 05 Section “Steel Deck”.
- Division 05 Section “Cold Formed Metal Framing”.
- Division 05 Section “Ornamental Metal”.

Submittals:

Submit each item in this Article according to the Conditions of the Contract and Division 01 Specification Sections.

Product data for nonslip aggregates and nonslip aggregate surface finishes, prefabricated building columns, cast nosings, treads and thresholds, steel floor plate, paint products, and grout.

Shop drawings detailing fabrication and erection of each metal fabrication indicated. Include plans, elevations, sections, and details of metal fabrications and their connections. Show anchorage and accessory items. Provide templates for anchors and bolts specified for installation under other Sections.

Quality Assurance:

Fabricator Qualifications: Firm experienced in producing metal fabrications similar to those indicated for this Project with a record of successful in-service performance, and with sufficient production capacity to produce required units without delaying the Work.

Welding Standards: Comply with applicable provisions of AWS D1.1 "Structural Welding Code--Steel," AWS D1.2 "Structural Welding Code--Aluminum," and AWS D1.3 "Structural Welding Code--Sheet Steel."

Certify that each welder has satisfactorily passed AWS qualification tests for welding processes involved and, if pertinent, has undergone recertification.

Project Conditions:

Field Measurements: Check actual locations of walls and other construction to which metal fabrications must fit by accurate field measurements before fabrication. Show recorded measurements on final shop drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

Products:

Ferrous Metals:

Ferrous Surfaces: For metal fabrications exposed to view in the completed Work, provide materials selected for their surface flatness, smoothness, and freedom from surface blemishes. Do not use materials with exposed pitting, seam marks, roller marks, rolled trade names, or roughness.

Steel Plates, Shapes, and Bars: ASTM A 36/A 36M.

Rolled Steel Floor Plates: ASTM A 786/A 786M).

Steel Tubing: Product type (manufacturing method) and as follows:

Cold-Formed Steel Tubing: ASTM A 500/A500M.

Hot-Formed Steel Tubing: ASTM A 501.

For exterior installations and where indicated, provide tubing with hot-dip galvanized coating per ASTM A53/A53M.

Steel Pipe: ASTM A 53/A53M, standard weight (schedule 40), unless otherwise indicated, or another weight required by structural loads.

Galvanized finish for exterior installations and where indicated (unless noted otherwise)

Black Finish for interior installations (unless noted otherwise)

Gray-Iron Castings: ASTM A 48/A48M, Class 30.

Malleable-Iron Castings: ASTM A 47, Grade 32510 (ASTM A 47M, Grade 22010).

Cast-in-Place Anchors in Concrete: Anchors of type indicated below, fabricated from corrosion-resistant materials capable of sustaining, without failure, the load imposed within a safety factor of 4, as determined by testing per ASTM E 488, conducted by a qualified independent testing agency. Welding Rods and Bare Electrodes: Select according to AWS specifications for the metal alloy to be welded.

Paint:

Galvanizing Repair Paint: High-zinc-dust-content paint for galvanizing welds in galvanized steel, with dry film containing not less than 94 percent zinc dust by weight, and complying with DOD-P-21035 or SSPC-Paint 20.

Concrete Fill:

Concrete Fill Materials and Properties: Comply with requirements of Division 3 Section "Cast-in-Place

Concrete" for normal-weight, air-entrained, ready-mix concrete with a minimum 28-day compressive strength of 3000 psi, unless higher strengths are indicated.

Fabrications:

Form metal fabrications from materials of size, thickness, and shapes indicated but not less than that needed to comply with performance requirements indicated. Work to dimensions indicated or accepted on shop drawings, using proven details of fabrication and support. Use type of materials indicated or specified for various components of each metal fabrication.

Welding:

Provide architectural grade welds on all finished fabrications.

Steel and Iron Finishes:

Galvanizing: For those items indicated for galvanizing, apply zinc coating by the hot-dip process complying with the following requirements:

ASTM A 153/A153M for galvanizing iron and steel hardware.

ASTM A 123/A123M for galvanizing both fabricated and unfabricated iron and steel products made of uncoated rolled, pressed, and forged shapes, plates, bars, and strip 0.0299 inch thick or thicker.

Preparation:

Coordinate and furnish anchorages, setting drawings, diagrams, templates, instructions, and directions for installing anchorages, including concrete inserts, sleeves, anchor bolts, and miscellaneous items having integral anchors that are to be embedded in concrete or masonry construction. Coordinate delivery of such items to Project site.

Adjusting and Cleaning:

Touchup Painting: Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with same material as used for shop painting to comply with SSPC-PA 1 requirements for touching up shop-painted surfaces.

Loose Bearing and Leveling Plates

A. Provide loose bearing and leveling plates for steel items bearing on masonry or concrete construction, made flat, free from warps or twists and of the required thickness and bearing area. Drill plates to receive anchor bolts and for grouting as required. Weld attached anchors where required. Galvanize after fabrication, where required.

Miscellaneous Steel Trim

A. Unless otherwise indicated, fabricate units from structural steel shapes, plates and bars of profiles shown with continuously welded joints and smooth exposed edges. Miter corners and use concealed field splices wherever possible.

B. Provide cutouts, fittings and anchorages as required to coordinate assembly and installation with other work. Provide anchors, welled to trim, for embedding in concrete or masonry construction, space not more than 6 inches from each end, 6 inches from corners and 24 inches o.c., unless otherwise indicated.

END OF SECTION 055000 – METAL FABRICATIONS

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

Summary:

This Section includes carpentry work, which is exposed to view, is nonstructural, and which is not specified as part of other sections. Work includes but is not limited to the following: Interior standing and running trim, custom and prefabricated wood cabinets, countertop, wainscots, wood door window frames and jambs, wood stairs.

Related Sections include the following:

Division 09, Section “Gypsum Board Assemblies”

Division 09, Section “Painting”

Submittals:

Submit each item in this Article according to the Conditions of the Contract and Division 01 Specification Sections.

Shop drawings showing location of each item, dimensioned plans and elevations, large scale details, attachment devices, and other components.

Quality Assurance:

Fabricator Qualifications: Firm experienced in producing architectural woodwork similar to that indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units without delaying the Work.

Installer Qualifications: Arrange for interior architectural woodwork installation by a firm that can demonstrate successful experience in installing architectural woodwork items similar in type and quality to those required for this Project.

Single-Source Responsibility: Arrange for production of interior architectural woodwork with sequence-matched wood veneers by a single firm.

Quality Standard: Except as otherwise indicated, comply with the following standard:

AWI Quality Standard: "Architectural Woodwork Quality Standards" of the Architectural Woodwork Institute for grades of interior architectural woodwork, construction, finishes, and other requirements.

Job Conditions: Installer shall field verify all dimensions prior to fabrication. Coordinate fabrication schedule with construction progress. Installer shall advise contractor of temperature and humidity requirements for finish carpentry installation. Do not install finish carpentry until required temperature and humidity levels have been stabilized.

Products and Materials:

Products: Provide materials that comply with requirements of the AWI quality standard for each type of woodwork and quality grade indicated and, where the following products are part of interior woodwork, with requirements of the referenced product standards that apply to product characteristics as indicated below:

Hardboard: ANSI/AHA A135.4
Medium-Density Fiberboard: ANSI/NPA A208.2
Particleboard: ANSI/NPA A208.1, Grade M-2.
Softwood Plywood: PS 1.

Hardwood Plywood and Face Veneers: ANSI/HPVA HP-1.

Formaldehyde Emission Level for Medium-Density Fiberboard: Comply with requirements of NPA 9.

Fiberboard: Medium-density fiberboard made without formaldehyde and complying with ANSI/NPA A208.1.

Product: Subject to compliance with requirements, provide Medite II by Medite Corp.

Particleboard: ANSI A208.1, Grade M-2 made with phenol-formaldehyde resins.

Solid Surface:

Available Manufacturers: Subject to compliance with requirements, manufacturers offering solid surface that may be incorporated in the Work include, but are not limited to, the following:
Corian.

Cabinet Hardware and Accessory Materials:

Provide cabinet hardware and accessory materials associated with architectural cabinets, except for items specified in Division 08 Section "Door Hardware."
Provide concealed hardware unless indicated otherwise.

Installation Materials:

Provide nails, screws, furring, blocking, shims and hanging brackets and other anchoring devices to provide secure attachment, concealed where possible.

Fabrication, General:

Provide interior woodwork to dimensions, profiles, and details indicated. Ease edges to radius indicated for the following:

Corners of cabinets and edges of solid-wood (lumber) members 3/4 inch (19 mm) thick or less: 1/16 inch (1.5 mm).

Edges of rails and similar members more than 3/4 inch (19 mm) thick: 1/8 inch (3 mm).
Corners of cabinets and edges of solid-wood (lumber) members and rails: 1/16 inch (1.5 mm).

Countertops:

Quality Standard: Comply with AWI Section 400 requirements for countertops. Grade: Custom.

Installation:

Quality Standard: Install woodwork to comply with AWI Section 1700 for the same grade specified in Part 2 of this Section for type of woodwork involved.

Install woodwork plumb, level, true, and straight with no distortions. Shim as required with concealed shims. Install to a tolerance of 1/8 inch in 96 inches (3 mm in 2400 mm).

Scribe and cut woodwork to fit adjoining work and refinish cut surfaces or repair damaged finish at cuts.

Anchor woodwork to anchors or blocking built in or directly attached to substrates. Secure to grounds, stripping and blocking with countersunk, concealed fasteners and blind nailing as required for complete installation. Use fine finishing nails for exposed nailing, countersunk and filled flush with woodwork and matching final finish where transparent finish is indicated.

Cabinets: Install without distortion so that doors and drawers fit openings properly and are accurately aligned. Adjust hardware to center doors and drawers in openings and to provide unencumbered operation. Complete the installation of hardware and accessory items as

indicated. Tops: Anchor securely to base units and other support systems as indicated. Caulk space between backsplash and wall with specified sealant.

Complete the finishing work specified in this Section to the extent not completed at shop or before installation of woodwork. Fill nail holes with matching filler where exposed. Apply specified finish coats, including stains and paste fillers if any, to exposed surfaces where only seaer/prime coats were applied in the shop.

Refer to Division 09 Sections for final finishing of installed architectural woodwork.

Adjusting and Cleaning:

Repair damaged and defective woodwork where possible to eliminate functional and visual defects; where not possible to repair, replace woodwork. Adjust joinery for uniform appearance.

Clean, lubricate, and adjust hardware.

Clean woodwork on exposed and semi exposed surfaces. Touch up shop-applied finishes to restore damaged or soiled areas.

END OF SECTION 064020 – INTERIOR ARCHITECTURAL WOODWORK

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

Summary:

This section includes Building Wrap Air and Weather Resistant Barrier over exterior of all wall sheathing locations regardless of whether or not indicated on the drawings.

Related Sections include the following:

Division 04, Section “Unit Masonry”

Division 06, Section “Rough Framing”

Division 08, Section “Metal Wall Panels”, “Formed Metal Wall Panels”

Performance Requirements:

Provide Building Wrap Air and Barrier with the following properties based on testing manufacturer’s standard products, according to test methods indicated, applied to substrates simulating Project conditions using same materials and application methods to be used for Project.

Air Penetration: ASTM E-1677

Water Vapor Transmission: ASTM E-96 Method B
Water Penetration Resistance: AATCC-127
Breaking Strength: ASTM D-882

Burning Characteristics: ASTM E-84-97a (Class A)

Submittals:

Product Data: Include manufacturer’s specifications, technical data, installation instructions, and protection instructions. Include data substantiating that materials are recommended by manufacturer for applications indicated and comply with requirements.

Quality Assurance:

Applicator Qualifications: Engage an experienced installer with successful experience on the installation of building wrap air and weather resistant barrier.

Warranty:

General Warranty: The special warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.

Manufacturers:

Available Products: Subject to compliance with requirements, products that may be incorporated into the work include, but are not limited to the following:

Dupont Tyvek Commercial Wrap

Accessories:

Building Paper Accessories: Provide manufacturer’s accessories including but not limited to the following: Rust resistant screws and/or nails with plastic washers, caulks and sealants, seam tape, flashing tape.

Installation:

Comply with manufacturer's written instructions for installation.

Install Building Wrap Air Barrier over exterior side of exterior wall sheathing.

Install Building Wrap Air Barrier after sheathing is installed and before windows and doors are installed. Install lower level barrier prior to upper layers to ensure proper shingling of layers. Overlap Building Wrap Air Barrier at corners of building by a minimum of 12 inches. Overlap Building Wrap Air Barrier vertical seams by a minimum of 6 inches.

Ensure air barrier is plum and level with foundation, and unroll extending Building Wrap Air Barrier over window and door openings.

Attach building Wrap Air Barrier to wood, insulated sheathing board or exterior gypsum with plastic cap nails every 12" to 18" on vertical stud line with wood stud framing, and screws with washers to metal stud framing. When attaching to masonry, use adhesive recommended by manufacturer.

Horizontally cut Building Wrap Air Barrier along bottom of header.

Vertically cut Building Wrap Air Barrier down the center of openings from the top of the opening down to 2/3 of the way to the bottom of the openings.

Diagonally cut Building Wrap Air Barrier from the bottom of the vertical cut to the left and right corners of opening.

Fold side and bottom flaps into window opening and fasten every 6 inches. Trim off excess.

Prepare each rough door opening by cutting a standard "I" pattern in the Building Wrap Air Barrier. Horizontally cut Building Wrap Air Barrier along bottom of door frame header and along top of sill.

Vertically cut Building Wrap Air Barrier down the center of door opening from the top of the door opening (header) down to the bottom of the door opening (sill).

Fold side flaps inside around door openings and fasten every 6 inches. Trim off excess.

Tape all horizontal and vertical seam of Building Wrap Air Barrier.

Seal all tears and cuts in Building Wrap Air Barrier.

END OF SECTION 071800 – BUILDING WRAP

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

Summary:

This Section includes the following:

- Extruded Polystyrene Board Insulation
- Polyisocyanurate Board Insulation
- Mineral-Fiber Blanket Insulation
- Cellulosic Loose-Fill Insulation
- Glass-Fiber Loose-Fill Insulation
- Vapor Retarder

Quality Assurance:

Fire-Test-Response Characteristics: Provide insulation and related materials with the fire-test-response characteristics indicated on Drawings or specified elsewhere in this Section as determined by testing identical products per test method indicated below by UL or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify materials with appropriate markings of applicable testing and inspecting agency.

Fire-Resistance Ratings: ASTM E 119.
Combustion Characteristics: ASTM E 136.

Protect insulation materials from physical damage and from deterioration by moisture, soiling, and other sources. Store inside and in a dry location. Comply with manufacturer's written instructions for handling, storing, and protecting during installation.

Products:

Available Manufacturers: Subject to compliance with requirements, manufacturers offering insulation products that may be incorporated in the work include, but are not limited to, the following:

Extruded-Polystyrene Board Insulation:

Amoco Foam Products Company.
Dow Chemical Co.
UC Industries, Inc.; Owens-Corning Co.

Polyisocyanurate Board Insulation:

Celotex Corp.
NRG Barriers, Inc.

Vapor Retarder:

“Membrane” Vapor Retarder by Certainteed or equal as approved by the Architect.

Insulating Materials:

Provide insulating materials that comply with requirements and with referenced standards. Pre-Formed Units: Sizes to fit applications indicated; selected from manufacturer's standard thicknesses, widths, and lengths.

Extruded-Polystyrene Board Insulation: Rigid, cellular polystyrene thermal insulation formed from polystyrene base resin by an extrusion process using hydrochlorofluorocarbons as blowing agent to comply with ASTM C 578 for type and with other requirements indicated below:

Type IV, 1.60-lb/cu. ft. minimum density, unless otherwise indicated.

Surface-Burning Characteristics: Maximum flame-spread and smoke-developed indices of 75 and 450, respectively. Compressive Strength: 25psi.

Polyisocyanurate Board Insulation: Rigid, cellular polyisocyanurate thermal insulation with core formed by using hydrochlorofluorocarbons as blowing agent and faced on both sides with aluminum foil to comply with referenced standards and with other requirements indicated below:

ASTM Standard: ASTM C 1289, Type I, Class 1 or 2.

Surface-Burning Characteristics: Maximum flame-spread and smoke-developed indixes of 75 and 450, respectively, based on tests performed on unfaced core on thicknesses up to 4 inches (101 mm). Thermal Resistivity: 7.2 deg F x h x sq. ft./Btu x in. at 75 deg F (50 K x m/W at 24 deg C).

Faced Mineral-Fiber Blanket Insulation: Thermal insulation combining mineral fibers of type described below with thermosetting resins to comply with ASTM C 665, Type III, Class A (blankets with craft facing and flame spread of 25 or less.

Mineral-Fiber Type: Fibers manufactured from glass, slag wool, or rock wool.

Flanged Units: Provide blankets fabricated with facing incorporating 5-inch (127-mm-) wide flanges along edges for attachment to framing members.

Unfaced Mineral-Fiber Blanket Insulation: Thermal insulation combining mineral fibers of type described below with thermosetting resings to comply with ASTM C 665. Type I (blankets without membrane facing).

Cellulosic-Fiber Loose-Fill Insulation: Recycled cellulosic-fiber loose-fill-type insulation complying with ASTM C 739, chemically treated for flame-resistance, processing, and handling characteristics. Glass-Fiber Loose-Fill Insulation: Glass fibers processed to comply with ASTM C 764 for type (method of application) indicated below; maximum flame-spread and smoke-developed indices of 5 and 5, respectively, and as follows:

Type 1 for pneumatic application.

Vapor Retarder:

Vapor Retarder, polyamide film that changes its permeability with the ambient humidity conditions.

ASTM Standard: ASTM E96/E96M dry cup method increasing to greater than 10 perms using wet cut method.

Fire Hazard Classification: ASTM E 84, surface burning characteristics, Max. Flame Spread Index: 20, Max. Smoke Developed Index: 55.

Thickness: 2-Mil thick polyamide (Nylon)

Locations: Where indicated on the drawings or as directed by the Architect.

Examination:

Examine substrates and conditions, with Installer present, for compliance with requirements of Sections in which substrates and related work are specified and to determine if other

conditions affecting performance of insulation are satisfactory. Do not proceed with installation until unsatisfactory conditions have been corrected.

Preparation:

Clean substrates of substances harmful to insulations or vapor retarders, including removing projections capable of puncturing vapor retarders or that interfere with insulation attachment.

Installation:

Comply with insulation manufacturer's written instructions applicable to products and application indicated.

Install insulation that is undamaged, dry, unsoiled, and has not been exposed at any time to ice and snow.

Extend insulation in thickness indicated to envelop entire area to be insulated. Cut and fit tightly around obstructions and fill voids with insulation. Remove projections that interfere with placement.

Apply single layer of insulation to produce thickness indicated.

Installation of Perimeter and Under-Slab Insulation:

On vertical surfaces, set units in adhesive applied according to manufacturer's written instructions.

Use adhesive recommended by insulation manufacturer.

Protect top surface of horizontal insulation from damage during concrete work by applying protection board.

Installation of General Building Insulation:

Apply insulation units to substrates by method indicated, complying with manufacturer's written instructions. If no specific method is indicated, bond units to substrate with adhesive or use mechanical anchorage to provide permanent placement and support of units.

Seal joints between closed-cell (nonbreathing) insulation units by applying adhesive, mastic, or sealant to edges of each unit to form a tight seal as units are shoved into place. Fill voids in completed installation with adhesive, mastic, or sealant as recommended by insulation manufacturer.

Set vapor-retarder-faced units with vapor retarder to warm side of construction, unless otherwise indicated. Do not obstruct ventilation spaces, except for firestopping.

Tape joints and ruptures in vapor retarder, and seal each continuous area of insulation to surrounding construction to ensure airtight installation.

Use blanket widths and lengths that fill cavities formed by framing members. Where more than one length is required to fill cavity, provide lengths that will produce a snug fit between ends.

For wood-framed construction with faced blankets, having stapling flanges, position insulation to produce 1/2-inch (13-mm) continuous air space between insulation facing and inner surface of concealing finish material, unless otherwise indicated. Secure insulation by inset, stapling flanges to sides of framing members.

Install board insulation on concrete substrates by adhesively attached, spindle-type insulation anchors as follows:

Fasten insulation anchors to concrete substrates with insulation anchor adhesive according to anchor manufacturer's written instructions. Space anchors according to insulation manufacturer's written instructions for insulation type, thickness, and application indicated.

Place loose-fill insulation into spaces and onto surfaces as shown, either by pouring or by machine blowing to comply with ASTM C 1015. Level horizontal applications to uniform thickness as indicated, lightly settle to uniform density, but do not compact excessively.

For cellulosic loose-fill insulation, comply with the Cellulose Insulation Manufacturers Association's "Special Report -- Standard Practice for Installing Cellulose Insulation."

Stuff glass-fiber loose-fill insulation into miscellaneous voids and cavity spaces where shown. Compact to approximately 40 percent of normal maximum volume equaling a density of approximately 2.5 lb/cu. ft. (40 kg/cu. m).

Installation of Vapor Retarder:

Apply to roof trusses and exterior wall studs as indicated on the drawings. Comply with manufacturers written instructions applicable to building products used for specific products.

Protection:

Protect installed insulation and vapor retarders from damage due to harmful weather exposures, physical abuse, and other causes. Provide temporary coverings or enclosures where insulation is subject to abuse and cannot be concealed and protected by permanent construction immediately after installation.

END OF SECTION 072100 – BUILDING INSULATION

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Summary:

Related Sections: The following Sections contain requirements that relate to this Section: Division 07, Section "Joint Sealants" for requirements specified by reference in this Section for sealing joints in system with elastomeric joint sealants.

Definitions:

Exterior insulation and finish systems refer to exterior assemblies composed of an inner layer of board insulation and an outer layer composed of a glass-fiber-mesh-reinforced base coat applied directly to board insulation and a textured protective finish coat. These assemblies are applied to supporting substrates of construction indicated.

Performance Requirements:

Provide systems that comply with the following performance requirements:

Bond Integrity: Free from bond failure within system components or between system and supporting wall construction, resulting from exposure to fire, wind loads, weather, or other in-service conditions.

Weathertightness: Resistant to water penetration from exterior into system and assemblies behind it or through them into interior of building that results in deterioration of thermal-insulating effectiveness or other degradation of system and assemblies behind system, including substrates, supporting wall construction, and interior finish.

Submittals:

Submit each item in this Article according to the Conditions of the Contract and Division 01 Specification Sections.

Product data for each component of exterior insulation and finish systems specified.

Samples for initial selection in the form of manufacturer's color charts and small-scale samples consisting of actual units or sections of units showing the full range of colors, textures, and patterns available for each type of textural choices indicated.

Submit sealant manufacturer's standard bead samples consisting of strips of actual products showing full range of colors available.

Installer certificates signed by manufacturer certifying that Installers comply with requirements under the "Quality Assurance" Article.

Quality Assurance:

Installer Qualifications: Engage an experienced Installer who has completed systems similar in material, design, and extent to that indicated for this Project and with a record of successful in-service performance.

Single-Source Responsibility:

Obtain materials for system from one source and by a single manufacturer or by manufacturers approved by the system manufacturer as compatible with other system components.

Delivery, Storage, and Handling:

Deliver products in original, unopened packages with manufacturer's labels identifying products legible and intact.

Store materials inside and under cover; keep them dry and protected from the weather, direct sunlight, surface contamination, aging, corrosion, damaging temperatures, damage from construction traffic, and other causes.

Project Conditions:

Do not install system when ambient outdoor air and substrate temperatures are 40 deg F (4 deg C) and falling unless temporary protection and heat are provided to maintain ambient temperatures above 40 deg F (4 deg C) during installation of wet materials, and until they have dried thoroughly, and become weather resistant, but for not less than 24 hours after installation.

Coordination and Scheduling:

Coordinate installation of system with related units of Work specified in other Sections to ensure that wall assemblies, including sheathing, flashing, trim, and joint sealers, are protected against damage from the effects of weather, age, corrosion, and other causes.

Warranty:

Manufacturer’s Warranty: Submit executed copy of manufacturer’s written warranty of completion of project, signed by manufacturer and installer.

Warranty Period: 10 years from date of Substantial Completion.

The warranty shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and will be in addition to and run concurrent with other warranties made by the Contractor under requirements of the Contract Documents.

Products and Manufacturers:

Available Manufacturers: Subject to compliance with requirements, manufacturers offering Class PB 100% Acrylic systems that may be incorporated in the Work include, but are not limited to, the following:

Dryvit Systems, Inc.

Parex Incorporated.

Senergy, Inc.

STO Industries.

Materials:

Provide adhesive, board insulation, reinforcing fabrics, base and finish coat materials, sealants, and accessories that are compatible with one another and approved for use by system manufacturer. Colors and Textures of Finish Coat: Comply with the following requirements:

Provide Architect's selections from manufacturer's full range of colors and textures for type of finish coat.

Primer-Sealer: System manufacturer's standard substrate conditioner designed to seal substrates from moisture penetration and to improve the bond between substrate of type indicated and adhesive used for application of insulation.

Adhesive for Application of Insulation: System manufacturer's standard formulation designed for indicated use, compatible with substrate, and complying with the following requirements:

Factory-mixed formulation designed for adhesive attachment of insulation to substrates of type indicated, as approved by system manufacturer.

Molded Polystyrene Board Insulation: Rigid cellular thermal insulation formed by the expansion of polystyrene resin beads or granules in a closed mold, complying with ASTM C 578 for Type I, approved by system manufacturer for material qualities including corner squareness, other dimensional tolerances, and the following:

Age insulation in block form prior to cutting and shipping by air drying for not less than 6 weeks or by another method approved by system manufacturer that produces equivalent results. Provide insulation in boards not more than 24 by 48 inches and in thickness indicated but not less than that allowed by system manufacturer, nor more than 12 inches.

Sheathing Board: Dens-Glas Gold by Georgia Pacific; 5/8" thick or ½" Durock exterior cement board manufactured by USG.

Reinforcing Fabric: Balanced, alkali-resistant open-weave glass-fiber fabric treated for compatibility with other system materials, made from continuous multiend strands with tensile strength of not less than 145 lb and 150 lb in warp and fill directions per ASTM D 5035, complying with ASTM D 578 and the following requirements for minimum weight:

Intermediate Reinforcing Fabric: 9.5 oz./sq. yd.
Strip Reinforcing Fabric: 3.75 oz./sq. yd.

Base Coat Materials: System manufacturer's standard mixture complying with the following requirements for material composition and method of combining materials:

Factory-mixed formulation of polymer emulsion adhesive and inert fillers that is ready to use without the addition of other materials.

Finish Coat Materials: System manufacturer's silicone enhanced mixture complying with the following requirements for material composition and method of combining materials:

Water: Clean and potable.

Trim Accessories: Type as designated or required to suit conditions indicated and to comply with system manufacturer's requirements, manufactured from vinyl plastic and complying with ASTM C 1063.

Mixing:

General: Comply with system manufacturer's requirements for combining and mixing materials. Do not introduce admixtures, water, or other materials except as approved by system manufacturer. Mix materials in clean containers. Use materials within time period specified by system manufacturer or discard.

Examination:

Examine substrates, with Installer present, to determine if they are in satisfactory condition for installation of system. Do not proceed with installation of system until unsatisfactory conditions have been corrected.

Preparation:

Protect contiguous work from moisture deterioration and soiling resulting from application of systems. Provide temporary covering and other protection needed to prevent spattering of exterior finish coatings on other work.

Protect system, substrates, and wall construction behind them from inclement weather during installation.

Prevent infiltration of moisture behind system and deterioration of substrates.

Prepare and clean substrates to comply with system manufacturer's requirements to obtain optimum bond between substrate and adhesive for insulation.

Apply primer-sealer over substrates where required by system manufacturer for improving adhesion or for protecting substrates from premature degradation.

Installation:

Comply with manufacturer's current published instructions for installation of system as applicable to each type of substrate indicated.

Apply trim accessories at perimeter of system, at expansion joints, and elsewhere, as indicated. Use drip screed at bottom edge of system unless otherwise indicated. Use casing beads at other locations.

Adhesively attach insulation to comply with the following requirements:

Apply adhesive to insulation by the notched trowel method in a manner that results in adhesive coating the entire surface of gypsum sheathing once insulation is adhered to the sheathing, unless system manufacturer's instructions specify the use of primer-sealer in combination with the ribbon and dab method.

Allow adhered insulation to remain undisturbed for period prescribed by system manufacturer, but not less than 24 hours, prior to beginning rasping and sanding insulation or application of base coat and reinforcing fabric.

Apply insulation boards over dry substrates in courses with long edges oriented horizontally. Begin first course from a level base line and work upward.

Stagger vertical joints in successive courses to produce running bond pattern. Locate joints so that no piece of insulation is less than 12 inches wide or 6 inches high. Offset joints at least 6 inches from corners of window and door openings.

Offset joints of insulation at least 6 inches (100 mm) from joints in sheathing. Interlock ends at internal and external corners.

Abut boards tightly at joints within and between each course to produce flush, continuously even surfaces without gaps or raised edges between insulation boards. If gaps occur, fill with spray foam or insulation cut to fit gaps exactly; insert without use of adhesive.

Cut insulation to fit openings, corners, and projections precisely and to produce edges and shapes conforming to details indicated.

Rasp or sand flush entire surface of insulation to remove irregularities projecting more than 1/32 inch from surface of insulation and to remove yellowed areas due to sun exposure; do not create depressions deeper than 1/16 inch.

Cut grooves, rabbets, and other features in outside face of insulation with high-speed router and bit configured to produce grooves, rabbets, and other features that conform accurately to profiles and locations indicated. Do not reduce insulation thickness at features to less than 3/4 inch. Interrupt insulation where expansion joints are indicated in substrates behind exterior insulation and finish systems.

Form joints for sealant application by leaving gaps between adjoining insulation edges as well as between insulation edges and dissimilar adjoining surfaces. Make gaps wide enough to produce joint widths indicated after encapsulation of joint substrates with base coat, reinforcing fabric, and tinted primer.

Form joints for sealant application with back-to-back casing beads for joints within system and with perimeter casing beads at dissimilar adjoining surfaces. Make gaps between casing beads and between perimeter casing beads and adjoining surfaces of width indicated.

Treat exposed edges of insulation board, including those forming substrates of sealed joints within system or between system and other work, by encapsulating with base coat, reinforcing fabric, and tinted primer, unless otherwise indicated.

Treat edges of insulation board at trim accessories by extending base coat, reinforcing fabric, and finish coat over face leg of accessories.

Coordinate flashing installation with installation of insulation to produce a wall system that does not allow water to penetrate behind protective coating.

Apply base coat to exposed surfaces of insulation in minimum thickness specified by system manufacturer.

Embed reinforcing fabric of type indicated below in wet base coat to produce wrinkle-free installation with fabric continuous or lapped at corners and lapped or otherwise treated at joints to comply with system manufacturer's requirements. Completely embed fabric, applying additional base coat material if necessary, so that reinforcing fabric pattern is not visible.

Double Layer Application: Where indicated, apply a second base coat and second layer of reinforcing fabric of weight indicated below, in same manner as first application. Do not apply until first base coat has cured.

- Standard reinforcing fabric.
- Intermediate reinforcing fabric.

Apply Stolit Lotusan finish coat over dry base coat in thickness required by system manufacturer to produce a uniform finish of texture and color matching approved sample.

Cleaning and Protection:

Remove temporary covering and protection of other work. Promptly remove coating materials from window and door frames and other surfaces outside areas indicated to receive system coatings. Provide final protection and maintain conditions in a manner acceptable to Installer and system manufacturer that ensures system's being without damage or deterioration at time of Substantial Completion.

END OF SECTION 072410 –EXTERIOR INSULATION AND FINISH SYSTEMS

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Summary:

This Section includes firestopping and smokestopping for the following:

- Penetrations through fire-resistance-rated construction including both empty openings and openings containing cables, pipes, ducts, conduits, and other penetrating items.
- Penetrations through smoke barriers and construction enclosing compartmentalized areas involving both empty openings and openings containing penetrating items.
- Sealant joints in fire-resistance-rated construction.
- Smoke stopping of all penetrations through smoke barriers.
- Extent of fire and smoke barriers is indicated on drawings, or as required by code.

Work not included: Repairing penetrations made in error and repairing penetrations, which are too large to be sealed by the methods indicated; these are to be repaired using the original material of the construction.

Products furnished but not installed:

Sleeves which are an integral part of the firestopping assembly but which must be set by installer of other construction.

Definitions:

Fire barrier: Any wall, floor, ceiling, or roof, which is indicated as having a fire-resistance rating. Smoke barrier: Any wall, floor, ceiling, or roof which is indicated as being designed to prevent passage of smoke and gases; may be indicated as "smoke barrier," "smoke partition," "smoke wall," etc.

Submittals:

Product data for each type of product specified.

Shop drawings detailing materials, installation methods, and relationships to adjoining construction for each through-penetration firestop and smoke stop systems, and each kind of construction condition penetrated and kind of penetrating item. Include firestop and smoke stop design designation of qualified testing and inspecting agency evidencing compliance with requirements for each condition indicated.

Submit documentation, including illustrations, from a qualified testing and inspecting agency that is applicable to each through-penetration firestop and smoke stop configuration for construction and penetrating items.

Where project conditions require modification of qualified testing and inspecting agency's illustration to suit a particular through-penetration firestop condition, submit illustration approved by firestopping and smoke stopping manufacturer's fire protection engineer with modifications marked.

Product certificates signed by manufacturers of firestopping and smoke stopping products certifying that their products comply with specified requirements.

Product test reports from, and based on tests performed by, a qualified testing and inspecting agency evidencing compliance of firestopping and smoke stopping with requirements based on comprehensive testing of current products.

Qualification data for firms and persons specified in "Quality Assurance" article to demonstrate their capabilities and experience. Include list of completed projects with project names, addresses, names of Architects and Owners, and other information specified.

Preinstallation Inspection Report: Identify penetrations, which need to be repaired using the- original material of the assembly.

Quality Assurance:

Testing Requirements: Testing shall have been conducted or witnessed by an independent testing agency acceptable to governing authorities.

Test method: ASTM E 119 or ASTM E 814.

Conduct tests with a measurably higher pressure inside the chamber than outside.

The listing of the assembly to be used in the current edition of one of the following classification

guides will be considered evidence of acceptable testing: Underwriters Laboratories Inc. "Fire Resistance Directory."

Factory Mutual System "Approval Guide."

A current evaluation report by one of the following will be considered evidence of acceptable testing:

BOCA Research and Evaluation Committee ("BOCA Research Report").

Coordinate delivery of products to minimize storage time at site.

Delivery, Storage and Handling:

Deliver products to project site in original unopened containers bearing the name of the manufacturer, product name, type, and testing agency's identification mark.

Store products in accordance with manufacturer's instructions.

Project Conditions:

Environmental Conditions: Do not install firestopping and smoke stopping when ambient or substrate temperatures are outside limits permitted by firestopping manufacturers or when substrates are wet due to rain, frost, condensation, or other causes.

Sequencing and Scheduling:

Perform firestopping and smoke stopping work after completion of work, which penetrates fire and smoke barriers, but prior to covering up or eliminating access to the penetration. Coordinate with installers of such other work.

Products:

Firestopping Materials:

Manufacturers: Products made by the following manufacturers, provided they comply with requirements of the contract documents, will be among those considered acceptable:

- American Vamag Company, Inc.
- Bio Fireshield, Inc.
- Chase Technology Corporation.
- Dow Corning Corporation.
- Flamemaster Corporation.
- GE Silicones.
- Insta-Foam Products, Inc.
- International Protective Coatings Corporation.
- Hevi-Duty/Nelson.
- Semco Division/Products Research and Chemical Corporation.
- 3M Ceramic Materials Department.

Materials:

Firestopping Materials: Provide penetration seal assemblies whose fire-resistance ratings have been determined by testing in the configurations required and which have fire-resistance ratings at least as high as that of the fire-rated assembly in which they are to be installed.

Use the materials required for the tested assemblies indicated on the drawings.

Where no tested assembly is indicated for a particular penetration, use any tested assembly which complies with the requirements of the specification.
T-Rating: Not less than F rating. Provide products that:

Allow normal expansion and contraction movement of the penetrating item without failure of the penetration seal.

Emit no hazardous, combustible, or irritating by-products during installation or curing period. Smoke stopping: Use any gunnable or pourable joint sealant suitable for the application; use only fully curing types where accessible in the finished work. Provide products which:

Allow normal expansion and contraction movement of the penetrating item without failure of the penetration seal.

Emit no hazardous, combustible, or irritating by-products during installation or curing period.

Do not require special tools for installation.

Labels: Red permanent marking using the words "Fire-Rated Assembly - Do Not Disturb - See Maintenance Instructions" and the testing agency designation, or equivalent as approved by the authority having jurisdiction.

For marking firestopping and smoke stopping assemblies use self-adhesive tape or wired-on labels.

Examination:

Preinstallation Inspection: Inspect all fire and smoke barriers for penetrations of any type; mark or otherwise identify all penetrations indicating action required:

1)Repair

2)Firestopping or

3)Smoke stopping

Conduct inspection prior to covering up or enclosing walls or ceilings.
Conduct inspection jointly with the Architect.

Submit a report detailing findings of inspection to the Architect.

If the configuration of a particular penetration does not conform to the configuration necessary for the required firestopping assembly, notify the installer of the penetration for modification of the configuration to suit the assembly; do not use the firestopping assembly in other configurations except as specifically stated in the test report or as approved by the authority having jurisdiction.

Preparation:

Prepare penetrations in accordance with the material manufacturer's instructions.

Installation:

Install firestopping materials in exact accordance with manufacturer's instructions and the conditions of the testing; provide all accessory materials required.

Remove combustible forming materials, unless they are a required component of the tested assembly.

Permanent Identification of Penetrations:

Near fire and smoke barriers, mark each exposed penetration with label identifying it as a fire-stopped or smoke-stopped assembly.

Field Quality Control:

Obtain the services of firestopping material manufacturer's representative to instruct installers and to inspect the completed installations for correctness.

Inspect completed installations for completeness and correct installation.

If installed work is to be covered in completed work, inspect and obtain approval prior to covering.

Obtain the Architect's approval; notify the Architect that the work is complete and ready for inspection.

Cleaning:

Clean up excess material adjacent to penetrations promptly; use methods and materials approved by the manufacturers of the penetration seals and of surfaces to be cleaned.

Protection:

Protect installed work during curing period.

Protect installed work from damage from construction operations using substantial barriers if necessary.

Repair damaged materials in accordance with manufacturer's instructions.

END OF SECTION 072700 – FIRESTOPPING AND SMOKESTOPPING

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Summary:

This Section includes concealed-fastener metal wall panels as shown on the drawings including building cornice, flat metal wall panels and curved metal wall panels.

Related Sections: The following Sections contain requirements that relate to this Section:

Division 06, Section 061000 “Rough Carpentry”
Division 07, Section 074616 “Aluminum Siding”

Division 07, Section 076200 “Sheet Metal Flashing and Trim”
Division 07, Section 079010 “Joint Sealants”

Division 07, Section 075400 “Thermoplastic Membrane”
Division 08, Section 085200 “Aluminum Windows”

Submittals:

Submit each item in this Article according to the Conditions of the Contract and Division 01 Specification Sections.

Product Data: Submit for each type of product indicated, include construction details, of edge conditions, joints, panel profiles, corners, anchorages, attachment system, trim, flashings, closures and accessories; and special details.

Shop Drawings: Submit shop drawings showing layout, profiles and product components, including anchorage, accessories, finish colors and textures.

 Include some details showing thickness and dimensions of the various system parts, fastening and anchoring methods, locations of joins and gaskets and location and configuration of joints necessary to accommodate thermal movement.

Samples: Submit selection and verification samples for finishes, colors and textures.
 Verification Samples:

1. Structural: 12-inch x 12-inch (305 x 305 mm) sample composite panels in thickness specified, from an available stock color, including clips, anchors, supports, fasteners, closures and other panel accessories, for assembly approval. Included panel assembly samples not less than 24 inches x 24 inches (610 x 610 mm), showing 4-way joint.

2. Include separate sets of draw down samples on aluminum substrate, not les than 3 inches x 5 inches (76 x 127 mm), of each color and finish selected, for color approval. Larger samples of standard colors are available with production applied coatings.

Quality Assurance Submittals: submit the following:

 Test Reports: certified test reports showing compliance with performance characteristics and physical properties for proposed locations and applications.

 Certificates: Product certificates signed by manufacturer certifying materials comply with specified performance characteristics and physical requirements.

 Manufacturer's Instructions: Manufacturer's installation instructions.

 Manufacturer's Field Reports: Manufacturer's field reports.

Maintenance Data: Submit maintenance data for wall panels.

Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with the manufacturer.

Quality Assurance:

Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with at least five years of documented experience.

Installer: Company specializing in performing work of this section and approved by manufacturer. Install systems in strict compliance with manufacturer's installation instructions and 10 years of documented experience.

Fabricator Qualifications: company with at least 3 years of experience on similar sized metal panel projects and qualified by the panel material manufacturer. Capable of providing field service representation during construction.

Mock-Ups: Install at project site a job mock-up using acceptable products and approved installation methods. Obtain Owner's and Architect's acceptance of finish color (draw down samples to be used for color approval of nonstandard coil coated colors), texture and pattern and workmanship standard.

1. Mock-Up Size: 12" x 12".

2. Maintenance: Maintain mock-up during construction for workmanship comparison; remove and legally dispose of mock-up when no longer required.

3. Incorporation: Mock-up may be incorporated into final construction upon Owner's approval.

Preinstallation Meetings: Conduct preinstallation meeting to verify project requirements, substrate conditions, installation instruction and warranty requirements.

Field Quality Control: Comply with panel system manufacturer's recommendations and guidelines for field forming of panels.

Delivery, Storage and Handling:

Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.

Storage and Handling: Store materials in clean, dry, interior area in accordance with manufacturer's instructions.

Deliver panels, components and other manufactured items without damage or deformation.

Protect panels during transportation, handling and installation from weather, excessive temperatures and construction operations.

Handle panels in strict compliance with manufacturer's instructions and recommendations and in a manner to prevent bending, warping, twisting, and surface damage.

Store panels covered with suitable weather tight and ventilated covering. Stack panels horizontally on platforms or pallets, covered with suitable weathertight and ventilated covering. Store panels to ensure dryness, with positive slope for drainage of water. Do not store panels in contact with other materials that might cause staining, denting or other surface damage.

Provide storage of panels to ensure dryness, with positive slope for drainage of moisture.

Do not store panels in contact with other materials that might cause staining, denting or other surface damage.

Remove strippable protective covering from formed metal panel during installation.

Site Conditions:

Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit assembly of this work to be performed according to manufacturer's installation instructions and warranty requirements.

Field Measurements: Verify locations of structural members and wall opening dimensions by field measurements before panel fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid construction delays. Coordinate metal panel installation with rain drainage work, flashing, trim, construction of soffits and other adjoining work to provide a leakproof, secure and noncorrosive installation.

Warranty

General Warranty: The special warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.

Special Warranty: Submit a written warranty executed by formed metal panel manufacturer agreeing to repair or replace components that fail in materials or workmanship within the specified warranty period. Failures include, but are not limited to, the following:

- Structural failures
- Deterioration of finishes and other materials beyond normal wear

Finish Warranty Period: 10 years from Date of Substantial Completion.

Products:

Composite Metal Panels:

- Manufacturer: Alpolic (FR Core) Mitsubushi Plastics Composites America, Inc.
- Proprietary Product: ALPOLIC Composite Metal Panels.

1. Basis of Design – ACMpanelworx PX-10 Dry Joint Rainscreen System 357 Croft Drive, Tecumseh, Ontario N8N-2L9, telephone 519-739-2380, fax 519-739- 1609, e-mail mark@acmpanelworx.com, website www.acmpanelworx.com.

Composite Metal Panel Materials:

- Composite Metal Panels:

1. Core: Thermoplastic material that meets performance characteristics specified when fabricated into composite assembly.

2. Face Sheets: Aluminum alloy 3105 H14, 0.020 inch (0.51 mm) thick and as follows: Coil coated with a fluoropolymer paint finish that meets or exceeds values expressed in AAMA 2605 where relevant to coil coatings.

3. Bond Integrity: Tested for resistance to delamination as follows:

Peel Strength (ASTM D1781): 22.5 in-lb/in (100 N-m/m) minimum.

□No degradation in bond performance after 8 hours of submersion in boiling water and after 21 days of immersion in water at 70 degrees F (21 degrees C).

4. Fire Performance:

□Flame spread (ASTM E84): 25 maximum (4 and 6 mm).

□Smoke Developed (ASTM E84): 450 maximum (4 and 6 mm).

□Surface Flammability (Modified ASTM E108): Pass (4 and 6 mm).

□V-O Rating (4 mm): Comply with UL 94.

□Production Tolerances:

1. Width: +/- 2 mm.
2. Length: +/- 4 mm.
3. Thickness (6 mm Panel): +/- 0.012 inch (0.3 mm).
4. Bow: Maximum 0.5% length or width.
5. Squareness: Maximum 0.2 inch (5 mm).
6. Edges of sheets shall be square and trimmed.

□Panel Thickness: 6 mm

Accessories

General: provide fabricator's all accessories including fasteners, clips, anchorage devices and attachments as required for a complete installation.

Related Materials

General: Refer to other related sections for related materials, including cold-formed metal framing, flashing and trim, joint sealers, aluminum windows, glass and glazing and curtain walls.

Fabrication

General: Shop fabricate to sizes and joint configurations indicated on the drawings.

□ Where final dimensions cannot be established by field measurements, provide allowances for field adjustments as recommended by the fabricator.

□ Form panel lines, breaks and angles to be sharp and true, with surfaces that are free from warp or buckle.

□ Fabricate with sharply cut edges, with no displacement of aluminum sheet or protrusion of core.

Finishes

Factory Finish: A fluoropolymer paint finish that meets or exceeds values expressed in AAMA 2605 where relevant to coil coatings.

Source Quality

Source Quality: Obtain composite panel products from a single manufacturer.

Execution:

Examination:

Examine substrates, work areas and conditions with installer present for compliance with requirements for installation tolerances, wall panel supports and other conditions affecting performance of this work.

Examine wall framing to verify that girts, angles, channels, studs and other structural wall panel support members and anchorage have been installed within alignment tolerances required by wall panel manufacturer.

Verify that weather barrier has been installed over sheathing or substrate to prevent air infiltration or water penetration.

Examine rough-in for components and systems penetrating wall panels to coordinate actual penetration locations relative to wall panel joint locations prior to installation.

Proceed with installation only after unsatisfactory conditions have been corrected.

Preparation:

Miscellaneous Framing: Install sub girt, base angles, sills, furring, and other wall panel support members and provide anchorage in accordance with ASTM C754 for gypsum panel type substrates and panel manufacturer's installation instructions.

Site Verification of Conditions: Verify that substrate conditions are acceptable for product installation.

Adjacent Surface Protection: Protect adjacent work areas and finish surfaces from damage during product installation.

Installation:

Install wall panels in accordance with manufacturer's installation instructions, including product technical bulletins and printed installation method and installation guidelines.

Shim or otherwise plumb substrates receiving metal panels.

Flash and seal metal panels at perimeter of all openings. Fasten with self-tapping screws. Do not begin installation until air-or water-resistive barriers and flashings that will be concealed by metal panels are installed.

Locate and space fastenings in uniform vertical and horizontal alignment.

Install flashing and trim as metal panel work proceeds.

Locate panel butt joints over structural supports. Stagger panel splices a four-panel lap splice condition.

Align bottoms of metal panels and fasten with blind rivets, bolts, or self-tapping screws. Fasten flashings and trim around openings and similar elements with self-tapping screws.

Provide weathertight escutcheons for pipe-and conduit-penetrating panels.

Install accessories with positive anchorage to building and weather tight mounting and provisions for thermal expansion, and coordinate installation with flashings and other components. Install components required for a complete wall panel assembly including trim, copings, flashings and other accessory items.

Weather Barrier: Install weather barrier behind wall panels and over substrate in accordance with requirements of Section 07 "Building Wrap".

Fasteners:

Steel Panels: Use stainless-steel fasteners for surfaces exposed to the exterior; use galvanized- steel fasteners for surfaces exposed to the interior.

Aluminum Panels: Use aluminum or stainless-steel fasteners for surfaces exposed to the exterior; use aluminum or galvanized-steel fasteners for surfaces exposed to the interior.

Metal Protection: Where dissimilar metals contact each other or corrosive substrates, protect against galvanic action as recommended in writing by metal panel manufacturer.

Lap-Seam Metal Panels: Fasten metal panels to supports with fasteners at each lapped joint at location and spacing recommended by manufacturer.

Provide metal-backed washers under heads of exposed fasteners bearing on weather side of metal panels.

Locate and space exposed fasteners in uniform vertical and horizontal alignment. Use proper tools to obtain controlled uniform compression for positive seal without rupture of washer.

Install screw fasteners with power tools having controlled torque adjusted to compress washer tightly without damage to washer, screw threads, or panels. Install screws in predrilled holes.

Flash and seal panels with weather closures at perimeter of all openings.

Watertight Installation:

Provide sealant or tape between panels and protruding equipment, vents, and accessories.

At panel splices, nest panels with minimum 1/8” gap between panels at butt joint, sealed with sealant and integral backer splice plate.

Accessory Installation: Install accessories with positive anchorage to building and weathertight mounting and provide for thermal expansion. Coordinate installation with flashings and other components.

Flashing and Trim: Comply with performance requirements, manufacturer's written installation instructions, and SMACNA's "Architectural Sheet Metal Manual." Provide concealed fasteners where possible and set units true to line and level as indicated. Install work with laps, joints, and seams that are permanently watertight.

Install exposed flashing and trim that is without buckling and tool marks, and that is true to line and levels indicated, with exposed edges folded back to form hems. Install sheet metal flashing and trim to fit substrates and achieve waterproof performance.

Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joints at a maximum of 10 feet with no joints allowed within 24 inches of corner or intersection. Where lapped expansion provisions cannot be used or would not be sufficiently waterproof, form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with mastic sealant (concealed within joints).

Field Quality Control:

Testing Agency: Engage a qualified independent testing agency to perform field tests and inspections.

Manufacturer's Field Service: Engage a factory-authorized service representative to test and inspect completed metal wall panel installation, including accessories.

Remove and replace metal wall panels where tests and inspections indicate that they do not comply with specified requirements.

Perform additional tests and inspections, at Contractor's expense, to verify compliance of replaced wall panels or necessary additional work with specified requirements.

Prepare test and inspection reports.

Adjustment & Cleaning:

Adjusting:

- Repair panels with minor damage such that repairs are not discernible at a distance of 10 feet (3.1m).
- Remove and replace panels damaged beyond repair.
- Remove protective film immediately after installation of joint sealers and immediately prior to completion of composite metal panel work.
- Remove from project site damaged panels, protective film and other debris attributable to work of this section.

Remove temporary protective covering and strippable films, if any, as metal panels are installed, unless otherwise indicated in manufacturer's written installation instructions. On completion of metal panel installation, clean finished surfaces as recommended by metal panel manufacturer. Maintain in a clean condition during construction.

After metal panel installation, clear weep holes and drainage channels of obstructions, dirt and sealant.

Upon completion of wall panel installation, clean finished surfaces as recommended by manufacturer.

Upon completion of wall panel installation, clear weep holes and drainage channels of obstructions and dirt.

Protection:

Protect installed products from damage during subsequent construction.

Replace wall panels damaged or deteriorated beyond successful repair by finish touchup or similar minor repair procedures.

END OF SECTION 074213 – METAL WALL PANEL

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Summary:

This Section includes single-ply membrane totally adhered roofing systems.

- Single-ply roofing membranes include the following: Ethylene Propylene Diene Monomer (EPDM).

Submittals:

Submit the following according to Conditions of Contract and Division 01 Specification Sections.

Product data, installation instructions, and general recommendations from manufacturer of single- ply membrane system for types of roofing required. Include data substantiating that materials comply with requirements.

Shop drawings showing roof configuration, sheet layout, seam locations, colors (as applicable), details at perimeter, and special conditions.

Indicate layout of tapered insulation materials.

Quality Assurance

Manufacturer: Obtain primary single-ply membrane roofing from a single manufacturer. Provide secondary materials as recommended by manufacturer of primary materials.

Installer: Engage an experienced Installer that has specialized in installing roofing systems similar to those required for this Project. Installer must be acceptable to or licensed by manufacturer of primary roofing material.

UL Listing: Provide labeled materials that have been tested and listed by UL in "Building Materials Directory" or by other nationally recognized testing laboratory for Class A rated materials/system.

Project Conditions:

Weather: Proceed with roofing work when existing and forecasted weather conditions permit work to be performed in accordance with manufacturers' recommendations and warranty requirements. Substrate Conditions: Do not begin roofing installation until substrates have been inspected and are determined to be in satisfactory condition.

Warranty:

Manufacturer's Warranty: Submit executed copy of single-ply membrane manufacturer's "Limited Service Warranty" agreement including flashing endorsement, signed by an authorized representative of manufacturer. Provide form that was published with product literature as of date of Contract Documents.

Warranty Period: 20 years from date of Substantial Completion.

The warranty shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and will be in addition to and run concurrent with other warranties made by the Contractor under requirements of the Contract Documents.

Products:

EPDM Membrane:

Ethylene propylenediene monomers formed into uniform, flexible sheets, complying with ASTM D 4637, Type 1.

- Class U: Unreinforced.

- Thickness: 60 mils (1.5 mm), nominal.
- Exposed Face Color: Black. (Unless noted otherwise on drawings).

Fully Adhered EPDM Membrane:

Manufacturers: Subject to compliance with requirements, provide products of one of the following:

- 'Sure Seal' as manufactured by Carlisle Syntec Systems
- 'Rubberguard' as manufactured by Firestone Building Products Co.

Auxiliary Materials:

Sheet Seaming System: Manufacturer's standard materials for sealing lapped joints, including edge sealer to cover exposed spliced edges as recommended by membrane manufacturer.

Cant Strips, Tapered Edge Strips, and Flashing Accessories: Types recommended by membrane manufacturer, including adhesive tapes, flashing cements, and sealants.

Flashing Material: Manufacturer's standard system compatible with single-ply membrane.

Slip Sheet: Type recommended by membrane manufacturer for protecting membrane from incompatible substrates.

Membrane Adhesive: As recommended by membrane manufacturer for particular substrate and project conditions, formulated to withstand minimum 60-psf (2870 Pa) uplift force.

Insulating Materials:

Provide insulating materials to comply with requirements indicated for materials and with referenced standards in sizes to fit applications indicated, selected from manufacturer's standard thicknesses, widths, and lengths.

Provide tapered boards where indicated for sloping to drain. Fabricate with taper of 1/4 inch per foot (6 mm per 300 mm), unless otherwise indicated.

Polyisocyanurate Board Roof Insulation: Rigid, cellular, thermal insulation with polyisocyanurate closed-cell foam core and manufacturer's standard facing laminated to both sides; complying with FS HH-I-1972/2, Class 1.

Preparing Substrate:

Comply with manufacturer's instructions to prepare substrate to receive single-ply membrane system.

Verify that penetrations, expansion joints, and blocking are in place and secured and that roof drains are properly clamped into position.

Clean substrate of dust, debris, and other substances detrimental to single-ply system installation.

Remove sharp projections.

Install cant strips, flashings, and accessory items as shown and as recommended by manufacturer.

Prime substrate where recommended by manufacturer of materials being installed.

On wood board decks to receive bituminous materials, install nailed course of paper slip-sheet.

Prevent compounds from entering and clogging drains and conductors and from spilling or migrating onto surfaces of other work.

Installing Insulation:

Extend insulation full thickness in two layers, or in multiple layers over entire surface to be insulated, cutting and fitting tightly around obstructions. Form cant strips, crickets, saddles, and tapered areas with additional material as shown and as required for proper drainage of membrane.

- Stagger joints in one direction for each course. For multiple layers, stagger joints in both directions between courses with no gaps, to form a complete thermal envelope.

- Provide tapered units to suit drainage pattern indicated.

Do not install more insulation in a day than can be covered with membrane before end of day or before start of inclement weather.

Secure roof insulation to substrate with mechanical anchors of type and spacing indicated but in no case provide less than one anchor per 4 sq. ft (0.4 sq. m) of surface area or less anchorage than required by FM Loss Prevention Data Sheet 1-28.

Installing Membrane:

Start installation only in presence of manufacturer's technical representative.
Cut out and repair membrane defects at the end of each day's work.

Fully Adhered Membrane: Install membrane by unrolling over prepared substrate; lapping adjoining sheets as recommended by manufacturer. Apply adhesive to surfaces to be bonded and roll into place when adhesive has properly cured. Treat seams with special adhesive and apply sealant to exposed sheet edges, tapering application as recommended by manufacturer. Install mechanical fasteners, flashings and counterflashings, and accessories at locations and as recommended by manufacturer.

For colored roofing sheet, apply two coats of Hypalon color coat within 30 days of sheet installation according to manufacturer's instructions, applying each coat at rate of 100 sq. ft per gallon (2.4 sq. m/L).

END OF SECTION 075300 – SINGLE PLY MEMBRANE ROOFING ADHERED

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Summary:

This Section includes sheet metal flashing and trim in the following categories:

- Metal counter flashing and base flashing (if any).
- Exposed trim, gravel stops, and fascia.
- Copings.
- Metal flashing.
- Reglets.
- Miscellaneous sheet metal accessories.

Related Sections: The following Sections contain requirements that relate to this Section: Division 07, Section “Metal Wall Panel”, “Formed Metal Wall Panel”

Submittals:

Submit each item in this Article according to the Conditions of the Contract and Division 01

Specification Sections.

Product Data including manufacturer's material and finish data, installation instructions, and general recommendations for each specified flashing material and fabricated product.

Shop Drawings of each item specified showing layout, profiles, methods of joining, and anchorage details.

Project Conditions:

Coordinate work of this Section with interfacing and adjoining work for proper sequencing of each installation. Ensure best possible weather resistance, durability of work, and protection of materials and finishes.

Products:

Metals:

Coil-Coated Galvanized Steel Sheet: Zinc-coated, commercial-quality steel sheet conforming to ASTM A 755, G 90 (ASTM A 755M, Z 275) coating designation, coil coated with high-performance fluoropolymer coating as specified in “Coil-Coated Galvanized Steel Sheet Finish” Article; not less than 0.0336 inch (0.85 mm) thick, unless otherwise indicated.

Reglets:

Units of type, material, and profile indicated, formed to provide secure interlocking of separate reglet and counterflashing pieces and compatible with flashing indicated.

Miscellaneous Materials and Accessories:

Solder: ASTM B 32, Grade Sn50, used with rosin flux.

Fasteners: Same metal as sheet metal flashing or other noncorrosive metal as recommended by sheet metal manufacturer. Match finish of exposed heads with material being fastened.

Asphalt Mastic: SSPC-Paint 12, solvent-type asphalt mastic, nominally free of sulfur and containing no asbestos fibers, compounded for 15-mil (0.4-mm) dry film thickness per coat.

Mastic Sealant: Polyisobutylene; nonhardening, nonskinning, nondrying, non-migrating sealant. Elastomeric Sealant: Generic type recommended by sheet metal manufacturer and fabricator of components being sealed and complying with requirements for joint sealants as specified in Division 07 Section "Joint Sealants."

Epoxy Seam Sealer: Two-part, noncorrosive, aluminum seam-cementing compound, recommended by aluminum manufacturer for exterior and interior nonmoving joints, including riveted joints.

Adhesives: Type recommended by flashing sheet metal manufacturer for waterproof and weather resistant seaming and adhesive application of flashing sheet metal.

Paper Slip Sheet: 5-lb/square (0.244 kg/sq. m) red rosin, sized building paper conforming to FS UU-B- 790, Type I, Style 1b.

Metal Accessories: Provide sheet metal clips, straps, anchoring devices, and similar accessory units as required for installation of work, matching or compatible with material being installed; noncorrosive; size and thickness required for performance.

Roofing Cement: ASTM D 4586, Type I, asbestos free, asphalt based.

Fabrication:

Sheet Metal Fabrication Standard: Fabricate sheet metal flashing and trim to comply with recommendations of SMACNA's "Architectural Sheet Metal Manual" that apply to the design, dimensions, metal, and other characteristics of the item indicated.

Comply with details shown to fabricate sheet metal flashing and trim that fit substrates and result in waterproof and weather-resistant performance once installed. Verify shapes and dimensions of surfaces to be covered before fabricating sheet metal.

Form exposed sheet metal work that is without excessive oil canning, buckling, and tool marks and that are true to line and levels indicated, with exposed edges folded back to form hems.

Seams: Fabricate nonmoving seams in sheet metal with flat-lock seams. Tin edges to be seamed, form seams, and solder.

Expansion Provisions: Space movement joints at maximum of 10 feet (3 m) with no joints allowed within 24 inches (610 mm) of corner or intersection. Where lapped or bayonet-type expansion provisions in work cannot be used or would not be sufficiently weatherproof and waterproof, form expansion joints of intermeshing hooked flanges, not less than 1 inch (25 mm) deep, filled with mastic sealant (concealed within joints).

Sealed Joints: Form nonexpansion, but movable, joints in metal to accommodate elastomeric sealant to comply with SMACNA standards.

Separate metal from noncompatible metal or corrosive substrates by coating concealed surfaces at locations of contact with asphalt mastic or other permanent separation as recommended by manufacturer.

Conceal fasteners and expansion provisions where possible. Exposed fasteners are not allowed on faces of sheet metal exposed to public view.

Fabricate cleats and attachment devices from same material as sheet metal component being anchored or from compatible, noncorrosive metal recommended by sheet metal manufacturer.

Installation:

Unless otherwise indicated, install sheet metal flashing and trim to comply with performance requirements, manufacturer's installation instructions, and SMACNA's "Architectural Sheet Metal Manual." Anchor units of work securely in place by methods indicated, providing for thermal expansion of metal units; conceal fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints, and seams that will be permanently watertight and weatherproof.

Install exposed sheet metal work that is without excessive oil canning, buckling, and tool marks and that are true to line and levels indicated, with exposed edges folded back to form hems. Install sheet metal flashing and trim to fit substrates and to result in waterproof and weather-resistant performance. Verify shapes and dimensions of surfaces to be covered before fabricating sheet metal. Roof-Edge Flashings: Secure metal flashings at roof edges according to FM Loss Prevention Data Sheet 1-49 for specified wind zone.

Expansion Provisions: Provide for thermal expansion of exposed sheet metal work. Space movement joints at maximum of 10 feet (3 m) with no joints allowed within 24 inches (610 mm) of corner or

intersection. Where lapped or bayonet-type expansion provisions in work cannot be used or would not be sufficiently weatherproof and waterproof, form expansion joints of intermeshing hooked flanges, not less than 1 inch (25 mm) deep, filled with mastic sealant (concealed within joints).

Sealed Joints: Form nonexpansion, but movable, joints in metal to accommodate elastomeric sealant to comply with SMACNA standards. Fill joint with sealant and form metal to completely conceal sealant.

Seams: Fabricate nonmoving seams in sheet metal with flat-lock seams. Tin edges to be seamed, form seams, and solder.

Separations: Separate metal from noncompatible metal or corrosive substrates by coating concealed surfaces, at locations of contact, with asphalt mastic or other permanent separation as recommended by manufacturer.

Counterflashings: Coordinate installation of counterflashings with installation of assemblies to be protected by counterflashing. Install counterflashings in reglets or receivers. Secure in a waterproof manner by means of snap-in installation and sealant, lead wedges and sealant, interlocking folded seam, or blind rivets and sealant. Lap counterflashing joints a minimum of 2 inches (50 mm) and bed with sealant.

Roof-Drainage System: Install drainage items fabricated from sheet metal, with straps, adhesives, and anchors recommended by SMACNA's Manual or the item manufacturer, to drain roof in the most efficient manner. Coordinate roof-drain flashing installation with roof-drainage system installation. Equipment Support Flashing: Coordinate equipment support flashing installation with roofing and equipment installation. Weld or seal flashing to equipment support member.

Roof-Penetration Flashing: Coordinate roof-penetration flashing installation with roofing and installation of items penetrating roof.

Splash Pans: Install where downspouts discharge on low-sloped roofs, unless otherwise shown. Set in roof cement or sealant compatible with roofing membrane.

Install continuous gutter screens on gutters with noncorrosive fasteners, arranged as hinged units to swing open for cleaning gutters.

Cleaning and Protection:

Clean exposed metal surfaces, removing substances that might cause corrosion of metal or

deterioration of finishes.

Provide final protection and maintain conditions that ensure sheet metal flashing and trim work during construction is without damage or deterioration other than natural weathering at the time of substantial completion.

END OF SECTION 076200 – SHEET METAL FLASHING AND TRIM

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Summary:

This Section includes joint sealants for the following locations:

Exterior joints in vertical surfaces and nontraffic horizontal surfaces as indicated below:

- Control and expansion joints in cast-in-place concrete.
- Control and expansion joints in unit masonry.
- Joints between cast stone or dimensional stone.
- Joints between different materials listed above.
- Perimeter joints between materials listed above and frames of doors and windows.
- Control and expansion joints in ceiling and overhead surfaces.
- Other joints as indicated.

Exterior joints in horizontal traffic surfaces as indicated below:

- Control, expansion, and isolation joints in cast-in-place concrete slabs.
- Other joints as indicated.

Interior joints in vertical surfaces and horizontal nontraffic surfaces as indicated below:

- Control and expansion joints on exposed interior surfaces of exterior walls.
- Perimeter joints of exterior openings where indicated.
- Tile control and expansion joints.
- Vertical control joints on exposed surfaces of interior unit masonry and concrete walls and partitions.
- Joints on underside of precast beams and planks.
- Perimeter joints between interior wall surfaces and frames of interior doors, windows, and elevator entrances.
- Perimeter joints of toilet fixtures.
- Other joints as indicated.

Interior joints in horizontal traffic surfaces as indicated below:

- Control and expansion joints in cast-in-place concrete slabs.
- Control and expansion joints in tile flooring.
- Other joints as indicated.

System Performance Requirements:

Provide elastomeric joint sealants that have been produced and installed to establish and to maintain watertight and airtight continuous seals without causing staining or deterioration of joint substrates. Provide joint sealants for interior applications that have been produced and installed to establish and maintain airtight continuous seals that are water resistant and cause no staining or deterioration of joint substrates.

Submittals:

Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections. Product data from manufacturers for each joint sealant product required.

Certification by joint sealant manufacturer that sealants plus the primers and cleaners required for sealant installation comply with local regulations controlling use of volatile organic compounds. Certificates from manufacturers of joint sealants attesting that their products comply with specification requirements and are suitable for the use indicated.

Quality Assurance:

Installer Qualifications: Engage an experienced Installer who has completed joint sealant applications similar in material, design, and extent to that indicated for Project that have resulted in construction with a record of successful in-service performance.

Single Source Responsibility for Joint Sealant Materials: Obtain joint sealant materials from a single manufacturer for each different product required.

Project Conditions:

Environmental Conditions: Do not proceed with installation of joint sealants under the following conditions:

When ambient and substrate temperature conditions are outside the limits permitted by joint sealant manufacturer.

Products and Materials:

Compatibility: Provide joint sealants, joint fillers, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer based on testing and field experience.

Colors: Provide color of exposed joint sealants to comply with the following:

Provide selections made by Architect from manufacturer's full range of standard colors for products of type indicated.

Elastomeric Joint Sealants:

Elastomeric Sealant Standard: Provide manufacturer's standard chemically curing elastomeric sealants that comply with ASTM C 920 and other requirements indicated on each Elastomeric Joint Sealant Data Sheet at end of this Section, including those requirements referencing ASTM C 920 classifications for Type, Grade, Class, and Uses.

Additional Movement Capability: Where additional movement capability is specified in Elastomeric Joint Sealant Data Sheet, provide products with the capability, when tested for adhesion and cohesion under maximum cyclic movement per ASTM C 719, to withstand the specified percentage change in the joint width existing at time of installation and remain in compliance with other requirements of ASTM C 920 for Uses indicated.

Available Products: Subject to compliance with requirements, elastomeric sealants that may be incorporated in the Work include, but are not limited to, the products specified in each Elastomeric Sealant Data Sheet.

Latex Joint Sealants:

Provide manufacturer's standard one-part, nonsag, mildew-resistant, paintable latex sealant of formulation indicated that is recommended for exposed applications on interior and protected exterior locations and that accommodates indicated percentage change in joint width existing at time of installation without failing either adhesively or cohesively.

Acrylic-Emulsion Sealant: Provide product complying with ASTM C 834 that accommodates joint movement of not more than 5 percent in both extension and compression for a total of 10 percent.
Silicone Emulsion Sealant: Provide product complying with ASTM C 834 and, except for weight loss

measured per ASTM C 792, with ASTM C 920 that accommodates joint movement of not more than 25 percent in both extension and compression for a total of 50 percent.

Available Products: Subject to compliance with requirements, latex joint sealants that may be incorporated in the Work include, but are not limited to, the following:

Acrylic-Emulsion Sealant:

- "AC-20," Pecora Corp.
- "Sonolac," Sonneborn Building Products Div., ChemRex, Inc.
- "Tremco Acrylic Latex 834," Tremco, Inc.

Acoustical Joint Sealants:

Acoustical Sealant: Manufacturer's standard nonsag, paintable, nonstaining latex sealant complying with ASTM C 834 and the following requirements:

Product is effective in reducing airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies per ASTM E 90.

Acoustical Sealant for Concealed Joints: Manufacturer's standard, nondrying, nonhardening, nonskinning, nonstaining, gunnable, synthetic rubber sealant recommended for sealing interior concealed joints to reduce transmission of airborne sound.

Available Products: Subject to compliance with requirements, acoustical joint sealants that may be incorporated in the Work include, but are not limited to, the following:

Acoustical Sealant:

- "SHEETROCK Acoustical Sealant," United States Gypsum Co.
- "AC-20 FTR Acoustical and Insulation Sealant," Pecora Corp.

Acoustical Sealant for Concealed Joints:

- "BA-98," Pecora Corp.
- "Tremco Acoustical Sealant," Tremco, Inc.

Joint Sealant Backing:

General: Provide sealant backings of material and type that are nonstaining; are compatible with joint substrates, sealants, primers and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.

Plastic Foam Joint Fillers: Preformed, compressible, resilient, nonstaining, nonwaxing, nonextruding strips of flexible plastic foam of material indicated below and of size, shape, and density to control sealant depth and otherwise contribute to producing optimum sealant performance:

- Open-cell polyurethane foam.
- Closed-cell polyethylene foam, nonabsorbent to liquid water and gas, non-out-gasing in unruptured state.
- Any material indicated above.

Elastomeric Tubing Joint Fillers: Neoprene, butyl, EPDM, or silicone tubing complying with ASTM D 1056, nonabsorbent to water and gas, capable of remaining resilient at temperatures down to -26 deg F.

Provide products with low compression set and of size and shape to provide a secondary seal, to control sealant depth, and otherwise contribute to optimum sealant performance.

Bond-Breaker Tape: Polyethylene tape or other plastic tape as recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint filler materials or joint surfaces at back of joint where such adhesion would result in sealant failure. Provide self-adhesive tape where applicable.

Miscellaneous Materials:

Primer: Material recommended by joint sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint sealant-substrate tests and field tests.

Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming in any way joint substrates and adjacent nonporous surfaces, and formulated to promote optimum adhesion of sealants with joint substrates.

Examination:

Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint sealant performance. Do not proceed with installation of joint sealants until unsatisfactory conditions have been corrected.

Preparation and Installation:

Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with recommendations of joint sealant manufacturer and the following requirements:

Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, paints (except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer), old joint sealants, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.

Clean concrete, masonry, unglazed surfaces of ceramic tile, and similar porous joint substrate surfaces by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining from above cleaning operations by vacuuming or blowing out joints with oil- free compressed air.

Remove laitance and form release agents from concrete.

Clean metal, glass, porcelain enamel, glazed surfaces of ceramic tile, and other nonporous surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants.

Joint Priming: Prime joint substrates where indicated or where recommended by joint sealant manufacturer based on preconstruction joint sealant-substrate tests or prior experience. Apply primer to comply with joint sealant manufacturer's recommendations. Confine primers to areas of joint sealant bond; do not allow spillage or migration onto adjoining surfaces.

Installation of Joint Sealants:

Comply with joint sealant manufacturer's printed installation instructions applicable to products and applications indicated, except where more stringent requirements apply.

Sealant Installation Standard: Comply with recommendations of ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.

Acoustical Sealant Application Standard: Comply with recommendations of ASTM C 919 for use of joint sealants in acoustical applications as applicable to materials, applications, and conditions indicated.

Installation of Sealant Backings: Install sealant backings to comply with the following requirements:

Install joint fillers of type indicated to provide support of sealants during application and at position required to produce the cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.

Install bond breaker tape between sealants where backer rods are not used between sealants and joint fillers or back of joints.

Installation of Sealants: Install sealants by proven techniques that result in sealants directly contacting and fully wetting joint substrates, completely filling recesses provided for each joint configuration, and providing uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability. Install sealants at the same time sealant backings are installed.

Tooling of Nonsag Sealants: Immediately after sealant application and prior to time skinning or curing begins, tool sealants to form smooth, uniform beads of configuration indicated, to eliminate air pockets, and to ensure contact and adhesion of sealant with sides of joint. Remove excess sealants from surfaces adjacent to joint. Do not use tooling agents that discolor sealants or adjacent surfaces or are not approved by sealant manufacturer.

Cleaning:

Clean off excess sealants or sealant smears adjacent to joints as work progresses by methods and with cleaning materials approved by manufacturers of joint sealants and of products in which joints occur.

Protection:

Protect joint sealants during and after curing period from contact with contaminating substances or from damage resulting from construction operations or other causes so that they are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so that installations with repaired areas are indistinguishable from original work.

Elastomeric Joint Sealant Data Sheet:

Elastomeric Joint Sealant Designation: ES1

Base Polymer: Multi part pourable urethane.

Type: M (Multicomponent)

Grade: P (Pourable)

Class: 25

Additional Movement Capability: 25 percent movement in extension and 25 percent in compression for a total of 50 percent.

Use Related to Exposure: T (Traffic)

Use Related to Joint Substrates: M.G.A. and, as applicable to joint substrates indicated, O.

Use O Joint Substrates: Color anodized aluminum coated with a high performance coating, cast-in- place-concrete, brick, ceramic tile, and wood.

Products:

“Vulkem 255”: Mameco International, Inc.

“NR-200 Urexpan”: Pecora Corp.

“PRC 280”: Products Research & Chemical Corp.

“Sikaflex 2c SL”: Sika Corp.

Sonolastic Paving Joint Sealant”: Sonneborn Building Products Div., Rexnord Chemical Products Inc.

“THC-900”: Tremco Inc.

Elastomeric Joint Sealant Data Sheet:

Elastomeric Joint Sealant Designation: ES2

Base Polymer: Multi part nonsag urethane sealant M (Multicomponent)

Type: S (Single Component)

Grade: NS (Nonsag)

Class: 25

Additional Movement Capability: 25 percent movement in extension and 25 percent in compression for a total of 50 percent.

Use Related to Exposure: NT (Nontraffic)

Use Related to Joint Substrates: M.G.A. and, as applicable to joint substrates indicated, O.

Use O Joint Substrates: Color anodized aluminum coated with a high performance coating, galvanized steel, ceramic tile, and wood.

Products:

"Vulkem 922": Mameco International, Inc.

"Dynatrol II": Pecora Corp.

"Permapol RC-2": Products Research & Chemical Corp.

"Sikaflex 2c NS": Sika Corp.

"Sonolastic NP2": Sonneborn Building Products Div.,
Rexnord Chemical Products, Inc.

"Dymeric": Tremco Inc.

Elastomeric Joint Sealant Data Sheet:

Elastomeric Joint Sealant Designation: ES3

Base Polymer: One part mildew resistant silicone.

Type: S (Single component)

Grade: NS (Nonsag)

Class: 25

Additional Movement Capability: 12.5 percent movement in extension and 12.5 percent in compression for a total of 25 percent.

Use Related to Exposure: NT (Nontraffic)

Use Related to Joint Substrates: G.A. and, as applicable to joint substrates indicated, O.

Use O Joint Substrates: Coated glass, Color anodized aluminum coated with a high performance coating, galvanized steel, ceramic tile.

Products:

"Dow Corning 786": Dow Corning Corp.

"863 #345 White": Pecora Corp.

"Proglaze White": Tremco Corp.

"OmniPlus": Sonneborn Building Products Div., Rexnord Chemical Products Inc.

Joint Sealer Schedule:

Multi Part Pourable Urethane Sealant (ES1): Exterior and interior joints in horizontal surfaces of concrete, between metal and concrete, mortar, stone, and masonry.

Multi Part Nonsag Urethane Sealant (ES2): Exterior and interior joints in vertical surfaces of concrete and masonry; between concrete masonry and Exterior Insulation Finish System; between metal and concrete, mortar, or stone; interior and extrior perimeter joints of metal frames in exterior walls; and exterior overhead hoints.

One Part Mildew-Resistant Silicone Sealant (ES3): Interior joints in vertical surfaces of ceramic tile in toilet rooms, showers, and kitchens.

Acrylic-Emulsion Sealant: Interior joints in field-painted vertical and overhead surfaces at perimeter of elevator door fames and hollow metal door frames; in gypsum drywall, plaster, and concrete, or concrete masonry, and all other interior joints not indicated otherwise.

END OF SECTION 079010 – JOINT SEALANTS

SECTION 081200 – ALUMINUM FRAMES

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Summary:

This Section includes:

• Aluminum Frames

Related Sections:

• Division 07 – Section 'Joint Sealants'.

• Division 08 - Sections 'Finish Hardware', 'Glazing', 'Aluminum Entrances and Storefronts'.
• Division 09 - Sections 'Gypsum Board Assemblies', 'Painting'.

Submittals:

Submit each item in this Article according to the Conditions of the Contract and Division 01 Specification Sections.

Product Data for each type of aluminum flush door and frame specified, including details of construction, materials, dimensions, hardware preparation, core, label compliance, sound ratings, profiles, and finishes.

Shop Drawings showing fabrication, finish, and installation of aluminum frames. Include details of each frame type, elevations of door design types, conditions at openings, details of construction, location and installation requirements of door and frame hardware and reinforcements, and details of joints and connections. Show anchorage and accessory items.

Samples: Provide panel 6 inches square manufacturer's samples for Architect's selection from full range of manufacturer's standard and non standard finishes.

Test Results: Offer any required test results as requested by Architect.

Quality Assurance:

Provide aluminum flush doors and frames complying the following ASTM referenced standards:

ASTM B 209: Aluminum and Aluminum-Alloy Sheet and Plate.

ASTM B 221: Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes. ASTM B 308: Aluminum-Alloy 6061-T6 Standard Structural Profiles.

ASTM E 283: Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen.

ASTM E 330: Structural Performance of Exterior Windows, Doors, Skylights, and Curtain Walls by Uniform Static Air Pressure Difference.

ASTM E 331: Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Difference.

Provide aluminum frames complying with the following system-performance minimum requirements: Air Infiltration: When tested in accordance with ASTM E 283, the air infiltration should not exceed .04 cfm per square foot of fixed area.

Water Penetration: No water will pass through the entry system when tested in accordance with ASTM E 331 at a pressure of 6.24.

Uniform Load Deflection: Entry system shall be tested in accordance with ASTM E 330: Pa or 80.0 psf positive and negative.

Uniform Load Structural: Entry system shall be tested in accordance with ASTM E 330: 5760 Pa or 120.0 psf positive and negative.

Delivery, Storage and Handling:

Deliver aluminum flush frames in factory packaging to provide protection during transit and job storage. Provide additional protection to prevent damage to finish of factory-finished frames. Protect aluminum frames from moisture.

Products:

Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the Work include, but are not limited to, the following:

Aluminum Frames: Match Existing

- Cross Aluminum Products, Inc.
- Special-Lite, Inc.

Warranty:

General Warranty: The special warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to , and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.

Special Warranty: Submit a written executed by aluminum frames manufacturer agreeing to repair or replace aluminum frames components that fail in materials or workmanship within the specified warranty period. Failures include, but are not limited to, the following:

Structural failures including excessive deflection, water leakage, air infiltration, or condensation. Deterioration of finishes, Frame structure and other materials beyond normal weathering.

Warranty Period for Aluminum Frames: 10 years after date of Substantial Completion.

Materials:

Inserts, Bolts, and Fasteners: Manufacturer's standard units. Where items are to be built into exterior walls. Provide manufacturer’s standard non-bleeding and non-corrosive material congruent to adjacent material to meet ASME B 18.6.4, ASTM B 221 and/or ASTM B 308.

Aluminum: ASTM B 221, alloy and temper to be 6063 T-5 or similar alloy and temper recommended by manufacturer for optimum finish results and consistency.

Internal Reinforcement: ASTM B 308, for structural aluminum.

Doors and Frames:

Aluminum Frames: Match Existing.

Fabrication:

Fabricate aluminum frame units to be rigid, neat in appearance, and free from defects, warp, or buckle. Where practical, fit and assemble units in manufacturer's plant. Clearly identify work that cannot be permanently factory assembled before shipment, to assure proper assembly at Project site. Provide factory install reinforcing per hardware supplier’s templates to doors and frames for finish hardware. Refer to Finish Hardware Specifications for schedule of door hardware.

Fasteners: Unless otherwise indicated, provide aluminum 18-8 stainless steel or other non-corrosive materials compatible with items being screw applied. Fasteners to be concealed (as practical) with exposed fasteners to match door and/or frame finish.

Anchoring: Provide appropriate anchoring fasteners to be secured no more than 18” apart on entire frame opening. Frame headers to receive no less than 2 anchoring fasteners. Add extra fasteners where hardware and hinge may require more.

Reinforce frames to receive surface-applied hardware. Drilling and tapping for surface-applied hardware may be done at Project site.

Locate hardware as indicated on Shop Drawings or, if not indicated, according to the Door and Hardware Institute's (DHI) "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."

Finishes:

Comply with NAAMM's "Metal Finishes Manual" for recommendations relative to applying and designating finishes.

Finish to be Anodic, Architectural Class 1, AA-M12C22A41, 0.7 mils. Color to be selected by Architect from manufacturer’s full range of colors.

Installation:

Install aluminum frames, and accessories according to Shop Drawings, manufacturer's data, and as specified.

Placing Frames: Comply with manufacturer’s written installation requirements. Set frames accurately in position, plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is completed, remove temporary braces and spreaders, leaving surfaces smooth and undamaged.

Install Wood Doors: Comply with manufacturer’s written installation requirements. Install doors plumb, level and square without warp or racking the frames. Do not install damaged doors or components. Hang doors with manufacturer’s tolerances for door clearances.

Fit joints to produce hairline joints free of burrs and distortion. Rigidly secure non movement joints. Seal joints watertight, unless otherwise indicated.

Anchors: Install recommended anchors with separators to prevent metal corrosion and electrolytic deterioration.

Glazers to provide necessary glazing shims for proper glass installation on vision lites and side lites. Place thresholds in proper weather sealant.

Adjusting and Cleaning:

Adjustment: Adjust doors for proper fit and smooth operation. Adjust closures for proper closer sweep period.

Protection Removal: Immediately before final inspection, remove protective wrappings from doors and frames.

Cleaning: Clean doors immediately after installation. Follow manufacturer’s guide to cleaning and care for proper treatment on entrances for optimum longevity, function, and performance.

END OF SECTION 081200 – ALUMINUM FLUSH DOORS AND FRAMES

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Summary:

This Section includes the following:

- Interior solid core wood doors.

Related Sections include the followings:

Division 06, Section "Interior Architectural Woodworks".

Division 08, Sections ‘Steel Doors and Frames’, ‘Door Hardware’, ‘Glazing’.

Division 09 Section "Painting" for finishing.

Submittals:

Submit each item in this Article according to the Conditions of the Contract and Division 01 Specification Sections.

Product data for each type of door, including details of construction, glazing, and factory-finishing specifications.

Shop drawings indicating location and size of each door; elevation of each kind of door, construction details not covered in product data, including those for stiles, rails, panels, and moldings (sticking), location and extent of hardware cutouts; fire rating requirements for veneer matching and factory finishing, and other pertinent data.

Product certificates signed by door manufacturers certifying that their products comply with specified requirements.

Quality Assurance and Warranty:

Quality Standard: Comply with the following standard:

AWI Quality Standard: "Architectural Woodwork Quality Standards" of the Architectural Woodwork Institute for grade of door, construction, finish, and other requirements.

WIC Quality Standard: "Manual of Millwork" of the Woodwork Institute of California for grade of door, core, construction, finish, and other requirements.

Warranty:

Door Manufacturer’s Warranty: Submit written agreement on door manufacturer’s standard form signed by Manufacturer, Installer, and Contractor, agreeing to repair or replace defective doors that have warped (bow, cup, or twist) more than ¼ inch (6.35 mm) in a 42-by-84-inch (1067-by- 2134-mm) section or that show telegraphing of core construction in face veneers exceeding 0.01 inch in a 3-inch (0.25 mm in a 75-mm) span, or do not conform to tolerance limitations of referenced quality standards.

Warranty shall also include installlation and finishing that may be required due to repair or replacement of defective doors where defect was not apparant prior to hanging.

Warranty shall be in effect during the following period of time after date of Substantial Completion.

Solid Core Interior Doors: Life of installation.

Contractor’s Responsibilities: Replace or refinish doors where contractor’s work contributed to rejection or to voiding of manufacturers warranty.

Fire-Rated Wood Doors: Provide wood doors that comply with NFPA 80; are identical in materials and construction to units tested in door and frame assemblies per ASTM E 152; and are labeled and listed by UL, Warnock Hersey, or another testing and inspection agency acceptable to authorities having jurisdiction.

Safety Glass: Provide products complying with ANSI Z97.1 and testing requirements of 16 CFR Part 1201 for Category II materials except where those of Category I are expressly indicated and permitted.

Single-Source Responsibility: Obtain doors from one source and by a single manufacturer. Product Certification: Require door manufacturer to certify that doors comply with specified requirements including those of referenced door standard.

Mark, label, or otherwise identify panel wood doors as complying with NWWDA I.S.6.

Products and Available Manufacturers:

Subject to compliance with requirements, manufacturers offering doors that may be incorporated in the Work include, but are not limited to, the following:

Solid Core Doors:

Algoma Hardwoods Inc.

Eggers Industries, Architectural Door Division.

Graham Manufacturing Corp.

Marshfield Door Systems

Marshfield Co.

Interior Flush Wood Doors:

Solid Core Doors: Comply with the following requirements:
Faces: Match existing - Red Oak, plain sliced.
Grade: Custom.

Construction: 5 or 7 plies.
Core: Particle board core.
Edges: To match face.

Finish:

Factory finish wood doors in accordance with AWI Division 1500-S-4 Finish System Standards.

Factory finish to be water based stain and ultraviolet (UV) cured polyurethane to comply with EPA Title 5 guidelines for Volatile Organic Compound (VOC) emissions limitations. Finish must meet or exceed performance standards of TR-6 catalyzed polyurethane. Color to be selected by Architect from manufacturer's full range of colors.

Installation:

Hardware: For installation see Division 08 Section "Door Hardware."

Manufacturer's Instructions: Install wood doors to comply with manufacturer's instructions and referenced quality standard and as indicated.

Install fire-rated doors in corresponding fire-rated frames according to requirements of NFPA 80. Job-Fit Doors: Align and fit doors in frames with uniform clearances and bevels as indicated below; do not trim stiles and rails in excess of limits set by manufacturer or permitted with fire-rated doors. Machine doors for hardware. Seal cut surfaces after fitting and machining.

Finish: Refer to the Division 09 Section "Painting."

Protection:

Protect doors form damage due to moisture and abuse. Touch up minor scratches and blemishes with manufacturers stain and finish touch-up products.

Adjusting and Cleaning:

Operation: Rehang or replace doors that do not swing or operate freely.
Finished Doors: Refinish or replace doors damaged during installation.

Protect doors as recommended by door manufacturer to ensure that wood doors will be without damage or deterioration at the time of Substantial Completion.

END OF SECTION 082110 – FLUSH WOOD DOORS

SECTION 083050 - ACCESS DOORS

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Submittals:

Submit each item in this Article according to the Conditions of Contract and Division 01 Specification Sections.

Product data for each type of access door assembly specified, including details of construction relative to materials, individual components, profiles, finishes, and fire-protection ratings (if required).

Include complete schedule, including types, general locations, sizes, wall and ceiling construction details, latching or locking provisions, and other data pertinent to installation.

Shop drawings showing fabrication and installation of customized access doors and frames, including details of each frame type, elevations of door design types, anchorage, and accessory items.

Quality Assurance:

Single-Source Responsibility: Obtain access doors for entire Project from one source and by a single manufacturer.

Fire-Rated Door Assemblies: Units that comply with NFPA 80, are identical to door and frame assemblies tested for fire-test-response characteristics per test method as indicated below, and are labeled and listed by UL, Warnock Hersey, or another testing and inspecting agency acceptable to authorities having jurisdiction.

Test Method for Vertical Installations: ASTM E 152.
Test Method for Horizontal Installations: ASTM E 119.

Size Variations: Obtain Architect's acceptance of manufacturer's standard size units, which may vary slightly from sizes indicated.

Available Manufacturers:

Subject to compliance with requirements, manufacturers offering products that may be incorporated in the Work include, but are not limited to, the following:

- J.L. Industries.
- Larsen’s Manufacturing Co.
- Milcor, Inc.

Access Doors:

Self-latching units consisting of frame, trim, door, insulation, and hardware, including automatic closer, interior latch release, and complying with the following requirements:
Trimless Frame: Perimeter frame complying with the following requirements:

Metal: 0.0598-inch 6063-T5 Extruded Aluminum.

Frame Configuration: Flange integral with frame and overlapping face of adjoining gypsum board, with surface formed to receive joint compound.

Frame Configuration: Zinc-coated steel sheet edge trim with both face and back flanges; face flange formed to receive joint compound, with thickness required to fit over edges of adjoining gypsum board panels.

Door: 14 gauge galvanized steel.

Hinges: Continuous type.

Latches: Bolt type, operated by either a ring turn or flush key device (keyed alike).
Fire-Protection Rating for Walls: (Where assembly is indicated as rated)

END OF SECTION 083050 – ACCESS DOORS

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Summary:

This Section includes the following types of aluminum entrances and storefronts:
Related Sections: The following Sections contain requirements that relate to this Section: Division 08 Section 'Glazing'

System Performance Requirements:

Provide aluminum storefront assemblies that comply with performance characteristics specified as demonstrated by testing the manufacturer's corresponding stock assemblies according to test methods indicated.

Thermal Movement: Design the aluminum entrance and storefront framing systems to provide for expansion and contraction of the component materials. Entrance doors shall function normally over the specified temperature range.

The system shall be capable of withstanding a metal surface temperature range of 180 deg F (100 deg C) without buckling, failure of joint seals, undue stress on structural elements, damaging loads on fasteners, reduction of performance, stress on glass, or other detrimental effects.

Design Requirements: Provide aluminum entrance and storefront systems that comply with structural performance, air infiltration, and water penetration requirements indicated.

Wind Loads: Provide aluminum entrance and storefront assemblies capable of withstanding wind pressures of 20 psf (958 Pa) inward, and 20 psf (958 Pa) outward, acting normal to the plane of the wall.

Structural Performance: Conduct tests for structural performance in accordance with ASTM E 330. At the conclusion of the tests, there shall be no glass breakage or permanent damage to fasteners, anchors, hardware, or actuating mechanism. Framing members shall have no permanent deformation in excess of 0.2 percent of their clear span.

Deflection Normal to the Plane of the Wall: Test pressure required to measure deflection of framing members normal to the plane of the wall shall be equivalent to the wind load specified above. Deflection shall not exceed 1/175 of the clear span when subjected to uniform load deflection test.

Deflection Parallel to the Plane of the Wall: Test pressures required to measure deflection parallel to the plane of the wall shall be equal to 1.5 times the wind pressures specified above. Deflection of any member carrying its full dead load shall not exceed an amount that will reduce glass bite below 75 percent of the design dimension, and shall not reduce the edge clearance between the member and the fixed panel, glass or other fixed member above to less than 1/8 inch (3 mm). The clearance between the member, and an operable door or window shall be at least 1/16 inch (1.6 mm).

Division 08 Section "Glazing" Air Infiltration: Provide aluminum entrance and storefront framing system with an air infiltration rate of not more than 0.06 cfm per sq. ft. (0.3 L/s x sq. m) of fixed area (excluding operable door edges) when tested in accordance with ASTM E 283 at an inward test pressure differential of 1.57 psf (75 Pa).

Water Penetration: Provide framing systems with no uncontrolled water penetration (excluding operable door edges) as defined in the test method when tested in accordance with ASTM E 331 at an inward test pressure differential of 6.24 lbf per sq. ft. (299 Pa).

Condensation Resistance: Where framing systems are "thermal-break" construction provide units tested for thermal performance in accordance with AAMA 1503 showing condensation resistance factor (CRF) of not less than 45.

Thermal Transmittance: Provide framing systems that have an overall U-value of not more than 0.65 BTU/hr x sq. ft. x deg F (3.7 W/sq. m x K) at 15 mph (24 kph) exterior wind velocity when tested in accordance with AAMA 1503.

Submittals:

Submit the following in accordance with Conditions of the Contract and Division 01 Specification Sections.

Product data for each aluminum entrance and storefront system required, including:

- Manufacturer's standard details and fabrication methods.
- Data on finishing, hardware, and accessories.
- Recommendations for maintenance and cleaning of exterior surfaces.

Shop drawings for each aluminum storefront system required, including:

- Layout and installation details, including relationship to adjacent work.
- Elevations at 1/4 inch = 1 foot (1:50) scale.
- Detail sections of typical composite members.
  - Anchors and reinforcement.
- Provisions for expansion and contraction.
- Glazing details.

Samples for Verification Purposes: The Architect reserves the right to require additional samples that show fabrication techniques and workmanship, design of hardware and accessories.

Test Reports: Provide certified test reports from a qualified independent testing laboratory showing that aluminum entrance and storefront systems have been tested in accordance with specified test procedures and comply with performance characteristics indicated.

Quality Assurance:

Installer Qualifications: Engage an experienced installer who has completed installations of aluminum storefront and entrances similar in design and extent to those required for the project, and whose work has resulted in construction with a record of successful in-service performance.

Manufacturer's Qualifications: Provide aluminum entrances and storefront systems produced by a firm experienced in manufacturing systems that are similar to those indicated for this project, and that have a record of successful in-service performance.

Single Source Responsibility: Obtain aluminum entrance and storefront systems from one source, and from a single manufacturer.

Design Criteria: The drawings indicate the size, profile, and dimensional requirements of aluminum entrance and storefront work required, and are based on the specific types and models indicated. Aluminum entrance and storefront by other manufacturers may be considered, provided deviations in dimensions and profiles are minor, and do not change the design concept as judged by the Architect. The burden of proof of equality is on the proposer.

Project Conditions:

Field Measurements: Check openings by accurate field measurement before fabrication. Show recorded measurements on shop drawings. Coordinate fabrication schedule with construction progress to avoid delay of the work.

Where necessary, proceed with fabrication without field measurements, and coordinate fabrication tolerances to ensure proper fit.

Warranty:

Submit a written warranty, executed by the manufacturer agreeing to repair or replace units that fail in materials or workmanship within the specified warranty period. Failures include, but are not necessarily limited to:

- Structural failures including excessive deflection, excessive leakage, or air infiltration.
- Faulty operation.
- Deterioration of metals, metal finishes, and other materials beyond normal weathering.

Warranty Period: Three (3) years after the date of Substantial Completion.

The warranty shall not deprive the Owner of other rights or remedies the Owner may have under other provisions of the Contract Documents, and is in addition to, and runs concurrent with other warranties made by the Contractor under requirements of the Contract Documents.

Products:

Available Manufacturers:

Subject to compliance with requirements, manufacturers offering entrance and storefront systems that may be incorporated in the work include, but are not limited to the following:

Kawneer Company, Inc,

Color: Match Existing

Other equal manufacturers: Tubelite and Vistawall.

Materials:

Aluminum Members: Alloy and temper recommended by the manufacturer for strength, corrosion resistance, and application of required finish, comply with ASTM B 221 (ASTM B 221M) for aluminum extrusions, ASTM B 209 (ASTM B 209M) for aluminum sheet or plate, and ASTM B 211 (ASTM B 211M) for aluminum bars, rods, and wire.

Carbon steel reinforcement of aluminum framing members shall comply with ASTM A 36 (ASTM A 36M) for structural shapes, plates, and bars, ASTM A 1008/A1008M for cold rolled sheet and strip, or ASTM A 1011/A1011M for hot rolled sheet and strip.

Glass and Glazing Materials: Comply with requirements of "Glass and Glazing" section of these specifications.

Fasteners: Provide fasteners of aluminum, nonmagnetic stainless steel, zinc-plated steel, or other material warranted by the manufacturer to be non-corrosive, and compatible with aluminum components, hardware, anchors, and other components.

Reinforcement: Where fasteners screw-anchor into aluminum members less than 0.125 inches (3.2 mm) thick reinforce the interior with aluminum or nonmagnetic stainless steel to receive screw threads, or provide standard noncorrosive pressed-in splined grommet nuts.

Exposed Fasteners: Do not use exposed fasteners except for application of hardware. For application of hardware use Phillips flat-head machine screws that match the finish of member or hardware being fastened.

Concealed Flashing: 0.0179-inch (0.5-mm) minimum dead-soft stainless steel, or 0.026-inch (0.7-mm) thick minimum extruded aluminum of alloy and type selected by manufacturer for compatibility with other components.

Brackets and Reinforcements: Provide high-strength aluminum brackets and reinforcements; where use of aluminum is not feasible provide nonmagnetic stainless steel or hot-dip galvanized steel complying with ASTM A 123/A123M.

Concrete and Masonry Inserts: Provide cast iron, malleable iron, or hot-dip galvanized steel inserts complying with ASTM A 123/A123M.

Compression Weatherstripping: Manufacturer's standard replaceable compressible weatherstripping gaskets of molded neoprene complying with ASTM D 2000 or molded PVC complying with ASTM D 2287.

Sliding Weatherstripping: Manufacturer's standard replaceable weatherstripping of wool, polypropylene, or nylon woven pile with nylon fabric or aluminum strip backing complying with AAMA 701.2.

Components:

Storefront Framing System: Provide storefront framing systems fabricated from extruded aluminum members of size and profile indicated. Include sub-frames and other reinforcing members of the type indicated. Provide for flush glazing storefront from the exterior on all sides without projecting stops. Shop-fabricate and preassemble frame components where possible. Provide storefront frame sections without exposed seams.

Fabrication:

Fabricate aluminum storefront components to designs, sizes, and thicknesses indicated, and to comply with indicated standards. Sizes and profile requirements are indicated on the drawings. Variable dimensions are indicated with maximum and minimum dimensions required to achieve design requirements, and coordination with other work.

Thermal-Break Construction: Fabricate storefront framing system with an integrally concealed, low-conductance thermal barrier located between exterior materials, and exposed interior members to eliminate direct metal-to-metal contact. Use manufacturer's standard construction that has been in use for similar projects for period of not less than (3) years.

Prefabrication: Complete fabrication, assembly, finishing, hardware application, and other work to the greatest extent possible before shipment to the Project site. Disassemble components only as necessary for shipment and installation.

Do not drill and tap for surface-mounted hardware items until time of installation at project site. Preglaze door and frame units to greatest extent possible.

Welding: Comply with AWS recommendations. Grind exposed welds smooth to remove weld spatter and welding oxides. Restore mechanical finish.

Reinforcing: Install reinforcing as required for hardware, and as necessary for performance requirements, sag resistance and rigidity.

Dissimilar Metals: Separate dissimilar metals with bituminous paint, or a suitable sealant, or a nonabsorptive plastic or elastomeric tape, or a gasket between the surfaces. Do not use coatings containing lead.

Continuity: Maintain accurate relation of planes and angles with hairline fit of contacting members.

Fasteners: Conceal fasteners wherever possible.

Weatherstripping: For exterior doors provide compression weatherstripping against fixed stops. At other edges provide sliding weatherstripping retained in adjustable strip mortised into door edge. Provide EPDM or vinyl-blade gasket weatherstripping in bottom door rail adjustable for contact with threshold.

At interior doors and other locations without weatherstripping provide neoprene silencers on stops to prevent metal-to-metal contact.

Finishes:

Comply with NAAMM "Metal Finishes Manual" for recommendations relative to application and designations of finishes.

Finish designations prefixed by "AA" conform to the system established by the Aluminum Association for designating aluminum finishes.

Fluoropon Architectural Coating: When a color is noted on the drawings, provide coating containing a minimum of 50% PVDF fluoropolymer resin to meet or exceed AAMA 2604 test requirements. Finish: Refer to the drawings for color/finish requirements.

Examination:

Examine substrates and supports with the installer present, for compliance with requirements indicated installation tolerances, and other conditions that affect installation of aluminum entrances and storefronts. Correct unsatisfactory conditions before proceeding with the installation.

Do not proceed with installation until unsatisfactory conditions are corrected.

Installation:

Comply with manufacturer's instructions and recommendations for installation.

Set units plumb, level, and true to line without warp or rack of framing members, doors, or panels. Install components in proper alignment, and relation to established lines and grades indicated. Provide proper support, and anchor securely in place.

Install aluminum components for proper cavity drainage, including but not limited to, water deflectors, sealants at horizontal and vertical joints, and subsill flashing.

Separate aluminum and other corrodible metal surfaces from sources of corrosion or electrolytic action at points of contact with other materials.

Drill and tap frames and doors, and apply surface-mounted hardware items. Comply with hardware manufacturer's instructions and template requirements. Use concealed fasteners wherever possible. Set sill members and other members in bed of sealant as indicated or with joint fillers or gaskets as indicated to provide weathertight construction. Comply with requirements of Division 07 for sealants, fillers, and gaskets.

Refer to "Glass and Glazing" Section of Division 08 for installation of glass, and other panels indicated to be glazed into doors and framing, and not preglazed by manufacturer.

Cleaning:

Clean the completed system inside and out promptly after installation exercising care to avoid damage to coatings.

Clean glass surfaces after installation complying with requirements contained in the "Glass and Glazing" Section for cleaning and maintenance. Remove excess glazing and sealant compounds, dirt, and other substances from aluminum surfaces.

Protection:

Institute protective measures required throughout the remainder of the construction period to ensure that aluminum entrances and storefronts will be without damage or deterioration, other than normal weathering at time of acceptance.

END OF SECTION 084100 – ALUMINUM ENTRANCES AND STOREFRONTS

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Summary:

This Section includes aluminum curtain wall and all necessarry labor, materials and equipment for a complete installation of aluminum curtain wall system as shown on the drawing.

Related Sections: The following Sections contain requirements that relate to this Section:

Division 08 Section ‘Aluminum Storefront”
Division 08 Section ‘Glazing’

System Performance Requirements:

Design Wind Loads:

Provide aluminum curtain wall system with all structural components including, but not limited to, anchors and mullions based on the following wind load design pressures and the deflection and stress criteria of paragraph 1.04 B. Pressures based on Allowable Stress Design (ASD).

- 18.3 psf positive and negative – typical zones
- 23.3 psf negative – corner zones
- Ultimate Wind Speed of 120 mph
  - Exposure category B
  - Importance factor 1
- Design criteria based on 2015 Michigan building code or wind pressure diagram.

Submittals:

Submit the following in accordance with Conditions of the Contract and Division 01 Specification Sections.

Product data for each aluminum curtainwall system required, including:

- Manufacturer's standard details and fabrication methods.
- Data on finishing, component profiles and accessories.
- Recommendations for maintenance and cleaning of exterior surfaces.
- Shop drawings for each aluminum entrance and storefront system required, including:

  Shop drawings must be prepared by a qualified engineering service, provided by the window wall manufacturer.
- Layout and installation details, including relationship to adjacent work.
- Elevations at 1/4 inch = 1-foot (1:50) scale.
- Detail sections of typical composite members.
- Anchors and reinforcement.
- Hardware mounting heights.
- Provisions for expansion and contraction.
- Glazing details.

- Include system dimensions, framed opening requirements and tolerances, affected related work, anchorage, expansion and contraction joint locations and details and field welding required.

Quality Assurance:

Manufacturer's Qualifications: Company specializing in manufacturing products specified in this section with at least twenty years of documented experience.

Designer Qualifications: Design structural support framing components under direct supervision of a professional structural engineer experienced in design of this work and licensed in the state in which the project is located.

Installer: Company approved by manufacturer and specializing in performing work of this section with at least 5 years of documented installation experience.

Source Limitations: Obtain the curtainwall and all products listed in this section from a single manufacturer.

Delivery, Storage and Handling:

Materials to be packed, loaded, shipped, unloaded, stored and protected in accordance with AAMA CW-10.

Do not use adhesive papers or sprayed coatings that bond to aluminum when exposed to sunlight or weather.

Field Conditions:

Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit assembly of this work to be performed according to the manufacturer's installation instructions and warranty requirements.

Field Measurements: Verify locations of structural members and wall opening dimensions by field measurements before fabrication of curtainwall framing and indicate measurements on shop drawings.

Install sealant according to sealant manufacturer's guidelines.

Coordinate installation with other applicable trades.

Warranty:

Aluminum Curtainwall Framing Warranty:

- Manufacturer agrees to repair or replace defective curtainwall components for a period of 5 years from the date of shipment.

Finish Warranty:

- Warranty covers factory-applied organic and anodic finishes on exposed extruded aluminum surfaces without standing water accumulation, against peeling, checking, cracking, chalking and change of color, per applicable AAMA specifications.
- Anodized Coatings
    - AAMA Class 1, 5 years

The warranty shall not deprive the Owner of other rights or remedies the Owner may have under other provisions of the Contract Documents, and is in addition to, and runs concurrent with other warranties made by the Contractor under requirements of the Contract Documents.

Products:

Available Manufacturers:

Subject to compliance with requirements, manufacturers offering entrance and storefront systems that may be incorporated in the work include, but are not limited to the following:

Tubelite, Inc. 400 Series Curtainwall

o 2 ½" x 6"
Color: Match Existing

Other equal manufacturers: Kawneer and Vistwall, Tubelite or approved equal.

Glazing:

Position: Match existing curtain wall system.
Thickness: 1"

Operations: Fixed

Finishes:

Comply with NAAMM "Metal Finishes Manual" for recommendations relative to application and designations of finishes.

Finish designations prefixed by "AA" conform to the system established by the Aluminum Association for designating aluminum finishes.

Finish: Clear anodize – Class 1, AA-M10C21A41

Examination:

Examine substrates and supports with the installer present, for compliance with requirements indicated installation tolerances, and other conditions that affect installation of aluminum entrances and storefronts. Correct unsatisfactory conditions before proceeding with the installation.

Do not proceed with installation until unsatisfactory conditions are corrected.

Installation:

Preparation: Coordinate and furnish anchors, concrete inserts, sleeves, anchor bolts and other accessories to be embedded in concrete or masonry construction or welded to structural steel. Coordinate delivery of these items to project site.

Install aluminum curtainwall framing in accordance with manufacturer's installation instructions, reviewed product data, approved shop drawings and as indicated on drawings (per professional engineer review, when applicable).

Do not install damaged components.

Attach to structure to permit sufficient adjustment to accommodate construction tolerances and other irregularities.

Provide alignment attachments and shims to permanently fasten system to building structure.

Align assembly plumb and level, free of warp or twist. Maintain assembly dimensional tolerances, aligning with adjacent work.

Install anchors with separators and isolators to prevent metal corrosion and electrolytic deterioration and to prevent impending movement of moving joints.

Coordinate attachment and seal of membrane materials per architectural drawings.

Install accessories with positive anchorage to building, weather tight mounting, provisions for thermal expansion and coordinate with flashings and other components.

Install hardware using templates provided.

Install glass in accordance with manufacturer's specifications and recommendations using glazing method required to achieve performance criteria.

Install perimeter sealant in accordance with manufacturer's specifications and recommendations. Apply to both interior and exterior sides of system. Application shall be similar to existing system. Touch-up minor damage to factory applied finish; replace components that cannot be satisfactorily repaired.

Adjust operating hardware for smooth operation.

Tolerances:

- Maximum variation from plumb: 1/16" every 3' non-cumulative or 1/16 per 10', whichever is least.
- Maximum misalignment of two adjoining members abutting in plane: 1/32".

Cleaning:

Comply with AAMA 609 and 610 for methods, equipment and materials to clean finished aluminum after installation and for subsequent periodic maintenance.

Wash down surfaces with a solution of mild detergent in warm water, applied with soft, clean wiping cloths.

Take care to remove dirt from corners and wipe surfaces clean.

Remove excess sealant from glass and aluminum by method acceptable to sealant and finish manufacturer.

Protection:

Protect installed products from damage during subsequent construction.

Protect anodized finishes from prolonged exposure to alkaline, such as lime in masonry mortar or acidic and other corrosive materials.

END OF SECTION 084400 – ALUMINUM CURTAINWALL

SECTION 087100 - DOOR HARDWARE

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Summary:

This Section includes items known commercially as finish or door hardware that are required for swing, sliding, and folding doors, except special types of unique hardware specified in the same sections as the doors and door frames on which they are installed.

Related Sections include the following:

Division 08 Sections “Wood Doors” and “Aluminum Entrances and Storefronts”.

Submittals:

Submit the following in accordance with Conditions of Contract and Division 01 Specification sections.

Product data including manufacturers' technical product data for each item of door hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.

Final hardware schedule coordinated with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.

Cover sheet with Job Name, Date, Architect, Contractor and supplier contact information. Opening Index in numerical order, corresponding with the hardware schedule.

Keying Index and/or Worksheet

Operational description for each electrified hardware system scheduled

Abbreviation Index

Final hardware schedule coordinated with doors, frames and related work to ensure proper size, thickness, hand, function and finish of door hardware.

Templates for doors, frames, and other work specified to be factory prepared for the installation of door hardware. Check shop drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.

Submit to Owner at Project Close Out: One copy of final approved hardware schedule, as-built electrical hardware drawings, installation and maintenance manuals and catalog cut/product data sheets for each operable hardware item supplied, recommendations on care and cleaning of architectural hardware finishes, extended warranty documents and hardware supplier contract information (contact name, address, phone/fax numbers, e-mail address).

Quality Assurance:

Single Source Responsibility: Obtain each type of hardware (latch and lock sets, hinges, closers, etc.) from a single manufacturer.

Supplier Qualifications: A recognized architectural door hardware supplier, with warehousing facilities in the Project's vicinity, that has a record of successful in-service performance for supplying door hardware similar in quantity, type, and quality to that indicated for this Project and that employs an experienced architectural hardware consultant (AHC) who is available to Owner, Architect, and Contractor, at reasonable times during the course of the Work, for consultation.

Fire-Rated Openings: Provide door hardware for fire-rated openings that complies with NFPA Standard No. 80 and requirements of authorities having jurisdiction. Provide only items of door hardware that are listed and are identical to products tested by UL, Warnock Hersey, FM, or other testing and inspecting organization acceptable to authorities having jurisdiction for use on types and sizes of doors indicated in compliance with requirements of fire-rated door and door frame labels.

Warranty:

General Warranty: Special warranties specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents, and shall be in addition to and run concurrent with other warranties made by the Contractor under requirements of the Contract Documents.

Maintenance:

Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

Maintenance Service: Installer to return to project Six (6) months after date of substantial completion to inspect and adjust operating hardware where needed.

Maintenance Supplies and Extra Materials: All remaining screws, fasteners and manufacturer supplied installation tools to be turned over to Owner upon completion of project.

Scheduled Hardware:

Manufacturer's Product Designations: The product designation and name of one manufacturer are listed for each hardware type required for the purpose of establishing minimum requirements. Provide either the product designated or, where more than one manufacturer is specified under the 'Hardware Schedule' for each hardware type, the comparable product of one of the other manufacturers that complies with requirements.

Lock Cylinders and Keying:

Review the keying system with the Owner and provide the type required (master, grandmaster or great-grandmaster), either new or integrated with Owner's existing system.

Comply with Owner's instructions for master keying and, except as otherwise indicated, provide individual change key for each lock that is not designated to be keyed alike with a group of related locks.

Key Quantity: Furnish (3) change keys for each lock. Deliver keys to Owner.

Execution

Examination:

Inspect doors, frames and other related products for damage that would prevent the proper installation and operation of hardware. Correct conditions prior to installation of hardware.

Installation:

Install hardware according to the following documents, unless alternate locations are specified in hardware groups.

Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames; Door and Hardware Institute; Chantilly, VA

Recommended Location for Architectural Hardware for Flush Wood Doors; Door and Hardware Institute; Chantilly, VA. Provide 1-1/2" nominal thickness wood blocking in walls for fastening of wall mounted stops.

Mop, Kick and Armor Plate installation

Install mop and armor plates centered on and flush with bottom of door.
Install kick plates centered on and ½" above bottom of door.

Electrified Hardware Installation

Hardware installer responsible for the installation of ALL electrified components, as specified in hardware sets, into doors and frames with the exception of locks and readers provided by the Owner. The Owner will arrange for installation of these items.

Electrical contractor responsible for installation of all conduit, and pulling of all low voltage wire related to the completion of electrified hardware systems, the installation of power supplies, connection of AC power to the power supplies.

Field Quality Control:

Upon completion of installation, hardware to be inspected by an Architectural Hardware Consultant (AHC), as certified by The Door and Hardware Institute, for proper installation and operation.

Adjusting and Cleaning:

Upon completion of installation make final adjustments to all operating hardware. If an item is found to be defective, replace as needed.

Inspect hardware to ensure it is clean and free from damage.

Adjustments, cleaning and corrections to be completed no later than One (1) week prior to building turnover.

Protection:

Protect all hardware items to keep clean and free from damage until Owner accepts projects as completed.
Hardware Schedule:

Manufacture's whose product numbers are listed in the Finish Hardware Schedules are designated with an asterisk (*):

Butts and Hinges:	*McKinney Products, Stanley Hardware
Locks and Cylinders:	Match Existing
Trims & Stops:	*Rockwood, H.B. Ives, Glynn-Johnson

DOOR HARDWARE SCHEDULE

Door 101

3 Hinges 4 ½ x 4 ½ 26D

1 Lever Lockset (Office Function)	Match Existing
1 Wall Stop	409 32D

END OF SECTION 087100 – DOOR HARDWARE

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

ALL GLAZING SHALL MATCH EXISTING GLAZING (VISION GLASS, SPANDREL, ETC.). Glazing Contractor is responsible for examining the existing glass in the building and providing products, tinting, etc. that match the existing building.

Summary:

This Section includes glazing for the following products, including those specified in other Sections where glazing requirements are specified by reference to this Section:

- Window units.
- Vision lites.

System Performance Requirements:

Provide glazing systems that are produced, fabricated, and installed to withstand normal thermal movement, wind loading, and impact loading (where applicable), without failure including loss or glass breakage attributable to the following: Defective manufacturer, fabrication, and installation, failure of sealants or gaskets to remain watertight and airtight, deterioration of glazing materials, and other defects in construction. All materials and glazing shall comply with Federal, State and local regulations, codes, and ordinances, the more stringent requirements shall govern.

Glass Design: Glass thicknesses indicated on Drawings are for detailing only. New glass shall match existing glazing, unless noted otherwise. Field verify existing glazing conditions and type. Confirm glass thicknesses by analyzing Project loads and in-service conditions. Provide glass lites for the various size openings in the thicknesses and strengths (annealed or heat-treated) to meet or exceed the following criteria:

Minimum glass thickness, nominally of lites in exterior walls is 6 mm.

Normal thermal movement results from the following maximum change (range) in ambient and surface temperatures acting on glass-framing members and glazing components. Base engineering calculation on materials' actual surface temperatures due to both solar heat gain and nighttime sky heat loss.

Quality Assurance:

Glazing Publications: Comply with published recommendations of glass product manufacturers and organizations below, except where more stringent requirements are indicated. Refer to these publications for glazing terms not otherwise defined in this Section or in referenced standards.

FGMA Publications: "FGMA Glazing Manual."

Safety Glass: Products complying with ANSI Z97.1 and testing requirements of 16 CFR Part 1201 for Category II materials.

Subject to compliance with requirements, provide safety glass permanently marked with certification label of Safety Glazing Certification Council (SGCC) or other certification agency acceptable to authorities having jurisdiction.

Fire-Resistive Glazing Products for Door Assemblies: Products identical to those tested per ASTM E 2074, labeled, and listed by UL or another testing and inspecting agency acceptable to authorities having jurisdiction.

Fire-Resistive Glazing Products for Window Assemblies: Products identical to those tested per ASTM E 2010, labeled, and listed by UL or another testing and inspecting agency acceptable to authorities having jurisdiction.

Insulating Glass Certification Program: Provide insulating glass units permanently marked either on spacers or at least one component lite of units with appropriate certification label of inspecting and testing agency indicated below:

Insulating Glass Certification Council (IGCC).

Single-Source Responsibility for Glass: Obtain glass from one source for each product indicated below:

- Primary glass of each (ASTM C 1036) type and class indicated.
- Heat-treated glass of each (ASTM C 1048) condition indicated.
- Laminated glass of each (ASTM C 1172) kind indicated.
- Insulating glass of each construction indicated.

Single-Source Responsibility for Glazing Accessories: Obtain glazing accessories from one source for each product and installation method indicated.

Warranty:

General: Warranties specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and will be in addition to and run concurrent with other warranties made by the Contractor under requirements of the Contract Documents.

Manufacturer's Warranty on Coated Glass Products: Submit written warranty signed by coated glass manufacturer agreeing to furnish replacements for those coated glass units that deteriorate as defined in "Definitions" article, F.O.B. point of manufacture, freight allowed project site, within specified warranty period indicated below. Warranty covers only deterioration due to normal conditions of use and not to handling, installing, and cleaning practices contrary to glass manufacturer's published instructions.

Warranty Period: Manufacturer's standard but not less than 5 years after date of Substantial Completion.

Products:

Primary Float Glass Products:

Float Glass: ASTM C 1036, Type I (transparent glass, flat), Class as indicated below, and Quality q3 (glazing select).

Class 1 (clear) unless otherwise indicated.

Heat-Treated Float Glass:

Uncoated, Clear, Heat-Treated Float Glass: ASTM C 1048, Condition A (uncoated surfaces), Type I (transparent glass, flat), Class 1 (clear), Quality q3 (glazing select), kind as indicated below.

Kind FT (fully tempered) where indicated.

Insulating Glass Products:

Sealed Tinted, Low-E Insulating Glass Units: Match Diebold Nixdorf Transaction Window Glazing. Preassembled units consisting of organically sealed lites of glass separated by dehydrated air spaces complying with ASTM E 2199 and with other requirements indicated.

Elastomeric Glazing Sealants:

General: Provide products of type indicated, complying with the following requirements:

Fabrication of Glass and other Glazing Products: Fabricate glass and other glazing products in sizes required to glaze openings indicated for Project, with edge and face clearances, edge and surface

conditions, and bite complying with recommendations of product manufacturer and referenced glazing standard as required to comply with system performance requirements.

Glazing: Comply with combined recommendations of manufacturers of glass, sealants, gaskets, and other glazing materials, except where more stringent requirements are indicated, including those in referenced glazing publications.

END OF SECTION 088000 - GLAZING

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Summary:

This Section includes the following:

- Gypsum board assemblies attached to steel framing.
- Gypsum sheathing assemblies attached to steel framing.
- Glass-mat, water-resistant gypsum backing board installed with gypsum board assemblies.
- Gypsum Board Specialty Products: Mold-resistant drywall, abuse-resistant drywall

Related Sections include the following:

Division 01, Section 'Submittals' for steel stud shop drawings and product submittals.

Division 07, Section 'Building Insulation" for insulation and vapor retarders.

Assembly Performance Requirements:

Sound Transmission Characteristics: For gypsum board assemblies with STC ratings, provide materials and construction identical to those of assemblies whose STC ratings were determined according to ASTM E 90 and classified according to ASTM E 413 by a qualified independent testing agency.

Fire Resistance: Provide gypsum board assemblies with fire-resistance ratings indicated.

Quality Assurance:

Fire-Test-Response Characteristics: Where fire-resistance-rated gypsum board assemblies are indicated, provide gypsum board assemblies that comply with the following requirements: Fire-Resistance Ratings: As indicated by GA File Numbers in GA-600 "Fire Resistance Design Manual" or design designations in UL "Fire Resistance Directory" or in the listing of another testing and inspecting agency acceptable to authorities having jurisdiction.

Project Conditions:

Environmental Conditions, General: Establish and maintain environmental conditions for applying and finishing gypsum board to comply with ASTM C 840 requirements or gypsum board manufacturer's recommendations, whichever are more stringent.

Products:

Available Manufacturers:

Subject to compliance with requirements manufacturers offering products that may be incorporated in the work include, but are not limited to the following:

Steel Framing and Furring:
Clark Steel Framing, Inc.
Dale Industries, Inc.
National Gypsum Co.; Gold Bond Building Products Division.
Grid Suspension Assemblies:
Armstrong World Industries, Inc.
Chicago Metallic Corp.
USG Interiors, Inc.
Gypsum Board and Related Products:
Domtar Gypsum.

Georgia-Pacific Corp.

National Gypsum Co.; Gold Bond Building Products Division.
United States Gypsum Co.

Available Products: Subject to compliance with requirements, products that may be incorporated in the work where proprietary gypsum wallboard is indicated include, but are not limited to the following:

Gyprock Fireguard C Gypsum Board; Domtar Gypsum.

Firestop Type C; Georgia-Pacific Corp.

Fire-Shield G; National Gypsum Co.; Gold Bond Building Products Division.

- SHEETROCK Brand Gypsum Panels, FIRE CODE C Core; United States Gypsum Co.
- SHEETROCK Brand Gypsum Panels, ULTRACODE Core; United States Gypsum Co.
- G.P. Dens-Glass Gold; G.P. Gypsum Corporation
- G.P. Dens Glass Gold; Fire Guard Gypsum Corporation

Steel Framing Components for Suspended and Furred Ceilings:

Provide components complying with ASTM C 754 for conditions indicated.

Wire Ties: ASTM A 641 (ASTM A 641 M), Class 1 zinc coating, soft temper, 0.062 inch thick.

Wire Hangers: ASTM A 641 (ASTM A 641M) Class 1 zinc coating, soft temper, 0.162 inch diameter. Steel Studs for furring channels: ASTM C 645, with flange edges of studs bent back 90 degrees, and doubled over to form 3/16 inch wide minimum lip (return), and complying with the following requirements for minimum thickness of base (uncoated) metal and for depth:

Thickness: 0.0179 inch, unless otherwise indicated.

Depth: 3 5/8 inches, unless otherwise noted.

Protective Coating: Manufacturer's standard corrosion resistant coating.

Grid Suspension System for Interior Ceilings: ASTM C 645, manufacturer's standard direct hung grid suspension system composed of main beams, and cross furring members that interlock to form a modular supporting network.

Steel Framing for Walls and Partitions:

Provide steel framing members complying with the following requirements:

Protective Coating: Manufacturer's standard corrosion resistant coating.

Structural Gauges: Refer to the structural drawings, structural notes for "Light Gauge Metal

Framed Wall Framing Notes" for design, detailing and shop drawing requirements.

Steel Studs and Runners: ASTM C 645, with flange edges of studs bent back 90 degrees and doubled over to form 3/16 inch wide minimum lip (return), and complying with the following requirements for minimum thickness of base (uncoated) metal, and for depth:

Thickness: 0.0179 inch, unless otherwise indicated.

Depth: 3 5/8 inches, unless otherwise noted.

Deflection Track: Manufacturer's top runner complying with the requirements of ASTM C 645, and with 2 inch deep flanges.

Deflection and Firestop Track:Top runner designed to allow partition heads to expand and contract with movement of structure above while maintaining continuity of the assembly. Comply with requirements of ASTM C 645 except configuration of thickness indicated for studs and width to

accommodate depth of studs indicated with flanges offset at midpoint to accommodate gypsum board thickness.

Gypsum Board Products:

Provide gypsum board of types indicated in maximum lengths available that will minimize end-to- end butt joints in each area indicated to receive gypsum board application.
Gypsum Wallboard: ASTM C 1396 and as follows:

Type: Regular for vertical surfaces, unless otherwise indicated.

Type: Foil backed where indicated.

Type: USG fire code core type 'X' or approved equal where required for fire-resistance-rated assemblies.

Edges: Tapered.

Thickness: 5/8 inch (15.9 mm) unless indicated otherwise.

Mold Resistant Gypsum Board: Type and thickness indicated below:

Type and Thickness: 5/8 inch thick, unless otherwise indicated.

Available Product: Subject to compliance with requirements, a product that may be incorporated in the work includes, but is not limited to "Mold Tough" manufactured by United States Gypsum Co.

Products: Subject to compliance with requirements other equal products as manufactured by Domtar Gypsum, Georgia Pacific Corp., or National Gypsum Co., are acceptable with approval of product submittals.

Exterior Gypsum Board Sheathing:

Type and thickness indicated below:

Type and Thickness: 5/8 inch thick, Type 'X', unless otherwise indicated.

Available Product: Subject to compliance with requirements, a product that may be incorporated in the work includes but is not limited to "Dens Glass" manufactured by Gypsum Corporation.

Products: Subject to compliance with requirements other equal products as manufactured by Domtar Gypsum, Georgia Pacific Corp., United States Gypsum Co., or National Gypsum Co. are acceptable with approval of product submittals.

Trim Accessories for Interior Installation:

Cornerbead, edge trim, and control joints complying with ASTM C 1047, and requirements indicated below:

Material: Formed metal or plastic, with metal complying with the following requirement:

Steel sheet zinc coated by hot-dip or electrolytic process, or steel sheet coated with aluminum or rolled zinc.

Shapes indicated below by reference to Fig. 1 designations in ASTM C 1047:

- Cornerbead on outside corners, unless otherwise indicated.
- LC-bead with both face and back flanges; face flange formed to receive joint compound.
- Use LC-beads for edge trim, unless otherwise indicated.
- L-bead with face flange only; face flange formed to receive joint compound. Use L-bead where indicated.
- U-bead with face and back flanges; face flange formed to be left without application of joint compound. Use U-bead where indicated.
- One-piece control joint formed with V-shaped slot and removable strip covering slot opening.

Control and Expansion Joints:

Form control and expansion joints at locations indicated and as detailed, with space between edges of adjoining gypsum panels, as well as supporting framing behind gypsum panels.

Provide control joints complying with ASTM C 1047, ASTM C840, and as follows:

- Provide control joints on interior face of exterior walls as shown on the drawings, and in specific locations approved by the Architect.
- Provide control joints on interior walls not to exceed 30 feet o.c. or as shown on drawings.
- Provide control joints on gypsum board bulkheads not to exceed 50 o.c. or as shown on drawings.

Joint Treatment Materials:

Provide joint treatment materials complying with ASTM C 475/C475M and the recommendations of both the manufacturers of sheet products and of joint treatment materials for each application indicated.

Joint Tape for Gypsum Board: Paper reinforcing tape, unless otherwise indicated.

Acoustical Sealant for Exposed and Concealed Joints:

Manufacturer's standard nonsag, paintable, nonstaining latex sealant complying with ASTM C 834 and the following requirements:

Product is effective in reducing airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies according to ASTM E 90. Acoustic Sealant for Concealed Joints: Manufacturer's standard nondrying, nonhardening, nonskinning, nonstaining, gunnable, synthetic-rubber sealant recommended for sealing interior concealed joints to reduce transmission of airborne sound.

Miscellaneous Materials:

Steel drill screws complying with ASTM C 954 for fastening gypsum board to steel members from 0.033 to 0.112 inch (0.84 to 2.84 mm) thick.
Gypsum Board Nails: ASTM C 514.

Foam Gaskets: Closed-cell vinyl foam adhesive-backed strips that allow fastener penetration without foam displacement, 1/8 inch (3.2 mm) thick, in width to suit metal stud size indicated.

Gypsum Board Application and Finishing Standards: Install and finish gypsum panels to comply with ASTM C 840 and GA-216.

Applying and Finishing Gypsum Board:

Install sound-attenuation blankets, where indicated, prior to installing gypsum panels unless blankets are readily installed after panels have been installed on one side.

Install ceiling board panels across framing to minimize the number of abutting end joints and to avoid abutting end joints in the central area of each ceiling. Stagger abutting end joints of adjacent panels not less than one framing member.

Install gypsum panels with face side out. Do not install imperfect, damaged, or damp panels. Butt panels together for a light contact at edges and ends with not more than 1/16 inch (1.5 mm) of open space between panels. Do not force into place.

Locate both edge or end joints over supports, except in ceiling applications where intermediate supports or gypsum board back-blocking is provided behind end joints. Do not place tapered edges against cut edges or ends. Stagger vertical joints on opposite sides of partitions. Avoid joints other than control joints at corners of framed openings where possible.

Gypsum Board Application Methods:

Single-Layer Application: Install gypsum wallboard panels as follows:

- On ceilings, apply gypsum panels prior to wall/partition board application to the greatest extent possible and at right angles to framing, unless otherwise indicated.
- On partitions/walls, apply gypsum panels vertically (parallel to framing), unless otherwise indicated, and provide panel lengths that will minimize end joints.
- On partitions/walls, apply gypsum panels horizontally (perpendicular to framing), unless parallel application is required for fire-resistance-rated assemblies. Use maximum-length panels to minimize end joints.

  Stagger abutting end joints not less than one framing member in alternate courses of board. At stairwells and other high walls, install panels horizontally.

  Direct Bonding to Substrate: Where gypsum panels are indicated as directly adhered to a substrate (other than studs, joists, furring members, or base layer of gypsum board), comply with gypsum board manufacturer's recommendations, and temporarily brace or fasten gypsum panels until fastening adhesive has set.

Finishing Gypsum Board Assemblies:

Treat gypsum board joints, interior angles, and flanges of cornerbead, edge trim, control joints, penetrations, fastener heads, surface defects, and elsewhere as required to prepare gypsum board surfaces for decoration.

Prefill open joints, rounded or beveled edges, and damaged areas using setting-type joint compound. Apply joint tape over gypsum board joints, except those with trim accessories having flanges not requiring tape.

Apply joint tape over gypsum board joints and to flanges of trim accessories as recommended by trim accessory manufacturer.

Gypsum Board Finish Levels: Finish panels to levels indicated below, according to ASTM C 840, for locations indicated:

Level 1: Embed tape at joints in ceiling plenum areas, concealed areas, and where indicated unless a higher level of finish is required for fire-resistance-rated assemblies and sound-rated assemblies.

Level 4: At all walls and bulkheads embed tape and apply separate first, fill, and finish coats of joint compound to tape, fasteners, and trim flanges at panel surfaces that will be exposed to view, unless otherwise indicated to be level 5.

Level 5: At all exposed finished ceilings and bulkheads with direct light or near skylights embed tape and apply separate first, fill, and finish coats of joint compound to tape, fasteners, and trim flanges, and apply skim coat of joint compound over entire surface where indicated.

Cleaning and Protection:

Promptly remove any residual joint compound from adjacent surfaces.

Provide final protection and maintain conditions, in a manner acceptable to Installer, that ensure gypsum board assemblies are without damage or deterioration at the time of Substantial Completion.

END OF SECTION 092550 – GYPSUM BOARD ASSEMBLIES

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

Submittals:

Submit each item in this Article according to the Conditions of the Contract and Division 01 Specification Sections.

Product Data for each type of carpet material, carpet cushion, and installation accessory specified. Submit manufacturer's printed data on physical characteristics, durability, fade resistance, and fire- test-response characteristics. Submit methods of installation for each type of substrate.

Samples for verification of the following products, in manufacturer's standard sizes, showing the full range of color, texture, and pattern variations expected. Prepare Samples from the same material to be used for the Work. Label each sample with manufacturer's name, material type, color, pattern, and designation indicated on Drawings and carpet schedule. Submit the following:

12-inch- (300-mm-) square samples of each type of carpet material required. Schedule of carpet using same room designations indicated on Drawings.

Two (2) copies of the manufacturer’s recommended installation procedures. The manufacturer’s recommended installation procedures, when approved by the Architect/Engineer will become the basis for inspection, and accepting or rejecting actual installation procedures used on the work.

Two (2) copies of the manufacturer’s maintenance manuals.

Installer Qualifications:

Engage an experienced Installer who is certified by the Floor Covering Installation Board (FCIB) or who can demonstrate compliance with FCIB certification program requirements.

Single-Source Responsibility: Obtain each type of carpet from one source and by a single manufacturer.

Carpet Fire-Test-Response Characteristics: Provide carpet with the following fire-test-response characteristics as determined by testing identical products per test method indicated below by UL or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify carpet with appropriate markings of applicable testing and inspecting agency.

- Surface Flammability: Passes CPSC 16 CFR, Part 1630.
- Flame Spread: 25 or less per ASTM E 84.
- Smoke Developed: 450 or less per ASTM E 84.

Carpet Cushion Fire-Test-Response Characteristics: Provide carpet cushion with the following fire- test-response characteristics as determined by testing identical products per test method indicated below by UL or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify carpet cushion with appropriate markings of applicable testing and inspecting agency.

- Surface Flammability: Passes CPSC 16 CFR, Part 1630.
- Flame Spread: 25 or less per ASTM E 84.
- Smoke Developed: 450 or less per ASTM E 84.

Project Conditions:

Subfloor Moisture Conditions: Moisture emission rate of not more than 3lb/1000 sq. ft./24 hours (14.6kg/1000 sq. m/24 hours) when tested by calcium chloride moisture test in compliance with CRI 104, 6.2.1, with subfloor temperatures not less than 55 degrees F (12.7 degrees C). Testing by Flooring Contractor. Subfloor Alkalinity Conditions: A pH range of 5 to 9 when subfloor is wet with potable water, and pHdrion paper is applied.

Warranty:

General Warranty: The special warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.

Special Carpet Warranty: Submit a written warranty executed by carpet manufacturer and Installer agreeing to repair or replace carpet that does not meet requirements or that fails in materials or workmanship within the specified warranty period. Failures include, but are not limited to, more than 10 percent loss of face fiber, edge raveling, snags, runs, and delamination.

Warranty Period: Five (5) years from date of Substantial Completion.

Extra Materials:

Deliver extra materials to Owner: Provide 2% extra carpet for each carpet specified. Carpet shall be provided in clean, marked rolls for Owner replacement use.

Products:

Provide carpet as specified herein and noted on the drawing and/or as specified in the finish schedule.

Other Materials: Other materials as required for a complete installation, including but not limited to, metal binder bar which shall be as selected by the Contractor subject to the approval of the Architect/Engineer.

Installation Accessories:

Concrete-Slab Primer: Nonstaining type as recommended by the following:

- Carpet manufacturer.
- Carpet cushion manufacturer (if indicated).

Trowelable Underlayments and Patching Compounds: As recommended by the following:

- Carpet manufacturer.

Adhesives: Water-resistant, mildew-resistant, nonstaining type to suit products and subfloor conditions indicated and to comply with flammability requirements for installed carpet as recommended by the following:

- Carpet manufacturer.
- Carpet cushion manufacturer, if indicated.
- Tackless Carpet Stripping: Water-resistant plywood in strips as required to match cushion thickness and in compliance with CRI 104, 11.3.
- Seaming Cement: Hot-melt adhesive tape or similar product recommended by carpet manufacturer for taping seams and butting cut edges at backing to form secure seams and to prevent pile loss at seams.

Installation:

Examine the areas and conditions under which of this Section will be performed. Correct conditions detrimental to the proper and timely completion of the work. Do not proceed until unsatisfactory conditions have been corrected.

Smoothing: All substrate shall be smooth and free from irregularities. Minor floor smoothing shall be performed by the carpet installer. Major floor irregularities and defects shall not be the responsibility of the carpet installer.

All materials used in substrate preparation and repair shall be recommended by the carpet manufacturer, and shall be chemically and physically compatible with the carpet system being bid. Comply with carpet manufacturer's recommendations for seam locations and direction of

carpet; maintain uniformity of carpet direction and lay of pile. At doorways, center seams under door in closed position. Do not bridge building expansion joints with continuous carpet.

Cut and fit carpet to butt tightly to vertical surfaces, permanent fixtures, and built-in furniture including cabinets, pipes, outlets, edgings, thresholds, and nosings. Bind or seal cut edges as recommended by carpet manufacturer.

Extend carpet into toe spaces, door reveals, closets, open-bottomed obstructions, removable flanges, alcoves, and similar openings.

Install carpet cushion seams (if indicated) at 90 degree angle with carpet seams.

Cleaning:

Immediately prior to installation of the work of this Section, thoroughly clean all substrate, and remove all oil, grease, paint, varnish, hardeners, and other items that would adversely affect the bond of adhesive.

Remove protruding yarns from carpet surface.

Vacuum carpet using commercial machine with face-beater element.

END OF SECTION 096800 - CARPET

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections apply to this Section.

Summary:

This Section includes surface preparation, painting, and finishing of exposed interior and exterior items and surfaces.

Surface preparation, priming, and finish coats specified in this Section are in addition to shop-priming, and surface treatment specified under other Sections.

Paint exposed surfaces whether or not colors are designated in schedules, except where a surface or material is specifically indicated not to be painted or is to remain natural. All casework, millwork and work trim, unless noted to be finished, factory finished unless otherwise noted, is to be field finished. Finish is to include stain and finished. Where an item or surface is not specifically mentioned, paint the same as similar adjacent materials or surfaces. If color or finish is not designated, the Architect will select from standard colors or finishes available. There will be no additional cost to the owner for the painting contractor not figuring, including items to be stained, finished or painted. Only items specifically mentioned within this specification or on the drawing as “exposed” or “prefinished” are to be not field painted.

Painting includes field-painting exposed bare and covered pipes and ducts (including color coding), hangers, exposed steel, and ironwork, and primed metal surfaces of mechanical and electrical equipment. Refer to Division 08 Section ‘Water Repellents’ for clear water repellent coatings for concrete block.

Painting is not required on prefinished items, finished metal surfaces, concealed surfaces, operating parts, and labels.

Labels: Do not paint over Underwriters Laboratories, Factory Mutual, or other code-required labels or equipment name, identification, performance rating or nomenclature plates.

Submittals:

Submit the following according to Conditions of the Contract and Division 01 Specification Sections.

Product data for each paint system specified, including block fillers and primers.

Provide the manufacturer's technical information including label analysis, and instructions for handling, storage, and application of each material proposed for use.

List each material and cross-reference the specific coating, finish system, and application. Identify each material by the manufacturer's catalog number and general classification.

Samples for Verification Purposes: Provide samples of each color and material to be applied with texture to simulate actual conditions on representative samples of the actual substrate.

Provide stepped samples defining each separate coat including block fillers and primers. Use representative colors when preparing samples for review. Resubmit until required sheen, color, and texture are achieved.

Quality Assurance:

Single-Source Responsibility: Provide primers and undercoat paint produced by the same manufacturer as the finish coats.

Products and Manufacturers:

Available Manufacturers: Subject to compliance with requirements, provide products of one of the following:

- Devoe and Raynolds Co. (Devoe).
- The Glidden Company (Glidden).
- Benjamin Moore and Co. (Moore).
- PPG Industries, Pittsburgh Paints (PPG).
- Pratt and Lambert (P & L).
- The Sherwin-Williams Company (S-W).

Application:

Apply paint according to manufacturer's directions. Use applicators and techniques best suited for substrate and type of material being applied.

Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces or conditions detrimental to formation of a durable paint film.

Apply additional coats if undercoats, stains, or other conditions show through final coat of paint until paint film is of uniform finish, color, and appearance. Give special attention to ensure that surfaces, including edges, corners, crevices, welds, and exposed fasteners, receive a dry film thickness equivalent to that of flat surfaces.

Paint surfaces behind movable equipment and furniture the same as similar exposed surfaces. Before the final installation of equipment, paint surfaces behind permanently fixed equipment or furniture with prime coat only.

Paint interior surfaces of ducts, where visible through registers or grilles with a flat, non specular black paint.

Paint backsides of access panels, and removable or hinged covers to match exposed surfaces. Finish interior of wall and base cabinets, and similar field-finished casework to match exterior.

Finish exterior doors on tops, bottoms, and side edges same as exterior faces.
Sand lightly between each succeeding enamel or varnish coat.

Omit primer on metal surfaces that have been shop-primed and touch-up painted.

Minimum Coating Thickness: Apply materials no thinner than the manufacturers recommended spreading rate. Provide the total dry film thickness of the entire system as recommended by the manufacturer.

Mechanical and Electrical Work: Painting mechanical and electrical work is limited to items exposed in mechanical equipment rooms, and in occupied spaces, and in exterior areas subjected to weather.

Mechanical items to be painted include, but are not limited to the following:

- Piping, pipe hangers, and supports
- Heat exchangers
- Tanks
- Ductwork
- Insulation
- Supports
- Motors and mechanical equipment
- Accessory items

Electrical items to be painted include, but are not limited to the following:

- Conduit and fittings.

- Switchgear.

Block Fillers: Apply block fillers to concrete masonry block at a rate to ensure complete coverage with pores filled.

Prime Coats: Before applying finish coats apply a prime coat of material as recommended by the manufacturer to material that is required to be painted or finished, and that has not been prime- coated by others. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears to ensure a finish coat with no burn-through or other defects due to insufficient sealing.

Pigmented (Opaque) Finishes: Completely cover to provide a smooth, opaque surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections will not be acceptable.

Transparent (Clear) Finishes: Use multiple coats to produce a glass-smooth surface film of even luster. Provide a finish, free of laps, cloudiness, color irregularity, runs, brush marks, orange peel, nail holes, or other surface imperfections. Provide satin finish for final coats.

Completed Work: Match approved samples for color, texture, and coverage. Remove, refinish, or repaint work not complying with specified requirements.

Cleaning:

Cleanup: At the end of each work day remove empty cans, rags, rubbish, and other discarded paint materials from the site.

After completing painting clean glass, and paint-spattered surfaces. Remove spattered paint by washing and scraping. Be careful not to scratch or damage adjacent finished surfaces.

Protection:

Provide "Wet Paint" signs to protect newly painted finishes. Remove temporary protective wrappings provided by others to protect their work after completing painting operations.

At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

Exterior Paint Schedule:

Provide the following paint systems for the various substrates indicated:

Parking stripes and lane marking paint: Chlorinated rubber - alkyd type, AASHTO M248, FS TT - P-115, Type III.

Ferrous Metal:

Primer is not required on shop-primed items.

Full-Gloss Alkyd Enamel: Two finish coats over primer.

Primer: Synthetic rust-inhibiting primer.

- Devoe: 14920 Bar-Ox Quick Dry Metal Primer, Red.
- Fuller: 621-04 Blox-Rust Alkyd Metal Primer.
- Glidden: 5210 Glid-Guard Universal Fast-Dry Metal Primer.
- Moore: IronClad Retardo Rust-Inhibitive Paint #163.
- PPG: 6-208 Red Inhibitive Metal Primer.
- P & L: Effecto Rust-Inhibiting Primer.
- S-W: Kem Kromik Metal Primer B50N2/B50W1.

First and Second Coats: Gloss alkyd enamel.

- Devoe: 70XX Mirrolac Interior/Exterior Alkyd-Urethane Gloss Enamel.

- Fuller: 312-XX EPA Compliant Heavy Duty Enamel.
- Glidden: 4500 Glid-Guard Industrial Enamel.
- Moore: Impervo High-Gloss Enamel #133.
- PPG: 54 Line Quick-Dry Enamel.
- P & L: Effecto Enamel.
- S-W: Industrial Enamel B-54 Series.

Ornamental Steel Work:

Full-Gloss Urethane Enamel: Two Finish Coats

Primer: As recommended by manufacturer for urethane enamel finish coat.

Zinc-Coated Metal:

High-Gloss Alkyd Enamel: Two finish coats over primer.

Primer: Galvanized metal primer.

- Devoe: 13201 Mirrolac Galvanized Metal Primer.
- Fuller: 621-05 Blox-Rust Latex Metal Primer.
- Glidden: 5229 Glid-Guard All-Purpose Metal Primer.
- Moore: IronClad Galvanized Metal Latex Primer #155.
- PPG: 6-215/216 Speedhide Galvanized Steel Primer.
- P & L: Interior Trim Primer.
- S-W: Galvite B50W30.

First and Second Coats: Gloss alkyd enamel.

- Devoe: 70XX Mirrolac Interior/Exterior Alkyd-Urethane Gloss Enamel.
- Fuller: 312-XX EPA Compliant Heavy Duty Enamel.
- Glidden: 4500-Line Glid-Guard Industrial Enamel.
- Moore: Impervo High-Gloss Enamel #133.
- PPG: 54 Line Quick-Dry Enamel.
- P & L: Effecto Enamel.
- S-W: DTM Acrylic B66 – 200 Series.

INTERIOR PAINT SCHEDULE:

Provide the following paint systems for the various substrates, as indicated.

Gypsum Drywall Systems:

Lusterless (Flat) Emulsion Finish: Two coats.

Primer: White, interior, latex-based primer.

- Devoe: 50801 Wonder-Tones Latex Primer and Sealer.
- Fuller: Pro-Tech Interior Latex Wall Primer and Sealer.
- Glidden: 5019 PVA Primer.
- Moore: Moore's Latex Quick-Dry Prime Seal #201.
- PPG: 6-2 Quick-Dry Latex Primer Sealer.
- P & L: Latex Wall Primer Z30001.
- S-W: Pro-Mar 200 Latex Wall Primer B28W200.

Finish Coat: Interior, flat, latex-based paint.

- Devoe: 36XX Wonder-Tones Latex Flat Wall Paint.
- Fuller: 602XX Liquid Velvet Latex Wall Paint.
- Glidden: 3400 Spred Satin Latex Wall Paint.
- Moore: Regal Wall Satin #215.
- PPG: 80 Line Wallhide Flat Latex Paint.
- P & L: Vapex Latex Flat Wall Finish.

- S-W: Classic 99 Wall and Trim Paint A27W10.

Low-Luster, Acrylic-Enamel Finish: Two finish coats over a primer.

Primer: Latex based, interior primer applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.2 mils (0.031mm).

- Devoe: 50801 Wonder-Tones Interior Vinyl Latex Primer-Sealer.
- Fuller: 220-20 Pro-Tech Interior Latex Wall Primer and Sealer.
- Glidden: 5111 Spred Ultra Latex Primer-Sealer.
- Moore: Regal First Coat Interior Latex Primer and Underbody #216.
- PPG: 17-10 Quick-Drying Interior Latex Primer-Sealer.
- P & L: Z/F 1004 Suprime "4" Interior Latex Wall Primer.

First and Second Coats: Low-luster (eggshell or satin), acrylic-latex, interior enamel applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 2.8 mils (0.071 mm).

- Devoe: 34XX Wonder-Tones Interior Latex Eggshell Enamel.
- Fuller: 212-XX AA Enamel Interior Acrylic Latex Eggshell Enamel.
- Glidden: 4100 Series Spred Ultra Eggshell Latex Wall and Trim Paint.
- Moore: Moore's Regal AquaVelvet #319.
- PPG: 89 Line Manor Hall Eggshell Latex Wall and Trim Enamel.
- P & L: Z/F 4000 Series Accolade Interior Velvet.

Odorless Semigloss Alkyd Enamel Finish: Three coats with total dry film thickness not less than 2.5 mils.

Primer: White, Interior, Latex-Based Primer.

- Devoe: 50801 Wonder-Tones Latex Primer and Sealer.
- Fuller: Pro-Tech Interior Latex Wall Primer and Sealer.
- Glidden: 5019 PVA Primer.
- Moore: Moore's Latex Quick-Dry Prime Seal #201.
- PPG: 6-2 Quick-Dry Latex Primer Sealer.
- P & L: Latex Wall Primer Z30001.
- S-W: Pro-Mar 200 Latex Wall Primer B28W200.

First and Second Coats: Interior, semigloss, odorless, alkyd enamel.

- Devoe: 26XX Velour Alkyd Semigloss Enamel.
- Fuller: 110XX Fullerglo Alkyd Semigloss Enamel.
- Glidden: 4200 Spred Ultra Semigloss Enamel.
- Moore: Moore's Satin Impervo Enamel #235.
- PPG: 27 Line Wallhide Semigloss Enamel.
- P & L: Cellu-Tone Alkyd Satin Enamel.
- S-W: Classic 99 Semigloss Enamel A40 Series.

Woodwork and Hardboard:

Low-Luster, Acrylic-Enamel Finish: Two finish coats over a primer.

Primer: Alkali- or acrylic-latex-based, interior wood primer, as recommended by the manufacturer for this substrate, applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.4 mils (0.036 mm).

- Devoe: 51701 Wonder-Prime All-Purpose Latex Primer Sealer & Vapor Barrier.
- Fuller: 220-07 Interior Alkyd Enamel Undercoat.
- Glidden: 5111 Spred Ultra Latex Primer-Sealer.
- Moore: Moore's Alkyd Enamel Underbody #217.
- PPG: 17-225 Quick-Drying Enamel Undercoater.
- P & L: Z/F 1001 Supreme "1" 100 Percent Acrylic Multi-Purpose Primer.

First and Second Coats: Low-luster (eggshell or satin), acrylic-latex, interior enamel applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 2.8 mils (0.071 mm).

- Devoe: 34XX Wonder-Tones Interior Latex Eggshell Enamel.
- Fuller: 212-XX AA Enamel Interior Acrylic Latex Eggshell Enamel.
- Glidden: 4100 Series Spred Ultra Eggshell Latex Wall and Trim Paint.
- Moore: Moore's Regal AquaVelvet #319.
- PPG: 89 Line Manor Hall Eggshell Latex Wall and Trim Enamel.
- P & L: Z/F 4000 Series Accolade Interior Velvet.

Semigloss Enamel Finish: Three coats.
Undercoat: Interior enamel undercoat.

- Devoe: 8801 Velour Alkyd Enamel Undercoat.
- Fuller: 220-07 Interior Alkyd Enamel Undercoat.
- Glidden: 310 Glidden Wood Undercoater.
- Moore: Moore's Alkyd Enamel Underbody #217.
- PPG: 6-6 Speedhide Quick-Dry Enamel Undercoater.
- P & L: Interior Trim Primer.
- S-W: Pro-Mar 200 Alkyd Enamel Undercoater B49W200.

First and Second Coats: Interior, semigloss, odorless, alkyd enamel.

- Devoe: 26XX Velour Alkyd Semigloss Enamel.
- Fuller: 110XX Fullerglo Alkyd Semigloss Enamel.
- Glidden: 4200 Spred Ultra Semigloss Enamel.
- Moore: Moore's Satin Impervo Enamel #235.
- PPG: 27 Line Wallhide Semigloss Enamel.
- P & L: Cellu-Tone Alkyd Satin Enamel.
- S-W: Classic 99 Semigloss Enamel A40 Series.

Full-Gloss Enamel Finish: Three coats.
Undercoat: Interior enamel undercoat.

- Devoe: 8801 Velour Alkyd Enamel Undercoat.
- Fuller: 220-07 Interior Alkyd Enamel Undercoat.
- Glidden: 310 Glidden Wood Undercoater.
- Moore: Moore's Alkyd Enamel Underbody #217.
- PPG: 6-6 Speedhide Quick-Dry Enamel Undercoater.
- P & L: Interior Trim Primer.
- S-W: Pro-Mar 200 Alkyd Enamel Undercoater B49W200.

First and Second Coats: Gloss alkyd enamel.

- Devoe: 70XX Mirrolac Interior/Exterior Alkyd Gloss Enamel.
- Fuller: 312XX EPA Compliant Heavy Duty Enamel.
- Glidden: 4500 Glid-Guard Industrial Enamel.
- Moore: Impervo High-Gloss Enamel #133.
- PPG: 54 Line Quick-Dry Enamel.
- P & L: Effecto Enamel.
- S-W: Industrial Enamel B-54 Series.

Stained Woodwork:

Stained-Varnish Rubbed Finish: Three finish coats over stain plus filler on open-grain wood. Wipe filler before applying first varnish coat.
Stain Coat: Oil-type interior wood stain.

- Devoe: 96XX Wonder Woodstain Alkyd Stain.

- Fuller: 640-XX Pen-Chrome Interior Oil Base Wood Stain.
- Glidden: 1600 Woodmaster Oil Stain.
- Moore: 241 Moore's Interior Wood Finishes Penetrating Stain.
- PPG: 77-302 Rez Medium Tint Base.
- P & L: S-Series Tonetic Wood Stain.
- S-W: Oil Stain A-48 Series.

First Coat: Cut shellac.

- Devoe: 4900 Wonder Woodsealer Quick-Dry Sealer.
- Glidden: 5035 Ultra-Hide Sanding Sealer.
- Moore: 413 Moore's Interior Wood Finishes Quick-Dry Sanding Sealer.
- PPG: 77-30 Quick Drying Sanding Sealer.
- S-W: Pro-Mar Varnish Sanding Sealer B26V3.

Filler Coat: Paste wood filler.

- Devoe: 4800 Wonder Woodstain Interior Paste Wood Filler.
- Fuller: 680-00 Pen Chrome Paste Wood Filler.
- Glidden: Glidden Paste Wood Filler.
- Moore: Benwood Paste Wood Filler #238.
- PPG: (none required)
- S-W: Sher-Wood Fast-Dry Filler.

Second and Third Coats: Oil rubbing varnish.

- Devoe: 4600 Wonder Wood Satin Alkyd Satin Varnish.
- Fuller: 653-01 EPA Compliant Clear Polyurethane Satin Finish.
- Glidden: 82 Woodmaster Satin Sheen Urethane Varnish.
- Moore: Benwood Satin Finish Varnish #404.
- PPG: 77-7 Rez Satin Varnish.
- P & L: Clear Finish Gloss.
- S-W: Oil Base Varnish, Gloss A66V91.

Ferrous Metal:

Lusterless (Flat) Finish: Two finish coats over primer with total dry film thickness not less than 2.5 mils.

Primer: Synthetic, quick-drying, rust-inhibiting primer.

- Devoe: 14920 Bar-Ox Quick Dry Metal Primer, Red.
- Fuller: 621-04 Blox-Rust Alkyd Metal Primer.
- Glidden: 5210 Glid-Guard Universal Fast-Dry Metal Primer.
- Moore: Ironclad Retardo Rust-Inhibitive Paint #163.
- PPG: 6-208 Red Inhibitive Metal Primer.
- P & L: Effecto Rust-Inhibiting Primer.
- S-W: Kem Kromik Metal Primer B50N2/B50W1.

First and Second Coats: Interior, flat, latex-based paint.

- Devoe: 36XX Wonder-Tones Latex Flat Wall Paint.
- Fuller: 602XX Liquid Velvet Latex Wall Paint.
- Glidden: 3400 Spred Satin Latex Wall Paint.
- Moore: Regal Wall Satin #215.
- PPG: 80 Line Wallhide Flat Latex Paint.
- P & L: Vapex Latex Flat Wall Finish.
- S-W: Classic 99 Wall and Trim Paint A27W10.

Semigloss Enamel Finish: Two coats over primer with total dry film thickness not less than 2.5 mils.

Primer: Synthetic, quick-drying, rust-inhibiting primer.

- Devoe: 14920 Bar-Ox Quick Dry Metal Primer, Red.
- Fuller: 621-04 Blox-Rust Alkyd Metal Primer.
- Glidden: 5210 Glid-Guard Universal Fast-Dry Metal Primer.
- Moore: Ironclad Retardo Rust-Inhibitive Paint #163.
- PPG: 6-208 Red Inhibitive Metal Primer.
- P & L: Effecto Rust-Inhibiting Primer.
- S-W: Kem Kromik Metal Primer B50N2/B50W1.

Undercoat: Interior enamel undercoat.

- Devoe: 8801 Velour Alkyd Enamel Undercoat.
- Fuller: 220-07 Interior Alkyd Enamel Undercoat.
- Glidden: 4200 Spred Ultra Semi-Gloss Enamel.
- Moore: Moore's Alkyd Enamel Underbody #217.
- PPG: 6-6 Speedhide Quick-Dry Enamel Undercoater.
- P & L: Interior Trim Primer.
- S-W: Pro-Mar 200 Alkyd Enamel Undercoater B49W200.

Finish Coat: Interior, semigloss, odorless, alkyd enamel.

- Devoe: 26XX Velour Alkyd Semigloss Enamel.
- Fuller: 110XX Fullerglo Alkyd Semigloss Enamel.
- Glidden: 4200 Spred Ultra Semigloss Enamel.
- Moore: Moore's Satin Impervo Enamel #235.
- PPG: 27 Line Wallhide Semigloss Enamel.
- P & L: Cellu-Tone Alkyd Satin Enamel.
- S-W: Classic 99 Semigloss Enamel A40 Series.

END OF SECTION 099000 - PAINTING

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections apply to this Section.

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes: Provide solid surfacing fabrications including but not limited to following:

1. window sills.

2. counter tops

B. Related Sections: Following description of work is included for reference only and shall not be presumed complete:

1. Provision of finish carpentry and architectural woodwork: Section 06 40 00, Architectural Woodwork.

2. Provision of elastomeric joint sealants: Section 07 92 00, Joint Sealants.

3. Provision of tile work: Section 09 30 00, Tiling.

1.02 REFERENCES

A. Abbreviations and Acronyms:
1. MDF: Medium Density Fiberboard.

2. VOC: Volatile Organic Compound.

B. Definitions:

1. Solid Surface: Non-porous, homogeneous material maintaining the same composition throughout the part with a composition of acrylic polymer, aluminum trihydrate filler and pigment.

C. Reference Standards:

1. ANSI/NPA A208.2-09 - Medium Density Fiberboard (MDF) For Interior Applications
2. ASTM C920-14a - Standard Specification for Elastomeric Joint Sealants

3. ASTM D638-10 - Standard Test Method for Tensile Properties of Plastics

4. ASTM D785-08 - Standard Test Method for Rockwell Hardness of Plastics and Electrical Insulating Materials

5. ASTM D790-10 - Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials

6. ASTM D5420-10 - Standard Test Method for Impact Resistance of Flat, Rigid Plastic Specimen by Means of a Striker Impacted by a Falling Weight (Gardner Impact)

7. ASTM E84-14 - Standard Test Method for Surface Burning Characteristics of

Building Materials

8. ASTM E228-11 - Standard Test Method for Linear Thermal Expansion of Solid Materials with a Push-Rod Dilatometer

9. ASTM G21-13 - Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi

10. ASTM G22-76(96) - Standard Practice for Determining Resistance of Plastics to Bacteria

11. ASTM G155-13 - Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials

12. CSA B45.5-11/ IAPMO Z124-2011 - Plastic Plumbing Fixtures

13. NFPA 255-06 - Standard Method of Test of Surface Burning Characteristics of Building Materials

14. NSF/ANSI 51-07 - Food Equipment Materials

15. SCAQMD Rule 1168 - Adhesive and Sealant Applications (amended January 2005) 16. UL 723 Standard for Test for Surface Burning Characteristics of Building Materials

1.03 ADMINISTRATIVE REQUIREMENTS

A. Preinstallation Meetings: Arrange preinstallation meeting 1 week prior to commencing work with all parties associated with trade as designated in Contract Documents or as requested by Architect. Presided over by Contractor, include Architect who may attend, Subcontractor performing work of this trade, Owner's representative, testing company's representative and consultants of applicable discipline. Review Contract Documents for work included under this trade and determine complete understanding of requirements and responsibilities relative to work included, storage and handling of materials, materials to be used, installation of materials, sequence and quality control, Project staffing, restrictions on areas of work and other matters affecting construction, to permit compliance with intent of work of this Section.

1.04 SUBMITTALS

A. Product Data: Indicate Product description including solid surface sheets, sinks, bowls and illustrating full range of standard colors, fabrication information and compliance with specified performance requirements. Submit Product data with resistance to list of chemicals.

B. Shop Drawings: Submit Shop Drawings for work of this Section in accordance with Section 01 30 00. Indicate plans, sections, dimensions, component sizes, edge details, thermosetting requirements, fabrication details, attachment provisions, sizes of furring, blocking, including concealed blocking and coordination requirements with adjacent work. Show locations and sizes of cutouts and holes for plumbing fixtures, faucets, soap dispensers, waste receptacles and other items installed in solid surface.

C. Coordination Drawings: Submit coordination drawings indicating plumbing and miscellaneous steel work indicating locations of wall rated or non-rated, blocking requirements, locations and recessed wall items and similar items.

D. Samples: Submit samples in accordance with Section 01 30 00. Submit minimum 6" x 6" samples. Cut sample and seam together for representation of inconspicuous seam. Indicate full range of color and pattern variation. Approved samples will be retained as standards for work.

E. Test and Evaluation Reports: Submit flammability test reports

1.05 CLOSEOUT SUBMITTALS

A. Operational and Maintenance Data:

1. Submit manufacturer's care and maintenance data, including repair and cleaning instructions. Include in Project closeout documents.

2. Provide a commercial care and maintenance kit and video. Review maintenance procedures and warranty details with Owner upon completion.

1.06 QUALITY ASSURANCE

A. Qualifications:

1. Installers: Provide work of this Section executed by competent installers with minimum 5 years experience in the application of Products, systems and assemblies specified and with approval and training of the Product manufacturers.

B. Mock-Ups:

1. Prior to final approval of Shop Drawings, erect 1 full size mock-up of each component at Project site demonstrating quality of materials and execution for Architect review.

2. Should mock-up not be approved, rework or remake until approval is secured. Remove rejected units from Project site.

3. Approved mock-up will be used as standard for acceptance of subsequent work.

4. Approved mock-ups may remain as part of finished work.

1.07 DELIVERY, STORAGE AND HANDLING

A. Delivery and Acceptance Requirements: Deliver no components to Project site until areas are ready for installation.

B. Storage and Handling Requirements:

1. Store components indoors prior to installation.

2. Handle materials to prevent damage to finished surfaces.

1.08 WARRANTY

A. Manufacturer Warranty: Provide manufacturer's standard warranty for material only for period of 10 years against defects and/or deficiencies in accordance with General Conditions of the Contract. Promptly correct any defects or deficiencies which become apparent within warranty period, to satisfaction of Architect and at no expense to Owner.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

Manufacturer List: Products of following manufacturers are acceptable subject to conformance to requirements of Drawings, Schedules and Specifications:

1. Corian® by DuPont; www.corian.com
2. Samsung Chemical USA; www.staron.com
3. Wilsonart Contract; www.wilsonartcontract.com

Substitution Limitations: This Specification is based on Corian® Products. Comparable Products from manufacturers listed herein will be accepted provided they meet requirements of this Specification.

2.02 MATERIALS

A. Performance/Design Criteria:

Property		Requirement	Test Procedure (min or max)
1.	Solid Surface Based Products:		
a.	Tensile Strength	6000 psi min	ASTM D638
b.	Tensile Modulus	1.5 x 10^6 psi min	ASTM D638
c.	Tensile Elongation	0.4% min.	ASTM D638
d.	Flexural Strength	10000 psi min	ASTM D790
e.	Flexural Modulus	1.2 x 10^6 psi min	ASTM D790
f.	Hardness	>85-Rockwell "M" scale min.	ASTM D785
g.	Thermal Expansion	2.2 x 10^{-5} in./in./°F	ASTM E228
h.	Fungi and Bacteria	Does not support microbial growth	ASTM G21 & G22
i.	Microbial Resistance	Highly resistant to mold growth	UL 2824
j.	Ball Impact No fracture - 1/2 lb. Ball: 12 mm slab - 144" drop	NEMA LD 3, 6 mm slab - 36" drop	Method 3.8
k.	Weatherability	ΔE*94<5 in 1,000 hrs	ASTM G155
l.	Flammability		ASTM E84, NFPA 255 & UL 723

All Colors

6 mm12 mm

m.	Flame Spread <25	<25	
n.	Smoke Developed	<25	<25
o.	Class AA NFPA 101®, Life Safety Code		

B. Solid Surface Material:

C. Non-porous, homogeneous material maintaining the same composition throughout the part with a composition of acrylic polymer, aluminum trihydrate filler and pigment; not coated, laminated or of composite construction; meeting following criteria:

D. Flammability: Class 1 and A when tested to UL 723.

E. Adhesive for Bonding to Other Products: One component silicone to ASTM C920.

F. Sealant: A standard mildew-resistant, FDA/UL® recognized silicone color matched sealant or clear silicone sealants.

2.03 COMPONENTS

A. Window Sills: 1/2" thick solid surfacing material, adhesively joined with inconspicuous seams, edge details as indicated on Drawings. Color as selected from manufacturer's full color range.

B. Countertops: Ensure ¾” thick plywood or OSB base layer with ½” solid surfacing material over base layer. Adhesively joined with inconspicuous seams, edge details as indicated on Drawings. Provide solid surface edge in same material and color. Color as selected from manufacturer’s full color range.

C. Fabrication:

1. Fabricate components in shop to greatest extent practical to sizes and shapes indicated, in accordance with approved Shop Drawings and solid polymer manufacturer requirements. Form joints between components using manufacturer’s standard joint adhesive without conspicuous joints. Provide factory cutouts for plumbing fittings and bath accessories as indicated on Drawings.

2. Where indicated, thermoform corners and edges or other objects to shapes and sizes indicated on Drawings, prior to seaming and joining. Cut components larger than finished dimensions and sand edges to remove nicks and scratches. Heat entire component uniformly prior to forming.

3. Ensure no blistering, whitening and cracking of components during forming.

4. Fabricate backsplashes from solid surfacing material with optional radius cove where counter and backsplashes meet as indicated on Drawings. Backsplashes for most colors may be fabricated by traditional means discussed in K-25294 *Backsplashe*s. Colors with metallic/mica particle or veined colors creating directional aesthetics (K-26833 *Directional Aesthetics*) may require the techniques in Technical Bulletin K-28235 *Thermoformed Backsplash*.

5. Fabricate joints between components using manufacturer's standard joint adhesive. Ensure joints are inconspicuous in appearance and without voids.

Attach 50 mm (2") wide reinforcing strip of solid polymer material under each joint. Reinforcing strip of solid polymer material is not required when using DuPont™ Joint Adhesive 2.0.

6. Provide holes and cutouts for plumbing and bath accessories as indicated on Drawings.

7.Rout and finish component edges to a smooth, uniform finish. Rout cutouts, then sand edges smooth. Repair or reject defective or inaccurate work.

8.Finish: Ensure surfaces have uniform finish:

a. Matte, with a 60° gloss rating of 5 - 20.

9. Fabrication Tolerances:

a. Variation in Component Size: +/-1/8".

b. Location of Openings: +/-1/8" from indicated location.

PART 3 - EXECUTION 3.01

EXAMINATION

A. Verification of Conditions:

1. Examine substrates and conditions, with fabricator present for compliance with requirements for installation tolerances and other conditions affecting performance of work. Proceed with installation only after unsatisfactory conditions have been corrected.

2. Verify actual site dimensions and location of adjacent materials prior to commencing work.

3. Examine cabinets upon which counter tops are to be installed. Verify cabinets are level to within 1/8" in 10' - 0".

4. Notify Architect in writing of any conditions which would be detrimental to installation.

B. Evaluation and Assessment: Commencement of work implies acceptance of previously completed work.

3.02 INSTALLATION

A. Install components plumb, level, rigid, scribed to adjacent finishes in accordance with reviewed Shop Drawings and Product installation details.

B. Fabricate field joints using manufacturer's recommended adhesive, with joints being inconspicuous in finished work. Exposed joints/seams are not permitted. Keep components and hands clean when making joints. Reinforce field joints as specified herein. Cut and finish component edges with clean, sharp returns.

C. Route radii and contours to template. Anchor securely to base component or other supports. Align adjacent components and form seams to comply with manufacturer's written recommendations using adhesive in color to match work. Carefully dress joints smooth, remove surface scratches and clean entire surface.

D. Install countertops with no more than 1/8" sag, bow or other variation from a straight line.

E. Seal between wall and components with joint sealant as specified herein and in Section 07 92 00, as applicable.

F. Provide backsplashes and endsplashes as indicated on Drawings. Adhere to countertops using a standard color-coordinated silicone sealant. Adhere applied sidesplashes to countertops using a standard color-matched silicone sealant. Provide coved backsplashes and sidesplashes at walls and adjacent millwork. Fabricate radius cove at intersection of counters with backsplashes to dimensions shown on reviewed Shop Drawings. Adhere to countertops using manufacturer's standard color-coordinated joint adhesive.

G. Keep components and hands clean during installation. Remove adhesives, sealants and other stains. Ensure components are clean on date of Substantial Completion of the Work.

3.03 REPAIR

A. Repair minor imperfections and cracked seams and replace areas of severely damaged surfaces in accordance with manufacturer's "Technical Bulletins".

3.04 SITE QUALITY CONTROL

A. Non-Conforming Work: Replace damaged work which cannot be satisfactorily repaired, restored or cleaned, to satisfaction of Architect at no cost to Owner.

3.05 CLEANING

A. Remove excess adhesive and sealant from visible surfaces.

B. Clean surfaces in accordance with manufacturer's "Care and Maintenance Instructions".

3.06 PROTECTION

A. Provide protective coverings to prevent physical damage or staining following installation for duration of Project.

B. Protect surfaces from damage until date of Substantial Completion of the Work.

END OF SECTION 123661 – SOLID SURFACE COUNTERTOPS

SECTION 311000 - SITE CLEARING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Protecting existing vegetation to remain.

2. Removing existing vegetation.

3. Clearing and grubbing.

4. Stripping and stockpiling topsoil.

5. Removing above- and below-grade site improvements.

6. Disconnecting, capping, or sealing site utilities.

7. Temporary erosion and sedimentation control.

1.2 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project Site.

1.3 MATERIAL OWNERSHIP

A. Except for materials indicated to be stockpiled or otherwise remain Owner's property, cleared materials shall become Contractor's property and shall be removed from Project site.

1.4 FIELD CONDITIONS

A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.

1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.

2. Provide alternate routes around closed or obstructed trafficways if required by Owner or authorities having jurisdiction.

B. Salvageable Improvements: Carefully remove items indicated to be salvaged and store on Owner's premises as directed by Owner.

C. Utility Locator Service: Notify utility locator service for area where Project is located before site clearing.

D. Do not commence site clearing operations until temporary erosion- and sedimentation-control measures are in place.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Satisfactory Soil Material: Requirements for satisfactory soil material are specified in Section 312000 "Earth Moving."

1. Obtain approved borrow soil material off-site when satisfactory soil material is not available on-site.

PART 3 - EXECUTION

3.1 PREPARATION

A. Protect and maintain benchmarks and survey control points from disturbance during construction.

B. Protect existing site improvements to remain from damage during construction.

1. Restore damaged improvements to their original condition, as acceptable to Owner.

3.2 TEMPORARY EROSION AND SEDIMENTATION CONTROL

A. Provide temporary erosion- and sedimentation-control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to erosion- and sedimentation-control Drawings and requirements of authorities having jurisdiction.

B. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross protection zones.

C. Inspect, maintain, and repair erosion- and sedimentation-control measures during construction until permanent vegetation has been established.

D. Remove erosion and sedimentation controls, and restore and stabilize areas disturbed during removal.

3.3 EXISTING UTILITIES

A. Locate, identify, disconnect, and seal or cap utilities indicated to be removed or abandoned in place.

1. Arrange with utility companies to shut off indicated utilities.

B. Interrupting Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others, unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:

1. Notify Architect not less than two days in advance of proposed utility interruptions.
2. Do not proceed with utility interruptions without Architect's written permission.

C. Removal of underground utilities is included in earthwork sections; in applicable fire suppression, plumbing, HVAC, electrical, communications, electronic safety and security, and utilities sections; and in Section 024119 "Selective Demolition."

3.4 CLEARING AND GRUBBING

A. Remove obstructions, trees, shrubs, and other vegetation to permit installation of new construction.

1. Grind down stumps and remove roots larger than 3 inches in diameter, obstructions, and debris to a depth of 18 inches below exposed subgrade.

2. Use only hand methods or air spade for grubbing within protection zones.

B. Fill depressions caused by clearing and grubbing operations with satisfactory soil material unless further excavation or earthwork is indicated.

1. Place fill material in horizontal layers not exceeding a loose depth of 12 inches and compact each layer to a density equal to adjacent original ground.

3.5 TOPSOIL STRIPPING

A. Remove sod and grass before stripping topsoil.

B. Strip topsoil to depth of 6 inches in a manner to prevent intermingling with underlying subsoil or other waste materials.

C. Stockpile topsoil away from edge of excavations without intermixing with subsoil or other materials. Grade and shape stockpiles to drain surface water. Cover to prevent windblown dust and erosion by water.

3.6 SITE IMPROVEMENTS

A. Remove existing above- and below-grade improvements as indicated and necessary to facilitate new construction.

3.7 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A. Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.

B. Separate recyclable materials produced during site clearing from other nonrecyclable materials. Store or stockpile without intermixing with other materials and transport them to recycling facilities. Do not interfere with other Project work.

END OF SECTION 311000

Note:
Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Submittals:
Submit the following according to Conditions of Contract and Division 01 Specification Sections.
Test Reports: In addition to test reports required under field quality control, submit the following: Report of actual unconfined compressive strength and/or results of bearing tests of each stratum tested. Forward data/report to Architect.

Quality Assurance:
Codes and Standards: Perform earthwork complying with requirements of authorities having jurisdiction.
Soil Erosion: The Contractor shall conduct operations in such a manner as to minimize erosion and sedimentation, including construction of necessary temporary collection ditches, sedimentation basins, and other required appurtenances in compliance with soil erosion control permit statutes. The Contractor shall remove all sediment in storm sewers, which occurs during construction.

Testing and Inspection Service: Owner will employ a qualified independent Geotechnical Engineering Testing Agency to classify proposed on-site and borrow soils to verify that soils comply with specified requirements, and to perform required field and laboratory testing.

Project Conditions:
Existing Utilities: Do not interrupt existing utilities serving facilities occupied by the Owner or others except when permitted in writing by the Architect and then only after acceptable temporary utility services have been provided.

Products, Soil Materials:
Provide approved borrow soil materials from off-site when sufficient approved soil materials are not available from excavations.
Satisfactory Soil Materials: ASTM D 2487 soil classification groups GW, GP, GM, SW, SP, and SM; free of rock or gravel larger than 2 inches in any dimension, debris, waste, frozen materials, vegetation and other deleterious matter.

Unsatisfactory Soil Materials: ASTM D 2487 soil classification groups GC, SC, ML, MH, CL, CH, OL, OH, and PT.

Backfill and Fill Materials: Satisfactory soil materials only.

Subbase and Base Material: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand, ASTM D 2940, with at least 95 percent passing a 1-1/2 inch sieve and not more than 8 percent passing a No. 200 sieve.

Engineered Fill: Subbase or base materials.

Bedding Material: Subbase or base materials with 100 percent passing a 1 inch sieve and not more than 8 percent passing a No. 200 sieve.

Drainage Fill: Washed, evenly graded mixture of crushed stone, or crushed or uncrushed gravel, ASTM D 448, coarse aggregate grading size 57, with 100 percent passing a 1-1/2 inch sieve and not more than 5 percent passing a No. 8 sieve.

Filtering Material: Evenly graded mixture of natural or crushed gravel or crushed stone and natural sand, with 100 percent passing a 1-1/2 inch (38 mm) sieve and 0 to 5 percent passing a No. 50 (300 micrometer) sieve.

Preparation:
Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.
Protect subgrades and foundation soils against freezing temperatures or frost. Provide protective insulating materials as necessary.

Dewatering:
Prevent surface water and subsurface or ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.
Protect subgrades and foundation soils from softening and damage by rain or water.

Excavation:
Do not use explosives.
Comply with local codes, ordinances, and requirements of authorities having jurisdiction to maintain stable excavations.

Fill Preparation:
Remove vegetation, topsoil, debris, wet, and unsatisfactory soil materials, obstructions, and deleterious materials from ground surface prior to placing fills.
Place fill material in layers to required elevations for each location listed below.
Topsoil: Provide a minimum of 4 inches of topsoil in all landscaping and areas to be hydroseeded.

Moisture Control:
Uniformly moisten or aerate subgrade and each subsequent fill or backfill layer before compaction to within 2 percent of optimum moisture content.

Compaction:
Place backfill and fill materials in layers not more than 8 inches (200 mm) in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches (100 mm) in loose depth for material compacted by hand-operated tampers.
When testing agency reports that subgrades, fills, or backfills are below specified density, scarify and moisten or aerate, or remove and replace soil to the depth required, recompact and retest until required density is obtained.

Protection:
Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.
Repairs: Where settling occurs during the Project correction period, or drainage due to construction traffic occurs, remove finished surfacing, backfill with additional approved material, compact, and reconstruct surfacing.
Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to the greatest extent possible.

Disposal of Surplus and Waste Materials:
Removal from Owner's Property: Remove waste materials and unsuitable or excess topsoil from Owner's property.

END OF SECTION 312000 - EARTHWORK

SECTION 321216 - ASPHALT PAVING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Cold milling of existing asphalt pavement.
2. Hot-mix asphalt patching.
3. Hot-mix asphalt paving.
4. Hot-mix asphalt overlay.
5. Asphalt curbs.

B. Related Requirements:

1. Section 312000 "Earth Moving" for subgrade preparation, fill material, separation geotextiles, unbound-aggregate subbase and base courses, and aggregate pavement shoulders.

2. Section 321373 "Concrete Paving Joint Sealants" for joint sealants and fillers at pavement terminations.

1.2 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

1.4 INFORMATIONAL SUBMITTALS

A. Material Certificates: For each paving material. Include statement that mixes containing recycled materials will perform equal to mixes produced from all new materials.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: A paving-mix manufacturer registered with and approved by MDOT.

B. Regulatory Requirements: Comply with materials, workmanship, and other applicable requirements of MDOT for asphalt paving work.

1. Measurement and payment provisions and safety program submittals included in standard specifications do not apply to this Section.

PART 2 - PRODUCTS

2.1 AGGREGATES

A. Coarse Aggregate: ASTM D 692/D 692M, sound; angular crushed stone, crushed gravel, or cured, crushed blast-furnace slag.

B. Fine Aggregate: ASTM D 1073, sharp-edged natural sand or sand prepared from stone, gravel, cured blast-furnace slag, or combinations thereof.

C. Mineral Filler: ASTM D 242/D 242M, rock or slag dust, hydraulic cement, or other inert material.

2.2 ASPHALT MATERIALS

A. Asphalt Binder: ASTM D 6373 or AASHTO M 320 binder designation PG 58-28.

B. Tack Coat: ASTM D 977 emulsified asphalt, or ASTM D 2397/D 2397M cationic emulsified asphalt, slow setting, diluted in water, of suitable grade and consistency for application.

2.3 AUXILIARY MATERIALS

A. Recycled Materials for Hot-Mix Asphalt Mixes: Reclaimed asphalt pavement; reclaimed, unbound-aggregate base material; and recycled tires, asphalt shingles, or glass from sources and gradations that have performed satisfactorily in previous installations, equal to performance of required hot-mix asphalt paving produced from all new materials.

B. Herbicide: Commercial chemical for weed control, registered by the EPA, and not classified as "restricted use" for locations and conditions of application. Provide in granular, liquid, or wettable powder form.

2.4 MIXES

A. Hot-Mix Asphalt: Dense-graded, hot-laid, hot-mix asphalt plant mixes approved by MDOT and complying with the following requirements:

1. Provide mixes with a history of satisfactory performance in geographical area where Project is located.

2. Tier 1 RAP limits apply.

3. Base Course: 2 inches, MDOT 4EML.

4. Surface Course: 1 1/2 inches, MDOT 5EML

PART 3 - EXECUTION

3.1 PREPARATION

A. Proof-roll subgrade below pavements with heavy pneumatic-tired equipment to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.

3.2 PATCHING

A. Asphalt Pavement: Saw cut perimeter of patch and excavate existing pavement section to sound base. Excavate rectangular or trapezoidal patches, extending 12 inches into perimeter of adjacent sound pavement, unless otherwise indicated. Cut excavation faces vertically. Remove excavated material. Recompact existing unbound-aggregate base course to form new subgrade.

B. Portland Cement Concrete Pavement: Break cracked slabs and roll as required to reseat concrete pieces firmly.

1. Remove disintegrated or badly cracked pavement. Excavate rectangular or trapezoidal patches, extending into perimeter of adjacent sound pavement, unless otherwise indicated. Cut excavation faces vertically. Recompact existing unbound-aggregate base course to form new subgrade.

C. Tack Coat: Before placing patch material, apply tack coat uniformly to vertical asphalt surfaces abutting the patch. Apply at a rate of 0.05 to 0.15 gal./sq. yd..

1. Allow tack coat to cure undisturbed before applying hot-mix asphalt paving.

2. Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.

D. Placing Patch Material: Fill excavated pavement areas with hot-mix asphalt base mix for full thickness of patch and, while still hot, compact flush with adjacent surface.

3.3 SURFACE PREPARATION

A. Immediately before placing asphalt materials, remove loose and deleterious material from substrate surfaces. Ensure that prepared subgrade is ready to receive paving.

B. Herbicide Treatment: Apply herbicide according to manufacturer's recommended rates and written application instructions. Apply to dry, prepared subgrade or surface of compacted- aggregate base before applying paving materials.

C. Tack Coat: Apply uniformly to surfaces of existing pavement at a rate of 0.05 to 0.15 gal./sq. yd..

1. Allow tack coat to cure undisturbed before applying hot-mix asphalt paving.

2. Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.

3.4 PLACING HOT-MIX ASPHALT

A. Machine place hot-mix asphalt on prepared surface, spread uniformly, and strike off. Place asphalt mix by hand in areas inaccessible to equipment in a manner that prevents segregation of mix. Place each course to required grade, cross section, and thickness when compacted.

1. Spread mix at a minimum temperature of 250 deg F.

2. Regulate paver machine speed to obtain smooth, continuous surface free of pulls and tears in asphalt-paving mat.

B. Place paving in consecutive strips not less than 10 feet wide unless infill edge strips of a lesser width are required.

C. Promptly correct surface irregularities in paving course behind paver. Use suitable hand tools to remove excess material forming high spots. Fill depressions with hot-mix asphalt to prevent segregation of mix; use suitable hand tools to smooth surface.

3.5 JOINTS

A. Construct joints to ensure a continuous bond between adjoining paving sections. Construct joints free of depressions, with same texture and smoothness as other sections of hot-mix asphalt course.

1. Clean contact surfaces and apply tack coat to joints.

2. Offset longitudinal joints, in successive courses, a minimum of 6 inches.

3. Offset transverse joints, in successive courses, a minimum of 24 inches.

4. Construct transverse joints at each point where paver ends a day's work and resumes work at a subsequent time. Construct these joints using either "bulkhead" or "papered" method according to AI MS-22, for both "Ending a Lane" and "Resumption of Paving Operations."

3.6 COMPACTION

A. General: Begin compaction as soon as placed hot-mix paving will bear roller weight without excessive displacement. Compact hot-mix paving with hot, hand tampers or with vibratory-plate compactors in areas inaccessible to rollers.

1. Complete compaction before mix temperature cools to 185 deg F.

B. Breakdown Rolling: Complete breakdown or initial rolling immediately after rolling joints and outside edge. Examine surface immediately after breakdown rolling for indicated crown, grade, and smoothness. Correct laydown and rolling operations to comply with requirements.

C. Intermediate Rolling: Begin intermediate rolling immediately after breakdown rolling while hot- mix asphalt is still hot enough to achieve specified density. Continue rolling until hot-mix asphalt course has been uniformly compacted to the following density:

1. Average Density: 92 percent of reference maximum theoretical density according to ASTM D 2041/D 2041M, but not less than 90 percent or greater than 96 percent.

D. Finish Rolling: Finish roll paved surfaces to remove roller marks while hot-mix asphalt is still warm.

E. Edge Shaping: While surface is being compacted and finished, trim edges of pavement to proper alignment. Bevel edges while asphalt is still hot; compact thoroughly.

F. Protection: After final rolling, do not permit vehicular traffic on pavement until it has cooled and hardened.

G. Erect barricades to protect paving from traffic until mixture has cooled enough not to become marked.

3.7 INSTALLATION TOLERANCES

A. Pavement Thickness: Compact each course to produce the thickness indicated within the following tolerances:

1. Base Course: Plus or minus 3/8 inch.

2. Surface Course: Plus 1/4 inch, no minus.

B. Pavement Surface Smoothness: Compact each course to produce a surface smoothness within the following tolerances as determined by using a 10-foot straightedge applied transversely or longitudinally to paved areas:

1. Base Course: 3/8 inch.

2. Surface Course: 1/8 inch.

3. Crowned Surfaces: Test with crowned template centered and at right angle to crown.

Maximum allowable variance from template is 1/4 inch.

3.8 FIELD QUALITY CONTROL

A. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections. B. Replace and compact hot-mix asphalt where core tests were taken.

C. Remove and replace or install additional hot-mix asphalt where test results or measurements indicate that it does not comply with specified requirements.

3.9 WASTE HANDLING

A. General: Handle asphalt-paving waste according to approved waste management plan.

END OF SECTION 321216 ASPHALT PAVING

SECTION 321313 – CONCRETE PAVING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes Concrete Paving

1. Curbs and gutters.
2. Walks.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Samples: For each type of product, ingredient, or admixture requiring color selection.

C. Design Mixtures: For each concrete paving mixture. Include alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.

1.3 QUALITY ASSURANCE

A. Ready-Mix-Concrete Manufacturer Qualifications: A firm experienced in manufacturing ready- mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.

1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities" (Quality Control Manual - Section 3, "Plant Certification Checklist").

1.4 PRECONSTRUCTION TESTING

- Preconstruction Testing Service: Engage a qualified independent testing agency to perform preconstruction testing on concrete paving mixtures.

PART 2 - PRODUCTS

2.1 CONCRETE, GENERAL

A. ACI Publications: Comply with ACI 301 unless otherwise indicated.

2.2 STEEL REINFORCEMENT

A. Plain-Steel Welded-Wire Reinforcement: ASTM A 1064/A 1064M, fabricated from as-drawn steel wire into flat sheets.

B. Reinforcing Bars: ASTM A 615/A 615M, Grade 60; deformed.

C. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars, welded-wire reinforcement, and dowels in place. Manufacture bar supports according to CRSI's "Manual of Standard Practice" from steel wire, plastic, or precast concrete of greater compressive strength than concrete specified.

2.3 CONCRETE MATERIALS

A. Cementitious Materials: Use the following cementitious materials, of same type, brand, and source throughout Project:

1. Portland Cement: ASTM C 150/C 150M, portland cement Type I.
2. Fly Ash: ASTM C 618, Class C or Class F.

3. Slag Cement: ASTM C 989/C 989M, Grade 100 or 120.

B. Normal-Weight Aggregates: ASTM C 33/C 33M, Class 4S, uniformly graded. Provide aggregates from a single source.

C. Air-Entraining Admixture: ASTM C 260/C 260M.

D. Chemical Admixtures: Admixtures certified by manufacturer to be compatible with other admixtures and to contain not more than 0.1 percent water-soluble chloride ions by mass of cementitious material.

E. Color Pigment: ASTM C 979/C 979M, synthetic mineral-oxide pigments or colored water- reducing admixtures; color stable, nonfading, and resistant to lime and other alkalis.

1. Color: As selected by Architect from manufacturer's full range.

F. Water: Potable and complying with ASTM C 94/C 94M.

2.4 CURING MATERIALS

A. Absorptive Cover: AASHTO M 182, Class 3, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. dry.

B. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.

C. Water: Potable.

D. Evaporation Retarder: Waterborne, monomolecular, film forming, manufactured for application to fresh concrete.

E. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B, dissipating.

F. White, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 2, Class B, dissipating.

2.5 RELATED MATERIALS

A. Joint Fillers: ASTM D 1751, asphalt-saturated cellulosic fiber in preformed strips.

2.6 CONCRETE MIXTURES

A. Prepare design mixtures, proportioned according to ACI 301, for each type and strength of normal-weight concrete, and as determined by either laboratory trial mixtures or field experience.

B. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than portland cement in concrete as follows:

1. Fly Ash or Pozzolan: 25 percent.

2. Slag Cement: 50 percent.

3. Combined Fly Ash or Pozzolan, and Slag Cement: 50 percent, with fly ash or pozzolan not exceeding 25 percent.

C. Add air-entraining admixture at manufacturer's prescribed rate to result in normal-weight concrete at point of placement having an air content as follows:
1. Air Content: 6 percent plus or minus 1-1/2 percent.

D. Chemical Admixtures: Use admixtures according to manufacturer's written instructions.

E. Color Pigment: Add color pigment to concrete mixture according to manufacturer's written instructions and to result in hardened concrete color consistent with approved mockup.
F. Concrete Mixtures: Normal-weight concrete.

1. Compressive Strength (28 Days): 4000 psi.

2. Maximum W/C Ratio at Point of Placement: 0.45.
3. Slump Limit: 5 inches, plus or minus 1 inch.

2.7 CONCRETE MIXING

A. Ready-Mixed Concrete: Measure, batch, and mix concrete materials and concrete according to ASTM C 94/C 94M. Furnish batch certificates for each batch discharged and used in the Work. PART 3 - EXECUTION

3.1 EXAMINATION

A. Proof-roll prepared subbase surface below concrete paving to identify soft pockets and areas of excess yielding.

3.2 PREPARATION

A. Remove loose material from compacted subbase surface immediately before placing concrete. 3.3 EDGE FORMS AND SCREED CONSTRUCTION

A. Set, brace, and secure edge forms, bulkheads, and intermediate screed guides to required lines, grades, and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least 24 hours after concrete placement.

B. Clean forms after each use and coat with form-release agent to ensure separation from concrete without damage.

3.4 STEEL REINFORCEMENT INSTALLATION

A. Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.

3.5 JOINTS

A. General: Form construction, isolation, and contraction joints and tool edges true to line, with faces perpendicular to surface plane of concrete. Construct transverse joints at right angles to centerline unless otherwise indicated.

B. Construction Joints: Set construction joints at side and end terminations of paving and at locations where paving operations are stopped for more than one-half hour unless paving terminates at isolation joints.

C. Isolation Joints: Form isolation joints of preformed joint-filler strips abutting concrete curbs, catch basins, manholes, inlets, structures, other fixed objects, and where indicated.

D. Contraction Joints: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of the concrete thickness:

E. Edging: After initial floating, tool edges of paving, gutters, curbs, and joints in concrete with an edging tool to a 3/8-inch radius. Repeat tooling of edges after applying surface finishes.

3.6 CONCRETE PLACEMENT

A. Moisten subbase to provide a uniform dampened condition at time concrete is placed. Do not place concrete around manholes or other structures until they are at required finish elevation and alignment.

B. Comply with ACI 301 requirements for measuring, mixing, transporting, and placing concrete.

C. Deposit and spread concrete in a continuous operation between transverse joints. Do not push or drag concrete into place or use vibrators to move concrete into place.

D. Screed paving surface with a straightedge and strike off.

E. Commence initial floating using bull floats or darbies to impart an open-textured and uniform surface plane before excess moisture or bleedwater appears on the surface. Do not further disturb concrete surfaces before beginning finishing operations or spreading surface treatments.

3.7 FLOAT FINISHING

A. General: Do not add water to concrete surfaces during finishing operations.

B. Float Finish: Begin the second floating operation when bleedwater sheen has disappeared and concrete surface has stiffened sufficiently to permit operations. Float surface with power-driven floats or by hand floating if area is small or inaccessible to power units. Finish surfaces to true planes. Cut down high spots and fill low spots. Refloat surface immediately to uniform granular texture.

1. Medium-to-Fine-Textured Broom Finish: Draw a soft-bristle broom across float-finished concrete surface, perpendicular to line of traffic, to provide a uniform, fine-line texture.

C. Slip-Resistive Aggregate Finish: Before final floating, spread slip-resistive aggregate finish on paving surface according to manufacturer's written instructions.

1. Cure concrete with curing compound recommended by slip-resistive aggregate manufacturer. Apply curing compound immediately after final finishing.

2. After curing, lightly work surface with a steel-wire brush or abrasive stone and water to expose nonslip aggregate.

3.8 CONCRETE PROTECTION AND CURING

A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.

B. Comply with ACI 306.1 for cold-weather protection.

C. Evaporation Retarder: Apply evaporation retarder to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete but before float finishing.

D. Begin curing after finishing concrete but not before free water has disappeared from concrete surface.

E. Curing Methods: Cure concrete by moisture curing, moisture-retaining-cover curing, curing compound or a combination of these.

3.9 PAVING TOLERANCES

A. Comply with tolerances in ACI 117 and as follows:

1. Elevation: 3/4 inch.

2. Thickness: Plus 3/8 inch, minus 1/4 inch.

3. Surface: Gap below 10-feet-long; unleveled straightedge not to exceed 1/2 inch.
4. Joint Spacing: 3 inches.

5. Contraction Joint Depth: Plus 1/4 inch, no minus.

6. Joint Width: Plus 1/8 inch, no minus.

3.10 REPAIR AND PROTECTION

A. Remove and replace concrete paving that is broken, damaged, or defective or that does not comply with requirements in this Section. Remove work in complete sections from joint to joint unless otherwise approved by Architect.

B. Protect concrete paving from damage. Exclude traffic from paving for at least 14 days after placement. When construction traffic is permitted, maintain paving as clean as possible by removing surface stains and spillage of materials as they occur.

C. Maintain concrete paving free of stains, discoloration, dirt, and other foreign material. Sweep paving not more than two days before date scheduled for Substantial Completion inspections.

END OF SECTION 321313 CONCRETE PAVING

SECTION 321373 - CONCRETE PAVING JOINT SEALANTS
PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Cold-applied joint sealants.
2. Hot-applied joint sealants.
3. Joint-sealant backer materials.
4. Primers.

1.2 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Samples: For each kind and color of joint sealant required.

C. Paving-Joint-Sealant Schedule: Include the following information:

1. Joint-sealant application, joint location, and designation.
2. Joint-sealant manufacturer and product name.
3. Joint-sealant formulation.
4. Joint-sealant color.

1.4 INFORMATIONAL SUBMITTALS

A. Product certificates.

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

A. Compatibility: Provide joint sealants, backing materials, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by joint-sealant manufacturer, based on testing and field experience.

2.2 COLD-APPLIED JOINT SEALANTS

A. Single-Component, Nonsag, Silicone Joint Sealant: ASTM D 5893/D 5893M, Type NS.

B. Single-Component, Self-Leveling, Silicone Joint Sealant: ASTM D 5893/D 5893M, Type SL.

C. Multicomponent, Nonsag, Urethane, Elastomeric Joint Sealant: ASTM C 920, Type M, Grade NS, Class 25, for Use T.

D. Single Component, Pourable, Urethane, Elastomeric Joint Sealant: ASTM C 920, Type S, Grade P, Class 25, for Use T.

E. Multicomponent, Pourable, Urethane, Elastomeric Joint Sealant: ASTM C 920, Type M, Grade P, Class 25, for Use T.

2.3 HOT-APPLIED JOINT SEALANTS

A. Hot-Applied, Single-Component Joint Sealant: ASTM D 6690, Type I.

B. Hot-Applied, Single-Component Joint Sealant: ASTM D 6690, Type I or Type II.

C. Hot-Applied, Single-Component Joint Sealant: ASTM D 6690, Type I, II, or III.

D. Hot-Applied, Single-Component Joint Sealant: ASTM D 6690, Type IV.

2.4 JOINT-SEALANT BACKER MATERIALS

A. Round Backer Rods for Cold- and Hot-Applied Joint Sealants: ASTM D 5249, Type 1, of diameter and density required to control sealant depth and prevent bottom-side adhesion of sealant.

B. Round Backer Rods for Cold-Applied Joint Sealants: ASTM D 5249, Type 3, of diameter and density required to control joint-sealant depth and prevent bottom-side adhesion of sealant.

C. Backer Strips for Cold- and Hot-Applied Joint Sealants: ASTM D 5249; Type 2; of thickness and width required to control joint-sealant depth, prevent bottom-side adhesion of sealant, and fill remainder of joint opening under sealant.

2.5 PRIMERS

A. Primers: Product recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated.

PART 3 - EXECUTION

3.1 INSTALLATION OF JOINT SEALANTS

A. Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated unless more stringent requirements apply.

B. Cleaning of Joints: Clean out joints immediately to comply with joint-sealant manufacturer's written instructions.

C. Joint Priming: Prime joint substrates where indicated or where recommended in writing by joint- sealant manufacturer.

D. Joint-Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions.

E. Install joint-sealant backings to support joint sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.

1. Do not leave gaps between ends of joint-sealant backings.
2. Do not stretch, twist, puncture, or tear joint-sealant backings.
3. Remove absorbent joint-sealant backings that have become wet before sealant application and replace them with dry materials.

F. Install joint sealants immediately following backing installation, using proven techniques that comply with the following:

1. Place joint sealants so they fully contact joint substrates.
2. Completely fill recesses in each joint configuration.
3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.

G. Tooling of Nonsag Joint Sealants: Immediately after joint-sealant application and before skinning or curing begins, tool sealants according to the following requirements to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint:

1. Remove excess joint sealant from surfaces adjacent to joints.

2. Use tooling agents that are approved in writing by joint-sealant manufacturer and that do not discolor sealants or adjacent surfaces.

H. Provide joint configuration to comply with joint-sealant manufacturer's written instructions unless otherwise indicated.

l. Clean off excess joint sealant as the Work progresses, by methods and with cleaning materials approved in writing by joint-sealant manufacturers.

END OF SECTION 321373 CONCRETE PAVING JOINT SEALANTS

SECTION 321723 - PAVEMENT MARKINGS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes painted markings applied to asphalt pavement.

1.2 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Samples: For each exposed product and for each color and texture specified.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Ennis-Flint.

2. Sherwin-Williams Company (The).

2.2 PERFORMANCE REQUIREMENTS

A. Accessibility Standard: Comply with applicable provisions in the USDOJ's "2010 ADA Standards for Accessible Design".

2.3 PAVEMENT-MARKING PAINT

A. Pavement-Marking Paint: MPI #32, solvent-borne traffic-marking paint.

1. Color: Match Existing

PART 3 - EXECUTION

3.1 PAVEMENT MARKING

A. Do not apply pavement-marking paint until layout, colors, and placement have been verified with Architect.

B. Allow paving to age for a minimum of 30 days before starting pavement marking.

C. Sweep and clean surface to eliminate loose material and dust.

D. Apply paint with mechanical equipment to produce pavement markings, of dimensions indicated, with uniform, straight edges. Apply at manufacturer's recommended rates to provide a minimum wet film thickness of 15 mils.

1. Apply graphic symbols and lettering with paint-resistant, die-cut stencils. Apply paint so that it cannot run beneath stencil.

2. Broadcast glass beads uniformly into wet markings at a rate of 6 lb/gal.

END OF SECTION 321723 PAVEMENT MARKINGS

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Summary:

Scope of Work:

The objective of these specifications is to provide an assembled and installed automatic irrigation system, which will efficiently irrigate all areas to be covered and shall prove satisfactory in all aspects to the owner.

Design: The City of Wyoming's irrigation contractor shall design and install the system. The work shall be limited to the construction area. Locations of all sprinkler heads, valves, piping, wiring, etc. shall be established by the Contractor at the time of construction. A drawing showing the system shall be provided to the City of Wyoming Facilities team for their review. All components shall be compatible with the existing irrigation system. Any substitutions shall be approved by the City of Wyoming Facilities team.

Unless otherwise specified or indicated on the drawings, the construction of the sprinkler system shall include the furnishing, installing and testing of: Valves, gate valves, control valves, controllers, electric wire, pumps, controls, and all necessary specialties. The removal and/or restoration of existing improvements, excavating and backfill, and all other work in accordance with the plans and specifications shall be included as required for a complete system.

All work herein specified or called for on the drawings shall be executed in accordance with all governing ordinances, laws and regulations that meet all local conditions. Additionally, any changes and/or additions in the work necessary to meet these ordinances, laws, regulations, and/or conditions will be made without additional cost to the Owner.

Adjustments of heads shall be made as deemed necessary and approved by Architect to assure 100% coverage.

The Contractor shall take out all required permits, arrange for all necessary inspections, and shall pay any fees and expenses in conjunction with the same as a part of the work under this contract.

Equipment, Tools, and Labor: The Contractor shall furnish all such equipment, tools and labor necessary to pursue work in the acceptable manner, to a speedy completion. This contract is based on the Contractor furnishing and using his own equipment, tools, and labor that are suitable to carry out this contract in a first class manner, unless herein specified.

Owner's Supervision: The Owner assumes no responsibility in the supervision and inspection of the work involved in the execution of this contract beyond insuring to the Owner's satisfaction, that the plans and specifications are being properly interpreted. This supervision and checking will not relive the Contractor of any responsibility for the performance of his work in accordance with the plans and these specifications.

Award of Contract: The Owner reserves the right to accept a bid other than the lowest.

Related Sections:

Division 02, Section 'Excavating, Filling and Grading'.

Division 02, Section 'Landscaping'.

Submittals:

Product Data, Shop Drawings, and Samples: Shop drawings on all equipment and systems to be furnished shall be provided for review within 30 days of contract award.

As Built Drawings: After completion of the piping installation, the Contractor shall furnish an “as built”drawing showing all sprinkler heads, valves, drains, and pipelines to scale with dimensions where required. Instruction sheets and parts list covering all operating equipment will be bound into a folder and furnished to the Owner in duplicate.

Quality Assurance:

Qualifications: Installer shall have satisfactorily installed acceptable underground sprinkler system(s) on at least five (5) other projects of comparable complexity. A list of these shall be provided with the proposal.

Regulatory Requirements and References: All work herein specified or called for on the drawings hall be executed in accordance with all governing ordinances, laws and regulations that meet all local conditions. Additionally, any changes and/or additions in the work necessary to meet theses ordinances, laws, regulations, and/or conditions will be made without additional cost to the Owner.

Delivery, Storage, and Handling:

Prevent damage to system component during loading, transporting, and unloading.

Store components in a dry, clean location.

Contractor shall arrange his material storage so as not to interfere with the Owner’s operation of the job.

The Contractor shall provide and pay for all transportation required to deliver and remove from the site all materials and equipment as required for all the work shown and specified.

Project/Site Conditions:

Utilities and Protection: The Owner shall make available to the Contractor all of the necessary information regarding the exact location of existing utilities, and shall mark the location of such utilities and/or any underground obstructions, both at the site, and on all copies of the installation plans. The Contractor shall be liable for the damages to and the cost of repairing or replacing any buried conduit, cables, or piping encountered during the installation of the work, unless they were not marked or he was not previously informed of such underground utilities. If the Contractor is aware of such buried lines, he shall immediately have the incurred damages repaired at his own expense. Conversely, the Owner shall be liable for the cost of replacing or repairing damages to any of those existing utilities of which the Contractor had not been previously informed.

Sequencing and Scheduling:

Coordinate all work with job site superintendent, and all applicable trades.

Warranty:

For a period of one-year from the date of final acceptance of the work performed under this contract, the Contractor shall promptly furnish, without cost to the Owner, any and all parts and labor, which prove defective in material or workmanship.

In the fall following the installation, the Contractor shall winterize the system and the following spring shall put the system back into operation. Winter damage due to improper winterization is the responsibility of the Contractor.

It shall be the Contractor’s responsibility to insure and guarantee complete coverage of the areas shown on the drawings to be irrigated. He shall also guarantee the satisfactory operations of the entire system, and the workmanship and restoration of the area. Adjustment of the sprinkler heads and automatic equipment will be done by the Contractor, upon completion of installation.

Acceptable Manufacturers:

Match existing irrigation system components.

Materials:

All materials to be incorporated in this system shall be new and without flaws or defects and of quality and performance as specified and meeting the requirements of this system. All material averages at the completion of the installation are property of the Contractor and are to be removed from this site.

Pipe and Fittings: Pipe sizes shall conform to those shown on the drawings. No substitutions of smaller pipe sizes will be permitted but substitutions of larger sizes may be approved. All pipe damaged or rejected because of defects shall be removed from the site at the time of said rejection.

Mainline Piping: Mainline piping shall be rigid unplasticized PVC Class 160 psi working pressure extruded from virgin parent material of the type specified on the drawings. The pipe shall be homogeneous throughout and free from visible cracks, holes, foreign materials, blisters, deleterious, wrinkles, and dents.

Lateral Piping: All lateral pipes shall be flexible, non-toxic polyethylene pipe bearing the NSF seal, PE-3408. All sizes shall have a minimum of 100 psi working pressure rating. All stainless steel screw clamps shall be used to secure joints. All plastic pipe shall be continuously marked with the manufacturer's name, pipe size, and schedule.

Plastic Pipe Fittings and Connections: All plastic pipe fittings to be installed shall be molded fittings manufactured of the same material as the pipe and shall be used. Slip fittings socket taper shall be so sized that a dry unsoftened pipe end, conforming to these special provisions, can be inserted no more than halfway into the socket. Plastic saddles and flange fittings will not be permitted. Only schedule 80 pipe may be threaded.

Controllers:

Utilize the existing Irrigation system controller.

Sprinkler Heads:

Gear Heads:

The sprinkler shall be of the gear driven type, capable of covering 36-40 foot radius at 40 psi.
The sprinkler shall be available with 8 nozzles ranging from .8 gpm to 9.75 gpm. All sprinklers shall be available in a full and part circle type. It shall be oil lubricated with a vandal resistant internal drive assembly.

Fixed Spray Heads:

The full or part circle pop-up spray sprinkler shall be capable of covering 5 – 15 foot radius at 20 – 40 psi. The sprinkler shall have a matched precipitation rate (MPR) plastic nozzle with an adjusting screw capable of regulation the radius and flow.

The sprinkler shall be available in 3", 4" 6" or 12" pop up heights.

The sprinkler shall be capable of low-pressure sealing @ 15 psi.

Electric Valve:

If required, the remote control valve shall be a normally closed 24 volt, A.C. cycle solenoid actuated globe pattern diaphragm type capable of having a flow rate of as low as .25 gpm and pressures as high as 200 psi. The valve shall have a flow control stem with wheel handle for regulation or shutting off the flow of water and a bleed plug for manual operation without electrically energizing the solenoid cell.

Electric valve installation. All electric valves shall be enclosed in a minimum ten-inch (10") width valve box or pit. Corrugated plastic tile shall be used as a pit extension under valve box as required. Quick Coupler Valve: The quick coupler valve shall be as provided for blow out of system in fail. It is to be installed on a galvanized three-elbow swing joint.

Examination:

Each bidder should visit the site of the proposed work and fully acquaint himself with the conditions there relating to construction and labor, and should fully inform himself as to the facilities involved, the difficulties, and restrictions attending the performance of the Contract. The bidder should thoroughly examine and familiarize himself with Drawings, Technical Specs, and all other bid and Contract Documents. The Contractor by the execution of the contract shall in no way be relieved of any obligation under it due to his failure to receive or examine any form of legal document or to visit the site and acquaint himself with the conditions there existing and the Owner will be justified in rejecting any claim thereof.

Installation:

Excavating and Backfilling (also See Section 022200):

The Contractor shall do all necessary excavating and backfilling required for proper installation of the work excepting as noted on the plans.

On sodded areas the Contractor will remove and replace the sod where possible from the trench area to the necessary width and depth required to facilitate his installation.

When backfilling, all backfill material shall be free from rock, large stone or other unsuitable substances to prevent damage to the pipe. Backfilling of trenches containing plastic pipe and copper pipe shall be done when the pipe is cool to avoid excessive contraction in cold weather. In addition, all backfill material will be compacted in 6" layers as it's brought up to finish grade so as to insure that no settling results.

Trenches shall be made wide enough to allow at least 6" between parallel pipe lines.
Maintain all warning signs, shoring, barricades, flares, and warning lanterns as required by OSHA and local ordinances.
Minimum Grade Cover on Pipe:

Mainline	2" and smaller	Min.	14" of cover
Mainline	2 ½" & 3"	Min.	16" of cover
Mainline	4" and larger	Min.	24" of cover
Lateral Line	2" and smaller	Min.	10" of cover
Sleeving	All sizes	Min.	12" to 18" of cover

Rock Excavation:

If rock is encountered in the alignment and depth shown on the plan, the alignment and/or depth shall be adjusted in order to avoid its excavation if possible. If alignment and depth adjustment cannot be made and it becomes necessary to remove the same, the Contractor shall be paid for all the additional cost incurred in the handling of it.

Sleeves:

Where provided, all piping run under roadways, sidewalks, or areas of construction shall be sleeved with Schedule 40 PVC to allow repair.

Electrical Installation:

The Contractor will be required to make connections to the building's electrical system as is required for the proper operation of the automatic control system in accordance with National Electrical Code or local codes.

All control circuitry, whether electrical or hydraulic passing through the wall of the building or beneath a sidewalk, road, or drive shall be installed in as suitable sleeve, whereas in all other locations they shall be installed in the pipe trench and protected by the pipe whenever possible. The joining of all underground wires shall be by the use of wire nuts, covered with Scotch Lok per installation instructions provided by manufacturer. Wire shall meet UL requirements for direct burial.

Sleeve control wire under paving and walks.

Testing and Flushing:

The entire system shall be tested at the normal system working pressure and upon visual inspection of the ground, should any leak be found, it shall be promptly repaired. The line shall then be retested until satisfactory.

Flushing: After all piping, risers, and valves are in place and connected, but prior to installation of sprinkler heads, quick coupler assemblies, and hose valves, thoroughly flush piping system under a full head of water. Maintain flushing for three minutes through furthermost valve. After flushing, cap all risers.

Pressure Test: Hydrostatically test the piping system in place before backfilling. Maintain a minimum test pressure of 100 psi without pumping for a period of not less than one hour. Test is acceptable if no leakage or loss of pressure is evident during test period. Detect and repair all leaks. Retest the system until test pressure can be maintained for duration of the test. Conduct test in presence of Architect/Engineer or Owner's representative.

Operation Test: At conclusion of pressure test, install sprinkler heads, quick coupling assemblies, and hose valves, and test entire system for operation under normal operating pressure. Test is acceptable if system operates in a satisfactory manner, with uniform coverage of areas to be sprinkled.

Instructions: After completion and testing of the system the Contractor will instruct the Owner's personnel in the proper operation and maintenance of the system.

Adjusting and Cleaning:

The Contractor shall keep the premises free form rubbish and debris at all times.

All unused materials, rubbish and debris shall be removed from the site.

After installation has been completed, return area to its original condition.

Properly replant all plant material removed during the installation.
Replace all permanent features disturbed by installation of the system.

END OF SECTION 324900 – UNDERGROUND IRRIGATION SYSTEM

Note:

Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

Summary:

This Section includes landscape planting, edging, and bark mulch in surface planting areas.
Related Sections include the following:

Division 02 – Site Clearing, Earthwork, Lawns and Grass.

Division 01 – Section Alternates for Underground Irrigation System.

Submittals:

Product Data: Provide Owner with data sheets on each species to be used.

Contract Closeout Submittals: Provide Owner with maintenance schedule as listed in the specification section.

Quality Assurance:

Qualifications of Workmen: Provide at least one person who shall be present at all times during execution of this portion of the work, who shall be thoroughly familiar with the type of materials being installed, and the proper materials and methods for their installation, and who shall direct all work performed under this Section.

Standards:

All planting material shall meet or exceed the specifications of Federal, State, and County laws requiring inspection for plant disease and insect control.

Quality shall conform with the current edition of: Horticultural Standards for Number One Grade Nursery Stock" as adopted by the American Association of Nurserymen.

Contractor shall be required to allow Architect to review plant material at the nursery prior to site delivery.

A preinstallation conference may be called to address concerns related to timing, seasonal concerns, weather conditions, or execution.

Delivery, Storage, and Handling:

Properly store all products in accordance with manufacturer's recommendations.

Project/Site Conditions:

Preliminary Investigations: The Contractor shall visit the site, and make his own interpretation of conditions based on his investigation of existing conditions, and on soil conditions. Where underground services, utilities, structures, etc are located on the drawings or given at the site, they are based on available records, but are not guaranteed to be complete or correct. They are merely available for assistance.

Sequencing and Scheduling:

Coordinate all work with job site superintendent, and all applicable trades.

Warranty:

All plantings shall carry a full replacement guarantee for one full growing year from the date of planting.

Any tree or shrub that in the opinion of the Architect required replacement shall immediately be removed from the site, and shall be replaced in proper season with a plant of equal specifications as the original planting.

Replaced plant material will carry this same guarantee.

The Contractor will not be responsible for plant material that has been damaged by vandalism, fire, removal, relocation, losses due to abnormal weather conditions, or other activities beyond the Contractor's control.

Maintenance and Replacement:

The Contractor shall be responsible for keeping all plant material and lawn areas, the work performed by him under the contract in good condition by watering, spraying, cultivating, weeding, and replacing displaced mulch.

Upon completion of the work in progress period, and before final acceptance by the Architect, the Contractor shall replace plant material which may be damaged or is not in a healthy condition as determined by the Architect or Construction Manager. Any replacement necessary shall be done during the proper accepted seasonal planting period, and at no additional cost to the Owner. Additionally, the Contractor shall furnish to the Owner and the Architect a written schedule of advised maintenance procedures, which the Owner should follow during the guarantee period. This will include a watering schedule, which shows amounts of water to be applied, and frequency of application for all contractual plant material and lawn areas. This schedule must be submitted prior to final acceptance by the Architect. The Owner will undertake no maintenance until the final acceptance. Final acceptance will be given upon completion of all work as defined in the contract and above conditions are met satisfactorily as determined by the Architect.

Failure of the Owner to provide the advised maintenance in no way negates the responsibility of the Contractor to provide proper maintenance throughout the one-year guarantee period.

Products and Manufacturers:

See below.

Materials:

Fertilizer: Provide commercial balance fertilizer delivered to the site in bags labeled with the manufacturer's guaranteed analysis. If sorted at the site, protect fertilizer from the elements at all times.

Fertilizer 'A' (Starter): Complete (16-32-2 ratio) fertilizer shall be of a neutral character which source elements derived from organic sources and containing the following percentages of available plant nutrients: 6 ¼" lbs per 1,000 sq. ft.

Fertilizer 'B' (2 weeks after seeding): Green Court (12-13-13 ratio) fertilizer at 4 lbs. Per 1,000 sq. ft. from Michigan Turf and Ornamental.

Weed Control: Contractor to apply Round Up as needed to eliminate all weed growth.

Topsoil: Topsoil layer shall be 6" deep in area of ground cover and planting beds, and 4" deep in all lawn areas. Lawn areas to include all disturbed areas. The Owner's topsoil stockpile shall be located on the project site as directed by Construction Manager.

Planting Material: See Architectural Site Plan, landscape plant material per plan. Relocate existing Japanese Maple.

Planting Mulch: Hardwood bark 4" deep on all planting beds, and as called for on landscape plan(s).
Edging:

Description:

Edge all landscape beds and where shown on drawing. Edging shall be commercial grade aluminum edging 1/8" x 4" mill finish. Edging to be 16'-0" sections with line stakes at 48" o.c. and spliced stakes as required.

Quality/Material:

Edging to be 6063 alloy, T-6 hardness, and to have horizontal undulations along both faces. A 1/8" horizontal locking ridge is to protrude ½" from the top edge and a locking tab is to be punched at each end of 16'-0" section.

All stakes to be 6061 alloy, T-6 hardness, and to have burr's protruding back off the face of the stake. Splicing stakes to be 14" long, 2" wide with a 2" portion folded over, parallel to the face of the stake. The 2" folded portion to have 2 sets of punches. Line stakes to be 12-1/2" long, 1" wide, with a 2' portion folded over parallel to the face of the stake. The 2" folded over portion to have 1 set of punches.

Resource:

Call PermaLoc at 1-800-356-9660, for product information and availability.
Call SureLoc at 1-800-787-3562 for product information and availability.
Call Curv-Rite at 1-800-366-2878 for product information and availability.

Landscape Rocks:

Provide landscape rocks in the appropriate size and locations shown on the landscape drawing. Relocate (2) landscaped rocks from existing traffic island as noted. Meet with the Owner and Architect prior to installation. All landscape rocks subject to Owner and Architect approval.

Other Materials: All other materials not specifically described, but required for a complete and proper installation, shall be as selected by the Contractor subject to approval of the Architect/Engineer.

Examination:

Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to the proper and timely completion of the work. Do not proceed until unsatisfactory conditions have been corrected.

Preparation:

Spreading of Topsoil:

Rough grading will be performed under another contract. Landscaping Contractor will be responsible for fine grading.

Fine grading: Perform all fine grading required in planting areas, using topsoil Hand rake all areas to receive sod, removing rocks and debris over 1".

Installation:

Lawn Establishment (by Landscape Contractor):

Fertilizer (See Section "Materials" under this Section.

Fertilizer 'A': Install starter fertilizer at time of planting.
Fertilizer 'B': Install four weeks after planting.

Notify Owner of future fertilizer requirements at time of seeding.

Grass Seed: See Section "Lawns and Grass".

Landscape Planting:

Description: The plant material shall conform to the requirements listed on the Landscaping Plans. Plant material shall be normal and natural in character. All plant material is not true to variety and color, 'as specified in the plant list', shall be removed by the Contractor at his own expense and replaced with plant material of variety and color 'specified', unless substitutions are approved by the Architect. Upon delivery of plant material, the Contractor will be required to properly store the plant material, which is not used

immediately. Such material may be “heeled in”. Tags shall remain on plants until approval from Construction Manager or Architect/Engineer.

Names:

Plant names as given in “Standardized Plant Names,” 1942 Edition, American Joint Committee on Horticultural nomenclature.

Quality and Inspection: All plants shall be nursery grown, unless otherwise noted in the plant list. Materials taken from another source will be acceptable upon the consent of the Architect. All plants shall be subject to inspection in the nursery, or at the source. Plants shall not be pruned prior to delivery, except if otherwise stated in the plant list or upon approval of the Architect. The Owner shall be furnished with a Certificate of Inspection, and/or a Certificate of Compliance with Quarantine Regulations, wherever such rules and regulations apply. All plant material shall conform to the “American Standard for Nursery Stock” sponsored by the American Association of Nurserymen, Inc. October 27, 1980.

Measurements:

The height and spread of all plants shall be measured with the plants in normal position. The caliper of all trees specified as six inches (6”) or under, shall be measured six inches (6”) above the surface of the ground. Where minimum and maximum dimensions have been stated, the plant material shall be equally proportioned as to size, unless otherwise noted.

Shape and Form: Plant material shall be normal, natural, and typical for the variety, except in the case of hedge material, or where otherwise stated. All trees shall have a full, well-developed head. Trees which have crooked trunks crooked main leaders, have extensive dead branches, or are poorly branched will not be accepted, and will be removed by Contractor at his/her expense. Digging and Moving: Trees shall be adequately balled and burlapped of a diameter and a depth to incorporate all roots. No plants will be accepted if the ball of earth surrounding its roots has been cracked or broken preparatory to, or during the process of planting. Plants with exposed roots shall be carefully dug at the place of origin, and the root sufficiently protected from drying out by either puddling or covering with moist material. Plants that arrive on the site with a dried root system will not be accepted. Bare root material shall be either planted immediately, or heeled in, in an approved manner. No air pockets shall remain after the heeling in process. Broken roots shall be cut away upon arrival of the plant material. Root pruning may be done where such operation is deemed advisable by the Architect.

Planting Trees:

Special topsoil and fertilizer for planting trees shall be furnished by the Contractor. No planting holes for trees shall be dug until the proposed locations have been staked out on the ground by the Contractor, and until such locations have been approved by the Architect or by the Owner.

Each tree shall be planted in an individual hole that must be at least 18 inches greater in diameter than the ball or root system. Before backfilling, the burlap shall be cut away from the upper one-third of the ball, and the balance thereof loosened from the ball and spread out. Adjusting the tree from proper facing must be done before the burlap is removed. Backfilling must be done with special topsoil. This backfilling operation shall be done in layers not over nine inches in depth and each layer settled with water. Enough topsoil shall be used to bring the surface to finished grade when settled. A slight saucer shall be formed around each tree to hold additional water, except in clay type soil.

Trees shall then be approximately the same depth they were in the nursery or collecting grounds.

The special topsoil shall be a mixture of one half peat, and one half topsoil, and shall be used only when in a friable condition. In the backfill for each tree, an organic fertilizer such as Milorganite shall be mixed in at the rate of one and one half pounds per inch of caliper for each tree. The cost of special soil and fertilizer required shall be considered incidental to the cost of the plant as bid.

Planting of Shrubs and Hedges:

Shrub and hedge material (bare root, or balled and burlapped) shall be planted in the same manner as stated under Section G. Follow planting layout on Landscaping Plans.
Planting of Vines and Ground Covers:

Existing soil shall be excavated from planting bed to a depth of six inches. Planting mixture consisting of one half peat moss, and one half topsoil in a friable condition shall be evenly spread to a six inch thickness covering the entire bed. Organic fertilizer such as Milorganite shall be thoroughly incorporated into the planting mixture at the rate of three pounds per 100 square feet.

Mulch the entire bed with a one-inch thickness of granulated peat moss.

The ground cover planting holes shall be dug through the mulch with one of the following: Hand trowel, shovel, bulb planter, or hoe.

Before planting, biodegradable pots shall be crushed, and non-biodegradable pot shall be removed. Root systems of all potted plants shall be split or crumbled.

The ground cover either potted or bare root shall be planted so that the roots of the plant are surrounded by soil below the mulch. Potted plants shall be set so that the top of the pot is even with the existing grade. Bare toot plants shall be covered up to the crown of the plant or soil level. All plants shall be planted at an equal distance apart (plant and specifications specify the on center (o.c.) distance for the ground cover). The entire ground cover bed shall be thoroughly watered.

Pruning:

The Contractor shall prune plants only at time of planting to remove damaged branches, all dead wood, suckers, broken or badly bruised branches, after consultation with the Construction Manager. Excessively damaged and improperly pruned plants will not be acceptable.

Staking:

All trees shall be guyed or staked. The tree stakes shall be hardwood stakes, not less than two inches by two inches or steel fence posts. Stakes shall be wired to trees using rubber hose of sufficient length to keep the wires from coming in contact with the bark. Follow planting detail on Landscaping Plan.

Guy wire shall be 12-gauge minimum with white surveyor's flagging tape or approved equal attached to wire midway between each stake and tree.

Each tree shall be staked immediately following its planting, watering, and determination that it will settle to the proper grade. Plants shall stand plumb after staking.

Adjusting and Cleaning:
Remove trash and excess materials from project site.
Maintain paved areas in clean condition.
Remove all barriers and signs from project site at termination of establishment period.

Immediately after seeding, erect barricades and warning signs to protect seeded areas from traffic until grass is established.

END OF SECTION 329000 - LANDSCAPING

SECTION 329200 - TURF AND GRASSES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Seeding.

2. Hydroseeding.
3. Sodding.

B. Related Requirements:

1. Section 32 93 00 "Plants" for trees, shrubs, ground covers, and other plants as well as border edgings and mow strips.

1.3 DEFINITIONS

A. Finish Grade: Elevation of finished surface of planting soil.

B. Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. Pesticides include insecticides, miticides, herbicides, fungicides, rodenticides, and molluscicides. They also include substances or mixtures intended for use as a plant regulator, defoliant, or desiccant.

C. Pests: Living organisms that occur where they are not desired or that cause damage to plants, animals, or people. Pests include insects, mites, grubs, mollusks (snails and slugs), rodents (gophers, moles, and mice), unwanted plants (weeds), fungi, bacteria, and viruses.

D. Planting Soil: Existing, on-site soil; imported soil; or manufactured soil that has been modified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth. See Section 32 91 13 "Soil Preparation" and drawing designations for planting soils.

E. Subgrade: The surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before planting soil is placed.

1.4 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.5 INFORMATIONAL SUBMITTALS

A. Qualification Data: For landscape Installer.

B. Certification of Grass Seed: From seed vendor for each grass-seed monostand or mixture, stating the botanical and common name, percentage by weight of each species and variety, and percentage of purity, germination, and weed seed. Include the year of production and date of packaging.

1. Certification of each seed mixture for turfgrass sod. Include identification of source and name and telephone number of supplier.

C. Product Certificates: For fertilizers, from manufacturer.

D. Pesticides and Herbicides: Product label and manufacturer's application instructions specific to Project.

1.6 CLOSEOUT SUBMITTALS

A. Maintenance Data: Recommended procedures to be established by Owner for maintenance of turf during a calendar year. Submit before expiration of required maintenance periods.

1.7 QUALITY ASSURANCE

A. Installer Qualifications: A qualified landscape installer whose work has resulted in successful turf establishment.

1. Professional Membership: Installer to have minimum 5 years of experience installing similar sized project scope in the west Michigan area.

2. Experience: Three years' experience in turf installation in addition to requirements in Section 01 40 00 "Quality Requirements."

3. Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on Project site when work is in progress.

4. Personnel Certifications: Installer's field supervisor shall have certification in one of the following categories from the Professional Landcare Network:

a. Landscape Industry Certified Technician - Exterior.

b. Landscape Industry Certified Lawncare Manager.

c. Landscape Industry Certified Lawncare Technician.

5. Pesticide Applicator: State licensed, commercial.

1.8 DELIVERY, STORAGE, AND HANDLING

A. Seed and Other Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of compliance with state and Federal laws, as applicable.

B. Sod: Harvest, deliver, store, and handle sod according to requirements in "Specifications for Turfgrass Sod Materials" and "Specifications for Turfgrass Sod Transplanting and Installation" sections in TPI's "Guideline Specifications to Turfgrass Sodding." Deliver sod within 24 hours of harvesting and in time for planting promptly. Protect sod from breakage and drying.

C. Bulk Materials:

1. Do not dump or store bulk materials near structures, utilities, walkways and pavements,

or on existing turf areas or plants.

2. Provide erosion-control measures to prevent erosion or displacement of bulk materials;

discharge of soil-bearing water runoff; and airborne dust reaching adjacent properties, water conveyance systems, or walkways.

3. Accompany each delivery of bulk materials with appropriate certificates.

1.9 FIELD CONDITIONS

A. Planting Restrictions: Plant during one of the following periods. Coordinate planting periods with initial maintenance periods to provide required maintenance from date of Substantial Completion.

1. Spring Planting: May 1-June 15.

2. Fall Planting: August 15-September 15.

B. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit planting to be performed when beneficial and optimum results may be obtained. Apply products during favorable weather conditions according to manufacturer's written instructions.

PART 2 - PRODUCTS

2.1 SEED

A. Grass Seed: Fresh, clean, dry, new-crop seed complying with AOSA's "Rules for Testing Seeds" for purity and germination tolerances.

B. Seed Species:

1. Quality: State-certified seed of grass species as listed below for solar exposure.

2. Quality: Seed of grass species as listed below for solar exposure, with not less than 85 percent germination, not less than 95 percent pure seed, and not more than 0.5 percent weed seed:

3. Full Sun: Kentucky bluegrass (Poa pratensis), a minimum of three cultivars.

4. Sun and Partial Shade: Proportioned by weight as follows:

a. 50 percent Kentucky bluegrass (Poa pratensis).

b. 30 percent chewings red fescue (Festuca rubra variety).
c. 10 percent perennial ryegrass (Lolium perenne).

d. 10 percent redtop (Agrostis alba).

5. Shade: Proportioned by weight as follows:

a. 50 percent chewings red fescue (Festuca rubra variety).

b. 35 percent rough bluegrass (Poa trivialis).
c. 15 percent redtop (Agrostis alba).

2.2 TURFGRASS SOD

A. Turfgrass Sod: Certified Number 1 Quality/Premium, including limitations on thatch, weeds, diseases, nematodes, and insects, complying with "Specifications for Turfgrass Sod Materials" in TPI's "Guideline Specifications to Turfgrass Sodding." Furnish viable sod of uniform density, color, and texture that is strongly rooted and capable of vigorous growth and development when planted.

B. Turfgrass Species: Sod of grass species as follows, with not less than 85 percent germination, not less than 95 percent pure seed, and not more than 0.5 percent weed seed:

1. Full Sun: Kentucky bluegrass (Poa pratensis), a minimum of three cultivars.
2. Sun and Partial Shade: Proportioned by weight as follows:

a. 50 percent Kentucky bluegrass (Poa pratensis).

b. 30 percent chewings red fescue (Festuca rubra variety).
c. 10 percent perennial ryegrass (Lolium perenne).

d. 10 percent redtop (Agrostis alba).

3. Shade: Proportioned by weight as follows:

a. 50 percent chewings red fescue (Festuca rubra variety).

b. 35 percent rough bluegrass (Poa trivialis).
c. 15 percent redtop (Agrostis alba).

2.3 FERTILIZERS

A. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources of urea formaldehyde, phosphorous, and potassium in the following composition:

1. Composition: 1 lb/1000 sq. ft. of actual nitrogen, 4 percent phosphorous, and 2 percent potassium, by weight.

2. Composition: Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified soil-testing laboratory.

B. Slow-Release Fertilizer: Granular or pelleted fertilizer consisting of 50 percent water-insoluble nitrogen, phosphorus, and potassium in the following composition:

1. Composition: 20 percent nitrogen, 10 percent phosphorous, and 10 percent potassium, by weight.

2. Composition: Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified soil-testing laboratory.

2.4 MULCHES

A. Straw Mulch: Provide air-dry, clean, mildew- and seed-free, salt hay or threshed straw of wheat, rye, oats, or barley.

B. Fiber Mulch: Biodegradable, dyed-wood, cellulose-fiber mulch; nontoxic and free of plant- growth or germination inhibitors; with a maximum moisture content of 15 percent and a pH range of 4.5 to 6.5.

C. Nonasphaltic Tackifier: Colloidal tackifier recommended by fiber-mulch manufacturer for slurry application; nontoxic and free of plant-growth or germination inhibitors.

2.5 PESTICIDES

A. General: Pesticide, registered and approved by the EPA, acceptable to authorities having jurisdiction, and of type recommended by manufacturer for each specific problem and as required for Project conditions and application. Do not use restricted pesticides unless authorized in writing by authorities having jurisdiction.

B. Pre-Emergent Herbicide (Selective and Nonselective): Effective for controlling the germination or growth of weeds within planted areas at the soil level directly below the mulch layer.

C. Post-Emergent Herbicide (Selective and Nonselective): Effective for controlling weed growth that has already germinated.

2.6 EROSION-CONTROL MATERIALS

A. Erosion-Control Blankets: Biodegradable wood excelsior, straw, or coconut-fiber mat enclosed in a photodegradable plastic mesh. Include manufacturer's recommended steel wire staples, 6 inches long.

B. Erosion-Control Fiber Mesh: Biodegradable burlap or spun-coir mesh, a minimum of 0.92 lb/sq. yd., with 50 to 65 percent open area. Include manufacturer's recommended steel wire staples, 6 inches long.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas to be planted for compliance with requirements and other conditions affecting installation and performance of the Work.

1. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in soil within a planting area.

2. Suspend planting operations during periods of excessive soil moisture until the moisture content reaches acceptable levels to attain the required results.

3. Uniformly moisten excessively dry soil that is not workable or which is dusty.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

C. If contamination by foreign or deleterious material or liquid is present in soil within a planting area, remove the soil and contamination as directed by Landscape Architect and replace with new planting soil.

3.2 PREPARATION

A. Protect structures; utilities; sidewalks; pavements; and other facilities, trees, shrubs, and plantings from damage caused by planting operations.

1. Protect adjacent and adjoining areas from hydroseeding and hydromulching overspray.

2. Protect grade stakes set by others until directed to remove them.

B. Install erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

3.3 TURF AREA PREPARATION

A. General: Prepare planting area for soil placement and mix planting soil according to Section 32 91 13 "Soil Preparation."

B. Placing Planting Soil: Place and mix planting soil in place over exposed subgrade.

1. Reduce elevation of planting soil to allow for soil thickness of sod.

C. Moisten prepared area before planting if soil is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.

D. Before planting, obtain Landscape Architect's acceptance of finish grading; restore planting areas if eroded or otherwise disturbed after finish grading.

3.4 PREPARATION FOR EROSION-CONTROL MATERIALS

A. Prepare area as specified in "Turf Area Preparation" Article.

B. For erosion-control blanket or mesh, install from top of slope, working downward, and as recommended by material manufacturer for site conditions. Fasten as recommended by material manufacturer.

C. Moisten prepared area before planting if surface is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.

3.5 SEEDING

A. Sow seed with spreader or seeding machine. Do not broadcast or drop seed when wind velocity exceeds 5 mph.

1. Evenly distribute seed by sowing equal quantities in two directions at right angles to each other.

2. Do not use wet seed or seed that is moldy or otherwise damaged.

3. Do not seed against existing trees. Limit extent of seed to outside edge of planting saucer. B. Sow seed at a total rate of 4 to 5 lb/1000 sq. ft.

C. Rake seed lightly into top 1/8 inch of soil, roll lightly, and water with fine spray.

D. Protect seeded areas with slopes exceeding 1:4 with erosion-control blankets installed and stapled according to manufacturer's written instructions.

E. Protect seeded areas with erosion-control mats where indicated on Drawings; install and anchor according to manufacturer's written instructions.

F. Protect seeded areas with slopes not exceeding 1:6 by spreading straw mulch. Spread uniformly at a minimum rate of 2 tons/acre to form a continuous blanket 1-1/2 inches in loose thickness over seeded areas. Spread by hand, blower, or other suitable equipment.

1. Anchor straw mulch by crimping into soil with suitable mechanical equipment.

2. Bond straw mulch by spraying with asphalt emulsion at a rate of 10 to 13 gal./1000 sq. ft..

Take precautions to prevent damage or staining of structures or other plantings adjacent to mulched areas. Immediately clean damaged or stained areas.

3.6 HYDROSEEDING

A. Hydroseeding: Mix specified seed, slow-release fertilizer, and fiber mulch in water, using equipment specifically designed for hydroseed application. Continue mixing until uniformly blended into homogeneous slurry suitable for hydraulic application.

1. Mix slurry with fiber-mulch manufacturer's recommended tackifier.

2. Spray-apply slurry uniformly to all areas to be seeded in a one-step process. Apply slurry at a rate so that mulch component is deposited at not less than 1500-lb/acre dry weight, and seed component is deposited at not less than the specified seed-sowing rate.

3. Spray-apply slurry uniformly to all areas to be seeded in a two-step process. Apply first slurry coat at a rate so that mulch component is deposited at not less than 500-lb/acre dry weight, and seed component is deposited at not less than the specified seed-sowing rate. Apply slurry cover coat of fiber mulch (hydromulching) at a rate of 1000 lb/acre.

3.7 SODDING

A. Lay sod within 24 hours of harvesting. Do not lay sod if dormant or if ground is frozen or muddy.

B. Lay sod to form a solid mass with tightly fitted joints. Butt ends and sides of sod; do not stretch or overlap. Stagger sod strips or pads to offset joints in adjacent courses. Avoid damage to soil or sod during installation. Tamp and roll lightly to ensure contact with soil, eliminate air pockets, and form a smooth surface. Work sifted soil or fine sand into minor cracks between pieces of sod; remove excess to avoid smothering sod and adjacent grass.

1. Lay sod across slopes exceeding 1:3.

2. Anchor sod on slopes exceeding 1:6 with wood pegs spaced as recommended by sod manufacturer but not less than two anchors per sod strip to prevent slippage.

C. Saturate sod with fine water spray within two hours of planting. During first week after planting, water daily or more frequently as necessary to maintain moist soil to a minimum depth of 1-1/2 inches below sod.

3.8 TURF RENOVATION

A. Renovate turf damaged by Contractor's operations, such as storage of materials or equipment and movement of vehicles.

1. Reestablish turf where settlement or washouts occur or where minor regrading is required.

2. Install new planting soil as required.

B. Remove sod and vegetation from diseased or unsatisfactory turf areas; do not bury in soil. Remove topsoil containing foreign materials, such as oil drippings, fuel spills, stones, gravel, and other construction materials resulting from Contractor's operations, and replace with new planting soil.

D. Mow, dethatch, core aerate, and rake existing turf.

E. Remove weeds before seeding. Where weeds are extensive, apply selective herbicides as required. Do not use pre-emergence herbicides.

F. Remove waste and foreign materials, including weeds, soil cores, grass, vegetation, and turf, and legally dispose of them off Owner's property.

G. Till stripped, bare, and compacted areas thoroughly to a soil depth of 6 inches.

H. Apply soil amendments and initial fertilizer required for establishing new turf and mix thoroughly into top 4 inches of existing soil. Install new planting soil to fill low spots and meet finish grades.

1. Soil Amendment(s): according to requirements of Section 32 91 13 "Soil Preparation."

2. Initial Fertilizer: Slow-release fertilizer applied according to manufacturer's recommendations.

I. Apply seed and protect with straw mulch as required for new turf.

J. Water newly planted areas and keep moist until new turf is established.

3.9 TURF MAINTENANCE

A. General: Maintain and establish turf by watering, fertilizing, weeding, mowing, trimming, replanting, and performing other operations as required to establish healthy, viable turf. Roll, regrade, and replant bare or eroded areas and remulch to produce a uniformly smooth turf. Provide materials and installation the same as those used in the original installation.

1. Fill in as necessary soil subsidence that may occur because of settling or other processes. Replace materials and turf damaged or lost in areas of subsidence.

2. In areas where mulch has been disturbed by wind or maintenance operations, add new mulch and anchor as required to prevent displacement.

3. Apply treatments as required to keep turf and soil free of pests and pathogens or disease.

Use integrated pest management practices whenever possible to minimize the use of pesticides and reduce hazards.

B. Watering: Install and maintain temporary piping, hoses, and turf-watering equipment to convey water from sources and to keep turf uniformly moist to a depth of 4 inches.

1. Schedule watering to prevent wilting, puddling, erosion, and displacement of seed or mulch. Lay out temporary watering system to avoid walking over muddy or newly planted areas.

2. Water turf with fine spray at a minimum rate of 1 inch per week unless rainfall precipitation is adequate.

C. Mow turf as soon as top growth is tall enough to cut. Repeat mowing to maintain specified height without cutting more than one-third of grass height. Remove no more than one-third of grass-leaf growth in initial or subsequent mowings. Do not delay mowing until grass blades bend over and become matted. Do not mow when grass is wet. Schedule initial and subsequent mowings to maintain the following grass height:

1. Mow to a height of 3 inches.

D. Turf Postfertilization: Apply slow-release fertilizer after initial mowing and when grass is dry.

1. Use fertilizer that provides actual nitrogen of at least 1 lb/1000 sq. ft. to turf area.

3.10 SATISFACTORY TURF

A. Turf installations shall meet the following criteria as determined by Landscape Architect:

1. Satisfactory Seeded Turf: At end of maintenance period, a healthy, uniform, close stand of grass has been established, free of weeds and surface irregularities, with coverage exceeding 90 percent over any 10 sq. ft. and bare spots not exceeding 5 by 5 inches.

2. Satisfactory Sodded Turf: At end of maintenance period, a healthy, well-rooted, even- colored, viable turf has been established, free of weeds, open joints, bare areas, and surface irregularities.

3. Satisfactory Plugged Turf: At end of maintenance period, the required number of plugs has been established as well-rooted, viable patches of grass, and areas between plugs are free of weeds and other undesirable vegetation.

4. Satisfactory Sprigged Turf: At end of maintenance period, the required number of sprigs has been established as well-rooted, viable plants, and areas between sprigs are free of weeds and other undesirable vegetation.

B. Use specified materials to reestablish turf that does not comply with requirements, and continue maintenance until turf is satisfactory.

3.11 PESTICIDE APPLICATION

A. Apply pesticides and other chemical products and biological control agents according to requirements of authorities having jurisdiction and manufacturer's written recommendations. Coordinate applications with Owner's operations and others in proximity to the Work. Notify Owner before each application is performed.

B. Post-Emergent Herbicides (Selective and Nonselective): Apply only as necessary to treat already-germinated weeds and according to manufacturer's written recommendations.

3.12 CLEANUP AND PROTECTION

A. Promptly remove soil and debris created by turf work from paved areas. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.

B. Remove surplus soil and waste material, including excess subsoil, unsuitable soil, trash, and debris, and legally dispose of them off Owner's property.

C. Erect temporary fencing or barricades and warning signs as required to protect newly planted areas from traffic. Maintain fencing and barricades throughout initial maintenance period and remove after plantings are established.

D. Remove nondegradable erosion-control measures after grass establishment period.

3.13 MAINTENANCE SERVICE

A. Turf Maintenance Service: Provide full maintenance by skilled employees of landscape Installer. Maintain as required in "Turf Maintenance" Article. Begin maintenance immediately after each area is planted and continue until acceptable turf is established, but for not less than the following periods:

1. Seeded Turf: 60 days from date of Substantial Completion.

a. When initial maintenance period has not elapsed before end of planting season, or if turf is not fully established, continue maintenance during next planting season.

2. Sodded Turf: 60 days from date of Substantial Completion.

END OF SECTION 329200 TURF AND GRASSES

2025D

poligon®

A Division of PORTERCORP 4240 N. 136th AVE HOLLAND, MI 49424 (616) 888-3500

PROJECT NAME: CITY OF WYOMING

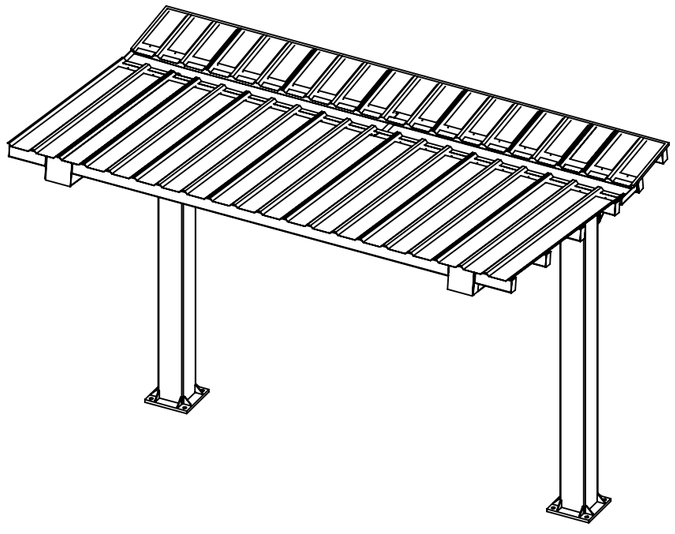
PROJECT LOCATION: WYOMING, MI

BUILDING TYPE: GULLWING 12X20

ROOF TYPE: MULTI-RIB

BUILDING NUMBER: P22752

ORDER NUMBER: 84164



DRAWING LIST:

SHEET NUMBER	DRAWING DESCRIPTION
CS	COVER SHEET
1	ARCHITECTURAL ELEVATIONS
2-2.1	ANCHOR AND FOOTING LAYOUT / DETAILS
3-3.1	STRUCTURAL FRAMING PLAN
4-4.2	FRAME CONNECTION DETAILS
5	ELECTRICAL VIEWS - N/A
6-6.1	ROOF LAYOUT
7-7.2	ROOF CONNECTION DETAILS

MANUFACTURER NOTES:

MATERIALS:

DESCRIPTION	ASTM DESIGNATION
TUBE STEEL	A500 (GRADE C)
SCHEDULE PIPE	A53 (GRADE B)
RMT PIPE	A519
LIGHT GAGE COLD FORMED	A1003 (GRADE 50)
STRUCTURAL STEEL PLATE	A36
ROOF PANELS (STEEL)	A653
ANCHOR BOLTS	SEE SHEET 2.1

GENERAL NOTES:

1. PORTER CORP IS RESPONSIBLE ONLY FOR THE STRUCTURAL DESIGN OF THE STEEL STRUCTURE (AND FOUNDATION DESIGN IF APPLICABLE) IT SELLS TO THE BUILDER. PORTER CORP OR THEIR ENGINEER IS NOT THE DESIGN PROFESSIONAL OR ENGINEER OF RECORD FOR THE CONSTRUCTION PROJECT. PORTER CORP IS NOT RESPONSIBLE FOR THE DESIGN OF ANY COMPONENTS OR MATERIALS NOT SOLD BY IT OR THEIR INTERFACE AND CONNECTION WITH THE STEEL STRUCTURE.
2. UNLESS NOTED OTHERWISE, THIS STRUCTURE WAS DESIGNED TO ONLY SUPPORT WHAT IS SHOWN ON THESE DRAWINGS. POLIGON MUST BE CONTACTED IF ANYTHING ELSE IS TO BE ATTACHED TO THIS STRUCTURE (WALLS, COLUMN WRAPS, RAILINGS, ETC.) SO THE DESIGN OF THIS STRUCTURE CAN BE REVIEWED AND POSSIBLY REVISED.
3. THE ENGINEERING SEAL FOR THE STRUCTURE DETAILED IN THESE DRAWINGS IS ONLY VALID IF PORTER CORP DESIGNS AND FABRICATES THE STEEL COMPONENTS. FABRICATING THE STEEL COMPONENTS ELSEWHERE VOIDS THE ENGINEERING PROVIDED BY PORTER CORP.
4. UNLESS NOTED OTHERWISE, THIS STRUCTURE WAS DESIGNED ASSUMING A 20' SEPARATION BETWEEN ANY ADJACENT STRUCTURE WITH AN EAVE HEIGHT EQUAL TO OR GREATER THAN THE EAVE HEIGHT OF THIS STRUCTURE (SEE SNOW DESIGN DATA). IF THAT SEPARATION DOES NOT EXIST AND THE GROUND SNOW LOAD (PG) IS GREATER THAN 0 PSF, POLIGON MUST BE CONTACTED SO THE DESIGN OF THIS STRUCTURE CAN BE REVIEWED AND POSSIBLY REVISED.
5. STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) SPECIFICATION MANUAL REFERENCED IN THE GOVERNING BUILDING CODE.
6. ALL WELDING IS PERFORMED BY AMERICAN WELDING SOCIETY (AWS) CERTIFIED WELDERS AND CONFORMS TO AWS D1.1 OR D1.3 AS REQUIRED.
7. PARTS SHOWN MAY BE UPGRADED DUE TO STANDARDIZED FABRICATION. REFER TO THE SHIPPING BILL OF MATERIALS AND FINAL INSTALLATION INSTRUCTIONS INCLUDED WITH THE STRUCTURE FOR POSSIBLE SUBSTITUTIONS AND IMPROVEMENTS.
8. FOR PROPER FIELD INSTALLATION OF THE BUILDING IT IS RECOMMENDED THAT THE PRIMARY FRAME INSTALLER AND THE ROOF INSTALLER HAVE A MINIMUM FIVE (5) YEARS DOCUMENTED EXPERIENCE INSTALLING THIS TYPE OF PRODUCT.
9. THE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK, AND SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, TECHNIQUES, SEQUENCES AND PROCEDURES, INCLUDING BRACING, SHORING, LAYDOWN AND PROTECTION OF CONSTRUCTION MATERIALS, ETC. TEMPORARY SHORING AND BRACING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
10. FOR PROPER FIELD INSTALLATION OF THE BUILDING IT IS RECOMMENDED THAT ELECTRIC WIRING, IF REQUIRED, BE RUN THROUGH THE STRUCTURAL MEMBERS BEFORE THE BUILDING IS ERECTED.
11. MAKING HOLES, CUTS OR MODIFICATIONS TO THE STRUCTURAL STEEL MEMBERS IS NOT PERMITTED IN THE FIELD WITHOUT SPECIFIC APPROVAL OF POLIGON.

CERTIFICATES:

MIAMI-DADE COUNTY CERTIFICATE OF COMPETENCY NO. 25-0730.11
PCI (POWDER COATING INSTITUTE) 4000 CERTIFIED

FABRICATOR APPROVALS:

CITY OF PHOENIX, AZ APPROVED FABRICATOR #C08-2010
CITY OF LOS ANGELES, CA APPROVED FABRICATOR #FB01596
CITY OF RIVERSIDE, CA APPROVED FABRICATOR #SF_000042
CITY OF HOUSTON, TX APPROVED FABRICATOR #470
CLARK COUNTY, NV APPROVED FABRICATOR #264
STATE OF UTAH APPROVED FABRICATOR 02008-14
AISC APPROVED FABRICATOR C-00026910
AWS CERTIFIED WELDING FABRICATOR #240707F

DESIGN CRITERIA:

GENERAL:
2021 MICHIGAN BUILDING CODE
RISK CATEGORY: II

DEAD LOAD:
ROOF DEAD LOAD: 2 PSF
FRAME DEAD LOAD: SELF WEIGHT

LIVE LOAD:
ROOF LIVE LOAD: 20 PSF

SNOW DESIGN DATA:
GROUND SNOW LOAD (Pg): 35 PSF
FLAT ROOF SNOW LOAD (Pf): 29 PSF
SNOW EXPOSURE FACTOR (Ce): 1.0
SNOW LOAD IMPORTANCE FACTOR (Is): 1.0
THERMAL FACTOR (Ct): 1.2
ROOF SLOPE FACTOR (Cs): 1.0
DRIFT SURCHARGE LOAD (Pd): 61.19 PSF
WIDTH OF SNOW DRIFT (w): 19.79 FT
MINIMUM HORIZONTAL SEPARATION DISTANCE (s): 0.167 FT

WIND DESIGN DATA:
BASIC WIND SPEED (V): 110 MPH
ALLOWABLE STRESS DESIGN WIND SPEED (Vasd): 85 MPH
GUST EFFECT FACTOR (G): 0.85
INTERNAL PRESSURE COEFFICIENT (GCpi): 0
WIND EXPOSURE: C

SEISMIC DESIGN DATA:
STEEL ORDINARY CANTILEVER COLUMN SYSTEMS
SEISMIC IMPORTANCE FACTOR (Ie): 1.0
SEISMIC DESIGN CATEGORY: B
SEISMIC SITE CLASS: D DEFAULT
SHORT SPECTRAL RESPONSE (Ss): 0.32
1-SEC SPECTRAL RESPONSE (S1): 0.08
DESIGN SHORT SPECTRAL RESPONSE (SDS): 0.33
DESIGN 1-SEC SPECTRAL RESPONSE (SD1): 0.13
SEISMIC RESPONSE COEFFICIENT (Cs): 0.26
RESPONSE MODIFICATION COEFFICIENT (R): 1.25
EQUIVALENT LATERAL FORCE PROCEDURE
SEE CALCULATIONS FOR ADDITIONAL DATA

ADDITIONAL CRITERIA:
COLUMN WRAP DESIGN AND MATERIALS NOT BY POLIGON
COLUMN WRAPS ASSUMED TO HAVE A DEAD WEIGHT OF 20 IBS/FT
MAX LATERAL SERVICE LOAD DEFLECTION IN STEEL COLUMN IS 0.285" AT 9'-8"
DESIGN AND MATERIAL, AND ATTACHMENT OF PNEUMATIC TUBE SYSTEM NOT BY POLIGON
PNEUMATIC TUBE SYSTEM ASSUMED LOAD IS 150 LBS

STATE OF MICHIGAN
Richelle Penn
License No. 6201314590
LICENSED PROFESSIONAL ENGINEER

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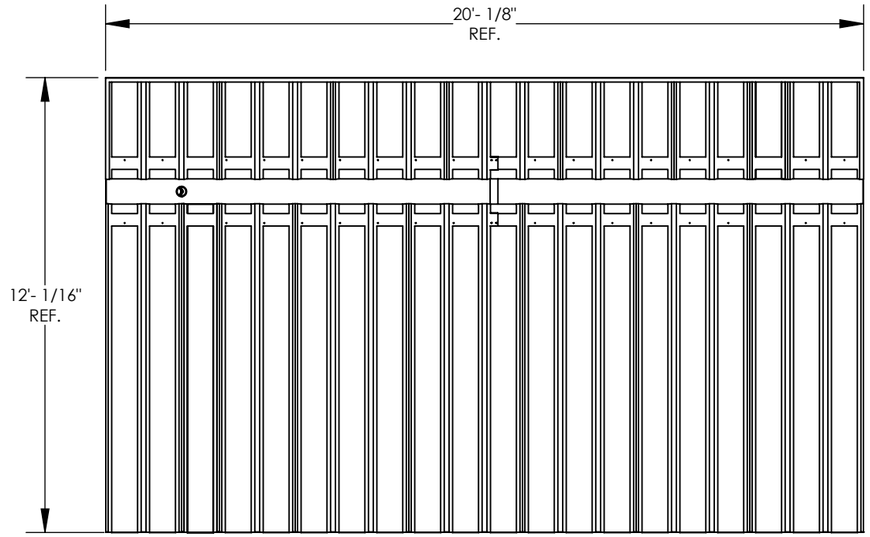
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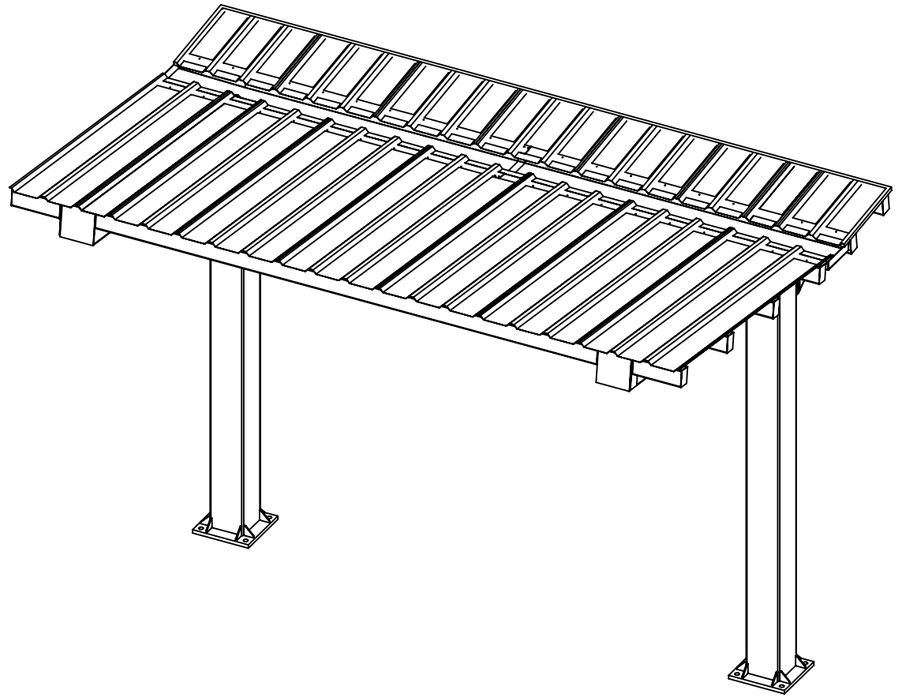
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FIELD SUPPORT: (616) 888-3504

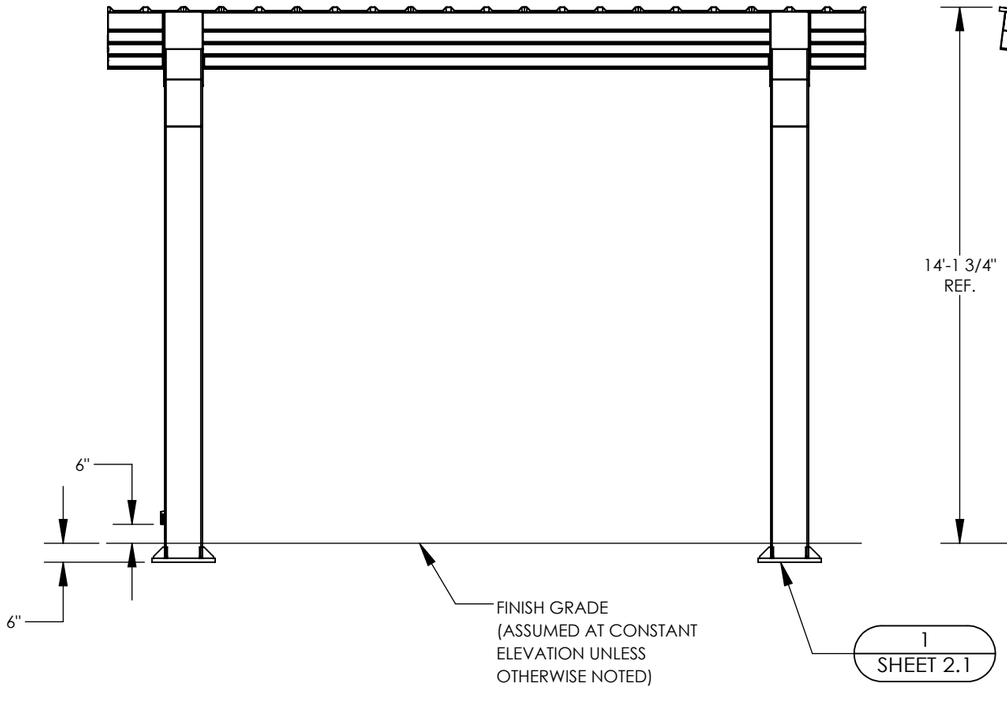
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REV LEVEL: A
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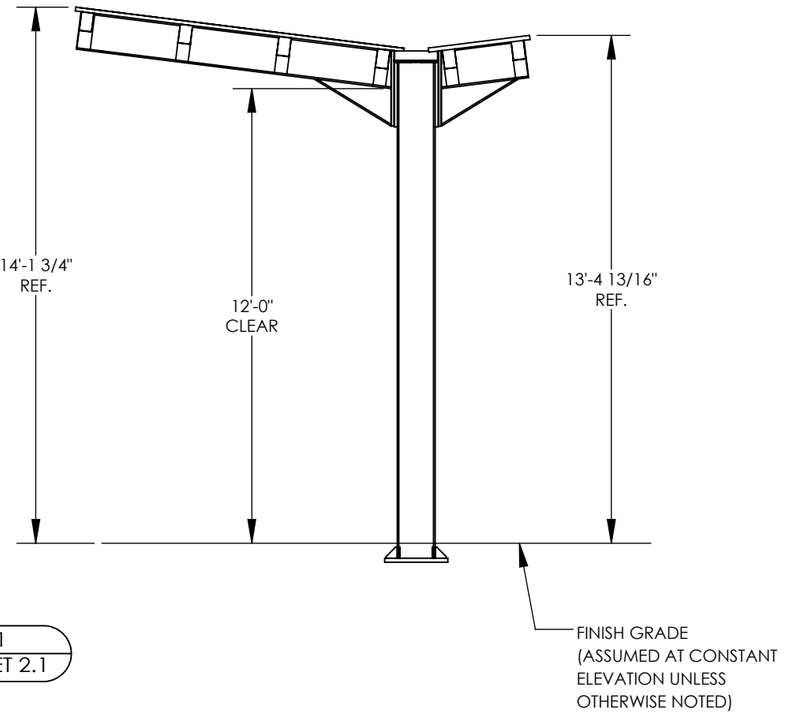
PROJECT: CITY OF WYOMING
PROJECT LOCATION: WYOMING, MI
DRAWING: COVER SHEET

SHEET
CS









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FIELD SUPPORT: (616) 888-3504

PRINT DATE: 10/30/2025
SCALE: 1:48
DRAWN BY: dylan.procter
REV LEVEL: A
CREATION DATE: 10/13/2017
ORDER NO: 84164
CAD MODEL: ~P22752

PROJECT: CITY OF WYOMING
PROJECT LOCATION: WYOMING, MI
DRAWING: ARCHITECTURAL ELEVATIONS

SHEET
1

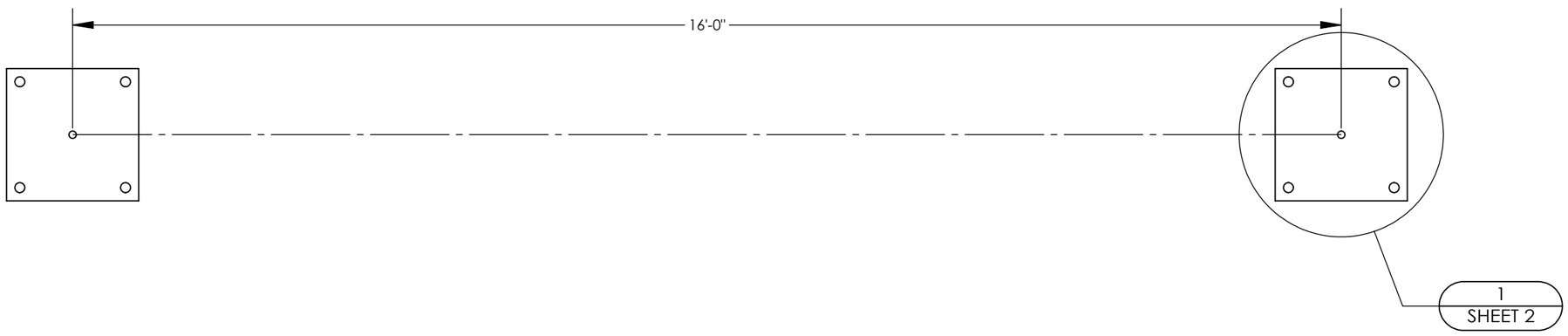
STATE OF MICHIGAN
Richelle Penn
License No. 6201314590
LICENSED PROFESSIONAL ENGINEER

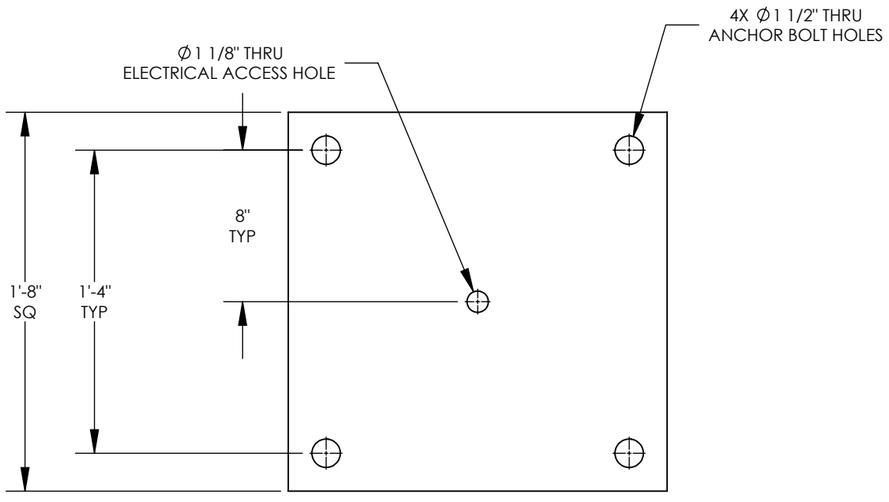
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ANCHOR AND FOOTING LAYOUT NOTES:

1. ANCHORS MUST BE CENTERED IN FOOTINGS
2. FOOTINGS MUST BE TURNED TO ALIGN WITH COLUMN AND TRUSS CENTERLINE.





1/2 ANCHOR BOLT PATTERN
BASE PLATE THICKNESS: 1-1/4"

Digitally signed by Richelle Penn
Date: 2025.10.30 14:07:56-04'00'

STATE OF MICHIGAN
Richelle Penn
License No. 6201314590
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CREATION DATE: 10/13/2017
ORDER NO: 84164
CAD MODEL: ~P22752

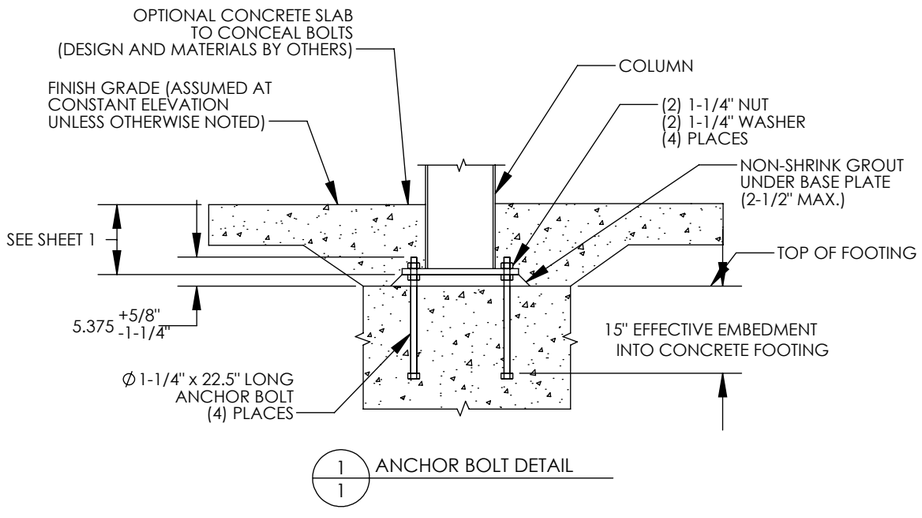
PROJECT: CITY OF WYOMING
PROJECT LOCATION: WYOMING, MI
DRAWING: ANCHOR AND FOOTING LAYOUT

SHEET
2

ANCHOR BOLT NOTES - EXTERNAL (ANCHOR BOLTS LOCATED OUTSIDE COLUMN):

1. ANCHOR RODS TO BE ASTM F1554 GRADE 55 TYPE S1 WITH "UNC" CLASS 2A THREADS, HEAVY HEX NUTS AND STANDARD CUT WASHERS, UNLESS OTHERWISE NOTED.
2. ANCHOR BOLTS SHALL BE EITHER "HEADED" OR "THREADED WITH NUT" AS DEFINED IN THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL.
3. HOOKED ANCHOR BOLTS ARE NOT ACCEPTABLE.
4. ACCURATE ANCHOR BOLT PLACEMENT IS CRITICAL. TO ENSURE THE ANCHOR BOLT LAYOUT MEETS THE DIMENSIONS REQUIRED ON THE DRAWINGS, SURVEY (OR MEASURE) THE LOCATION OF ALL ANCHOR BOLTS PRIOR TO POURING THE FOOTINGS. AN ADDITIONAL SURVEY (OR MEASUREMENT) SHOULD BE MADE AFTER THE FOOTINGS ARE POURED TO CONFIRM THE ANCHOR BOLTS DID NOT SHIFT DURING THE CONCRETE POUR.
5. THE MANUFACTURER STRONGLY RECOMMENDS USING ANCHOR BOLT TEMPLATES BECAUSE THEY SIGNIFICANTLY IMPROVE THE ACCURACY OF ANCHOR BOLT PLACEMENT. AN ANCHOR BOLT TEMPLATE IS PROVIDED WITH ANY ANCHOR BOLT KIT PURCHASED.
6. IF OUTSIDE CONSULTING ENGINEERS ARE DESIGNING THE FOUNDATIONS FOR THIS STRUCTURE, THEY MUST REFER TO THE MANUFACTURER'S CALCULATIONS FOR MINIMUM CONCRETE PROPERTIES (COMPRESSIVE STRENGTH, EDGE DISTANCE, ETC.) REQUIRED FOR THE ANCHOR BOLT DESIGN.
7. ELECTRICAL ACCESS HOLE IS ALWAYS LOCATED IN THE COLUMN BASE PLATE AS SHOWN. TEMPLATE MUST BE REMOVED BEFORE INSTALLING COLUMNS.
8. GROUT UNDER BASEPLATES SHALL BE NON-METALLIC, NON-SHRINK GROUT WITH MINIMUM f'c=6500 PSI.
9. THE CALCULATIONS FOR THIS STRUCTURE ASSUME A FIXED COLUMN BASE.
10. ADHESIVE ANCHORS MAY NOT BE SUBSTITUTED FOR THE CAST-IN-PLACE ANCHORS.

FOUNDATION DESIGN NOT BY POLIGON



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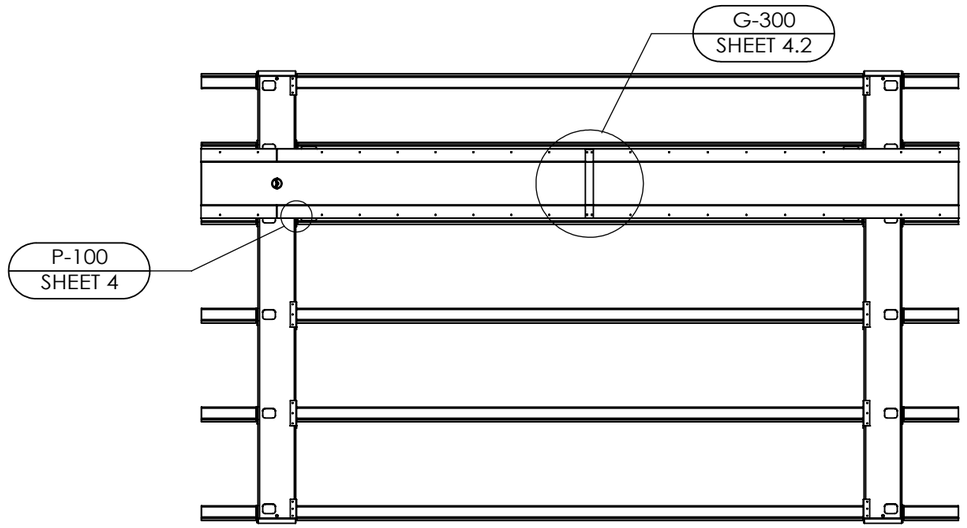
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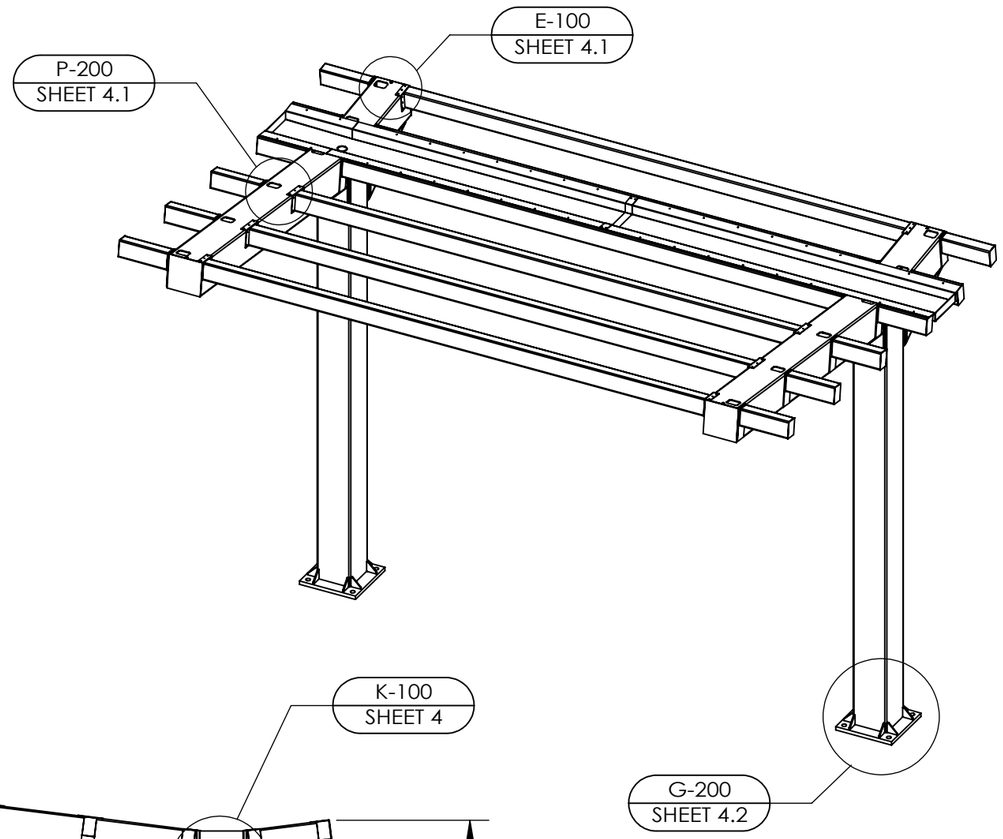
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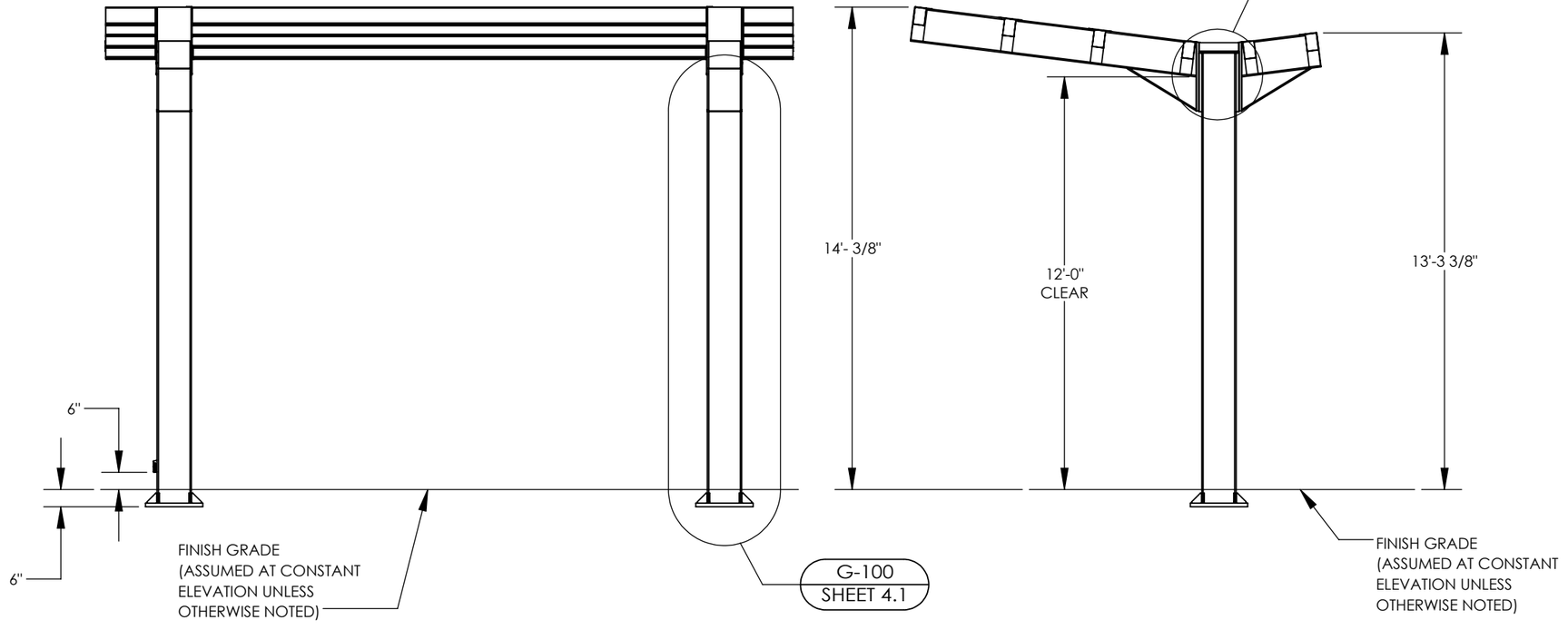
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DRAWN BY: dylan.procter
REV LEVEL: A
CREATION DATE: 10/13/2017
ORDER NO: 84164
CAD MODEL: ~P22752

PROJECT: CITY OF WYOMING
PROJECT LOCATION: WYOMING, MI
DRAWING: ANCHOR AND FOOTING DETAILS

SHEET
2.1







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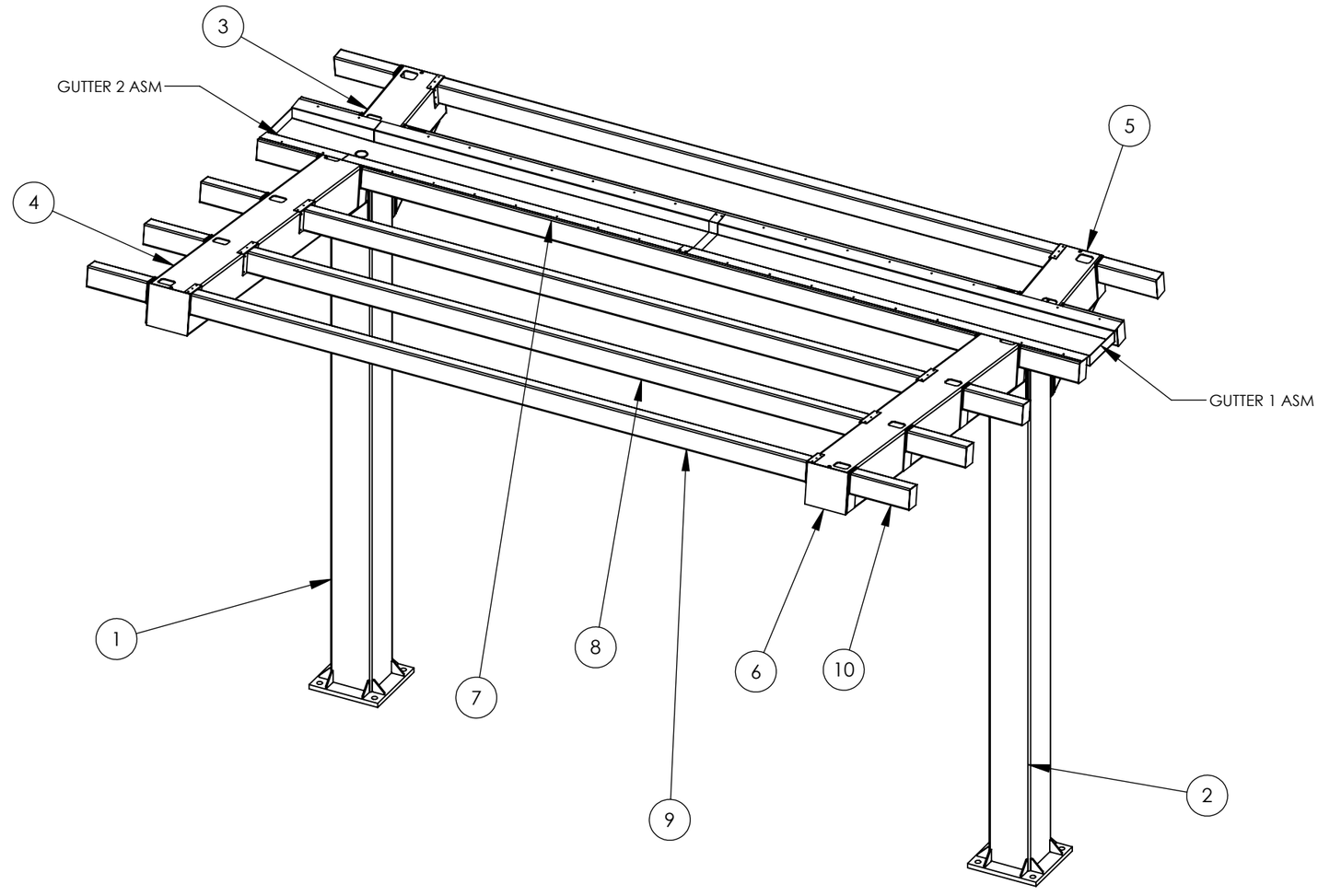
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PRINT DATE: 10/30/2025
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PROJECT: CITY OF WYOMING
PROJECT LOCATION: WYOMING, MI
DRAWING: STRUCTURAL FRAMING PLAN

SHEET
3



ITEM	QTY	PART NO.	DESCRIPTION	MATERIAL	WEIGHT
10	12	-	TAIL 1 ASM	HSS6"X4"X3/16"	19.93
9	2	-	EAVE 1 ASM	HSS6"X4"X3/16"	181.59
8	2	-	PURLIN 2 ASM	HSS6"X4"X3/16"	182.80
7	2	-	PURLIN 1 ASM	HSS6"X4"X3/16"	180.41
6	1	-	TRUSS 4 ASM	HSS12"X12"X1/4"	464.19
5	1	-	TRUSS 3 ASM	HSS12"X12"X1/4"	222.38
4	1	-	TRUSS 2 ASM	HSS12"X12"X1/4"	463.99
3	1	-	TRUSS 1 ASM	HSS12"X12"X1/4"	222.58
2	1	-	COLUMN 2 ASM	HSS12"X12"X1/4"	791.20
1	1	-	COLUMN 1 ASM	HSS12"X12"X1/4"	793.69

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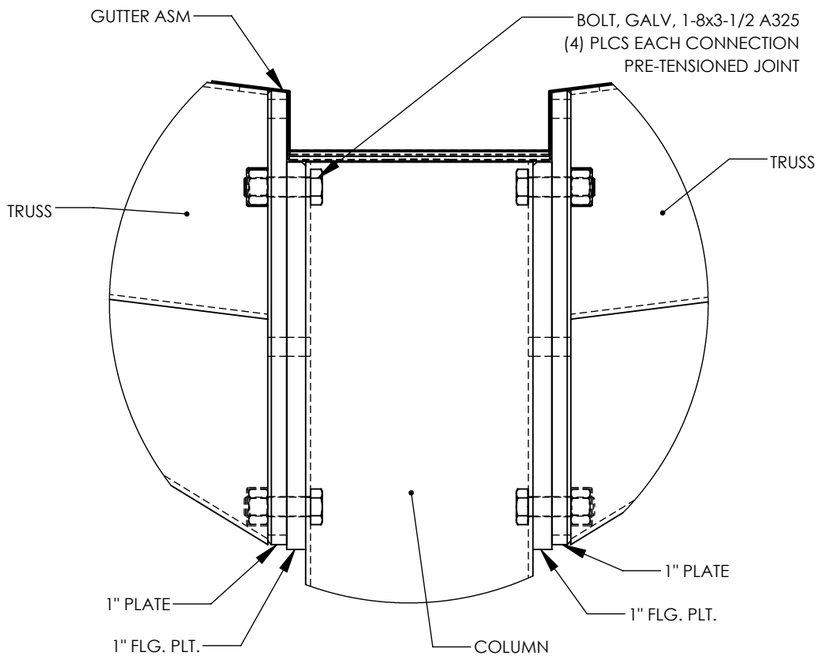
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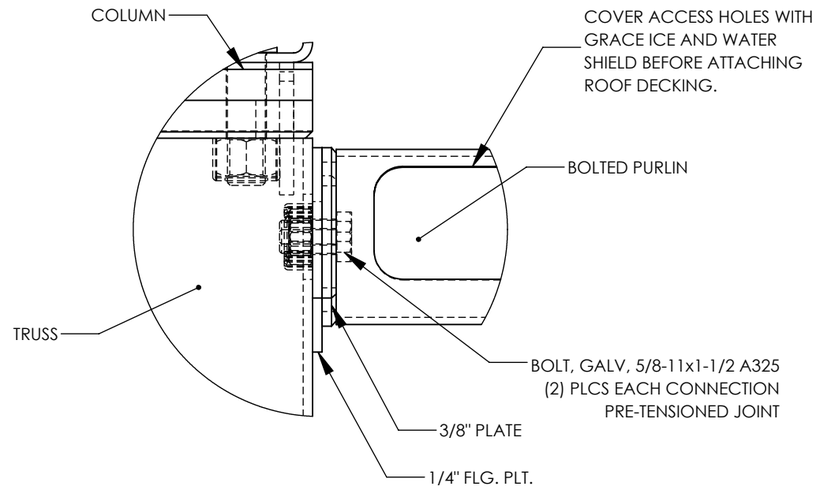
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CAD MODEL: ~P22752

PROJECT: CITY OF WYOMING
PROJECT LOCATION: WYOMING, MI
DRAWING: STRUCTURAL FRAMING PLAN

SHEET
3.1



COLUMN CONNECTIONS | K-100



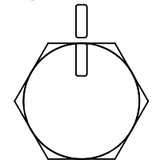
PURLIN CONNECTION | P-100

TURN-OF-NUT PRETENSIONING METHOD:

THESE STEPS ILLUSTRATE THE REQUIREMENTS OUTLINED IN THE AISC SPECIFICATION. THE ROTATION INDICATED IS ACCURATE FOR MOST BOLT DIAMETERS AND LENGTHS BUT IT IS THE RESPONSIBILITY OF THE INSTALLER TO MEET AISC REQUIREMENTS.

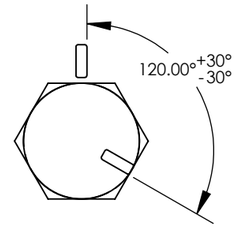
STEP ONE:

AFTER SNUG TIGHT, MATCH MARK PLATE



STEP TWO:

THEN TURN BOLT/NUT PAST SNUG TIGHT 1/3 TURN



CONNECTION NOTES:

1. ALL BOLTS SHOWN ON THESE DRAWINGS ARE ASTM F3125 (A325 TYPE 1) HIGH STRENGTH BOLTS (UNO) AND SHALL BE HOT DIPPED GALVANIZED PER ASTM F2329.
2. HIGH STRENGTH NUTS SHALL CONFORM TO ASTM A563 AND SHALL BE GALVANIZED PER ASTM F2329.
3. HIGH STRENGTH WASHERS SHALL CONFORM TO ASTM F436 AND SHALL BE GALVANIZED PER ASTM F2329.
4. UNLESS A SNUG-TIGHT JOINT IS PERMITTED IN THE CONNECTION DETAIL, ALL BOLTS ARE TO BE INSTALLED BY ONE OF THE FOLLOWING PRETENSIONING METHODS AS SPECIFIED IN THE AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS", SECTION 8:
   A. TURN-OF-NUT PRETENSIONING
5. THE SNUG-TIGHT CONDITION IS THE TIGHTNESS THAT IS ATTAINED WITH A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF AN IRONWORKER USING AN ORDINARY SPUD WRENCH TO BRING THE CONNECTED PLIES INTO FIRM CONTACT.
6. ANCHOR BOLTS NEED NOT BE TIGHTENED PAST SNUG-TIGHT.
7. WHEN INSTALLING BOLTS REFER TO SECTIONS 8.1 AND 8.2 OF THE "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS" FOR GUIDANCE.
8. LOCAL JURISDICTIONS MAY REQUIRE AN INSPECTOR TO BE PRESENT TO WITNESS HARDWARE INSTALLATION AND INDEPENDENT TESTING. INSPECTION REQUIREMENTS SHOULD BE VERIFIED BY INSTALLER PRIOR TO STEEL ERECTION.
9. ERECTION OF THE FRAMING MEMBERS WILL REQUIRE THE MAIN COLUMNS TO BE PLUMB SQUARE AND TIGHTENED TO THE TRUSSES AND/OR TENSION MEMBERS BEFORE INSTALLING THE PURLINS. PURLINS, IF REQUIRED, MUST BE AS SHOWN IN FRAMING PLAN.
10. TEMPORARY SHORING OR BRACING SHALL BE USED TO COMPACT THE JOINTS UNTIL THE CONNECTED PLIES ARE IN FIRM CONTACT PRIOR TO PRETENSIONING.
11. ALL BOLTS MUST BE LUBRICATED WITH WAX TO ASSIST IN PROPER TIGHTENING. TO LUBRICATE A BOLT IN THE FIELD, APPLY THE WAX STICK DOWN THE LENGTH OF THE BOLT'S THREADS.
12. TO PREVENT RUST STAINING OF FINISH, ALL METAL SHAVINGS MUST BE REMOVED AFTER INSTALLATION. ENSURE NO SHAVING ARE TRAPPED BETWEEN MATING SURFACES.
13. TOUCH-UP PAINT MUST BE APPLIED TO ALL EXPOSED FASTENERS. PERIODIC TOUCH-UP AT THESE CONNECTIONS IS REQUIRED.
14. ENSURE FRAME MEMBERS WITH DRAIN HOLES NEAR THE ENDS OF TUBES ARE INSTALLED FACING UP UNLESS SPECIFIED IN THE FRAME CONNECTION DETAILS.



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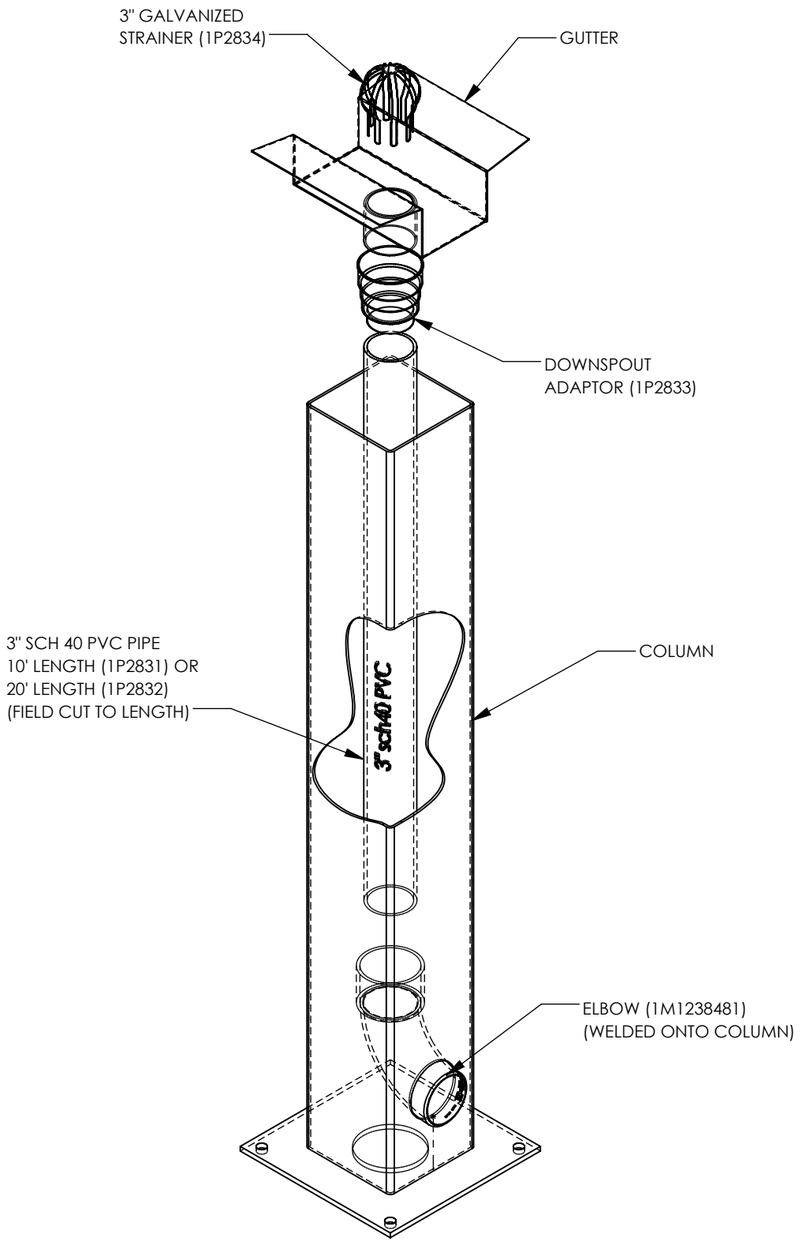
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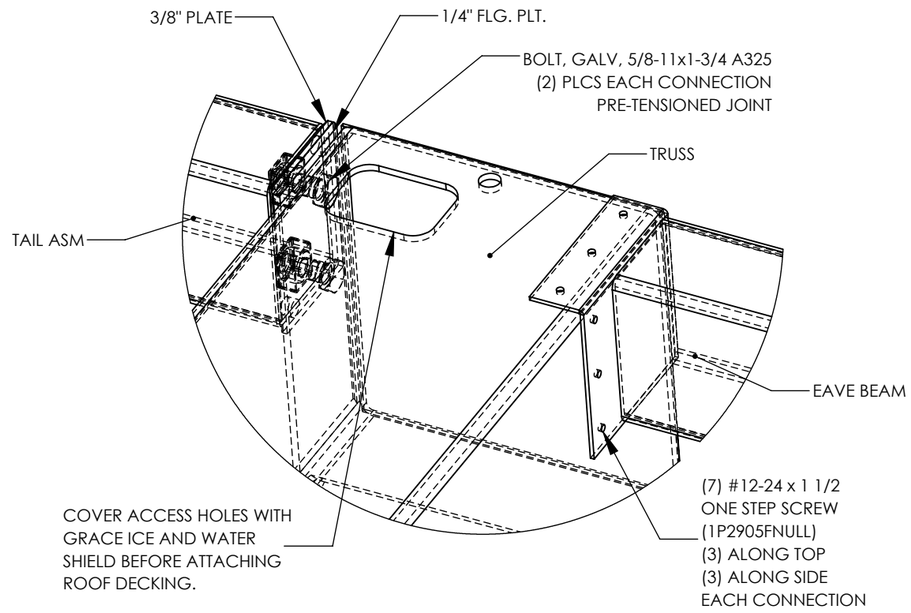
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REV LEVEL: A
CREATION DATE: 10/13/2017
ORDER NO: 84164
CAD MODEL: ~P22752

PROJECT: CITY OF WYOMING
PROJECT LOCATION: WYOMING, MI
DRAWING: FRAME CONNECTION DETAILS

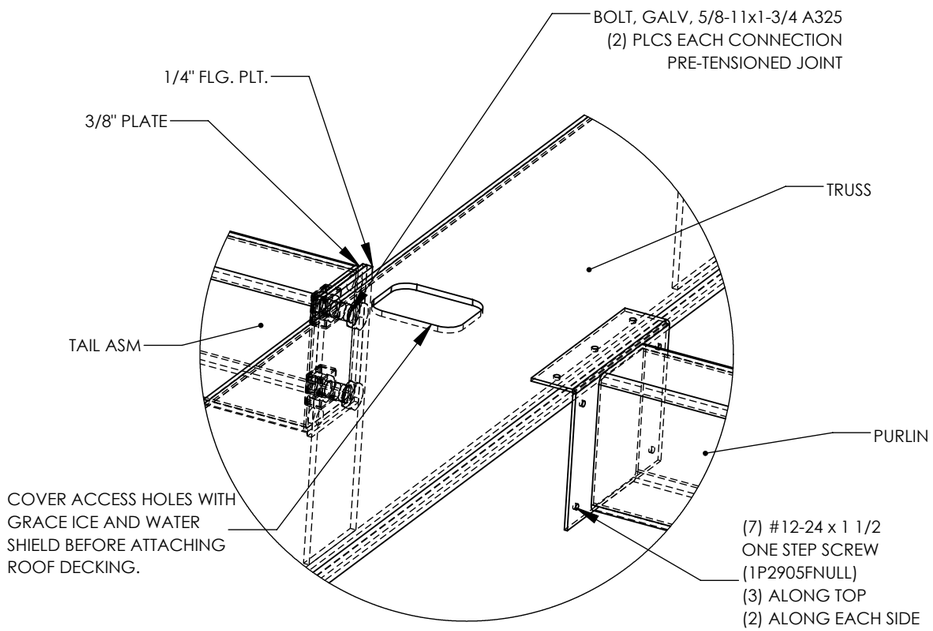
SHEET
4



INTERNAL GUTTER CONNECTION DETAIL | G-100



EAVE BEAM CONNECTION | E-100



PURLIN CONNECTION | P-200

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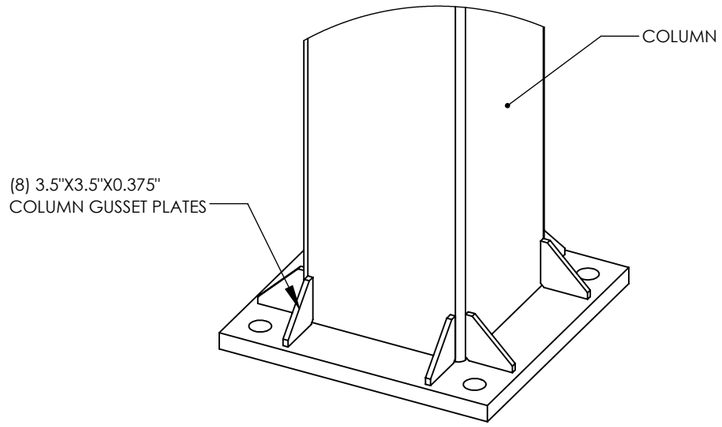
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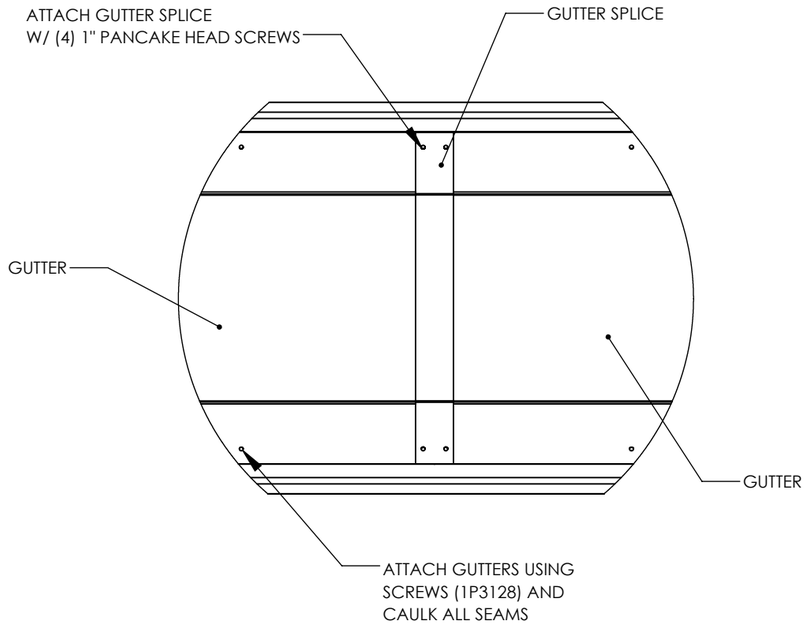
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REV LEVEL: A
CREATION DATE: 10/13/2017
ORDER NO: 84164
CAD MODEL: ~P22752

PROJECT: CITY OF WYOMING
PROJECT LOCATION: WYOMING, MI
DRAWING: FRAME CONNECTION DETAILS

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COLUMN GUSSET DETAIL | G-200



GUTTER SPLICE DETAIL | G-300

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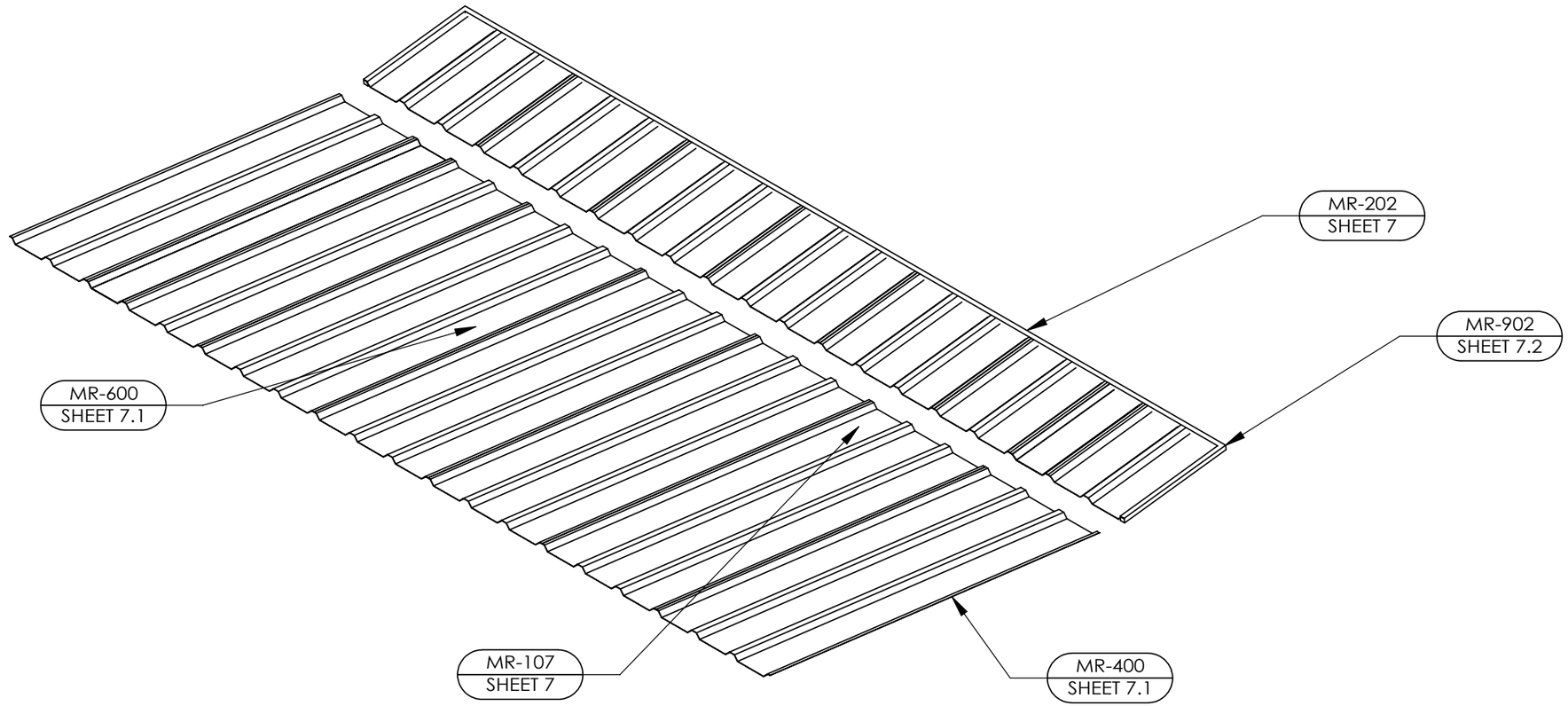
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REV LEVEL: A
CREATION DATE: 10/13/2017
ORDER NO: 84164
CAD MODEL: ~P22752

PROJECT: CITY OF WYOMING
PROJECT LOCATION: WYOMING, MI
DRAWING: FRAME CONNECTION DETAILS

SHEET
4.2



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PRINT DATE: 10/30/2025
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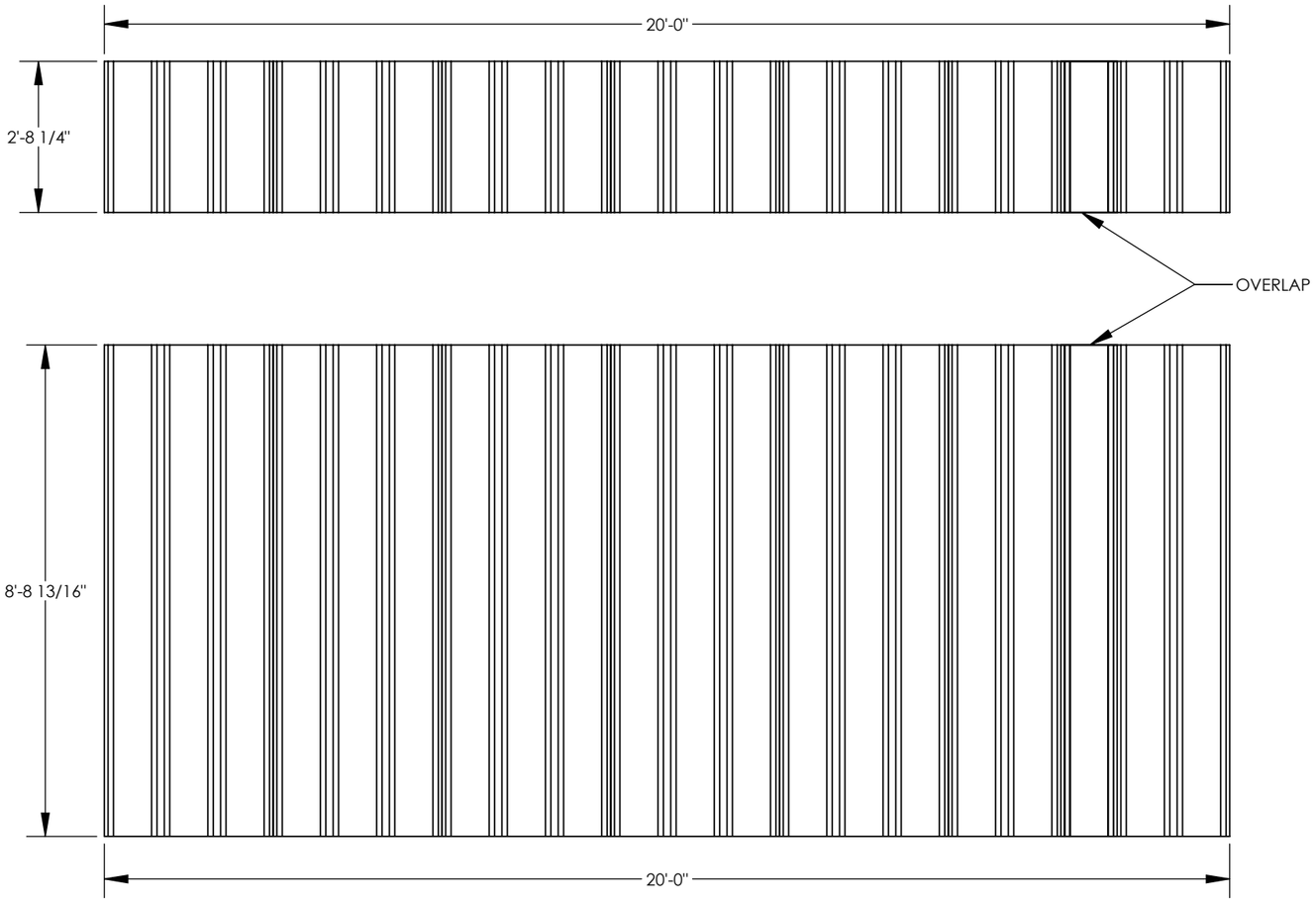
PROJECT: CITY OF WYOMING
PROJECT LOCATION: WYOMING, MI
DRAWING: ROOF OVERVIEW

SHEET
6

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MULTI-RIB NOTES:

1. THE DETAILS SHOWN ARE SUGGESTIONS OR GUIDELINES ON HOW TO ERECT THE SYSTEMS. THE INFORMATION SHOWN IS ACCURATE, BUT IT IS NOT INTENDED TO COVER ALL INSTANCES, BUILDING REQUIREMENTS, DESIGNS OR CODES. THE DETAILS MAY REQUIRE CHANGES OR REVISIONS DUE TO FIELD CONDITIONS.

2. IT SHALL BE THE RESPONSIBILITY OF THE ERECTOR TO ENSURE THAT THE DETAILS MEET PARTICULAR BUILDING REQUIREMENTS AND TO ASSURE ADEQUATE WATER TIGHTNESS.

3. THE ERECTOR SHOULD THOROUGHLY FAMILIARIZE HIMSELF/HERSELF WITH ALL ERECTION INSTRUCTIONS BEFORE STARTING WORK.

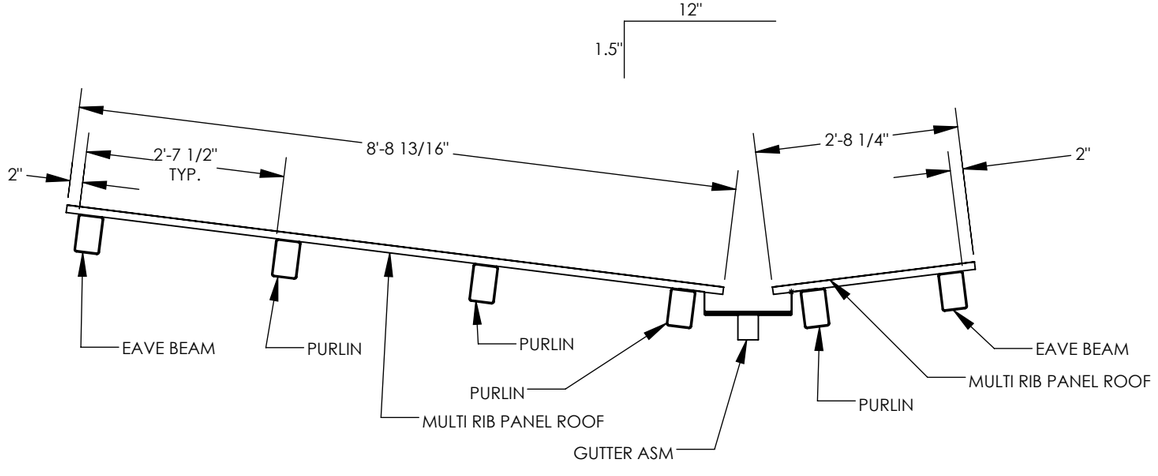
4. THE PANELS SHOULD BE INSTALLED PLUMB, STRAIGHT, AND ACCURATELY TO THE ADJACENT WORK.

5. FLASHING AND TRIM SHALL BE INSTALLED TRUE, AND IN PROPER ALIGNMENT, WITH ANY EXPOSED FASTENERS EQUALLY SPACED FOR THE BEST APPEARANCE.

6. SEALANT SHALL BE FIELD APPLIED ON DRY, CLEAN SURFACES. SOME FIELD CUTTING AND FITTING OF PANELS AND FLASHING IS TO BE EXPECTED BY THE ERECTOR AND MINOR FIELD CORRECTIONS ARE A PART OF NORMAL ERECTION WORK.

7. WORKMANSHIP SHALL BE OF THE BEST INDUSTRY STANDARDS AND INSTALLATION SHALL BE PERFORMED BY EXPERIENCED METAL CRAFTSMEN.

8. METAL SHAVINGS FROM DRILLING OR INSTALLATION OF ROOF FASTENERS MUST BE CAREFULLY REMOVED FROM THE ROOF BY BRUSHING OR SWEEPING AT THE END OF EACH DAY DURING INSTALLATION. SHAVINGS LEFT ON THE ROOF WILL QUICKLY RUST AND STAIN THE ROOF FINISH.



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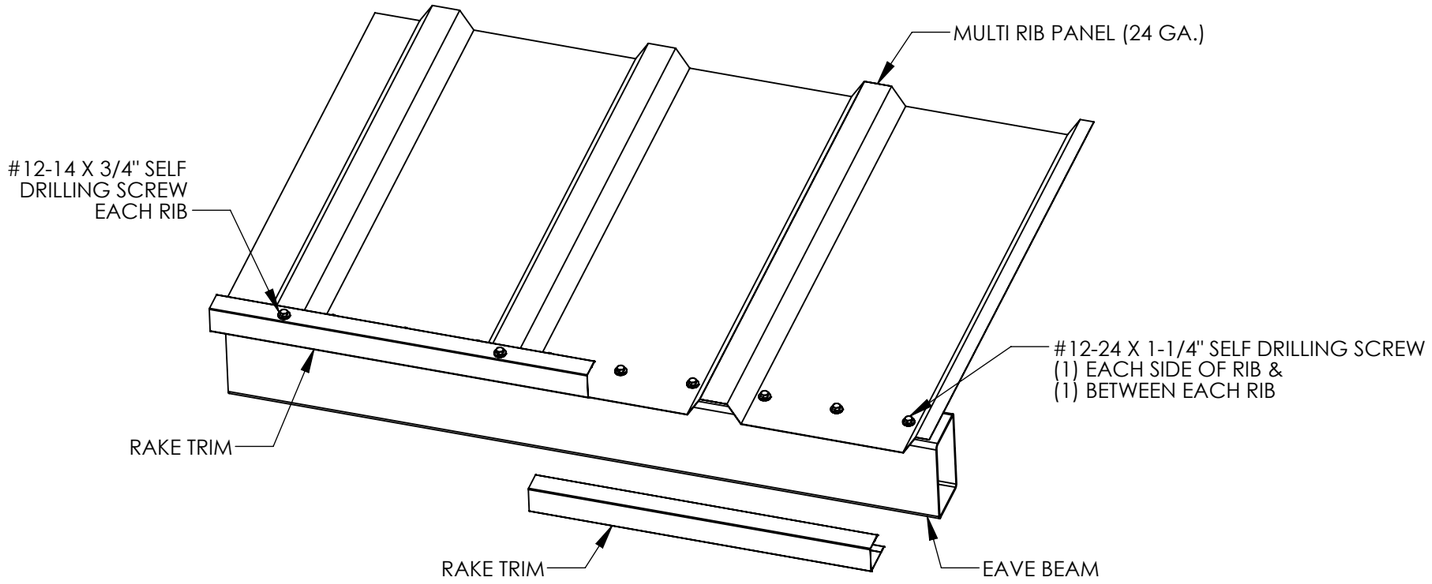
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ORDER NO: 84164
CAD MODEL: ~P22752

PROJECT: CITY OF WYOMING
PROJECT LOCATION: WYOMING, MI
DRAWING: ROOF LAYOUT

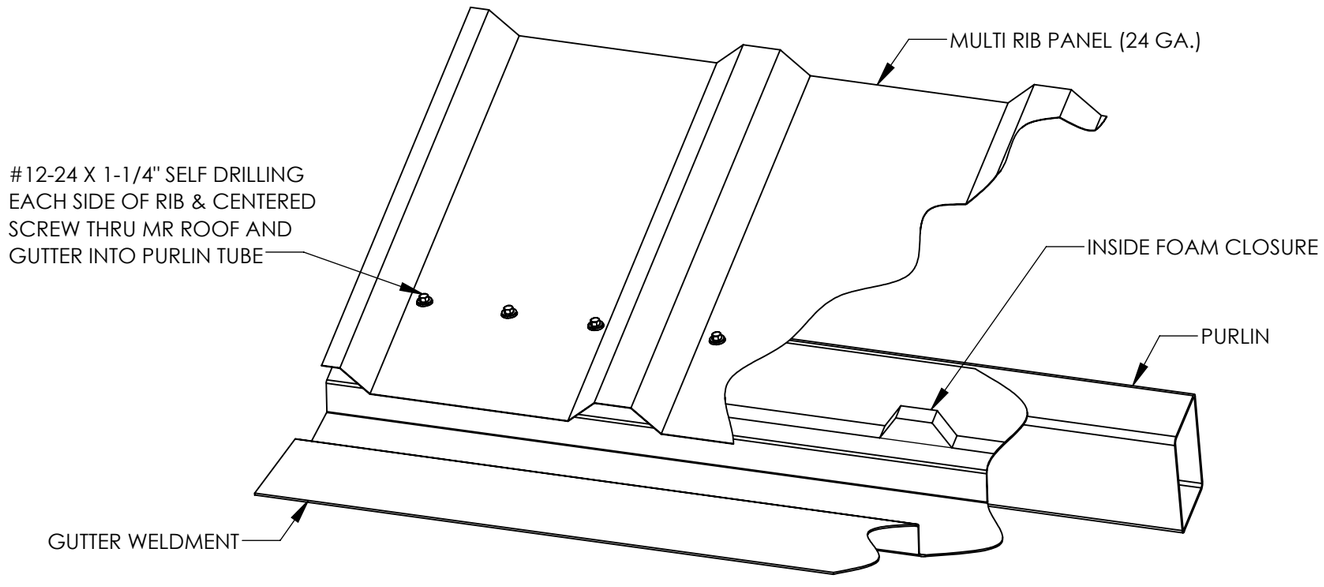
SHEET
6.1



2022A

HIGHSIDE DETAIL (VIEWING FROM ABOVE)

MR-202



2023A

GUTTER DETAIL

MR-107

PART DESCRIPTIONS:

#12-14x3/4" SELF DRILLING SCREW.

#12-24x1 1/4" SELF DRILLING SCREW.

1/8" POP RIVET.

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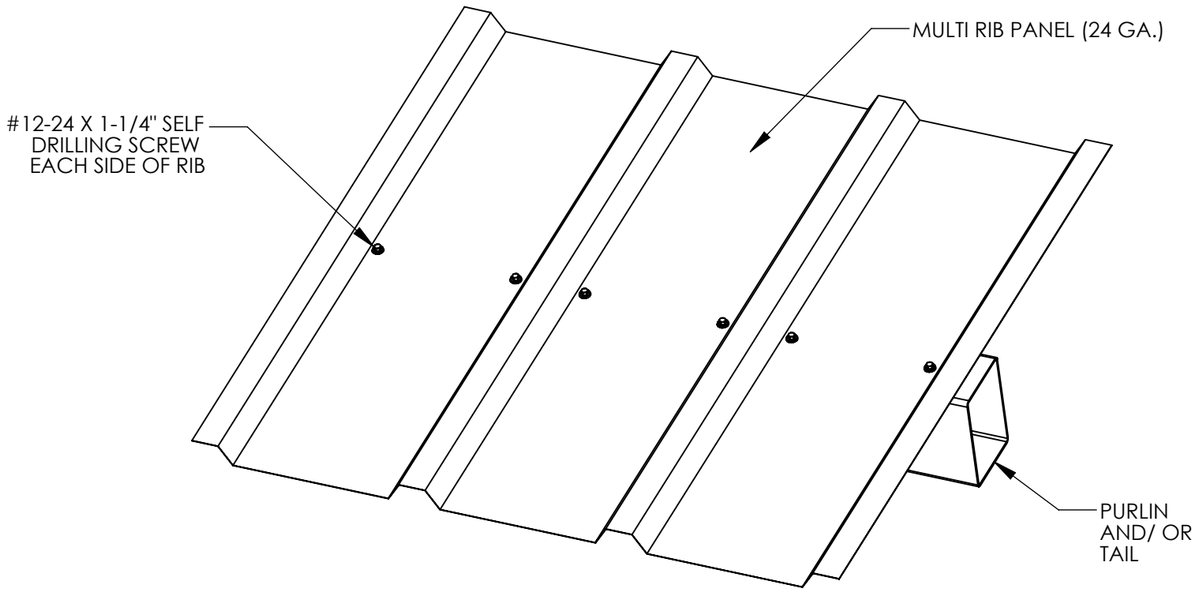
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REV LEVEL: A
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ORDER NO: 84164
CAD MODEL: ~P22752

PROJECT: CITY OF WYOMING
PROJECT LOCATION: WYOMING, MI
DRAWING: ROOF CONNECTION DETAILS

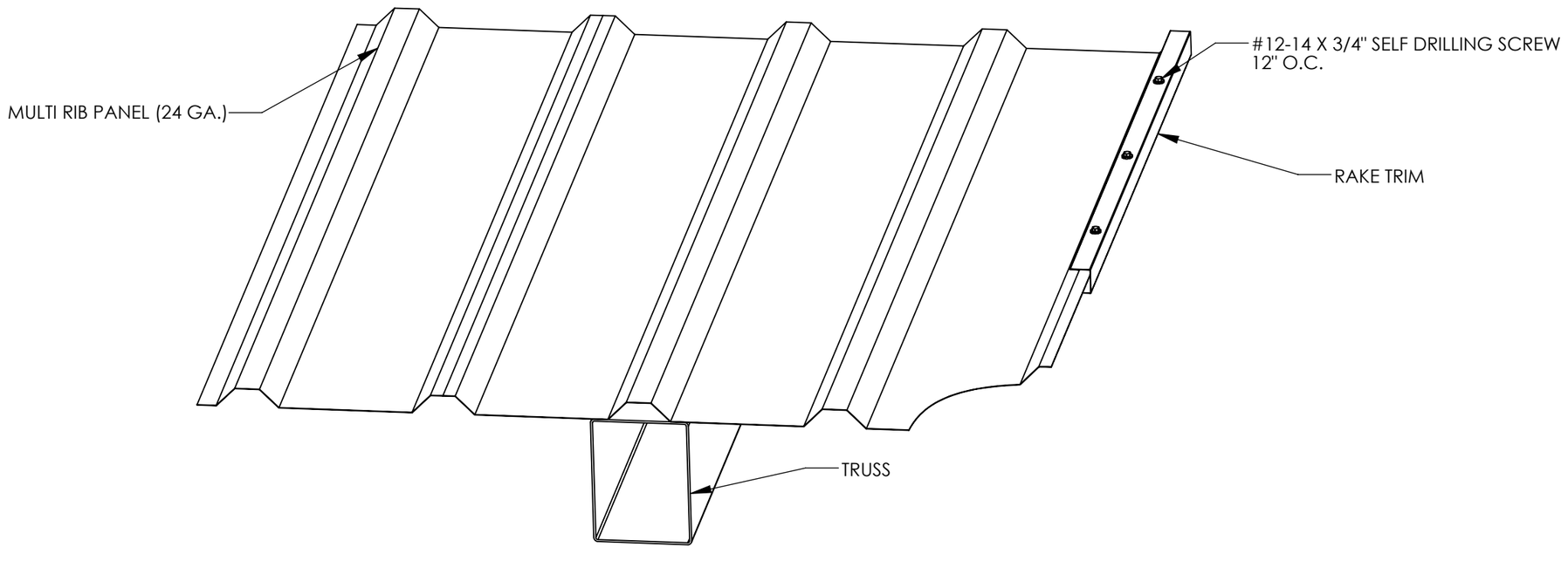
SHEET
7



PURLIN DETAIL

MR-600

2022A



RAKE DETAIL

MR-400

2022A

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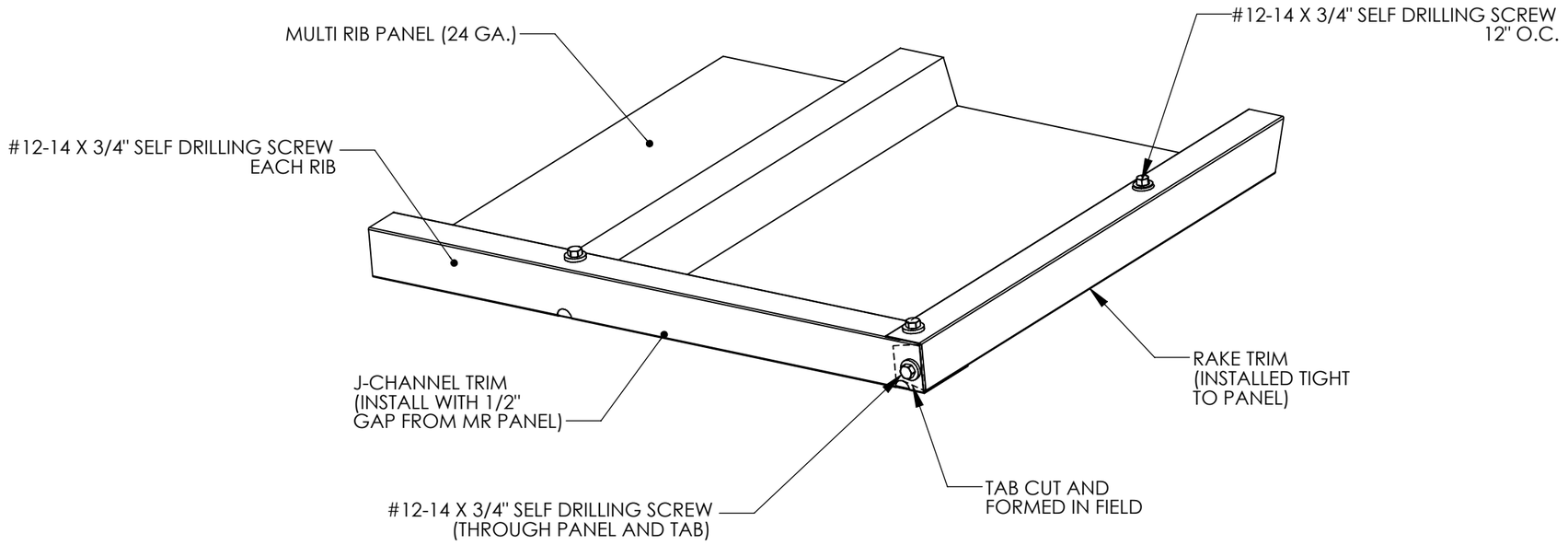
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SCALE: NTS
DRAWN BY: dylan.procter
REV LEVEL: A
CREATION DATE: 10/13/2017
ORDER NO: 84164
CAD MODEL: ~P22752

PROJECT: CITY OF WYOMING
PROJECT LOCATION: WYOMING, MI
DRAWING: ROOF CONNECTION DETAILS

SHEET
7.1



2023A

CORNER DETAIL

MR-902

STATE OF MICHIGAN
Richelle
Penn
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CREATION DATE: 10/13/2017
ORDER NO: 84164
CAD MODEL: ~P22752

PROJECT: CITY OF WYOMING
PROJECT LOCATION: WYOMING, MI
DRAWING: ROOF CONNECTION DETAILS

SHEET
7.2

Proposed Canopy and Renovations to:

City of Wyoming City Hall

1155 28th St. SW, Wyoming, MI 49509



Drawing Index

T1	Title Sheet
D1	Demolition Plan
A1	Overall Floor Plan
A2	Enlarged Floor Plan
A3	Interior Elevations, Sections and Details
A4	Exterior Elevations, Specifications
S0.1	Structural Notes
S0.2	Structural Specifications
S1.1	Foundation Plan

NOTE: PENCHURA CANOPY DRAWINGS ARE INCLUDED FOR REFERENCE ONLY. PENCHURA IS RESPONSIBLE FOR THE CANOPY DESIGN AND IS RESPONSIBLE FOR COORDINATING THEIR ANCHOR BOLT DESIGN WITH THE STRUCTURAL DRAWINGS.

Project Team

Architect:
The Architectural Group, Inc.
3100 Prairie SW, Grandville, MI 49418
(616) 531-7040 TheArchitecturalGroup.com

Structural Engineer:
JDH Engineering
3000 Ivanrest SW, Grandville, MI 49418
(616) 531-6020 jdheng.com

Project Information

Building Code:	2021 Michigan Building Code
Plumbing Code:	2021 Michigan Plumbing Code
Mechanical Code:	2021 Michigan Mechanical Code
Electrical Code:	2023 National Electrical Code
Use Group:	B-Business (Office Areas)
Type of Construction:	II-B Non-Separated Occupancy (Non-combustible, Sprinkled)
Building Area:	Unchanged

Building Area (MBC 506.2): Unchanged

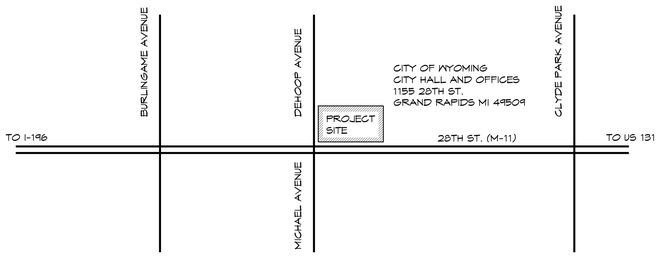
Fire Suppression (MBC 903.2.1.3):
Building is fully sprinkled per NFPA 13 (MBC 903.3.1.1).
Canopy is structurally independent of the main building and is not sprinkled.

Occupancy (MBC Chap. 10): Unchanged

Travel Distance (MBC 1017): Unchanged

Interior Finishes:
B Finish: Flame Spread: 26-75
Smoke Spread: 0-450
C Finish: Flame Spread: 76-200
Smoke Spread: 0-450

B Use Groups:
Corridors: B
Rooms & Enclosed spaces: C



North

LOCATION MAP
Not to scale

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New Drive-up Canopy for:
Wyoming City Hall
City of Wyoming
1155 28th St SW, Wyoming, MI 49509

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Ap. JM

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Drawing

T1

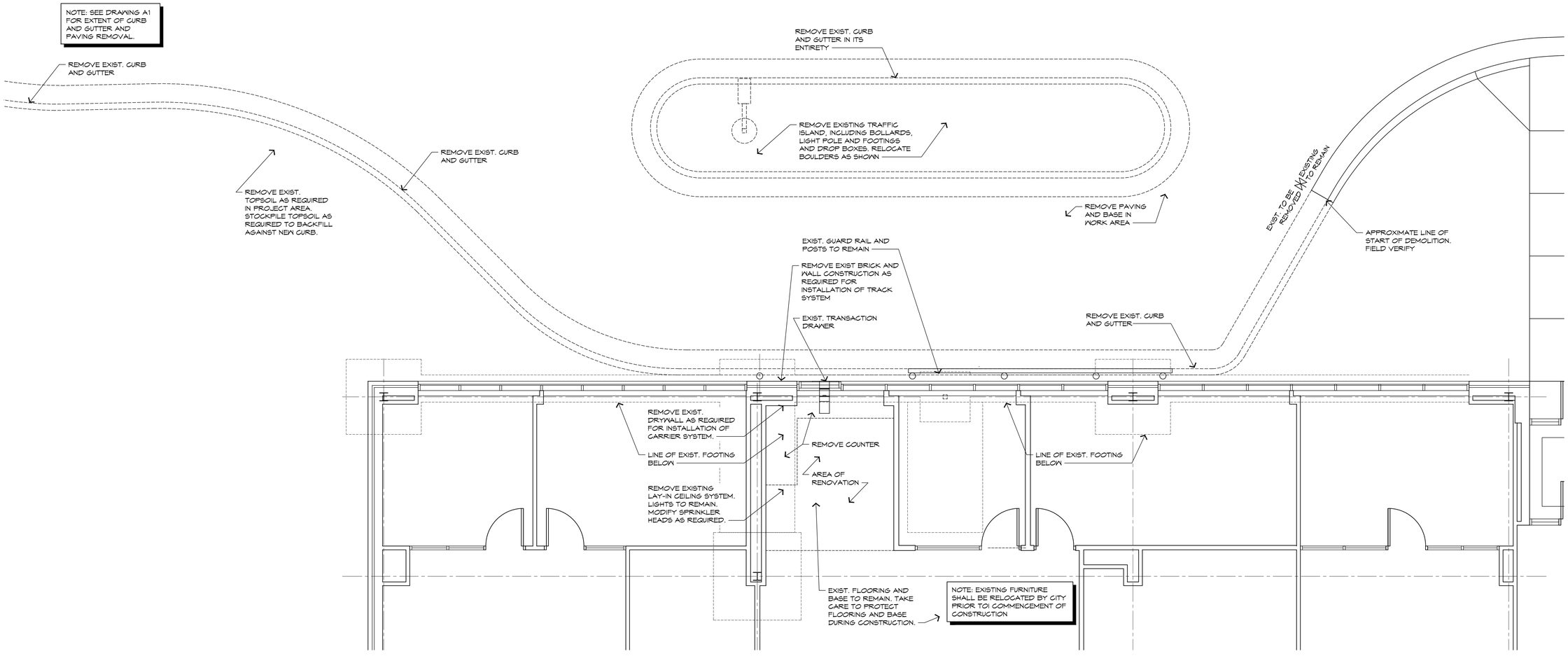
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DEMOLITION LEGEND	
SYMBOL	DESCRIPTION
----------	EXISTING CONSTRUCTION TO BE REMOVED
==========	EXISTING CONSTRUCTION TO REMAIN

DEMOLITION NOTES:

1. THE ARCHITECT HAS ATTEMPTED TO INDICATE ALL AREAS REQUIRING DEMOLITION TO THE BEST OF HIS ABILITIES. THE CONTRACTOR SHALL BE REQUIRED TO ACHIEVE COMPLETION OF THE PROJECT AS INDICATED ON THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR SPECIFIC CONSTRUCTION METHODS AND SAFETY.
2. THE CONTRACTOR SHALL VERIFY THAT ALL WALLS INDICATED TO BE REMOVED ARE NON-LOAD BEARING' PRIOR TO DEMOLITION. CONTACT ARCHITECT IMMEDIATELY IF SAID WALL IS DISCOVERED TO BE 'LOAD BEARING'. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL SHORING NECESSARY TO ENSURE THE INTEGRITY OF EXISTING ADJACENT ASSEMBLIES.
3. COORDINATE PLUMBING, MECHANICAL, AND ELECTRICAL WORK ITEMS WITH TRADE CONTRACTORS.
4. DRYWALL CONTRACTOR SHALL PATCH AND REPAIR ALL DEMOLITION AREAS IN EXISTING CONSTRUCTION THAT ARE MADE BY PLUMBING, MECHANICAL, AND/OR ELECTRICAL TRADES AND/OR CARRIER SYSTEM INSTALLER TO INSTALL NEW WORK OR REMOVE EXISTING.
5. WALL SURFACES TO RECEIVE NEW FINISHES ARE TO BE CLEANED AND PREPPED FOR NEW WORK. SEE DEMOLITION PLAN FOR INDICATION OF EXISTING FINISHES. FIELD VERIFY.
6. PROTECT ALL EXISTING FINISHES TO REMAIN.
7. SALVAGE ALL OWNER EQUIPMENT AND FURNITURE UNLESS INSTRUCTED OTHERWISE.
8. THE CONTRACTOR SHALL COORDINATE DEMOLITION WORK WITH THE OWNER TO ENSURE THAT IMPACTS ON THE BALANCE OF THE BUILDING ARE HELD TO A MINIMUM.



NORTH

DEMOLITION PLAN

0 2' 4' 8'

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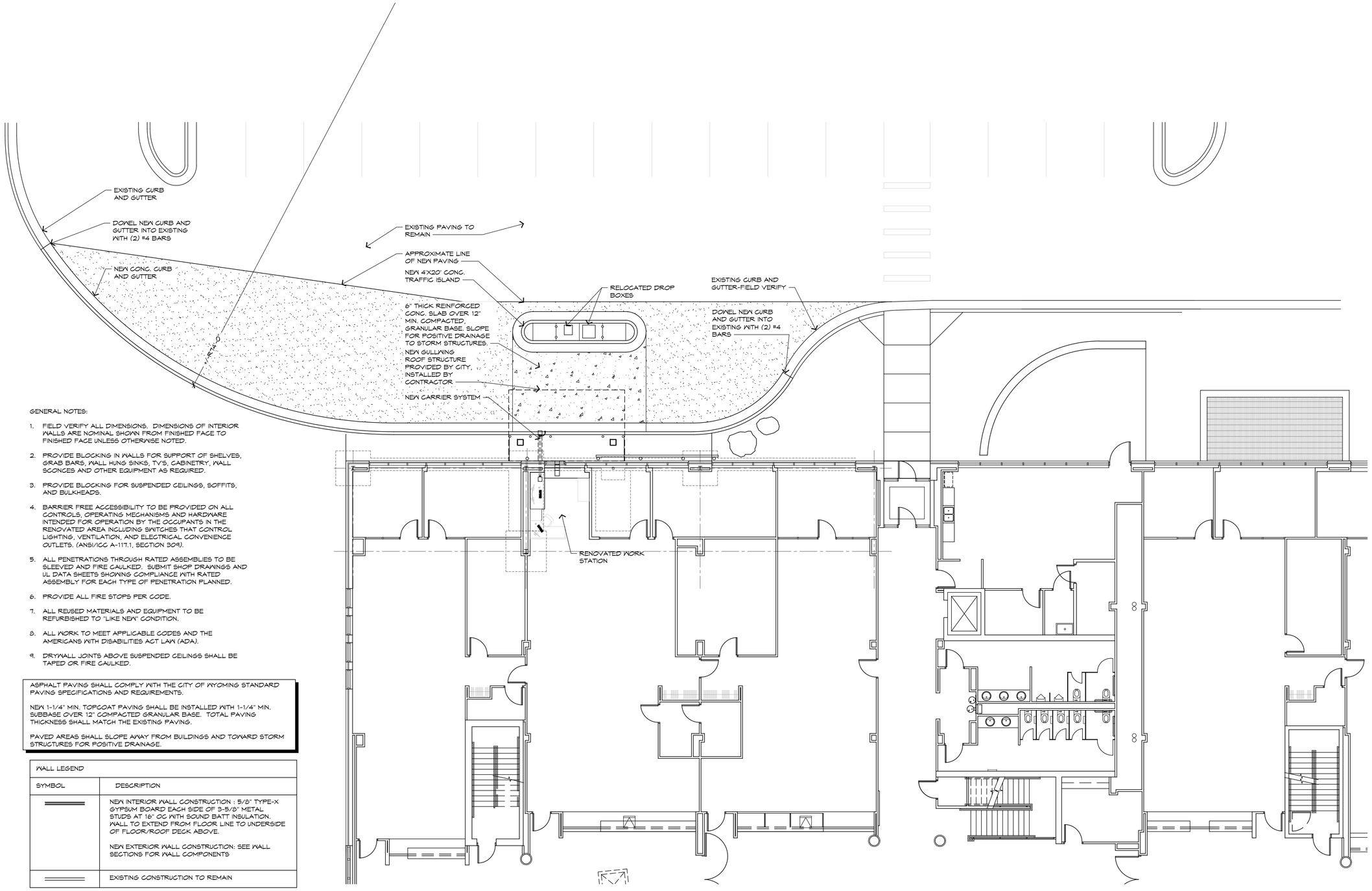
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Drawing

D1

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GENERAL NOTES:

1. FIELD VERIFY ALL DIMENSIONS. DIMENSIONS OF INTERIOR WALLS ARE NOMINAL SHOWN FROM FINISHED FACE TO FINISHED FACE UNLESS OTHERWISE NOTED.
2. PROVIDE BLOCKING IN WALLS FOR SUPPORT OF SHELVES, GRAB BARS, WALL HUNG SINKS, TV'S, CABINETRY, WALL SCONCES AND OTHER EQUIPMENT AS REQUIRED.
3. PROVIDE BLOCKING FOR SUSPENDED CEILINGS, SOFFITS, AND BULKHEADS.
4. BARRIER FREE ACCESSIBILITY TO BE PROVIDED ON ALL CONTROLS, OPERATING MECHANISMS AND HARDWARE INTENDED FOR OPERATION BY THE OCCUPANTS IN THE RENOVATED AREA INCLUDING SWITCHES THAT CONTROL LIGHTING, VENTILATION, AND ELECTRICAL CONVENIENCE OUTLETS. (ANSI/ICC A-117.1, SECTION 309).
5. ALL PENETRATIONS THROUGH RATED ASSEMBLIES TO BE SLEEVED AND FIRE CAULKED. SUBMIT SHOP DRAWINGS AND UL DATA SHEETS SHOWING COMPLIANCE WITH RATED ASSEMBLY FOR EACH TYPE OF PENETRATION PLANNED.
6. PROVIDE ALL FIRE STOPS PER CODE.
7. ALL REUSED MATERIALS AND EQUIPMENT TO BE REFURBISHED TO "LIKE NEW" CONDITION.
8. ALL WORK TO MEET APPLICABLE CODES AND THE AMERICANS WITH DISABILITIES ACT LAW (ADA).
9. DRYWALL JOINTS ABOVE SUSPENDED CEILINGS SHALL BE TAPED OR FIRE CAULKED.

ASPHALT PAVING SHALL COMPLY WITH THE CITY OF WYOMING STANDARD PAVING SPECIFICATIONS AND REQUIREMENTS.

NEW 1-1/4" MIN. TOPCOAT PAVING SHALL BE INSTALLED WITH 1-1/4" MIN. SUBBASE OVER 12" COMPACTED GRANULAR BASE. TOTAL PAVING THICKNESS SHALL MATCH THE EXISTING PAVING.

PAVED AREAS SHALL SLOPE AWAY FROM BUILDINGS AND TOWARD STORM STRUCTURES FOR POSITIVE DRAINAGE.

WALL LEGEND	
SYMBOL	DESCRIPTION
═══	NEW INTERIOR WALL CONSTRUCTION : 5/8" TYPE-X GYPSUM BOARD EACH SIDE OF 3-5/8" METAL STUDS AT 16" OC WITH SOUND BATT INSULATION. WALL TO EXTEND FROM FLOOR LINE TO UNDERSIDE OF FLOOR/ROOF DECK ABOVE. NEW EXTERIOR WALL CONSTRUCTION: SEE WALL SECTIONS FOR WALL COMPONENTS
═══	EXISTING CONSTRUCTION TO REMAIN

NORTH

PARTIAL FLOOR PLAN

0 4' 8' 16'

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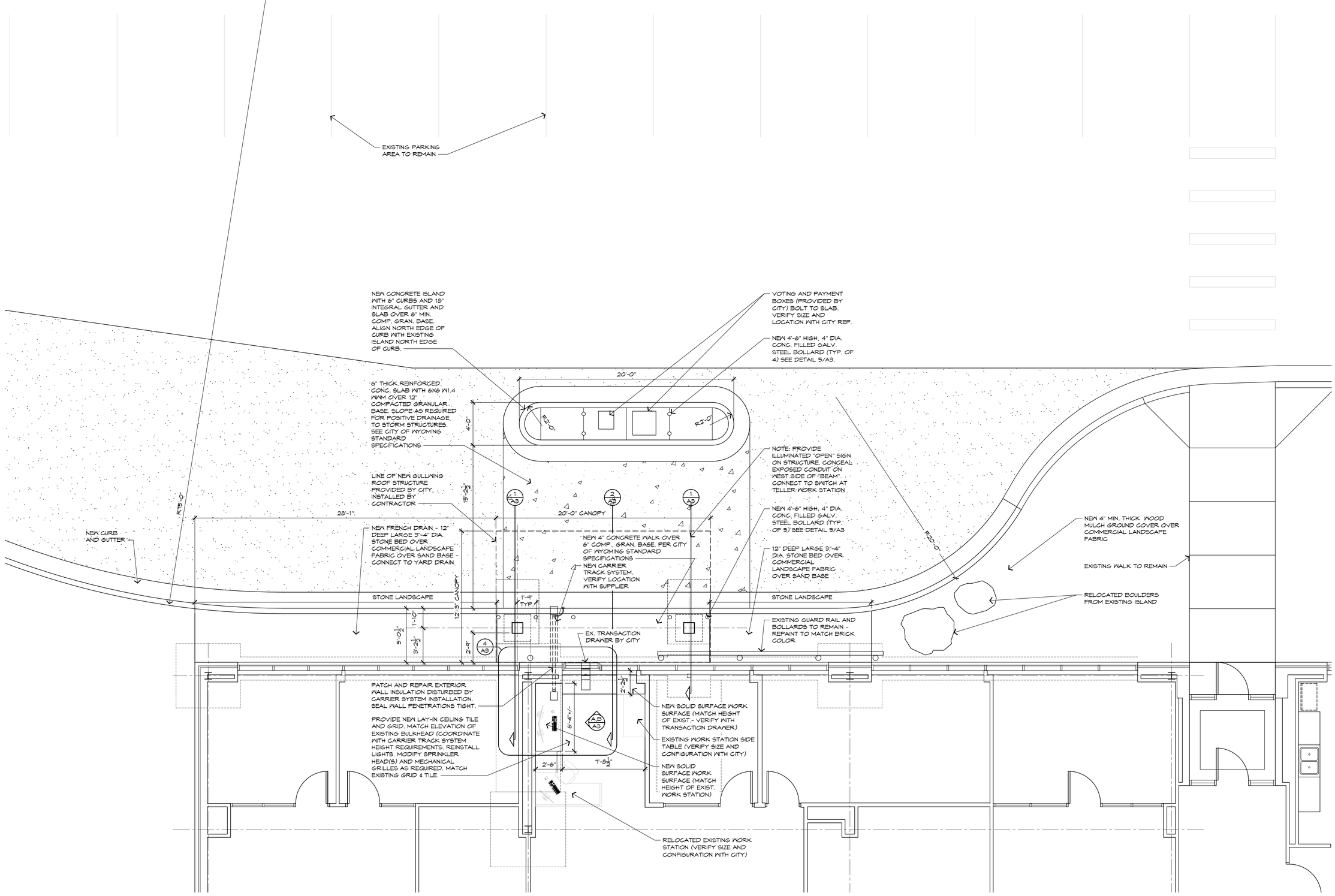
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NORTH

FLOOR PLAN

0 1/2" 1" 2"

NOTE: PROVIDE JUNCTION BOX AND WIRING FOR FUTURE CAMERA. LOCATION ON UNDERSIDE OF CANOPY VERIFY FINAL LOCATION WITH OWNER.

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City of Wyoming, Wyoming, MI 49509
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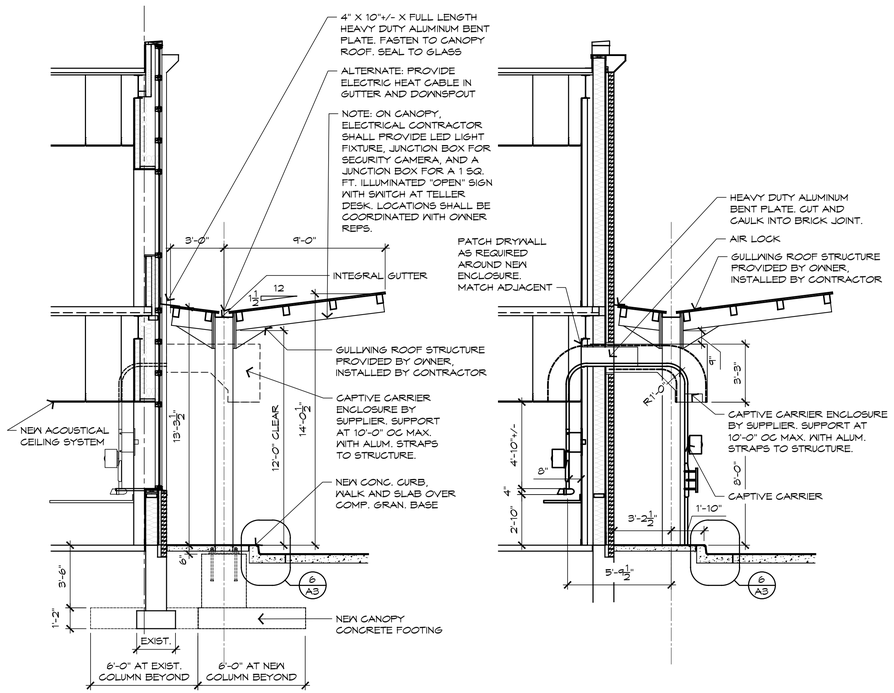
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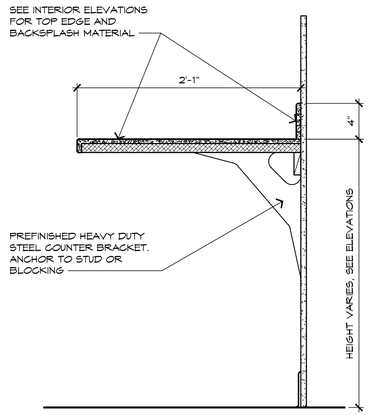
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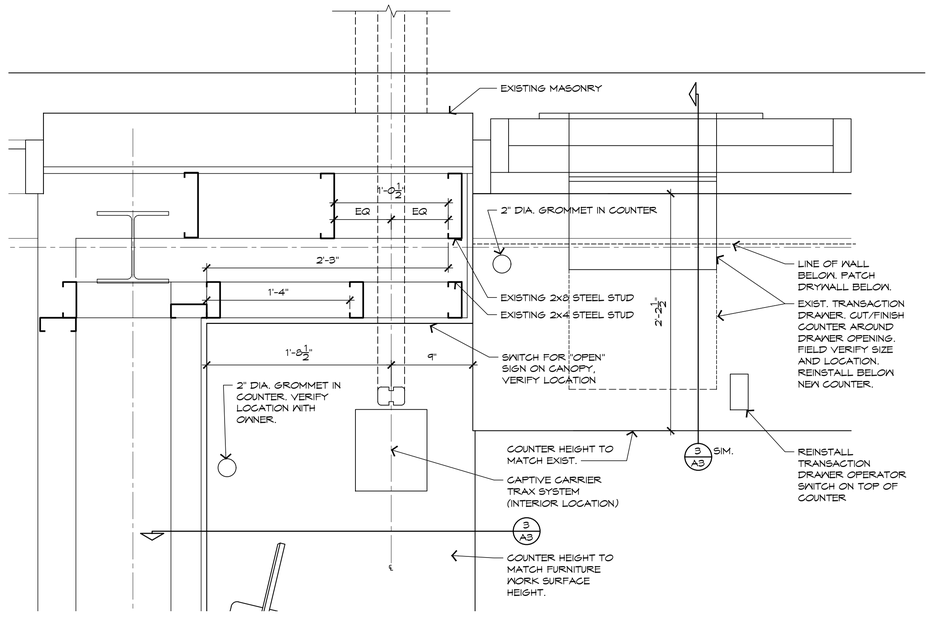


1 / A3 CANOPY SECTION
SCALE: 1/4" = 1'-0"

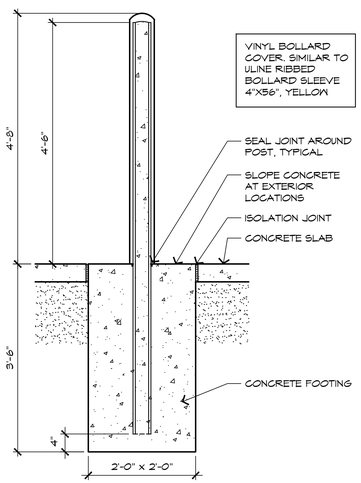


2 / A3 CANOPY SECTION
SCALE: 1/4" = 1'-0"

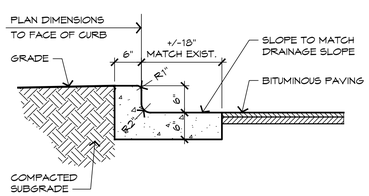
3 / A3 TYPICAL COUNTER SECTION
SCALE: 1-1/2" = 1'-0"



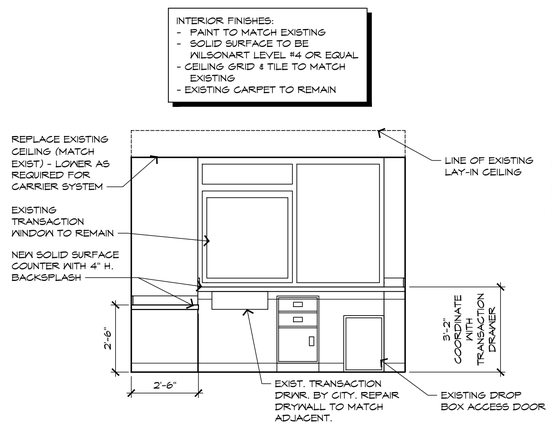
4 / A3 CAPTIVE CARRIER ENLARGED PLAN DETAIL
SCALE: 1-1/2" = 1'-0"



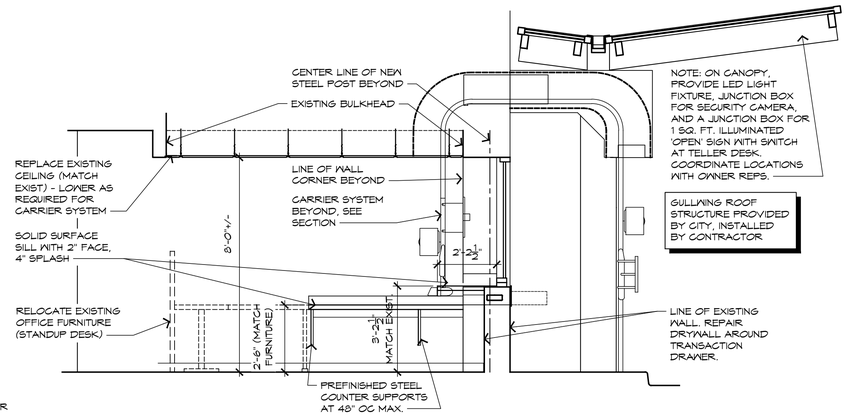
5 / A3 PIPE BUMPER DETAIL
SCALE: 3/4"= 1'-0"



6 / A3 CONCRETE CURB AND GUTTER DETAIL
SCALE: 3/4" = 1'-0"



A / A3 OFFICE NORTH WALL
SCALE: 3/8"= 1'-0"



B / A3 OFFICE WEST WALL
SCALE: 3/8"= 1'-0"

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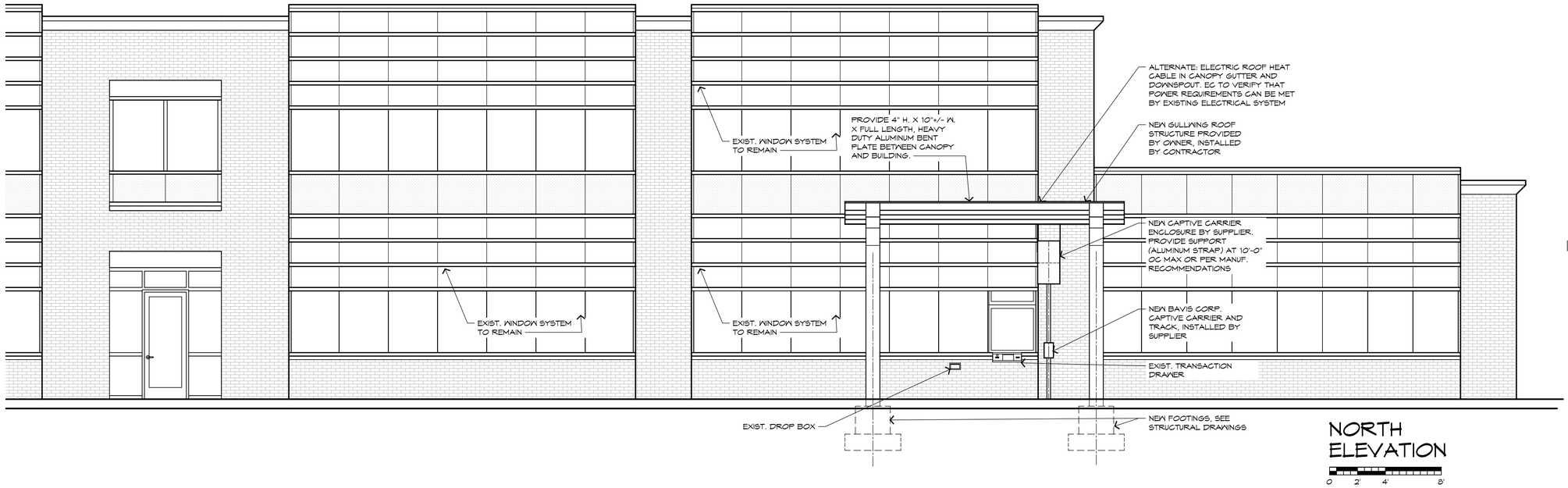
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SEE INSTRUCTIONS TO BIDDERS FOR GENERAL REQUIREMENTS

THE AIA A201 GENERAL CONDITIONS 2017 SHALL BE PART OF THE CONSTRUCTION DOCUMENTS.

THE GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION (AIA DOCUMENT A-201, JUNE 2017 EDITION OF THE AMERICAN INSTITUTE OF ARCHITECTS), ARTICLE 1 THROUGH 14 SHALL APPLY TO ALL CONTRACTORS, SEPARATE CONTRACTOR AND/OR SUBCONTRACTORS.
COPIES OF SAID GENERAL CONDITIONS ARE ON FILE AT ARCHITECT'S OFFICE OR MAY BE OBTAINED FROM THE AMERICAN INSTITUTE OF ARCHITECTS, 1735 NEW YORK AVENUE NW, WASHINGTON, DC, 20006.

IT SHALL BE THE FULL RESPONSIBILITY OF THE GENERAL CONTRACTOR TO COORDINATE AND EXPEDITE ALL PHASES OF ARCHITECTURAL, STRUCTURAL, MECHANICAL, INCLUDING PLUMBING, HEATING, VENTILATION, AND ELECTRICAL WORK.
VERIFY EXACT LOCATION, AND INVERTS OF ALL EXISTING SITE UTILITIES AND STAKE SAME.
THE GENERAL CONTRACTOR SHALL VERIFY EXISTING GRADE AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.
THE GENERAL CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES AND BE RESPONSIBLE FOR ANY DAMAGE TO SAME.

ALL CONTRACTORS SHALL GUARANTEE ALL OF THEIR WORK FOR THIS BUILDING TO BE FREE FROM DEFECTS OF FAULTY LABOR AND/OR MATERIALS FOR A PERIOD OF ONE (1) YEAR FROM DATE OF SUBSTANTIAL COMPLETION OR CERTIFICATE OF OCCUPANCY, EXCEPT WHEN LONGER PERIODS ARE SPECIFIED.
THE WARRANTY SHALL NOT DEPRIVE THE OWNER OF OTHER RIGHTS OR REMEDIES THAT THE OWNER MAY HAVE UNDER OTHER PROVISIONS OF THE CONTRACT DOCUMENTS, AND, IN ADDITION TO, AND RUNS CONCURRENT WITH, OTHER WARRANTIES MADE BY THE CONTRACTOR, AND/OR SUPPLIERS AND MANUFACTURERS.

NO INTERRUPTION OF OCCUPANCY:
- CERTAIN WORK AND SERVICES ARE REQUIRED TO BE PERFORMED ON THIS JOB IN CONNECTION WITH THE EXISTING BUILDING, AS INDICATED ON DRAWINGS INCLUDING ARCHITECTURAL, MECHANICAL AND ELECTRICAL TRADES.
- ALL CONTRACTORS SHALL HAVE FREE ACCESS TO THEIR WORK IN AREAS WHERE NEW CONSTRUCTION OCCURS UNTIL OCCUPIED BY THE OWNER.
- THE OWNER WILL OCCUPY AND OPERATE IN THE EXISTING BUILDING DURING CONSTRUCTION AND COMPLETION OF THE PROPOSED ADDITION.
- GENERAL CONTRACTOR, SUBCONTRACTORS, AND OTHER CONTRACTORS SHALL ARRANGE WITH OWNER TO MAKE ALTERATIONS, PERFORM NEW WORK, AND MAKE CONNECTIONS TO UTILITIES AT SUCH TIMES AS SHALL NOT INTERRUPT UTILITY SERVICES OR PROPER OPERATIONS OF THE BUILDING, AND WHICH ARE OTHERWISE CONVENIENT AND SATISFACTORY TO THE OWNER. CONTRACTOR WHOSE WORK IS INVOLVED, SHALL PROTECT, REROUTE, SHORE-UP, CAP, CUT-OFF, AND/OR REPLACE EXISTING PIPES, ELECTRICAL WORK, AND ALL OTHER ACTIVE UTILITIES ENCOUNTERED, WHICH MAY INTERFERE WITH NEW WORK.
- PERFORM ALL WORK IN AN APPROVED MANNER, AND WITH MINIMAL INTERFERENCE AND INCONVENIENCE TO THE OWNER, AND THE OTHER TENANTS.

CONTRACTORS FOR ALL TRADES SHALL COMPLY WITH ALL CURRENT BUILDING CODES SUCH AS MBC, NEC, OSHA, ADA, ETC., INCLUDING LATEST AMENDMENTS, AND/OR REVISIONS, AND ALL OTHER APPLICABLE CODES.

USE ONLY SPECIFIED EQUIPMENT AND MATERIAL FOR THE BASE BID. ANY SUBSTITUTIONS MUST BE BID AS AN ALTERNATE.

SUBMITTALS:
- PROVIDE SUBMITTALS FOR ALL CONSTRUCTION MATERIAL, AND AS-BUILT DRAWINGS AT THE COMPLETION OF THE WORK. DELIVERY SCHEDULES SHALL INCLUDE A MINIMUM OF (2) TWO WEEKS FOR SHOP DRAWING REVIEW BY ARCHITECT/ENGINEER.
- GENERAL CONTRACTOR TO PROVIDE ALL NECESSARY BLOCKING IN WALLS AND CEILINGS FOR CABINETS, BULKHEADS, OWNER SUPPLIED EQUIPMENT AND FURNITURE, RESTROOM ACCESSORIES, SUPPORT OF SHELVING ETC.

SITE WORK SHALL INCLUDE EROSION AND SEDIMENTATION CONTROL MEASURES, INCLUDING REMOVAL OF SITE MATERIAL IN EXCESS OF PROJECT REQUIREMENTS, COMPLETING PERMANENT CONTROL MEASURES 15 CALENDAR DAYS AFTER THE FINAL EARTH CHANGE IS COMPLETED FOR EACH DISTURBED AREA, APPLYING MULCHING TO SEEDED AREAS IMMEDIATELY AFTER SEED APPLICATION, CLEANING AND MAINTAIN THE STORM SEWER INLETS AND PIPES DURING THE COURSE OF CONSTRUCTION AND CLEAN THE SYSTEM OF ALL DEBRIS UPON COMPLETION AND STABILIZATION OF THE PROJECT, REMOVING TEMPORARY CONTROLS SUCH AS SILT FENCE, INLET PROTECTION, AND NETTING ONCE VEGETATION IS ESTABLISHED AND THE SITE HAS BEEN STABILIZED.

CONCRETE:
REFER TO STRUCTURAL DRAWINGS FOR CONCRETE REQUIREMENTS.

SITE CONCRETE:
FOLLOW CITY OF WYOMING STANDARD SPECIFICATIONS.
ALL EXTERIOR SURFACES SHALL HAVE A BROOM FINISH.
ALL EXTERIOR HARD SURFACES SHALL SLOPE AWAY FROM THE BUILDING.
REINFORCED SLABS SHALL HAVE 6X6 W1.4 WWM.
JOINTS SHALL BE PROVIDED AT NO GREATER THAN 10'X10'.
CURBS SHALL BE INSTALLED PER CITY OF WYOMING STANDARD SPECIFICATIONS.

EXTERIOR JOINTS:
- CAULK WITH EXTERIOR SEALANT AS MANUFACTURED FOR EACH APPLICATION.
- COMPLY WITH THE JOINT SEALANT MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS.
- COLOR TO BE SELECTED FROM MANUFACTURER'S FULL RANGE OF COLORS.

COUNTERTOPS & MILLWORK:
- WORK MATERIAL, WORKMANSHIP, AND INSTALLATION FOR COUNTERTOPS SHALL CONFORM TO QUALITY STANDARDS OF THE ARCHITECTURAL WOODWORK INSTITUTE, CUSTOM GRADE.
- ALL INTERIOR MILLWORK AND TRIM SHALL BE FINISHED SMOOTH, AND FREE FROM MACHINE OR TOOL MARKS THAT WILL SHOW THROUGH THE FINISH.
- ALL NAIL HEADS SHALL BE SET PRIMED TO CONCEAL SHRINKAGE.
- SHOP MITERS 4 INCHES OR MORE FROM HEEL TO POINT SHALL BE GLUED AND LOCKED.
- MAKE DOWELS AND TENONS TO A DRIVING FIT.
- JOINTS SHALL BE HAIRLINE, PRACTICALLY INVISIBLE.
- TOPS UP TO 10 FEET LONG SHALL BE IN ONE PIECE. TOPS OVER 10 FEET LONG SHALL BE SPLICED JOINTS IN BACKING, AND JOINTS SHALL BE AT LEAST 12 INCHES FROM JOINT IN BACKING.
- JOINTS IN BACKING SHALL BE REINFORCED TO PREVENT SEPARATION.
- THE ARCHITECT WILL SELECT FROM MANUFACTURER'S STANDARD COLOR AND PATTERNS.
- SOLID SURFACE TO BE WILSONART LEVEL #4 OR EQUAL UNLESS NOTED OTHERWISE.

GYPSUM BOARD ASSEMBLIES:
- PROVIDE BOARD ASSEMBLIES ATTACHED TO STEEL AND WOOD FRAMING MEMBERS AND BONDED ADHESIVELY TO INTERIOR CONCRETE AND MASONRY SUBSTRATE.
- GYPSUM WALLBOARD ASTM C36 USG FIRE CODE CORE 5/8 INCHES THICK, TYPE 'X' OR 'C' OR APPROVED EQUAL WITH TAPERED EDGES, UNLESS NOTED OTHERWISE.
- PROVIDE CORNERBEAD, EDGE TRIM, AND CONTROL JOINTS COMPLYING WITH ASTM C 1047, AND ASTM C840.
- PROVIDE CONTROL JOINTS ON INTERIOR FACE OF EXTERIOR WALLS AS SHOWN ON THE DRAWINGS, AND IN SPECIFIC LOCATIONS APPROVED BY ARCHITECT.

- STEEL FRAMING FOR WALLS AND PARTITIONS TO HAVE MANUFACTURER'S STANDARD CORROSION RESISTANT COATING.
- STEEL STUDS AND RUNNERS ASTM C 645 WITH FLANGED EDGES BENT BACK 90 DEGREES AND DIVIDED OVER TO FORM 3/16-INCH-WIDE MINIMUM LIP TO SIZES ON THE DRAWINGS.
- PROVIDE DEFLECTION TRACK AND FIRESTOP TRACK WITH MANUFACTURER'S TOP RUNNER COMPLYING WITH THE REQUIREMENTS OF ASTM C 645, AND WITH 2-INCH-DEEP FLANGES MINIMUM FOR STUDS AND WIDTH TO ACCOMMODATE DEPTH OF STUDS INDICATED WITH FLANGES OFFSET AT MIDPOINT TO ACCOMMODATE GYPSUM BOARD THICKNESS.

PAINTING:
- PAINT EXPOSED SURFACES UNLESS A SURFACE OR MATERIAL IS SPECIFICALLY INDICATED NOT TO BE PAINTED.
- PAINTING INCLUDES FIELD-PAINTING EXPOSED BARE AND COVERED PIPES AND DUCTS, HANGERS, EXPOSED STEEL AND IRON WORK, AND PRIMED METAL SURFACES OF MECHANICAL AND ELECTRICAL EQUIPMENT.
- DO NOT PAINT PRE-FINISHED ITEMS, FINISHED METAL SURFACES, CONCEALED SURFACES, OPERATING PARTS, AND LABELS.
- THERE WILL BE NO ADDITIONAL COST TO THE OWNER FOR THE PAINTING CONTRACTOR NOT FIGURING, INCLUDING ITEMS TO BE PAINTED AND/OR FINISHED.
- ONLY ITEMS SPECIFICALLY MENTIONED WITHIN THESE SPECIFICATIONS OR ON THE DRAWING AS "EXPOSED" OR "PREFINISHED" ARE TO BE NOT FIELD PAINTED.
- ACCEPTABLE MANUFACTURERS: DEVOE COATINGS (DEVOE), BENJAMIN MOORE AND CO. (MOORE), PPG INDUSTRIES, PITTSBURGH PAINTS (PPG), PRATT AND LAMBERT (P AND L), THE SHERWIN-WILLIAMS COMPANY (S-W).

EXTERIOR PAINT SCHEDULE:

ZINC-COATED/GALVANIZED METAL:
SEMI-GLOSS ACRYLIC: TWO FINISH COATS OVER PRIMER.
PRIMER: GALVANIZED METAL PRIMER. S-W: GALVITE B50WZ30 (OR EQUAL).
FIRST AND SECOND COATS: SEMI-GLOSS ALKYD ENAMEL. S-W: DTM ACRYLIC COATING B66-200 SERIES (OR EQUAL).

INTERIOR PAINT SCHEDULE:

GYPSUM DRYWALL SYSTEMS:
LOW-LUSTER, ACRYLIC-ENAMEL FINISHES: TWO FINISH COATS OVER A PRIMER.
PRIMER: WHITE INTERIOR, LATEX BASED. MOORE: REGAL FIRST COAT INTERIOR LATEX PRIMER AND UNDERBODY #216 (OR EQUAL).
FIRST AND SECOND COATS: LOW-LUSTER (EGGSHELL OR SATIN), ACRYLIC-LATEX, INTERIOR ENAMEL. MOORE: MOIRÉ'S REGAL AQUAVELVET #319 (OR EQUAL).
ODORLESS SEMI-GLOSS ALKYD ENAMEL FINISH: THREE COATS WITH TOTAL DRY FILM THICKNESS NOT LESS THAN 2.5 MILS (0.06MM).
PRIMER: WHITE, INTERIOR, LATEX-BASED PRIMER. S-W: PRO-MAR 200 LATEX WALL PRIMER B28W200 (OR EQUAL).
FIRST AND SECOND COATS: INTERIOR, SEMI-GLOSS, ODORLESS, ALKYD ENAMEL. S-W: CLASSIC 99 SEMI-GLOSS ENAMEL A40 SERIES (OR EQUAL).
EPOXY FINISH, WATER-BASED EPOXY: TWO FINISH COATS OVER A PRIMER
PRIMER: S-W PRO MAR 200 LATEX PRIMER "PRIMMER".
FIRST AND SECOND COATS S-W PRO INDUSTRIAL PRECATALYZED EPOXY.

WOODWORK AND HARDBOARD:
LOW-LUSTER, ACRYLIC-ENAMEL FINISH: TWO FINISH COATS OVER A PRIMER.
PRIMER: ALKALI- OR ACRYLIC-LATEX-BASED, INTERIOR WOOD PRIMER, AS RECOMMENDED BY THE MANUFACTURER FOR THIS SUBSTRATE. MOORE: MOORE'S ALKYD ENAMEL UNDERBODY #217 (OR EQUAL).
FIRST AND SECOND COATS: LOW-LUSTER (EGGSHELL OR SATIN), ACRYLIC-LATEX, INTERIOR ENAMEL. MOORE: MOORE'S REGAL AQUAVELVET #319 (OR EQUAL).
SEMI-GLOSS ENAMEL FINISH: THREE COATS.
UNDERCOAT: INTERIOR ENAMEL UNDERCOAT. S-W: PRO-MAR 200 ALKYD ENAMEL UNDERCOATER B49W200 (OR EQUAL).
FIRST AND SECOND COATS: INTERIOR, SEMI-GLOSS, ODORLESS, ALKYD ENAMEL. S-W: CLASSIC 99 SEMI-GLOSS ENAMEL A40 SERIES (OR EQUAL).

CEILING TILES, ACOUSTICAL PANEL CEILING SYSTEM:
- SEE DRAWINGS FOR GRID AND TILE SELECTIONS.
- ALL CEILING TILES AND GRID TO BE MANUFACTURER'S STANDARD 'WHITE' FINISH, UNLESS NOTED OTHERWISE.

PROJECT CLOSEOUT:
- SUBSTANTIAL COMPLETION: BEFORE REQUESTING INSPECTION FOR CERTIFICATION OF SUBSTANTIAL COMPLETION, COMPLETE THE FOLLOWING: ADVISE THE OWNER OF PENDING INSURANCE CHANGEOVER REQUIREMENTS; SUBMIT SPECIFIC WARRANTIES, WORKMANSHIP BONDS, MAINTENANCE AGREEMENTS, FINAL CERTIFICATIONS AND SIMILAR DOCUMENTS; OBTAIN AND SUBMIT RELEASES ENABLING THE OWNER UNRESTRICTED USE OF THE WORK AND ACCESS TO SERVICES AND UTILITIES, INCLUDE OCCUPANCY PERMITS, OPERATING CERTIFICATES AND SIMILAR RELEASES; SUBMIT RECORD DRAWINGS, MAINTENANCE MANUALS, FINAL PROJECT PHOTOGRAPHS, DAMAGE OR SETTLEMENT SURVEYS, PROPERTY SURVEYS AND SIMILAR FINAL RECORD INFORMATION; DELIVER TOOLS, SPARE PARTS, EXTRA STOCK AND SIMILAR ITEMS; MAKE FINAL CHANGEOVER OF PERMANENT LOCKS AND TRANSMIT KEYS TO THE OWNER, ADVISE THE OWNER'S PERSONNEL OF CHANGEOVER IN SECURITY PROVISIONS; COMPLETE STARTUP TESTING OF SYSTEMS AND INSTRUCTION OF THE OWNER'S OPERATION AND MAINTENANCE PERSONNEL, DISCONTINUE AND REMOVE TEMPORARY FACILITIES FROM THE SITE; COMPLETE FINAL CLEANUP REQUIREMENTS INCLUDING TOUCH UP PAINTING.

FINAL ACCEPTANCE:
- BEFORE REQUESTING FINAL INSPECTION FOR CERTIFICATION OF FINAL ACCEPTANCE AND FINAL PAYMENT, COMPLETE THE FOLLOWING: SUBMIT AN UPDATED FINAL STATEMENT ACCOUNTING FOR FINAL ADDITIONAL CHANGES TO THE CONTRACT SUM; SUBMIT A COPY OF THE ARCHITECT'S FINAL INSPECTION LIST OF ITEMS TO BE COMPLETED OR CORRECTED, THE COPY OF THE LIST SHALL STATE THAT EACH ITEM HAS BEEN COMPLETED OR OTHERWISE RESOLVED FOR ACCEPTANCE; TIMELY EXECUTION OF PUNCH LIST: OWNER RETAINS THE RIGHT, AND CONTRACTORS ACKNOWLEDGE AND AGREE WITH THIS RIGHT, THAT THE OWNER, AT HIS DISCRETION, MAY HIRE AN INDEPENDENT CONTRACTOR TO COMPLETE FINAL INSPECTION PUNCH LIST ITEMS IF THEY ARE NOT PERFORMED WITHIN A REASONABLE TIME, DEDUCTING A COST FROM RETAINAGES PRIOR TO FORWARDING FINAL PAYMENT, NORMALLY, A REASONABLE TIME IS CONSIDERED TO BE (30) DAYS AFTER RECEIPT OF PUNCH LIST BY THE GENERAL CONTRACTOR.

RECORD DOCUMENT SUBMITTALS:
- RECORD DRAWINGS: MAINTAIN A CLEAN, UNDAMAGED SET OF BLACK LINE COPIES OF CONTRACT DRAWINGS AND SHOP DRAWINGS. MARK THE SET TO SHOW THE ACTUAL INSTALLATION WHERE THE INSTALLATION VARIES SUBSTANTIALLY FROM THE WORK AS ORIGINALLY SHOWN. MARK RECORD SETS WITH RED ERASABLE PENCIL, USE OTHER COLORS TO DISTINGUISH BETWEEN VARIATIONS IN SEPARATE CATEGORIES OF THE WORK. ELECTRONIC DRAWINGS: THE CONTRACTOR WILL SCAN A COMPLETE RECORD SET OF AS BUILTS AND PROVIDE TO THE OWNER. ELECTRONIC OWNER'S MANUAL: THE CONTRACTOR SHALL ORGANIZE OPERATION AND MAINTENANCE DATA INTO SUITABLE COMPUTER FILES OF MANAGEABLE SIZE, MARK FILES WITH APPROPRIATE IDENTIFICATION INCLUDING THE FOLLOWING TYPES OF INFORMATION: EMERGENCY INSTRUCTIONS; SPARE PARTS LIST; COPIES OF WARRANTIES; WIRING DIAGRAMS; RECOMMENDED "TURN-AROUND" CYCLES; INSPECTION PROCEDURES; SHOP DRAWINGS AND PRODUCT DATA; FIXTURE LAMPING SCHEDULE: SCHEDULE IS TO INCLUDE FIXTURE TYPE, LOCATION(S), LAMP REPLACEMENT MODEL NUMBER AND MANUFACTURER. CLOSEOUT PROCEDURES: OPERATION AND MAINTENANCE INSTRUCTIONS: ARRANGE FOR EACH INSTALLER OF EQUIPMENT THAT REQUIRES REGULAR MAINTENANCE TO MEET WITH THE OWNER'S PERSONNEL TO PROVIDE INSTRUCTION IN PROPER OPERATION AND MAINTENANCE. PROVIDE INSTRUCTION BY MANUFACTURER'S REPRESENTATIVES IF INSTALLERS ARE NOT EXPERIENCED IN OPERATION AND MAINTENANCE PROCEDURES. INCLUDE A DETAILED REVIEW OF THE FOLLOWING ITEMS: MAINTENANCE MANUALS; RECORD DOCUMENTS; SPARE PARTS AND MATERIALS; TOOLS; CONTROL SEQUENCES; CLEANING; WARRANTIES AND BONDS; MAINTENANCE AGREEMENTS AND SIMILAR CONTINUING COMMITMENTS. AS PART OF INSTRUCTION FOR OPERATING EQUIPMENT, DEMONSTRATE THE FOLLOWING PROCEDURES: STARTUP; SHUTDOWN; EMERGENCY OPERATIONS; NOISE AND VIBRATION ADJUSTMENTS; SAFETY PROCEDURES; ECONOMY AND EFFICIENCY ADJUSTMENTS; EFFECTIVE ENERGY UTILIZATION.

FINAL CLEANING:
- THE CONTRACT REQUIRES GENERAL CLEANING DURING CONSTRUCTION. REGULAR SITE CLEANING IS ALSO REQUIRED. CLEANING: EMPLOY EXPERIENCED WORKERS OR PROFESSIONAL CLEANERS FOR FINAL CLEANING. CLEAN EACH SURFACE OR UNIT TO THE CONDITION EXPECTED IN A NORMAL COMMERCIAL BUILDING CLEANING AND MAINTENANCE PROGRAM. COMPLY WITH MANUFACTURER'S INSTRUCTIONS. COMPLETE THE FOLLOWING CLEANING OPERATIONS BEFORE REQUESTING INSPECTION FOR CERTIFICATION OF SUBSTANTIAL COMPLETION: REMOVE LABELS THAT ARE NOT PERMANENT LABELS; CLEAN TRANSPARENT MATERIALS, INCLUDING MIRRORS AND GLASS IN DOORS AND WINDOWS; REMOVE GLAZING COMPOUNDS AND OTHER SUBSTANCES THAT ARE NOTICEABLE VISION-OBSCURING MATERIALS, REPLACE CHIPPED OR BROKEN GLASS AND OTHER DAMAGED TRANSPARENT MATERIALS; CLEAN EXPOSED EXTERIOR AND INTERIOR HARD-SURFACED FINISHES TO A DUST FREE CONDITION, FREE OF STAINS, FILMS AND SIMILAR FOREIGN SUBSTANCES; RESTORE REFLECTIVE SURFACES TO THEIR ORIGINAL CONDITION, LEAVE CONCRETE FLOORS BROOM CLEAN, VACUUM CARPETED SURFACES; WIPE SURFACES OF MECHANICAL AND ELECTRICAL EQUIPMENT, REMOVE EXCESS LUBRICATION AND OTHER SUBSTANCES; CLEAN PLUMBING FIXTURES TO A SANITARY CONDITION, CLEAN LIGHT FIXTURES AND LAMPS; CLEAN THE SITE, INCLUDING LANDSCAPE DEVELOPMENT AREAS, OF RUBBISH, LITTER AND OTHER FOREIGN SUBSTANCES, SWEEP PAVED AREAS BROOM CLEAN, REMOVE STAINS, SPILLS AND OTHER FOREIGN DEPOSITS, RAKE GROUNDS THAT ARE NEITHER PAVED NOR PLANTED TO A SMOOTH, EVEN-TEXTURED SURFACE.

PROJECT CLOSEOUT:
BEFORE REQUESTING INSPECTION FOR CERTIFICATION OF SUBSTANTIAL COMPLETION, COMPLETE THE FOLLOWING:
- ADVISE THE OWNER OF PENDING INSURANCE CHANGEOVER REQUIREMENTS;
- SUBMIT SPECIFIC WARRANTIES, WORKMANSHIP BONDS, MAINTENANCE AGREEMENTS, FINAL CERTIFICATIONS AND SIMILAR DOCUMENTS;
- OBTAIN AND SUBMIT RELEASES ENABLING THE OWNER UNRESTRICTED USE OF THE WORK AND ACCESS TO SERVICES AND UTILITIES, INCLUDE OCCUPANCY PERMITS, OPERATING CERTIFICATES AND SIMILAR RELEASES;
- SUBMIT RECORD DRAWINGS, MAINTENANCE MANUALS, FINAL PROJECT PHOTOGRAPHS, DAMAGE OR SETTLEMENT SURVEYS, PROPERTY SURVEYS AND SIMILAR FINAL RECORD INFORMATION;
- DELIVER TOOLS, SPARE PARTS, EXTRA STOCK AND SIMILAR ITEMS;
- MAKE FINAL CHANGEOVER OF PERMANENT LOCKS AND TRANSMIT KEYS TO THE OWNER, ADVISE THE OWNER'S PERSONNEL OF CHANGEOVER IN SECURITY PROVISIONS;
- COMPLETE STARTUP TESTING OF SYSTEMS AND INSTRUCTION OF THE OWNER'S OPERATION AND MAINTENANCE PERSONNEL, DISCONTINUE AND REMOVE TEMPORARY FACILITIES FROM THE SITE;
- COMPLETE FINAL CLEANUP REQUIREMENTS INCLUDING TOUCH UP PAINTING.

FINAL ACCEPTANCE:
BEFORE REQUESTING FINAL INSPECTION FOR CERTIFICATION OF FINAL ACCEPTANCE AND FINAL PAYMENT, COMPLETE THE FOLLOWING:
- SUBMIT AN UPDATED FINAL STATEMENT ACCOUNTING FOR FINAL ADDITIONAL CHANGES TO THE CONTRACT SUM;
- SUBMIT A COPY OF THE ARCHITECT'S FINAL INSPECTION LIST OF ITEMS TO BE COMPLETED OR CORRECTED, THE COPY OF THE LIST SHALL STATE THAT EACH ITEM HAS BEEN COMPLETED OR OTHERWISE RESOLVED FOR ACCEPTANCE;
- TIMELY EXECUTION OF PUNCH LIST: OWNER RETAINS THE RIGHT, AND CONTRACTORS ACKNOWLEDGE AND AGREE WITH THIS RIGHT, THAT THE OWNER, AT HIS DISCRETION, MAY HIRE AN INDEPENDENT CONTRACTOR TO COMPLETE FINAL INSPECTION PUNCH LIST ITEMS IF THEY ARE NOT PERFORMED WITHIN A REASONABLE TIME, DEDUCTING A COST FROM RETAINAGES PRIOR TO FORWARDING FINAL PAYMENT, NORMALLY, A REASONABLE TIME IS CONSIDERED TO BE (30) DAYS AFTER RECEIPT OF PUNCH LIST BY THE GENERAL CONTRACTOR.

RECORD DOCUMENT SUBMITTALS:
RECORD DRAWINGS:
- MAINTAIN A CLEAN, UNDAMAGED SET OF BLACK LINE COPIES OF CONTRACT DRAWINGS AND SHOP DRAWINGS.
- MARK THE SET TO SHOW THE ACTUAL INSTALLATION WHERE THE INSTALLATION VARIES SUBSTANTIALLY FROM THE WORK AS ORIGINALLY SHOWN.
- MARK RECORD SETS WITH RED ERASABLE PENCIL, USE OTHER COLORS TO DISTINGUISH BETWEEN VARIATIONS IN SEPARATE CATEGORIES OF THE WORK.

ELECTRONIC DRAWINGS:
THE CONTRACTOR WILL SCAN A COMPLETE RECORD SET OF AS-BUILTS AND PROVIDE TO THE OWNER.

ELECTRONIC OWNER'S MANUAL:
THE CONTRACTOR SHALL ORGANIZE OPERATION AND MAINTENANCE DATA INTO SUITABLE COMPUTER FILES OF MANAGEABLE SIZE, MARK FILES WITH APPROPRIATE IDENTIFICATION INCLUDING THE FOLLOWING TYPES OF INFORMATION:
- EMERGENCY INSTRUCTIONS;
- SPARE PARTS LIST;
- COPIES OF WARRANTIES;
- WIRING DIAGRAMS;
- RECOMMENDED "TURN-AROUND" CYCLES;
- INSPECTION PROCEDURES;
- SHOP DRAWINGS AND PRODUCT DATA;
- FIXTURE LAMPING SCHEDULE: SCHEDULE IS TO INCLUDE FIXTURE TYPE, LOCATION(S), LAMP REPLACEMENT MODEL NUMBER AND MANUFACTURER.

CLOSEOUT PROCEDURES; OPERATION AND MAINTENANCE INSTRUCTIONS:
- ARRANGE FOR EACH INSTALLER OF EQUIPMENT THAT REQUIRES REGULAR MAINTENANCE TO MEET WITH THE OWNER'S PERSONNEL TO PROVIDE INSTRUCTION IN PROPER OPERATION AND MAINTENANCE.
- PROVIDE INSTRUCTION BY MANUFACTURER'S REPRESENTATIVES IF INSTALLERS ARE NOT EXPERIENCED IN OPERATION AND MAINTENANCE PROCEDURES.
- INCLUDE A DETAILED REVIEW OF THE FOLLOWING ITEMS:
  - MAINTENANCE MANUALS;
  - RECORD DOCUMENTS;
  - SPARE PARTS AND MATERIALS;
  - TOOLS;
  - CONTROL SEQUENCES;
  - CLEANING;
  - WARRANTIES AND BONDS;
  - MAINTENANCE AGREEMENTS AND SIMILAR CONTINUING COMMITMENTS.
- AS PART OF INSTRUCTION FOR OPERATING EQUIPMENT, DEMONSTRATE THE FOLLOWING PROCEDURES:
  - STARTUP;
  - SHUTDOWN;
  - EMERGENCY OPERATIONS;
  - NOISE AND VIBRATION ADJUSTMENTS;
  - SAFETY PROCEDURES;
  - ECONOMY AND EFFICIENCY ADJUSTMENTS;
  - EFFECTIVE ENERGY UTILIZATION.

FINAL CLEANING:
- THE CONTRACT REQUIRES GENERAL CLEANING DURING CONSTRUCTION.
- REGULAR SITE CLEANING IS ALSO REQUIRED.
  CLEANING:
  - EMPLOY EXPERIENCED WORKERS OR PROFESSIONAL CLEANERS FOR FINAL CLEANING.
  - CLEAN EACH SURFACE OR UNIT TO THE CONDITION EXPECTED IN A NORMAL COMMERCIAL BUILDING CLEANING AND MAINTENANCE PROGRAM.
  - COMPLY WITH MANUFACTURER'S INSTRUCTIONS.
  COMPLETE THE FOLLOWING CLEANING OPERATIONS BEFORE REQUESTING INSPECTION FOR CERTIFICATION OF SUBSTANTIAL COMPLETION:
  - REMOVE LABELS THAT ARE NOT PERMANENT LABELS;
  - CLEAN TRANSPARENT MATERIALS, INCLUDING MIRRORS AND GLASS IN DOORS AND WINDOWS;
    - REMOVE GLAZING COMPOUNDS AND OTHER SUBSTANCES THAT ARE NOTICEABLE VISION-OBSCURING MATERIALS;
    - REPLACE CHIPPED OR BROKEN GLASS AND OTHER DAMAGED TRANSPARENT MATERIALS;
  - CLEAN EXPOSED EXTERIOR AND INTERIOR HARD-SURFACED FINISHES TO A DUST FREE CONDITION, FREE OF STAINS, FILMS AND SIMILAR FOREIGN SUBSTANCES:
    - RESTORE REFLECTIVE SURFACES TO THEIR ORIGINAL CONDITION;
    - LEAVE CONCRETE FLOORS BROOM CLEAN;
    - VACUUM CARPETED SURFACES;
  - WIPE SURFACES OF MECHANICAL AND ELECTRICAL EQUIPMENT:
    - REMOVE EXCESS LUBRICATION AND OTHER SUBSTANCES;
    - CLEAN PLUMBING FIXTURES TO A SANITARY CONDITION;
    - CLEAN LIGHT FIXTURES AND LAMPS;
  - CLEAN THE SITE, INCLUDING LANDSCAPE DEVELOPMENT AREAS, OF RUBBISH, LITTER AND OTHER FOREIGN SUBSTANCES:
    - SWEEP PAVED AREAS BROOM CLEAN;
    - REMOVE STAINS, SPILLS AND OTHER FOREIGN DEPOSITS;
    - RAKE GROUNDS THAT ARE NEITHER PAVED NOR PLANTED TO A SMOOTH, EVEN-TEXTURED SURFACE.

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New Drive-up Canopy for:
Wyoming City Hall
City of Wyoming
1155 28th St SW, Wyoming, MI 49509

TAG Architecture and Planning

Dr. ____
Ap. JM

Date	Issued For
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Drawing

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STRUCTURAL ABBREVIATION INDEX	
ABBREV.	ITEM
A/E	Architect/Engineer
AB	Anchor Bolt/Column Anchor Rod
ACIP	Augered Cast In Place
AESS	Architecturally Exposed Structural Steel
AFF	Above Finished Floor
ALT	Alternate
AP	Anchor Plate
ARCH	Architectural
BB	Bond Beam
BC	Bottom Chord
BCX	Bottom Chord Extension
BFF	Below Finished Floor
BL	Brick Ledge
BM	Beam
BO	Bottom of
BOS	Bottom of Steel
BP	Bearing Plate
BRG	Bearing
BT	Bent
C/C	Center-to-Center
CANT	Cantilever
CBP	Column Base Plate
CFMF	Cold Formed Metal Framing
CFMT	Cold Formed Metal Truss
CJ	Construction Joint
CJ	Contraction Joint
CJ	Control Joint
CJP	Complete Joint Penetration Weld
CL	Centerline
CLR	Clear
CMU	Concrete Masonry Unit
COL	Column
CONC	Concrete
CONN	Connection, Connect
CONT	Continuous
COORD	Coordinate
DA	Deck Angle
DB	Deck Bar
DBE	Deck Bearing Elevation
DIA, Ø	Diameter
DP	Deck Plate
DWG	Drawing(s)
EA	Each
EF	Each Face
EL	Elevation
EQ	Equal
ES	Each Side
EW	Each Way
EX	Existing
EXP	Expansion
EXT	Exterior
FD	Floor Drain
FDN	Foundation
FF	Finished Floor
FFE	Finished Floor Elevation
FP	Foundation Pier
FS	Far Side
FTG, F	Footing
FV	Field Verify
GA	Gauge
GALV	Galvanized
GB	Grade Beam
GS	Grout Solid
GT	Girder Truss
HD	Hold Down Anchor
HORZ	Horizontal
HP	High Point
HS	Headed Stud
HT	Height
ID	Inside Diameter
IF	Inside Face

STRUCTURAL ABBREVIATION INDEX	
ABBREV.	ITEM
INT	Interior
JB	Joist Bearing Elevation
L	Lintel
L	Angle
LAT	Lateral
LD	Load
LF	Linear Foot
LG	Long
LLH	Long Leg Horizontal
LLV	Long Leg Vertical
LOC'N	Location
LP	Low Point
LT	Light
LW	Long Way
LWB	Laminated Wood Beam
MAX	Maximum
MCJ	Masonry Control Joint
MECH	Mechanical
MIN	Minimum
NS	Near Side
NTS	Not To Scale
O/O	Out-to-Out
OC	On-Center
OD	Outside Diameter
OF	Outside Face
OFD	Overflow Drain
OH	Opposite Hand
P	Pier
PAF	Power Actuated Fastener
PC	Precast
PEMB	Pre-Engineered Metal Building
PERP	Perpendicular
PL	Plate
PT	Pressure Treated
R, RAD	Radius
RD	Roof Drain
RE:	Reference, Refer to
REINF	Reinforce
REM	Remainder
REQ'D	Required
RMW	Reinforced Masonry Wall
RTU	Roof Top Unit
RXN	Reaction
SC	Slip Critical
SF	Step Footing
SIM	Similar
SIP	Structural Insulated Panel
SOG	Slab On Grade
SPCS	Spaces
SS	Stainless Steel
SST	Simpson Strong Tie
STL	Steel
SW	Short Way
T&B	Top and Bottom
TC	Top Chord
TCX	Top Chord Extension
TO	Top of
TOB	Top of Beam
TOF	Top of Footing
TOL	Top of Ledge
TOM	Top of Masonry
TOS	Top of Steel
TOW	Top of Wall
TYP	Typical
UNO	Unless Noted Otherwise
VERT	Vertical
w/	With
w/o	Without
WF	Wall Footing
WP	Working Point
WWF	Welded Wire Fabric

STRUCTURAL SPECIAL INSPECTION SCHEDULE (2021 MBC - Chapter 17)				
ITEM	CONT[2]	PERIODIC[2]	REFERENCE STANDARD	NOTES
PRE-FABRICATED CONSTRUCTION (1704.2.5)				3&4
CONCRETE CONSTRUCTION (1705.3)			ACI 318: Ch. 26	9
Inspect reinforcement, including prestressing tendons, and verify placement		X	ACI 318: Ch. 20, 25.2, 25.3, 26.6.1 - 26.6.3, 26.13	
Other reinforcing steel		X	AWS D1.4/ACI 318 - 26.6, 26.13	
Embedded Bolts & Plates		X	ACI 318: 17.8.2, 26.13	
Verify Required Mix Design		X	ACI 318: Ch 19, 26.4.3, 26.4.4, 26.13 IBC: 1904.1, 1904.2	
Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete	X		ASTM C 172/ASTM C 31/ACI 318:26.5, 26.12, 26.13	
Concrete Placement	X		ACI 318: 26.4, 26.5, 26.13 IBC: 1908	
Curing temperatures and techniques		X	ACI 318: 26.5.3 - 26.5.5, 26.13 IBC:1908.9	
Verify In-Situ Strength		X	ACI 318: 26.11.2, 26.12, 26.13	10
Formwork Shape, Location & Dimensions		X	ACI 318: 26.11.1.2(b), 26.13	
SOILS (1705.6)				12
Verify materials below shallow foundations are adequate to achieve the deign bearing capacity		X		
Verify excavations are extended to proper depth and have reach proper material		X		
Perform classification and testing of compacted fill materials		X		
During fill placement, verify use of proper materials and procedures in accordance with the provisions of the approved geotechnical report. Verify densities and lift thicknesses during placement and compaction of compacted fill	X			
Prior to placement of compacted fill, observe subgrade and verify that site has been prepared properly		X		

STRUCTURAL SPECIAL INSPECTION SCHEDULE NOTES:

1. Items marked with an 'X' shall be inspected in accordance with chapter 17 of the building code by a certified special inspector from an established testing agency. For material sampling and testing requirements, refer to the project specifications and the specific general notes, sections. The testing agency shall send copies of all structural testing and inspection reports directly to the architect, engineer, contractor, and building official. Any items which fail to comply with the approved construction documents shall immediately be brought to the attention of the contractor for correction. If discrepancies are not corrected, they shall be brought to the attention of the building official, architect, and engineer prior to completion of that phase of the work. Special inspection testing requirements apply equally to all bidder designed components.
2. Continuous special inspection means the full-time observation of work requiring special inspection by an approved special inspector who is present in the area where the work is being performed. Periodic special inspection means the part-time or intermittent observation of work requiring special inspection by an approved special inspector who is present in the area where the work has been or is being performed and at the completion of the work. (sect 1702)
3. Special inspection is not required for work performed by an approved fabricator per section 1704.2.5.1.
4. Inspection for pre-fabricated construction shall be the same as if the material used in the construction took place on site. Continuous inspection will not be required during pre-fabrication if the approved agency certifies the construction and furnishes evidence of compliance.
5. Note not used.
6. Note not used.
7. Note not used.
8. Periodic special inspection is allowed for verification of the weldability of reinforcing steel other than ASTM A 706 and single pass fillet welds (maximum 5/16") in accordance with building code section 1705.3.1. Continuous special inspection is required for inspection of all other welds not included in the periodic special inspection requirements noted above.
9. Special inspection is not required for isolated spread footings (≤ 3 stories), non-structural slabs, foundation walls, patios, driveways and sidewalks provided the requirements of section 1705.3 are met.
10. Periodic special inspection is required for verification of in-situ concrete strength for post-tensioned concrete prior to tensioning tendons and for beams and structural slabs before removing shoring or forms.
11. Note not used.
12. Special inspection of soils shall reference the approved soils report to determine compliance.
13. Note not used.
14. Any construction or material that has failed inspection shall be subject to removal and replacement.
15. Note not used.
16. Note not used.
17. This table and notes represent code requirements for structural portions of the project and is not a complete representation of what may be required by chapter 17 of the building code. See chapter 17 and project specifications for additional requirements.

CONCRETE MIX DESIGN PERFORMANCE SPECIFICATION TABLE													
		REQUIRED ADMIXTURES											
MIX TYPE	MIX DESCRIPTION	CHEMICAL	CEMENTITIOUS (% BY WEIGHT)	REQUIRED SULFATE RESISTANCE (NOTE 6)	MINIMUM FREEZE-THAW RESISTANCE	PERMEABILITY & CHLORIDE RESISTANCE	MAXIMUM ALLOWED CHLORIDE ION CONTENT (% BY WEIGHT OF CEMENT)	MAXIMUM ALLOWED 28-DAY SHRINKAGE (%)	MINIMUM COMPRESSIVE STRENGTH F'C (PSI) (NOTE 3)	MAX W/CM RATIO (NOTE 2)	AIR CONTENT (% +/- 1.5%)	MAX AGG SIZE (IN)	FIBROUS REINF DOSAGE (LB/CY) (NOTE 7)
1	FOUNDATIONS & FOOTINGS		25% FLY ASH OR 30% GROUND BLAST FURNACE SLAG IS ACCEPTABLE	S0	F1	C1	0.3	-	4500	0.55	4.5	1	0

CONCRETE MIX DESIGN PERFORMANCE SPEC SCHEDULE NOTES:

1. All aggregates shall be clean uniformly grades from coarse to fine.
2. Water-reducing admixtures may be utilized to maintain water/cement ratio AND workability. Note that this may affect finish procedures.
3. F'c values shown are code minimums. Engineering data may require a high f'c as dictated by project design requirements. Higher compressive strength requirement shall govern mix design.
4. Coordinate admixtures and curing measures to be compatible with flooring materials and adhesives.
5. Note not used.
6. See ACI 318 Table 19.3.2.1 for cementitious material restrictions, and Table 26.4.2.2(c) for maximum expansion strain limits.
7. Fibrous reinforcement basis of design is fibrillated polypropylene micro-fibers engineered and designed for use in concrete, complying with ASTM C1116/C1116M, Type III, 1/2 to 1 1/2 inches long.
8. See ACI 318 Table 26.4.2.2(b) for limits on cementitious materials for F3 exposure class.

FOOTING SCHEDULE				
MARK	WIDTH	LENGTH	THICKNESS	REINFORCING EW
F4x6	4' - 0"	6' - 0"	15"	(5) #6 LONG (7) #6 TRANS

ENGINEERING DATA

Design soil bearing pressure	3000 psf
Design stresses	
Concrete	
Footings and Foundations	f'c = 4500 psi
Reinforcing steel	Fy = 60000 psi
Steel	
Anchor bolts/Column anchor rods	ASTM F 1554 - Grade 55 Type S1
Structural design requirements	
Roof live load	20 psf
Risk Category	II
Roof snow load	
Ground snow load (Pg)	35 psf
Wind Load	
Ultimate design wind speed (3 sec)	110 mph
Wind exposure category	B
Earthquake	By canopy suppliers engineer
Design codes	
General building code	Michigan Building Code 2021
Concrete	ACI 318
Environmental Loads	ASCE 7

GENERAL STRUCTURAL NOTES

1. All work shall be performed in accordance with the contract documents. In case of a conflict within the contract documents, the more stringent condition shall govern, unless directed otherwise by the engineer of record. Prior to implementation, any discrepancies shall be reported to the architect for clarification.
2. In the event that certain details of construction are not indicated or noted in the drawings, details for similar conditions that are indicated or noted shall be utilized, subject to the structural engineer's approval.
3. Openings and penetrations through structural elements, and items embedded in structural elements that are not indicated in the structural drawings shall be reviewed by the structural engineer prior to fabrication, erection and/or construction.
4. The methods, procedures and sequences of construction are the responsibility of the contractor. Contractor shall take all necessary precautions to maintain and ensure the integrity of the structure at all stages of construction. Contractor shall immediately notify the structural engineer of any condition which, in his opinion, might endanger the stability of the structure or cause distress in the structure.
5. All existing conditions and all related dimensions indicated in the contract documents shall be field verified prior to fabrication, erection and/or construction. Any condition that differs from that indicated in the contract documents shall be submitted to the architect for review prior to fabrication, erection and/or construction.
6. Provide special inspection in accordance with chapter 17 of the Michigan Building Code and with project specifications.
7. Copies or reproductions of architectural or structural drawings and details will not be accepted as shop drawings. Submittals received as such will not be reviewed and will be rejected.

GENERAL FOUNDATION AND CONCRETE NOTES

1. The contractor shall implement all requirements and recommendations stated in the geotechnical engineer's report by Materials Testing Consultants, entitled "City Hall Drive-Up Canopy, Wyoming Michigan", dated February 2023.
2. It is strongly recommended that the geotechnical engineer of record that produces the report be retained to provide the soils testing and inspections during construction.
3. Fill material shall be thoroughly compacted prior to placement of concrete.
4. Provide dowels from footing equal in size and number to vertical pier reinforcing.
5. Cover for reinforcing shall be in accordance with ACI-318.
6. Coordinate placement of column anchor rods with foundation reinforcing. All column anchor rods shall be installed using templates and setting drawings. No tilted or misplaced bolts will be accepted. Notify Architect/Engineer for approval of any corrective action. Tolerances for the installation of the anchor bolts shall be in accordance with AISC "Code of Standard Practice" guidelines.

CONCRETE SPEC NOTES

1. All concrete shall be done in accordance with ACI 117, 211, 301, 302, 315, 347 and 318 requirements, and as stated on contract documents.
2. Provide submittals for Product Data, Design Mixes, Steel Reinforcement Shop Drawings, Material Test Reports, and Material Certifications.
3. Testing of concrete shall be done for each 100 cu. yd. or fraction thereof, and shall include but is not limited to slump, air content concrete temperature, unit weight, and compressive strength. All testing shall follow ASTM standards.
4. Admixtures shall contain no more than 0.1 percent water-soluble chloride ions by mass of cementitious material. Do not use admixtures containing calcium chloride.
   A. Water-Reducing Admixture: ASTM C494, Type A
   B. High-Range, Water-Reducing Admixture: ASTM C494, Type F
   C. Water-Reducing and Accelerating Admixture: ASTM C494, Type E
   D. Water-Reducing and Retarding Admixture: ASTM C494, Type D
   E. Air-Entraining Admixture: ASTM C260
5. Repair and patch defective areas as directed by Architect.

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New Drive-up Canopy For:
Wyoming City Hall -
City of Wyoming
1155 28th St SW, Wyoming, Michigan 19509

TAG Architecture and

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Drawing

S0.1

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SECTION 031000 - CONCRETE FORMING AND ACCESSORIES

1. PART 1 - GENERAL
   - A. SUMMARY
     - a. Section Includes:
       - Form-facing material for cast-in-place concrete.
       - Shoring, bracing, and anchoring.
       - Concrete accessories
   - B. ACTION SUBMITTALS
     - a. Product Data: For each of the following:
     - b. Shop Drawings: Indicate location of waterstops (if present on project).
   - C. INFORMATIONAL SUBMITTALS
     - a. Field quality-control reports.
2. PART 2 - PRODUCTS
   - A. PERFORMANCE REQUIREMENTS
     - a. Concrete Formwork: Design, engineer, erect, shore, brace, and maintain formwork, shores, and reshores in accordance with ACI 301, to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until structure can support such loads, so that resulting concrete conforms to the required shapes, lines, and dimensions.
   - B. FORM-FACING MATERIALS
     - a. As-Cast Surface Form-Facing Material:
       - Provide continuous, true, and smooth concrete surfaces.
       - Furnish in largest practicable sizes to minimize number of joints.
     - b. Concealed Surface Form-Facing Material: Lumber, plywood, metal, plastic, or another approved material.
   - C. 2.4 RELATED MATERIALS
     - a. Reglets: Fabricate reglets of not less than 0.022-inch-thick, galvanized-steel sheet. Temporarily fill or cover face opening of reglet to prevent intrusion of concrete or debris.
     - b. Dovetail Anchor Slots: Hot-dip galvanized-steel sheet, not less than 0.034 inch thick, with bent tab anchors. Temporarily fill or cover face opening of slots to prevent intrusion of concrete or debris.
     - c. Chamfer Strips: Wood, metal, PVC, or rubber strips, 3/4 by 3/4 inch, minimum.
     - d. Rustication Strips: Wood, metal, PVC, or rubber strips, kerfed for ease of form removal.
     - e. Form-Release Agent: Commercially formulated form-release agent that does not bond with, stain, or adversely affect concrete surfaces and does not impair subsequent treatments of concrete surfaces.
     - f. Form Ties: Factory-fabricated, removable or snap-off, glass-fiber-reinforced plastic or metal form ties designed to resist lateral pressure of fresh concrete on forms and to prevent spalling of concrete on removal.
3. PART 3 - EXECUTION
   - A. INSTALLATION OF FORMWORK
     - a. Comply with ACI 301.
     - b. Construct formwork within tolerance limits of ACI 117.
     - c. Limit concrete surface irregularities as follows:
       - Surface Finish-1.0: ACI 117 Class D, 1 inch. (concealed concrete only)
       - Surface Finish-2.0: ACI 117 Class B, 1/4 inch. (all exposed concrete)
     - d. Construct forms tight enough to prevent loss of concrete mortar.
     - e. At construction joints, overlap forms onto previously placed concrete not less than 12 inches.
   - B. INSTALLATION OF EMBEDDED ITEMS
     - a. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete.
       - Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
       - Install anchor rods, accurately located, to elevations required and complying with tolerances in Section 7.5 of AISC 303.
       - Install reglets to receive waterproofing and to receive through-wall flashings in outer face of concrete frame at exterior walls, where flashing is shown at lintels, shelf angles, and other conditions.
       - Install dovetail anchor slots in concrete structures, as indicated on Drawings.
       - Clean embedded items immediate prior to concrete placement.
   - C. FIELD QUALITY CONTROL
     - a. Special Inspections: Owner will engage a special inspector and qualified testing and inspecting agency to perform field tests and inspections and prepare test reports.
     - b. Inspections:
       - Inspect formwork for shape, location, and dimensions of the concrete member being formed.
       - Inspect insulating concrete forms for shape, location, and dimensions of the concrete member being formed.

END OF SECTION 031000

SESECTION 032000 - CONCRETE REINFORCING

1. PART 1 - GENERAL
   - A. SUMMARY
     - a. Section Includes:
       - Steel reinforcement bars.
       - Welded-wire reinforcement.
   - B. PREINSTALLATION MEETINGS
     - a. Preinstallation Conference: Conduct conference at Project site.
   - C. ACTION SUBMITTALS
     - a. Product Data: For the following:
       - Each type of steel reinforcement.
       - Mechanical splice couplers.
     - b. Shop Drawings: Comply with ACI SP-066:
       - Include placing drawings that detail fabrication, bending, and placement.
       - Include bar sizes, lengths, materials, grades, bar schedules, stirrup spacing, bent bar diagrams, bar arrangement, location of splices, lengths of lap splices, details of mechanical splice couplers, details of welding splices, tie spacing, hoop spacing, and supports for concrete reinforcement.
   - D. INFORMATIONAL SUBMITTALS
     - a. Field quality-control reports.
   - E. QUALITY ASSURANCE
     - a. Welding Qualifications: Qualify procedures and personnel in accordance with AWS D1.4/D 1.4M.
2. PART 2 - PRODUCTS
   - A. STEEL REINFORCEMENT
     - a. Reinforcing Bars: ASTM A615/A615M, Grade 60, deformed.
     - b. Low-Alloy Steel Reinforcing Bars: ASTM A706/A706M, deformed.
     - c. Headed-Steel Reinforcing Bars: ASTM A970/A970M.
     - d. Plain-Steel Welded-Wire Reinforcement: ASTM A1064/A1064M, plain, fabricated from as-drawn steel wire into flat sheets.
     - e. Deformed-Steel Welded-Wire Reinforcement: ASTM A1064/A1064M, flat sheet.
   - B. REINFORCEMENT ACCESSORIES
     - a. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded-wire reinforcement in place.
       - Manufacture bar supports from steel wire, plastic, or precast concrete in accordance with CRSI's "Manual of Standard Practice," of greater compressive strength than concrete and as follows:
         1. For concrete surfaces exposed to view, where legs of wire bar supports contact forms, use CRSI Class 1 plastic-protected steel wire, all-plastic bar supports, or CRSI Class 2 stainless steel bar supports.
     - b. Mechanical Splice Couplers: ACI 318 Type 1, same material of reinforcing bar being spliced; tension-compression type.
   - C. FABRICATING REINFORCEMENT
     - a. Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."
3. PART 3 - EXECUTION
   - A. PREPARATION
     - a. Protection of In-Place Conditions:
       - Do not cut or puncture vapor retarder.
       - Repair damage and reseal vapor retarder before placing concrete.
     - b. Clean reinforcement of loose rust and mill scale, earth, ice, and other foreign materials that reduce bond to concrete.
   - B. INSTALLATION OF STEEL REINFORCEMENT
     - a. Comply with CRSI's "Manual of Standard Practice" for placing and supporting reinforcement.
     - b. Accurately position, support, and secure reinforcement against displacement.
       - Locate and support reinforcement with bar supports to maintain minimum concrete cover.
       - Do not tack weld crossing reinforcing bars.
     - c. Provide concrete coverage in accordance with ACI 318.
     - d. Set wire ties with ends directed into concrete, not toward exposed concrete surfaces.
     - e. Splices: Lap splices as indicated on Drawings or as follows whichever is greater.
       - Bars indicated to be continuous, and all vertical bars shall be lapped per ACI 318.
       - Stagger splices in accordance with ACI 318.
       - Mechanical Splice Couplers: Install in accordance with manufacturer's instructions.
       - Weld reinforcing bars in accordance with AWS D1.4/D 1.4M, where indicated on Drawings.
     - f. Install welded-wire reinforcement in longest practicable lengths.
       - Support welded-wire reinforcement in accordance with CRSI "Manual of Standard Practice."
       - Lap edges and ends of adjoining sheets at least one mesh spacing plus 2 inches for plain wire and 8 inches for deformed wire.
       - Offset laps of adjoining sheet widths to prevent continuous laps in either direction.
       - Lace overlaps with wire.
   - C. JOINTS
     - a. Construction Joints: Install so strength and appearance of concrete are not impaired, at locations indicated or as approved by Architect.
       - Place joints perpendicular to main reinforcement.
       - Continue reinforcement across construction joints unless otherwise indicated.
   - D. INSTALLATION TOLERANCES
     - a. Comply with ACI 117.
   - E. FIELD QUALITY CONTROL
     - a. Special Inspections: Owner will engage a special inspector and qualified testing and inspecting agency to perform field tests and inspections and prepare test reports.
     - b. Testing Agency: Engage a qualified testing and inspecting agency to perform tests and inspections and to submit reports.
     - c. Inspections:
       - Steel-reinforcement placement.
       - Steel-reinforcement mechanical splice couplers.
       - Steel-reinforcement welding.

END OF SECTION 032000

SECTION 033000 - CAST-IN-PLACE CONCRETE

1. PART 1 - GENERAL
   - A. SUMMARY
     - a. Section Includes:
       - Cast-in-place concrete, including concrete materials, mixture design, placement procedures, and finishes.
     - b. Related Requirements:
       - Section 031000 "Concrete Forming and Accessories" for form-facing materials, form liners, insulating concrete forms, and waterstops.
       - Section 032000 "Concrete Reinforcing" for steel reinforcing bars and welded-wire reinforcement.
   - B. DEFINITIONS
     - a. Cementitious Materials: Portland cement alone or in combination with one or more of the following: blended hydraulic cement, fly ash, slag cement, and other pozzolans materials subject to compliance with requirements.
     - b. Water/Cement Ratio (w/cm): The ratio by weight of water to cementitious materials.
   - C. ACTION SUBMITTALS
     - a. Product Data: For each of the following.
       - Portland cement.
       - Fly ash.
       - Slag cement.
       - Blended hydraulic cement.
       - Aggregates.
       - Admixtures:
         1. Include limitations of use, including restrictions on cementitious materials, supplementary cementitious materials, air entrainment, aggregates, temperature at time of concrete placement, relative humidity at time of concrete placement, curing conditions, and use of other admixtures.
       - Vapor retarders.
       - Curing materials.
       - Joint fillers.
     - b. Design Mixtures: For each concrete mixture, include the following:
       - Mixture identification.
       - Minimum 28-day compressive strength.
       - Durability exposure class.
       - Maximum w/cm.
       - Calculated equilibrium unit weight, for lightweight concrete.
       - Slump limit.
       - Air content.
       - Nominal maximum aggregate size.
       - Indicate amounts of mixing water to be withheld for later addition at Project site if permitted.
       - Intended placement method.
       - Submit alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.
       - Proportions or historical strength data in accordance with ACI 301.
   - D. INFORMATIONAL SUBMITTALS
     - a. Material Certificates: For each of the following, signed by manufacturers:
       - Cementitious materials.
       - Admixtures.
       - Curing compounds.
     - b. Field quality-control reports.
   - E. QUALITY ASSURANCE
     - a. Ready-Mixed Concrete Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C94/C94M requirements for production facilities and equipment.
       - Manufacturer certified in accordance with NRMCA's "Certification of Ready Mixed Concrete Production Facilities."
   - F. DELIVERY, STORAGE, AND HANDLING: Comply with ASTM C94/C94M and ACI 301.
2. PART 2 - PRODUCTS
   - A. CONCRETE, GENERAL
     - a. ACI Publications: Comply with ACI 301.
   - B. CONCRETE MATERIALS
     - a. Cementitious Materials:
       - Portland Cement: ASTM C150/C150M, Type I. or
       - Blended Cement: ASTM C595.
       - Fly Ash: ASTM C618, Class C or F.
       - Slag Cement: ASTM C989/C989M, Grade 100 or 120.
     - b. Normal-Weight Aggregates: ASTM C33/C33M, Class 1N coarse aggregate or better, graded. Provide aggregates from a single source.
       - Maximum Coarse-Aggregate Size: as indicated.
       - Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.
     - c. Air-Entraining Admixture: ASTM C260/C260M.
     - d. Chemical Admixtures: Certified by manufacturer to be compatible with other admixtures that do not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride in steel-reinforced concrete.
       - Water-Reducing Admixture: ASTM C494/C494M, Type A.
       - Retarding Admixture: ASTM C494/C494M, Type B.
       - Water-Reducing and -Retarding Admixture: ASTM C494/C494M, Type D.
       - High-Range, Water-Reducing Admixture: ASTM C494/C494M, Type F.
       - High-Range, Water-Reducing and -Retarding Admixture: ASTM C494/C494M, Type G.
       - Plasticizing and Retarding Admixture: ASTM C1017/C1017M, Type II.
     - e. Water and Water Used to Make Ice: ASTM C94/C94M, potable or complying with ASTM C1602/C1602M, including all limits listed in Table 2 and the requirements of paragraph 5.4
   - C. RELATED MATERIALS
     - a. Expansion- and Isolation-Joint-Filler Strips: ASTM D1751, asphalt-saturated cellulosic fiber or ASTM D1752, cork or self-expanding cork.
   - D. CONCRETE MIXTURES, GENERAL
     - a. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, in accordance with ACI 301.
       - Use a qualified testing agency for preparing and reporting proposed mixture designs, based on laboratory trial mixtures.
     - b. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than portland cement in concrete as follows:
       - Fly Ash or Other Pozzolans: 25 percent by mass.
       - Slag Cement: 50 percent by mass.
       - Total of Fly Ash or Other Pozzolans, Slag Cement: 50 percent by mass, with fly ash or pozzolans not exceeding 25 percent by mass.
       - Total of Fly Ash or Other Pozzolans: 35 percent by mass with fly ash or pozzolans not exceeding 25 percent by mass.
     - c. Admixtures: Use admixtures in accordance with manufacturer's written instructions.
   - E. CONCRETE MIXTURES: As indicated on drawings.
   - F. CONCRETE MIXING
     - a. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete in accordance with ASTM C94/C94M and ASTM C1116/C1116M, and furnish batch ticket information.

SECSECTION 033000 - CAST-IN-PLACE CONCRETE (cont)

3. PART 3 - EXECUTION
   - A. INSTALLATION OF EMBEDDED ITEMS
     - a. Place and secure anchorage devices and other embedded items required for adjoining Work that is attached to or supported by cast-in-place concrete.
       - Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
       - Install anchor rods, accurately located, to elevations required and complying with tolerances in Section 7.5 of ANSI/AISC 303.
       - Install reglets to receive waterproofing and to receive through-wall flashings in outer face of concrete frame at exterior walls, where flashing is shown at lintels, shelf angles, and other conditions.
   - B. CONCRETE PLACEMENT
     - a. Before placing concrete, verify that installation of formwork, reinforcement, embedded items, and vapor retarder is complete and that required inspections are completed.
     - b. Notify Architect and testing and inspection agencies 24 hours prior to commencement of concrete placement.
     - c. Before test sampling and placing concrete, water may be added at Project site, subject to limitations of ACI 301, but not to exceed the amount indicated on the concrete delivery ticket.
       - Do not add water to concrete after adding high-range water-reducing admixtures to mixture.
     - d. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete is placed on concrete that has hardened enough to cause seams or planes of weakness.
       - If a section cannot be placed continuously, provide construction joints as indicated.
       - Consolidate placed concrete with mechanical vibrating equipment in accordance with ACI 301.
     - e. Deposit and consolidate concrete for floors and slabs in a continuous operation, within limits of construction joints, until placement of a panel or section is complete.
   - C. FINISHING FORMED SURFACES
     - a. As-Cast Surface Finishes:
       - ACI 301 Surface Finish SF-1.0: As-cast concrete texture imparted by form-facing material.
         1. Apply to concrete surfaces not exposed to public view.
       - ACI 301Surface Finish SF-2.0: As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams.
         1. Apply to concrete surfaces exposed to public view, to receive a rubbed finish, or to be covered with a coating or covering material applied directly to concrete.
         2. Provide mockup.
     - b. Related Unformed Surfaces:
       - At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a color and texture matching adjacent formed surfaces.
   - D. 3.7 CONCRETE CURING
     - a. Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.
       - Comply with ACI 301 and ACI 306.1 for cold weather protection during curing.
       - Comply with ACI 301 and ACI 305.1 for hot-weather protection during curing.
     - b. Evaporation Retarder: Apply evaporation retarder to unformed concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply in accordance with manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.
     - c. Curing: Comply with ACI 308.1.
   - E. TOLERANCES: Conform to ACI 117.

SECTION 033000 - CAST-IN-PLACE CONCRETE (cont)

   - F. FIELD QUALITY CONTROL
     - a. Special Inspections: Owner will engage a special inspector to perform field tests and inspections and prepare testing and inspection reports.
     - b. Batch Tickets: For each load delivered, submit three copies of batch delivery ticket to testing agency, indicating quantity, mix identification, admixtures, design strength, aggregate size, design air content, design slump at time of batching, and amount of water that can be added at Project site.
     - c. Concrete Tests: Testing of composite samples of fresh concrete obtained in accordance with ASTM C 172/C 172M shall be performed in accordance with the following requirements:
       - Testing Frequency: Obtain one composite sample for each day's pour of each concrete mixture exceeding 5 cu. yd., but less than 25 cu. yd., plus one set for each additional 50 cu. yd. or fraction thereof.
         1. When frequency of testing provides fewer than five compressive-strength tests for each concrete mixture, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.
       - Slump: ASTM C143/C143M:
         1. One test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture.
         2. Perform additional tests when concrete consistency appears to change.
       - Slump Flow: ASTM C1611/C1611M:
         1. One test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture.
         2. Perform additional tests when concrete consistency appears to change.
       - Air Content: ASTM C231/C231M pressure method, for normal-weight concrete;
         1. One test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
       - Concrete Temperature: ASTM C1064/C1064M:
         1. One test hourly when air temperature is 40 deg F and below or 80 deg F and above, and one test for each composite sample.
       - Compressive-Strength Tests: ASTM C39/C39M.
         1. Test one set of two laboratory-cured specimens at seven days and one set of two specimens at 28 days.
         2. Test one set of two field-cured specimens at seven days and one set of two specimens at 28 days.
         3. A compressive-strength test shall be the average compressive strength from a set of two specimens obtained from same composite sample and tested at age indicated.
       - When strength of field-cured cylinders is less than 85 percent of companion laboratory-cured cylinders, Contractor shall evaluate operations and provide corrective procedures for protecting and curing in-place concrete.
       - Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Architect but will not be used as sole basis for approval or rejection of concrete.
       - Additional Tests:
         1. Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Architect.
         2. Testing and inspecting agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C42/C42M or by other methods as directed by Architect.
            - A. Acceptance criteria for concrete strength shall be in accordance with ACI 301 section 1.6.6.3.
       - Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.
       - Correct deficiencies in the Work that test reports and inspections indicate do not comply with the Contract Documents.

END OF SECTION 033000

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TAG Architecture and

New Drive-up Canopy For:
Wyoming City Hall -
City of Wyoming
1155 28th St SW, Wyoming, Michigan 19509

Dr. MV
Ap CT

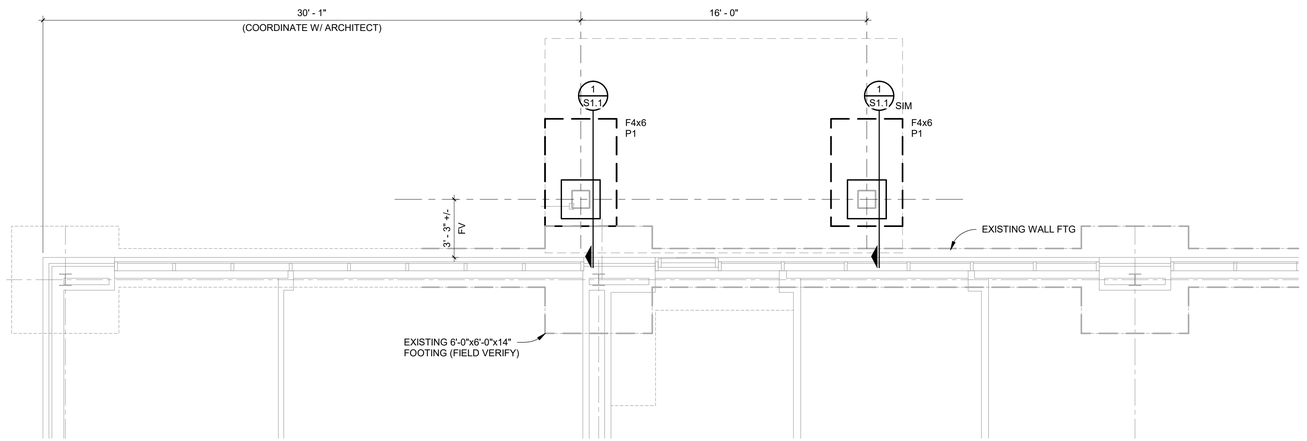
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Drawing

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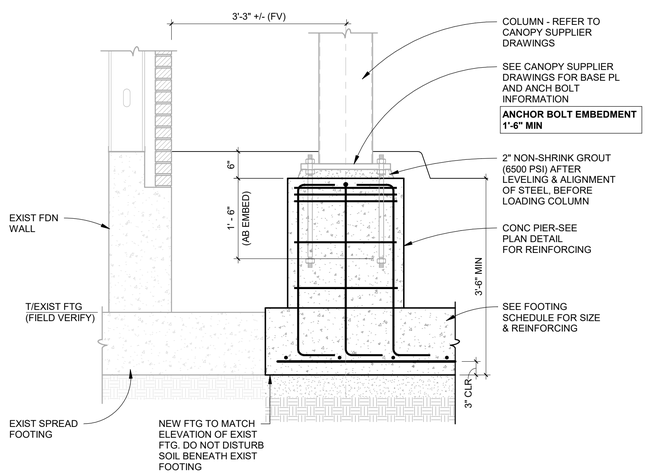


CANOPY FOUNDATION PLAN

SCALE: 1/4" = 1'-0"

FOUNDATION PLAN NOTES

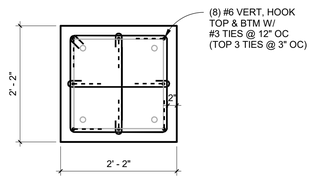
1. Refer to architectural drawings for all dimensions not indicated.



1 S1.1 FOOTING AND PIER SECTION

SCALE: 3/4" = 1'-0"

COLUMN BASE PLATE (BY CANOPY SUPPLIER)
SHOWN FOR ILLUSTRATION PURPOSE ONLY



2 S1.1 PIER P1

SCALE: 3/4" = 1'-0"

PRE-ENGINEERED METAL CANOPY NOTE:

FOUNDATIONS SHOWN ARE BASED ON REACTIONS PROVIDED BY THE PRE-ENGINEERED CANOPY SUPPLIER POLIGON DATED 10/30/2025.

EXISTING BUILDING NOTE:

THIS PROJECT INVOLVES AN EXISTING BUILDING. THE DRAWINGS REFLECT WHAT IS KNOWN ABOUT THE EXISTING BUILDING, BUT EXISTING CONDITIONS MUST BE VERIFIED BEFORE FABRICATION AND CONSTRUCTION. ABUTTING CONSTRUCTION MUST MATCH UP. VERIFY ALL SUCH CONDITIONS, AND NOTIFY A/E IF ACTUAL CONDITIONS DIFFER FROM THE CONTRACT DOCUMENTS. AN ATTEMPT HAS BEEN MADE TO ANTICIPATE CONDITIONS IN THE EXISTING STRUCTURE.

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Dr. MV
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MATERIALS TESTING CONSULTANTS

GEOTECHNICAL REPORT

CITY HALL DRIVE-UP CANOPY

WYOMING, MICHIGAN

Prepared For:

CITY OF WYOMING – ENGINEERING DEPARTMENT

WYOMING, MICHIGAN

Prepared By:

MATERIALS TESTING CONSULTANTS, INC.

February 2023

MTC Project No. 221587

February 3, 2023
Project No. 221587

City of Wyoming
Engineering Department
2660 Burlingame Avenue SW
Wyoming, Michigan 49509

Attention: Mr. Jeffrey Oonk, P.E.
Senior Civil Engineer

Reference: Report of Geotechnical Investigation
City Hall Drive-Up Canopy
Wyoming, Michigan

Dear Mr. Oonk:

We have completed a geotechnical investigation for the above-referenced project. The purpose of this investigation has been to identify the general subsurface soil conditions in the vicinity of the proposed construction, analyze the conditions relative to the planned construction and to provide recommendations for the design of foundations and earth-related structures. This work has been performed as described in your email dated November 14, 2022.

Presented herein are descriptions of our understanding of the design considerations, the geotechnical investigation, encountered conditions and engineering recommendations. The Appendix contains the report limitations and data collected during this investigation.

DESIGN CONSIDERATIONS

Available Information

We have been provided the following documents and information for use in this investigation:

- Demo and proposed plans (sketch Nos. 1 and 2), showing the existing site conditions as well as the proposed boring locations and proposed construction prepared by The Architectural Group, Inc. and dated June 8, 2022.
- Various record plans provided by Mr. Jeffrey Oonk, P.E. with the City of Wyoming Engineering Department on November 16, 2022, showing the historical site development and existing conditions including known utilities.
- Conversations with Mr. Jeffrey Oonk, P.E. of the City of Wyoming Engineering Department regarding the type of construction and elevations.

- Conversations with Mr. Jay Miedema of the Architectural Group, Inc. regarding design loads.

Location and Type of Structure

The proposed construction will be located in plan as shown on Figure No. 1. The site is located in the north parking lot west of the existing staff entry of Wyoming City Hall at 1101 28th Street SW, Wyoming, Michigan 49509.

The construction will be a drive-up canopy, with a radius 20 ft in plan and maximum column loads of 50 kips. Asphalt pavement areas and concrete curbs are planned. Traffic is expected to consist of relatively light passenger vehicles.

We should be informed of any changes between the actual design conditions and those described herein as this information may affect our recommendations.

INVESTIGATION METHODOLOGY

Conventional soil test borings and sampling along with field engineering reconnaissance were used to investigate the subsurface conditions. A pavement core was completed adjacent to Boring B-3 to document the existing pavement thickness and recover a core sample.

Conventional soil test borings and sampling along with field engineering reconnaissance were used to investigate the subsurface conditions. Boring locations are shown on Figure No. 1. Investigation procedures, soil classification information and boring/core logs are provided in the Appendix.

Number of Borings	3
Boring Depth Range, ft.	15

Borings were drilled and other sampling was conducted solely to obtain indications of subsurface conditions as part of a geotechnical exploration program. No services were performed to evaluate subsurface environmental conditions.

Recovered samples were sealed, labeled, and transported to our laboratory. All soil samples will be discarded after sixty days unless a longer hold time is specifically requested.

INVESTIGATION RESULTS

Regional Geology

The *Map of the Surface Formations of the Southern Peninsula of Michigan,* published by the State of Michigan, indicates the site is in an area of outwash and glacial channels. Soil conditions typically are found to be sand and silt in this type of geologic area, as found within our soil borings. The *Map of Bedrock Topography of the Southern Peninsula of Michigan* indicates bedrock to be at approximately el 600, approximately 80 ft below the existing ground surface.

Site Conditions

At the time of our field work, the area of investigation was covered with asphalt pavement and an existing landscaped island area. The site, in general, was relatively flat with elevations ranging from 681.6 to 682.2. Indications of previous structures were not observed during our field staking activities. An irrigation system was present in the proposed construction area as well as parking lot lighting. There were no obvious signs of structural distress, such as readily-visible settlement or cracking, on the exterior of the existing building.

Subsurface Conditions

The encountered pavement section consisted of 3 to 3.5 inches of HMA over 3 to 4 inches of gravel base. Beneath the pavement, the borings encountered fill soil classified as loose to medium dense dark brown poorly graded sand with silt (SP-SM) to depths ranging from 2.5 to 5.5 ft (els. 676.7 to 679.1) overlying loose to dense brown poorly graded sand (SP) with varying amounts of gravel to termination at 15 ft. The relative density of granular soil is based on recorded SPT N-values.

Groundwater and seepage groundwater from saturated silt or sand lenses were not encountered during the time of our investigation. Groundwater levels may fluctuate due to seasonal variations such as precipitation, snowmelt, nearby river or lake levels and other factors that may not be evident at the time of measurement. Groundwater levels may be different at the time of construction.

This section has provided a generalized description of the encountered subsurface soil conditions. The boring logs located in the Appendix should be reviewed for detailed soil descriptions. Some variation between boring locations may be expected.

CONCLUSIONS AND RECOMMENDATIONS

Foundations

A conventional shallow continuous and spread foundation system is recommended for support of the proposed structure. It is important that the recommendations of this report, in particular those pertaining to subgrade preparation, construction observation and testing, be implemented during design and construction.

The following parameters are recommended for foundation design:

Foundation Design Parameters

Bearing pressure for square or rectangular foundations, maximum net allowable, psf	3000
Minimum width of square or rectangular foundations, inches	24
Minimum embedment depth for frost protection, inches	42
Friction Angle between rough concrete and subgrade, degrees	24

Foundations are expected to bear on approved engineered fill. Subgrade preparation recommendations are contained in the following section.

Foundation recommendations presented herein are based on a safety factor to resist bearing capacity failure of at least 3.0 and a maximum anticipated total foundation settlement of 1 inch or less. New foundations placed adjacent to the existing structure should bear at the same elevation as the existing foundations to prevent undermining. If new foundations will extend below the level of existing foundations, precautions to prevent undermining of the existing foundations should be taken. If new loads will be transferred to the existing foundations, the stability of the foundations (i.e., bearing capacity safety factor and predicted settlement) should be evaluated as part of the design.

Site and Subgrade Preparation

All topsoil, vegetation, roots and any other miscellaneous debris should be removed from within the proposed construction areas. The limits of the proposed construction area, prior to the placement of any structures or engineered fill material, should be compacted in the upper 12 inches using suitable compaction equipment to at least 95 percent of the soil's maximum ASTM D1557 dry density by the contractor.

Due to the previously developed nature of the site, fill conditions encountered in the field investigation and due to variations that may exist between borings, it is possible that some form of subgrade improvement may be required over portions of the canopy structure area to provide suitable foundation bearing conditions. Subgrade improvement may include, but not be necessarily limited to, densification of existing soil in-place or excavation of all unsuitable material to an approved subgrade and replacement with engineered fill. If overexcavation is selected, it should encompass soil within the stress influence region of the foundation,

defined as a region bordered by 2V:1H planes extending down and away from the bottom edge of the foundation to the approved bearing stratum.

The foundation subgrade should be inspected and tested by qualified geotechnical personnel familiar with the geotechnical recommendations. As part of the inspection and testing, the subgrade at each individual bearing element should be verified to be consistent with the conditions encountered in this investigation and the indicated recommended allowable bearing pressures. This testing should include a dynamic cone penetrometer (ASTM STP 399) to verify minimum relative densities and equivalent N-values in granular soil.

Engineered fill is approved on-site or imported soil placed in uniform layers and compacted to a minimum required density. Generally, on-site soil with group symbols of SP or SP-SM are expected to be suitable for engineered fill. Imported fill should meet the requirements for MDOT Class II granular material. MDOT Class II soil or approved on-site soil meeting the requirements of SP or SP-SM should be used as backfill against foundations.

Granular engineered fill and backfill should be compacted to at least 95 percent of the soil's maximum dry density as determined by the Modified Proctor test (ASTM D1557). Vibratory compaction methods are typically found to be most effective in granular soils.

The fill should be placed and compacted in horizontal layers not exceeding 9 inches. Field density tests (ASTM D2922) should be taken on each lift, as the fill is being placed, to verify compliance with compaction specifications. If the earthwork takes place during winter months, fill must not be placed on frozen ground and fill with frozen conglomerations of soil must not be used.

Because the site has been previously developed, there may be buried items not encountered in our borings, such as a septic tank, well, or utility conduit, which may cause settlement problems. The contract documents should reflect that it is necessary to remove or relocate such structures and to fill the excavation with engineered fill.

Groundwater

Groundwater was not encountered in the borings during the time of our investigation and the control of groundwater for foundation construction is not expected to be of concern on this project.

Slopes and Temporary Excavations

The owner and the contractor should make themselves aware of and become familiar with applicable local, state, and federal safety regulations, including current OSHA excavation and trench safety standards. Construction site safety generally is the sole responsibility of the contractor. The contractor shall also be solely responsible for the means, methods, techniques, sequences and operations of construction operations. We are providing the

following information solely as a service on this project and, under no circumstances, should our provision of the following information be construed to mean that we are assuming responsibility for construction site safety or the contractor's activities; such responsibility is not implied and should not be inferred.

The contractor should be aware that slope height, slope inclination, and excavation depths (including utility trench excavations) should in no case exceed those specified in local, state, or federal safety regulations; e.g., OSHA Health and Safety Standards for Excavations, 29 CFR Part 1926, or successor regulations. For this site, the overburden soil encountered in our exploratory program is granular. We anticipate that OSHA will classify these materials as Type C. OSHA recommends a maximum slope inclination of 1½H:1V for this type of soil under ideal conditions.

As an alternative to temporary slopes, vertical excavations can be temporarily shored. The contractor or the specialty subcontractor should be responsible for the design of the temporary shoring in accordance with applicable regulatory requirements.

Flexible Pavement

Subgrade preparation in pavement areas should be as described in the "Site and Subgrade Preparation" section of this report. The pavement sections recommended in this section are based on procedures contained in the 1993 AASHTO Guide for Design of Pavement Structures.

The design recommendations provided are based on the following:

Flexible Pavement Basis of Design

AASHTO design method	Low volume roads
Level of reliability	75 percent
Analysis period	15 to 25 years
Low traffic level, no. 18-kip ESAL	50,000 to 300,000
Number of rehabilitation periods during analysis period	1

The following flexible pavement sections are recommended:

Flexible Pavement Section

Traffic Condition	Standard Duty	Heavy Duty
Sand subbase thickness, inches	10	12
Aggregate base thickness, inches	6	8
Bituminous leveling course thickness, inches	2.0	2.5
Bituminous wearing course thickness, inches	1.5	1.5

The following materials are recommended:

Flexible Pavement Materials

Sand subbase	MDOT Class II granular
Aggregate base	MDOT 21AA
Bituminous leveling	MDOT 13A
Bituminous wearing	MDOT 36A

Sand subbase material should be laboratory tested to confirm MDOT Class II grading requirement. The binder grade should be a minimum PG 58-28. MDOT standard specifications for materials and placement should be observed.

It is recommended that cracks that may develop in the pavement be quickly and properly sealed through a regular maintenance program. Also, the subgrade should be sufficiently sloped (2 percent minimum) to provide drainage within the sand subbase; and underdrains should be provided within the subbase, around catch basins and pavement edges, to facilitate drainage. At each catch basin, four underdrains with a watertight connection should extend out radially at least 20 ft. A suitable rubberized asphalt sealant should be placed between all concrete curb/HMA joints immediately after paving.

CLOSURE

In this report, descriptions of the geotechnical investigation, encountered conditions and recommendations for the design of foundations and earth-related structures have been presented. The limitations of this study are described in the Appendix.

The recommendations presented in this report are based upon a limited number of subsurface samples obtained from various sampling locations. The samples may not fully indicate the nature and extent of the variations that actually exist between sampling locations. For that reason, among others, we strongly recommend that a qualified geotechnical firm be retained to observe earthwork construction. If variations or other latent conditions become evident during construction, it will be necessary for us to review these conditions and our recommendations as appropriate.

We appreciate the opportunity to provide this service to you on this project. Should you have any questions or require further assistance, please contact our office.

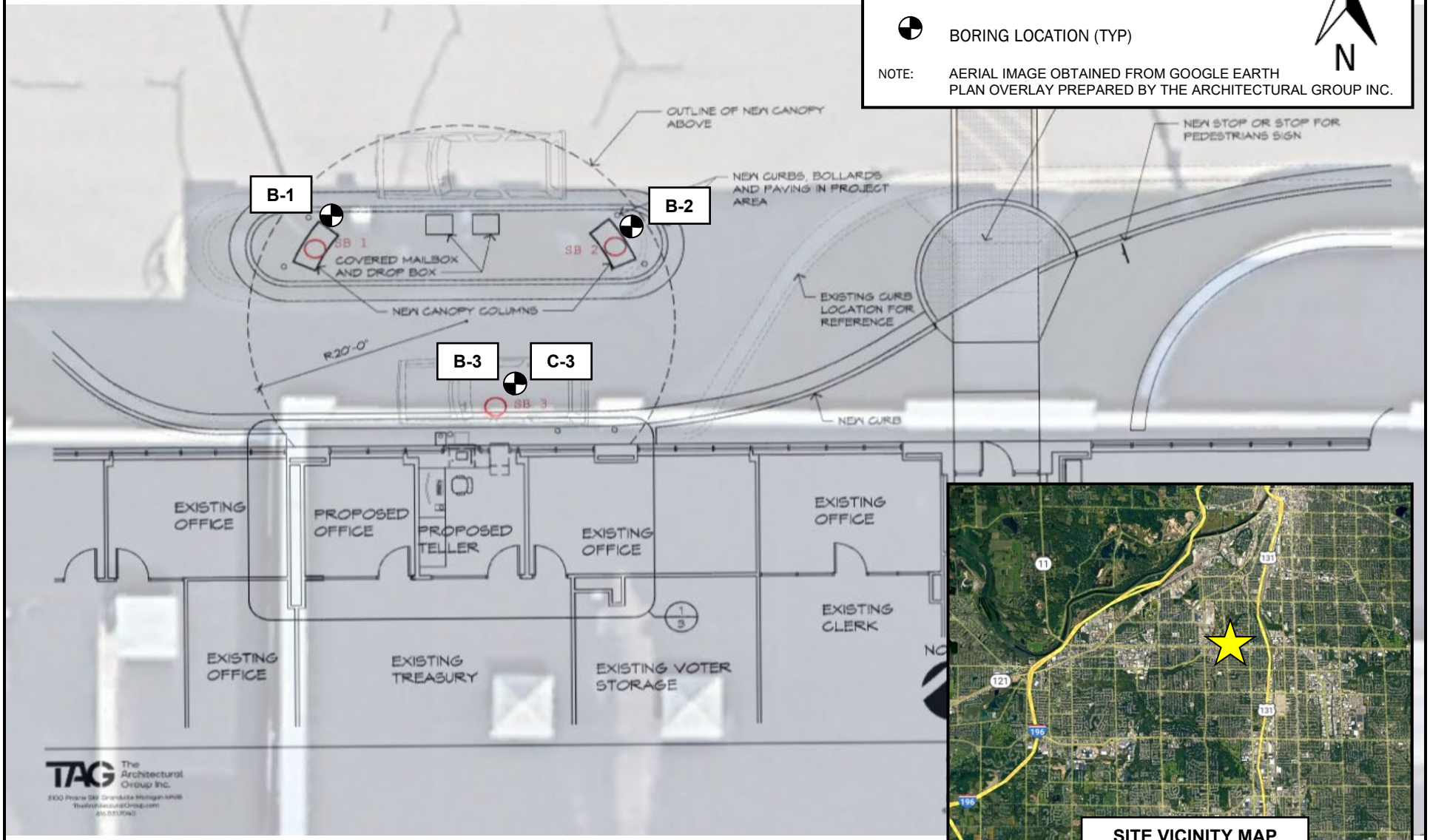
Sincerely,

MATERIALS TESTING CONSULTANTS, INC.

Chelsea L. Kennedy, E.I.T.
Assistant Project Engineer

Todd D. Munger, P.E.
Senior Project Manager

Attachments: Figure No. 1 - Boring Location Plan
Appendix
- Limitations
- Test Drilling and Sampling Procedures
- Boring Log Terminology and Classification Outline
- Boring Logs



TITLE: BORING LOCATION PLAN		PROJECT: CITY HALL DRIVE-UP CANOPY	
SCALE: NS	DATE: DECEMBER 8, 2022	PROJECT NO.: 221587	MTC MATERIALS TESTING CONSULTANTS
FIG. NO.: 1	DR. BY: ES	REV. BY: CK	

APPENDIX

- Limitations
- Test Drilling and Sampling Procedures
- Boring Log Terminology and Classification Outline
- Boring Logs

LIMITATIONS

Soil Variations

The recommendations in this report are based upon the data obtained from the soil borings. This report does not reflect variations which may occur between these borings, and which would not become evident until construction. If variations then become evident, it would be necessary for a re-evaluation of recommendations of this report, after performing on-site observations.

Warranties

We have prepared this report in accordance with generally accepted soil and foundation engineering practices. We make no other warranties, either expressed or implied, as to the professional advice provided under the terms of our agreement and included in this report. This report is prepared exclusively for our client and may not be relied upon by other parties without written consent from our office.

Boring Logs

In the process of obtaining and testing samples and preparing this report, we follow reasonable and accepted practice in the field of soil engineering. Field logs maintained during drilling describe field occurrences, sampling locations, and other information. The samples obtained in the field are subjected to additional testing in the laboratory and differences may exist between the field logs and the final logs. The engineer reviews the field logs and laboratory test data, and then prepares the final boring logs. Our recommendations are based on the contents of the final logs.

Review of Design Plans and Specifications

In the event that any changes in the design of the building or the location, however slight, are planned, our recommendations shall not be considered valid unless modified or approved in writing by our office. We recommend that we be provided the opportunity to review the final design and specifications in order to determine whether changes in the original concept may have affected the validity of our recommendations, and whether our recommendations have, in fact, been implemented in the design and specifications.

TEST DRILLING AND SAMPLING PROCEDURES

Test Drilling Methods:

- [X] Hollow stem auger, ASTM D6151
- [ ] Mud rotary, ASTM D5783
- [ ] Casing advancer, ASTM D5872
- [ ] Rock coring, ASTM D2113
- [ ] Hand Auger

Note: Cone penetration test data can be used to interpret subsurface stratigraphy and can provide data on engineering properties of soils. The ASTM procedure does not include a procedure for determining soil classification from CPT testing. Soil classifications shown on CPT logs are based on published procedures and are not based on physical ASTM soil classification tests.

Sampling Methods:

- [X] SPT, ASTM D1586, Auto hammer (140 lb., 30" drop, 2" OD split spoon sampler)
- [ ] Thin-walled tube sampler (Shelby), ASTM D1587

Note: The number of hammer blows required to drive the SPT sampler 12 inches, after seating 6 inches, is termed the soil N-value and provides an indication of the soil's relative density and strength parameters at the sample location. SPT blow counts in 6 inch increments are recorded on the boring logs.

Drill Rig:

- [ ] CME 55 LC (ATV)
- [ ] Acker Renegade (ATV)
- [ ] CME 45 Truck
- [X] Geoprobe 7822 (ATV)
- [ ] Geoprobe Rotary Sonic

Boreholes Backfilled With:

- [X] Excavated soil
- [ ] Cement bentonite grout
- [ ] Piezometer or Monitoring Well (see notes on logs)
- [X] Concrete or asphalt patch where appropriate

Sample Handling and Disposition:

- [X] Samples labeled, placed in jars, returned to MTC Laboratory
- [X] Discard after 60 days

BORING LOG TERMINOLOGY AND ASTM D 2488 CLASSIFICATION OUTLINE

TERMS DESCRIBING CONSISTENCY OR CONDITION

COARSE-GRAINED SOILS (major portions retained on No. 200 sieve): includes (1) clean gravel and sands and (2) silty or clayey gravels and sands. Condition is rated according to relative density as determined by laboratory tests or standard penetration resistance tests.

Descriptive Terms	Relative Density	SPT Blow Count
Very loose	0 to 15 %	< 5
Loose	15 to 35 %	5 to 10
Medium dense	35 to 65 %	10 to 30
Dense	65 to 85 %	30 to 50
Very dense	85 to 100 %	> 50

Per ASTM D2487, the following conditions must be met based on laboratory testing to justify the label 'well graded' in a soil description.

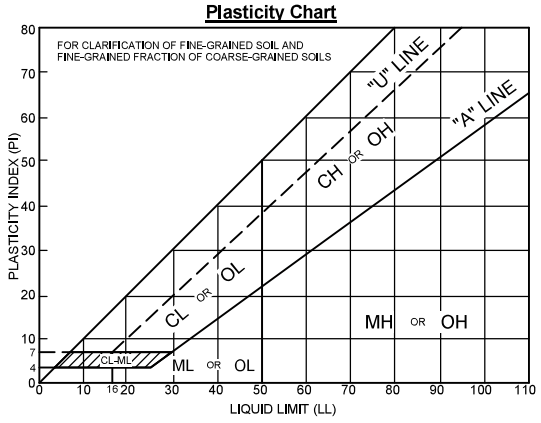
Gravel: $C_U = \frac{D_{60}}{D_{10}}$ greater than 4; $C_C = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3

Sand: $C_U = \frac{D_{60}}{D_{10}}$ greater than 6; $C_C = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3

FINE-GRAINED SOILS (major portions passing on No. 200 sieve): includes (1) inorganic and organic silts and clays, (2) gravelly, sandy, or silty clays, and (3) clayey silts. Consistency is rated according to shearing strength, as indicated by penetrometer readings, SPT blow count, or unconfined compression tests.

Descriptive Terms	Unconfined Compressive Strength TSF	SPT Blow Count
Very soft	< 0.25	< 2
Soft	0.25 to 0.5	2 to 4
Medium stiff	0.5 to 1.0	4 to 8
Stiff	1.0 to 2.0	8 to 15
Very stiff	2.0 to 4.0	15 to 30
Hard	> 4.0	> 30

Plasticity Chart



MAJOR DIVISIONS					TYPICAL NAMES
COARSE-GRAINED SOILS MORE THAN HALF IS COARSER THAN NO. 200 SIEVE	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE	CLEAN GRAVELS WITH LESS THAN 15% FINES	GW		WELL-GRADED GRAVELS WITH OR WITHOUT SAND
			GP		POORLY-GRADED GRAVELS WITH OR WITHOUT SAND
		GRAVELS WITH 15% OR MORE FINES	GM		SILTY GRAVELS WITH OR WITHOUT SAND
			GC		CLAYEY GRAVELS WITH OR WITHOUT SAND
	SANDS MORE THAN HALF COARSE FRACTION IS FINER THAN NO. 4 SIEVE SIZE	CLEAN SANDS WITH LESS THAN 15% FINES	SW		WELL-GRADED SANDS WITH OR WITHOUT GRAVEL
			SP		POORLY-GRADED SANDS WITH OR WITHOUT GRAVEL
			SP-SM		POORLY-GRADED SANDS WITH SILT WITH OR WITHOUT GRAVEL
		SANDS WITH 15% OR MORE FINES	SM		SILTY SANDS WITH OR WITHOUT GRAVEL
			SC		CLAYEY SANDS WITH OR WITHOUT GRAVEL
FINE-GRAINED SOILS MORE THAN HALF IS FINER THAN NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT 50% OR LESS		ML		INORGANIC SILTS OF LOW TO MEDIUM PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			CL		INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			OL		ORGANIC SILTS OR CLAYS OF LOW TO MEDIUM PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50%		MH		INORGANIC SILTS OF HIGH PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			CH		INORGANIC CLAYS OF HIGH PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			OH		ORGANIC SILTS OR CLAYS OF HIGH PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
HIGHLY ORGANIC SOILS			PT/OL		PEAT AND OTHER HIGHLY ORGANIC SOILS

GENERAL NOTES

1. Classifications are based on the United Soil Classification System and include consistency, moisture, and color. Field descriptions have been modified to reflect results of laboratory tests where deemed appropriate.
2. "Grades with" or "Grades without" may be used to describe soil when characteristics vary within a stratum.
3. Preserved soil samples will be discarded after 60 days unless alternate arrangements have been made.

GROUNDWATER OBSERVATIONS:

During - indicates water level encountered during the boring
End- indicates water level immediately after drilling
Date and Depth - Measurements at indicated date

SAMPLE TYPES AND NUMBERING

S	SPT, split barrel sample, ASTM D1586
U	Shelby tube sample, ASTM D1587
R	Rock core run
*S	Other than 2" split barrel sample
L	SPT with liner, ASTM D1586
A	Auger cuttings
G	Geoprobe liner

MINOR COMPONENT QUANTIFYING TERMS

Less than 5%	TRACE
5 to 10%	FEW
15 to 25%	LITTLE
30 to 40%	SOME
50 to 100%	MOSTLY

GRAIN SIZE

BOULDER	>12"
COBBLE	12" to 3"
COARSE GRAVEL	3" to 0.75"
FINE GRAVEL	0.75" to No. 4
COARSE SAND	No. 4 to No. 10
MEDIUM SAND	No. 10 to No.40
FINE SAND	No. 40 to No. 200

LOG OF BORING

Project No.: 221587
Boring No.: B-1
Sheet: 1 of 1

Project: City Hall Drive-Up Canopy
Client: City of Wyoming
Location: Wyoming, Michigan
Drill Type: Geoprobe 7822
Crew Chief: MDS Field Eng.: MS Rev. By: ES
Coordinates: N=518187.2 E=12767584.8 (MI South ift)
Elevation: 681.6 ft Datum: NAVD 88 (GPS Observation)
Notes:

Plugging Record: Backfilled borehole with compacted cuttings. Cave in at 7.5 ft.

Date Begin: 12/02/2022 Date End: 12/02/2022

Tooling	Type	Dia.	Groundwater, ft.	
Casing	HSA	4 1/4"	During	None
Sampler	SPT	2"	End	NA
Core			Seepage	
Tube			Date	Depth, ft.
SPT Hammer	Auto			

Depth Drilled: 15.0 ft.

Component Percentages: Trace < 5%, Few 5-10%, Little 15-25%, Some 30-45%, Mostly 50-100%

QP = Calibrated Penetrometer (tons/sq. ft.)

Elev. FT.	Depth FT.	Sample Number	Recov. FT.	Penetration (Blows Per 6") ASTM D 1586	*USCS Group Symbol	*DESCRIPTION	QP tsf	MST %	DD pcf	REMARKS
680.6	1					3 1/2" HMA, 4" Gravel Base 0.6				Fill: 0' to 2.5'
679.6	2	S-1	1.5	4-3-3 N=6	SP-SM	Dark brown poorly graded SAND with silt; mostly medium to fine sand, few silty fines, trace fine gravel, moist, Fill 2.5				
678.6	3									
677.6	4					Brown poorly graded SAND; mostly medium to fine sand, trace fine gravel, moist				
676.6	5	S-2	1.5	3-4-6 N=10						
675.6	6									
674.6	7	S-3	1.5	9-12-12 N=24						
673.6	8									
672.6	9				SP					
671.6	10	S-4	1.5	4-4-9 N=13		Grades without gravel				
670.6	11									
669.6	12									
668.6	13									
667.6	14									
666.6	15	S-5	1.5	9-11-34 N=45		Grades with coarse to fine sand, trace fine gravel 15.0				
						End of Boring				

* Visual estimate following ASTM D 2488 unless laboratory testing has been performed. Stratification changes are approximated between samples.

LOG OF BORING

Project No.: 221587
Boring No.: B-2
Sheet: 1 of 1

Project: City Hall Drive-Up Canopy
Client: City of Wyoming
Location: Wyoming, Michigan
Drill Type: Geoprobe 7822
Crew Chief: MDS Field Eng.: MS Rev. By: ES
Coordinates: N=518185.9 E=12767612.7 (MI South ift)
Elevation: 681.7 ft Datum: NAVD 88 (GPS Observation)
Notes:

Plugging Record: Backfilled borehole with compacted cuttings. Cave in at 7.3 ft.

Date Begin: 12/02/2022 Date End: 12/02/2022

Tooling	Type	Dia.	Groundwater, ft.	
Casing	HSA	4 1/4"	During	None
Sampler	SPT	2"	End	NA
Core			Seepage	
Tube			Date	Depth, ft.
SPT Hammer	Auto			

Depth Drilled: 15.0 ft.

Component Percentages: Trace < 5%, Few 5-10%, Little 15-25%, Some 30-45%, Mostly 50-100%

QP = Calibrated Penetrometer (tons/sq. ft.)

Elev. FT.	Depth FT.	Sample Number	Recov. FT.	Penetration (Blows Per 6") ASTM D 1586	*USCS Group Symbol	*DESCRIPTION	QP tsf	MST %	DD pcf	REMARKS
680.7	1					3" HMA, 3" Gravel Base (0.5)				Fill: 0' to 2.5'
679.7	2	S-1	1.5	2-3-3 N=6	SP-SM	Dark brown poorly graded SAND with silt; mostly medium to fine sand, few silty fines, trace fine gravel, moist, Fill (2.5)				
678.7	3									
677.7	4					Brown poorly graded SAND; mostly fine sand, trace fine gravel, moist				
676.7	5	S-2	1.5	2-4-4 N=8						
675.7	6									
674.7	7	S-3	1.5	3-4-5 N=9						
673.7	8									
672.7	9				SP					
671.7	10	S-4	1.5	3-5-7 N=12						
670.7	11									
669.7	12									
668.7	13									
667.7	14									
666.7	15	S-5	1.5	4-6-8 N=14		(15.0)				
						End of Boring				

* Visual estimate following ASTM D 2488 unless laboratory testing has been performed. Stratification changes are approximated between samples.

LOG OF BORING

Project No.: 221587
Boring No.: B-3
Sheet: 1 of 1

Project: City Hall Drive-Up Canopy
Client: City of Wyoming
Location: Wyoming, Michigan
Drill Type: Geoprobe 7822
Crew Chief: MDS Field Eng.: MS Rev. By: ES
Coordinates: N=518171.7 E=12767600.8 (MI South ift)
Elevation: 682.2 ft Datum: NAVD 88 (GPS Observation)
Notes:

Plugging Record: Backfilled borehole with compacted cuttings. Cave in at 6.8 ft.

Date Begin: 12/02/2022 Date End: 12/02/2022

Tooling	Type	Dia.	Groundwater, ft.	
Casing	HSA	4 1/4"	During	None
Sampler	SPT	2"	End	NA
Core			Seepage	
Tube			Date	Depth, ft.
SPT Hammer	Auto			

Depth Drilled: 15.0 ft.

Component Percentages: Trace < 5%, Few 5-10%, Little 15-25%, Some 30-45%, Mostly 50-100%

QP = Calibrated Penetrometer (tons/sq. ft.)

Elev. FT.	Depth FT.	Sample Number	Recov. FT.	Penetration (Blows Per 6") ASTM D 1586	*USCS Group Symbol	*DESCRIPTION	QP tsf	MST %	DD pcf	REMARKS
681.2	1					3 1/2" HMA, 4" Gravel Base 0.6				Fill: 0' to 5.5'
680.2	2	S-1	1.5	4-5-6 N=11	SP-SM	Dark brown poorly graded SAND with silt; mostly coarse to fine sand, few silty fines, few fine gravel, moist, Fill				
679.2	3									
678.2	4									
677.2	5	S-2	1.5	2-3-4 N=7		5.5				
676.2	6									
675.2	7	S-3	1.5	5-6-7 N=13	SP	Brown poorly graded SAND; mostly fine sand, trace silty fines, moist				
674.2	8									
673.2	9									
672.2	10	S-4	1.5	7-9-4 N=13						
671.2	11									
670.2	12									
669.2	13									
668.2	14									
667.2	15	S-5	1.5	3-6-7 N=13		Grades with medium to fine sand, trace fine gravel 15.0				
						End of Boring				

* Visual estimate following ASTM D 2488 unless laboratory testing has been performed. Stratification changes are approximated between samples.

LOG OF BORING

Project No.: 221587
Boring No.: C-3
Sheet: 1 of 1

Project: City Hall Drive-Up Canopy
Client: City of Wyoming
Location: Wyoming, Michigan
Drill Type: Core/Hand Auger
Performed By: MS Rev. By: ES
Coordinates: N=518171.7 E=12767600.8 (MI South ift)
Elevation: 682.2 ft Datum: NAVD 88 (GPS Observation)
Notes:

Date: 12/02/2022

Tooling	Type	Dia.
Core	Diamond	4"
Auger	Hand	3 1/4"

Pavement Section (in)	
HMA	3 1/2
Concrete	NA
Gravel Base	4
Subbase	NA

Plugging Record: Backfilled borehole with compacted cuttings, patched pavement with cold patch.

Depth Drilled: 0.6 ft.

Component Percentages: Trace < 5%, Few 5-10%, Little 15-25%, Some 30-45%, Mostly 50-100%

Core Photograph



3.5" 3 1/2" HMA
4" Gravel Base
7.5" End of Boring

Water Level During Drilling: None

Pavement Condition: HMA core in good condition.

Laboratory Results:

Remarks: B-3 SPT samples taken from gravel base to 15.0'

* Visual estimate following ASTM D 2488 unless laboratory testing has been performed. Stratification changes are approximated between samples.

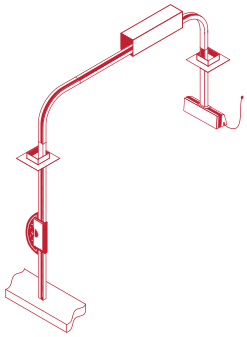
BAVIS FABACRAFT

EXPAND THE VALUE OF DRIVE-THRU WITH RELIABLE REMOTE LANE CONVEYORS



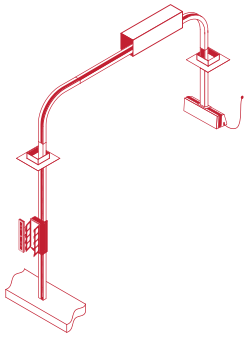
- **Built to last:** Streamlined engineering minimizes maintenance and maximizes uptime.
- **Delivered with care:** Smooth operation and engineered protection against the elements ensure paperwork and products get to customers without incident.
- **Orders of any size:** Conveyor solutions can deliver small, medium and large orders.
- **Lane two and beyond:** Based on need and solution type, conveyors help you add multiple drive-thru lanes.
- **Audio-ready:** Compatible with high-quality audio options, as well as other accessories such as video and credit card mounting kits.

SOLUTION DETAILS



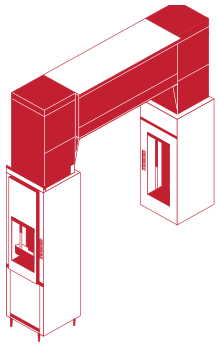
TRANSTRAX® REMOTE LANE DELIVERY SYSTEM

Standard size carrier box; standard, twist or reverse track; integrated Bavis audio.



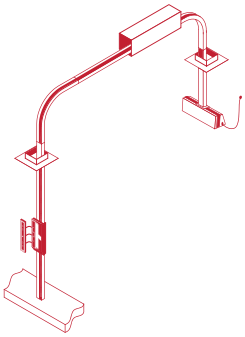
CAPTIVE CARRIER TRANSTRAX

High-capacity carrier; standard or reverse track. Ideal for pharmacies.



VITTLEVEYOR® FOR REMOTE LANE OR VERTICAL DELIVERY

Max. 32’ extension from building; 16’ max ht. Ideal for restaurants.



LICENSE PLATE RUNNER

Standard, twist or reverse track; 1-on-1 audio included; holds multiple plates.

HAVE A PROJECT?
GET A QUOTE AT **BAVIS.COM/REMOTE-LANE-CONVEYORS**

ABOUT BAVIS

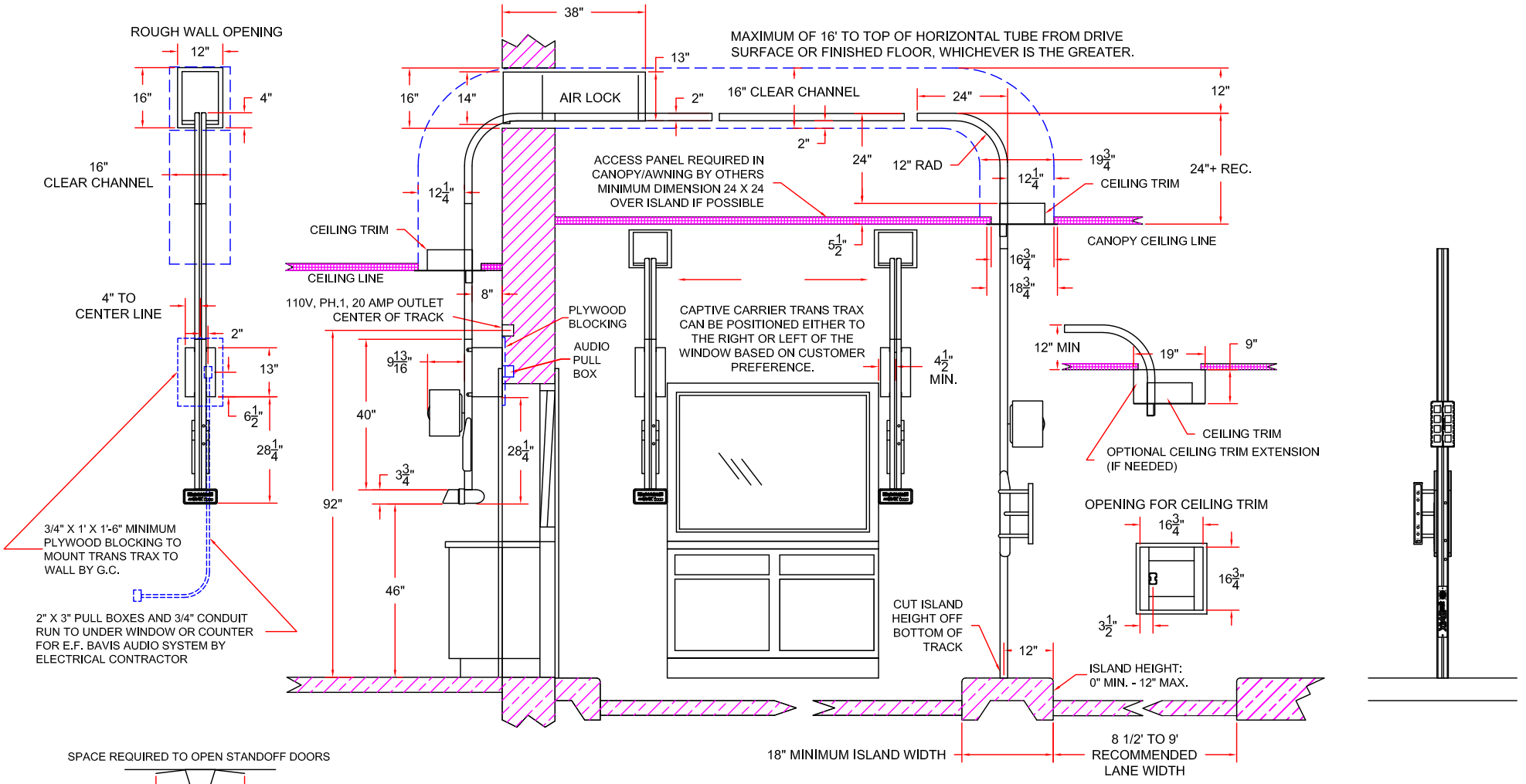
Since 1957, Bavis Fabacraft has manufactured drive thru solutions that expand customer access, ensure employee and customer security and empower businesses to transact more, faster.

BAVIS FABACRAFT | Better Drive-thru

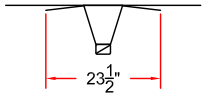
PHARMACIES | BANKS | RESTAURANTS | DISPENSARIES | GOVERNMENT SERVICES

BAVIS.COM | 513.677.0500 | sales@bavis.com
LinkedIn: company/bavisfabacraft | **Twitter:** @BavisFabacraft
201 Grandin Rd. | Maineville, OH 45039

DATE	ECN	REVISION RECORD	DR	CK
01/29/08	8054	ADD CUSTOMER CLEAR CHANNEL DIMS	BB	BN



SPACE REQUIRED TO OPEN STANDOFF DOORS



RECOMMENDED MINIMUM - MAXIMUM HORIZONTAL LENGTH:
MIN. C-L TO C-L OF VERTICALS: 32"
MAX. C-L TO C-L OF VERTICALS: 33' 10"

HORIZONTAL TUBE SHOULD HAVE A SUPPORT EVERY 10' CAPABLE OF 150 LBS.

IF THE HORIZONTAL TUBE IS USED UNCUT IN THE HORIZONTAL, THERE ARE ENOUGH SUPPLIES TO POSITION THE TOP OF THE HORIZONTAL TUBE 12' 4" ABOVE THE DRIVEWAY SURFACE.

MINIMUM HEIGHT FROM FINISHED FLOOR TO THE TOP OF THE HORIZONTAL TUBE 9' 5-3/4", (113-3/4").

CAPTIVE CARRIER WIRED FOR BAVSONIC AUDIO
04921992 - 20 FT OF HORIZONTAL TUBE
04921993 - 30 FT OF HORIZONTAL TUBE

CAPTIVE CARRIER WIRED FOR AUDIO AUTHORITY AUDIO
04922992 - 20 FT OF HORIZONTAL TUBE
04922993 - 30 FT OF HORIZONTAL TUBE

PROPRIETARY
THIS DOCUMENTATION AND INFORMATION CONTAINED ARE THE SOLE PROPERTY OF E.F.BAVIS & ASSOC., INC. IT SHALL BE RETURNED UPON REQUEST AND SHALL NOT BE REPRODUCED IN WHOLE OR IN PART, OR DISCLOSED TO ANYONE ELSE, OR USED, WITHOUT WRITTEN CONSENT OF E.F. BAVIS & ASSOC., INC.

E.F.BAVIS & ASSOCIATES INC.
201 GRANDIN RD.
MAINEVILLE, OH 45039
T: 513-677-0500 F: 513-677-0552 E: info@bavis.com www.bavis.com

DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED

TITLE: TRANSTRAX CAPTIVE CARRIER TYPICAL DIMENSIONS

REVISED	DRAWN		SIZE	DRAWING NO.	SHEET
09/17/18	B.PRINCE	03/25/05	A	TTCCTYP1-A	1 OF 1

W:\ARCHIVE\AUTOCAD DRAWINGS\TYPICALS\Captive Carrier\TTCCTYP1-A.dwg

E.F.BAVIS & ASSOC. INC.
201 GRANDIN RD. P.O.BOX 337
MAINEVILLE, OH. 45039 0337
PH 513-677-0500 FAX 513-677-0552

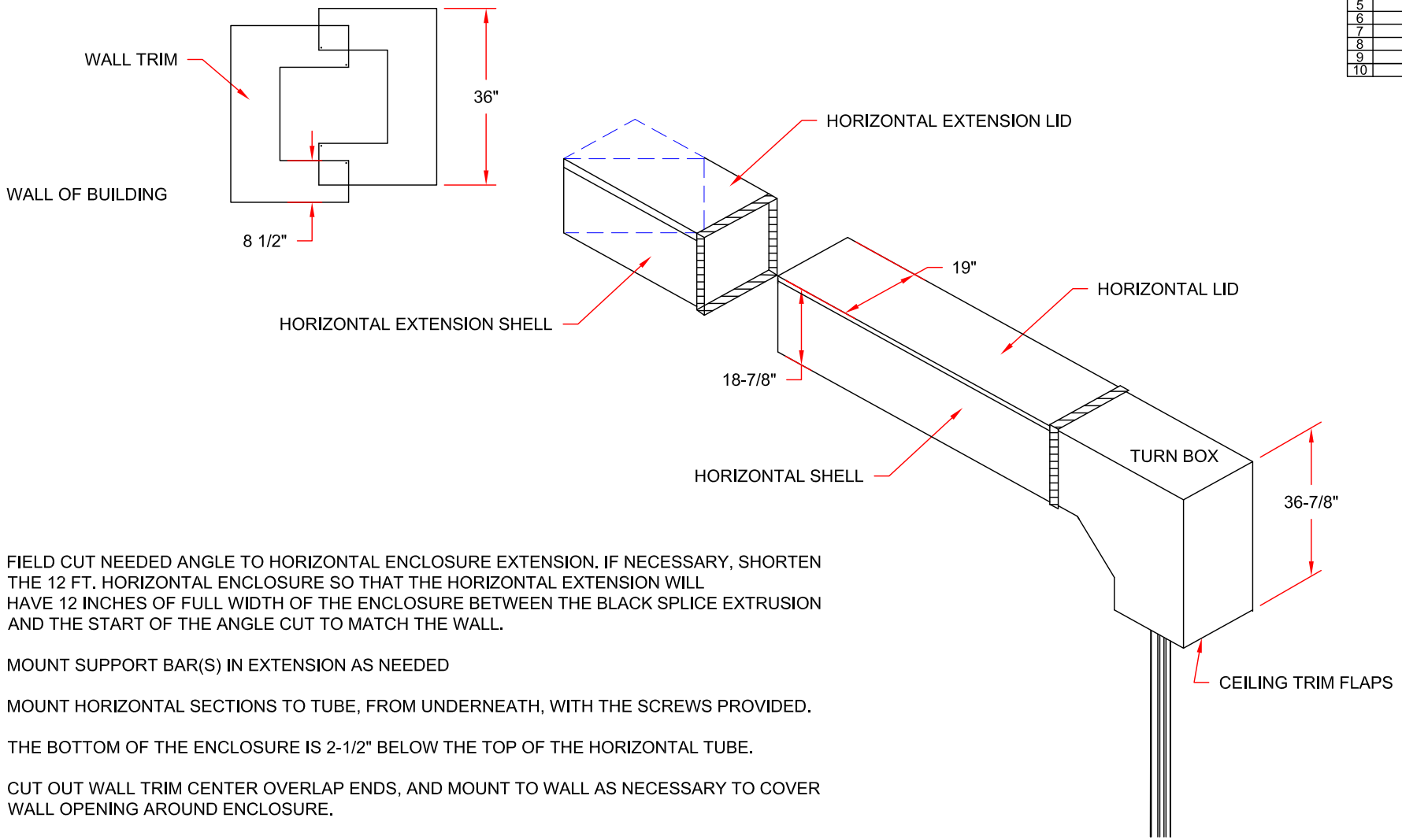
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES
DECIMALS: .XX + - .01 .XXX + - .005 FRACTIONS: + - 1/64; ANGLES: + - 30'
REMOVE ALL BURRS AND SHARP EDGES TO R .02 OR .02 X .02 CHAMFER MAX.

THIS DOCUMENTATION AND INFORMATION CONTAINED ARE THE SOLE PROPERTY OF E.F.BAVIS & ASSOC, INC. IT SHALL BE RETURNED UPON REQUEST AND SHALL NOT BE REPRODUCED IN WHOLE OR IN PART, OR DISCLOSED TO ANYONE ELSE, OR USED, WITHOUT WRITTEN CONSENT OF E.F.BAVIS & ASSOC, INC.

CAPTIVE CARRIER
HORIZONTAL ENCLOSURE

PART		PAGE	OF
DWG.	04031995	DATE CREATED:	
		LAST DATE:	09/11/01 JMF
REV. DATE:	12/02/02	BAP	COPYRIGHT 1996,2002 E.F.Bavis & Assoc. Inc.

NO.	ECN
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	



FIELD CUT NEEDED ANGLE TO HORIZONTAL ENCLOSURE EXTENSION. IF NECESSARY, SHORTEN THE 12 FT. HORIZONTAL ENCLOSURE SO THAT THE HORIZONTAL EXTENSION WILL HAVE 12 INCHES OF FULL WIDTH OF THE ENCLOSURE BETWEEN THE BLACK SPLICE EXTRUSION AND THE START OF THE ANGLE CUT TO MATCH THE WALL.

MOUNT SUPPORT BAR(S) IN EXTENSION AS NEEDED

MOUNT HORIZONTAL SECTIONS TO TUBE, FROM UNDERNEATH, WITH THE SCREWS PROVIDED.

THE BOTTOM OF THE ENCLOSURE IS 2-1/2" BELOW THE TOP OF THE HORIZONTAL TUBE.

CUT OUT WALL TRIM CENTER OVERLAP ENDS, AND MOUNT TO WALL AS NECESSARY TO COVER WALL OPENING AROUND ENCLOSURE.

THE HORIZONTAL ENCLOSURE SHOULD HAVE AT LEAST ONE SUPPORT EVERY 10 FEET, CAPABLE OF 150 LBS.

WALL TRIM, HORIZONTAL LID, HORIZONTAL SHELL, AND TURN BOX, ARE MADE OF 0.050" ALUMINUM WITH A POWDER COAT FINISH. STANDARD COLOR: MAIZE

VANDER KODDE
CONSTRUCTION

www.vanderkoddeconstruction.com

April 20, 2026

CITY OF WYOMING - CANOPY PROJECT

COVER LETTER ENCLOSED

- ✓ BID FORM – signed
- ✓ ADDENDUM #1 - signed
- ✓ ADDENDUM #2 - signed
- ✓ ADDENDUM #2a - signed
- ✓ CONTRACT FORM - signed
- ✓ SUBCONTRACT LIST - signed
- ✓ QUALIFICATIONS - signed

441 44TH ST SW GRAND RAPIDS, MI 49548 P 616.538.7470 F 616.538.9290

Bid/Proposal Form

City Hall Canopy

The proponent identified below submits the attached bid/proposal materials, including the price(s) stated on the attached bid form.

By signing this bid/proposal form, the proponent identified below represents, attests and promises, the proponent:

1. Has reviewed and is familiar with all plans and specifications, including any issued addenda and any interpretations, and any information provided at any pre-bid meeting.
2. Has reviewed, meets, and will comply with all the Standard Terms and Conditions except those specifically stated in the materials submitted with this bid/proposal form, including, without limitation, all of the applicable insurance and bonding requirements.
3. If applicable, is familiar with the Work site and Work site conditions.
4. Accepts full responsibility for its conclusions relative to the nature and probable difficulties of performing the work specified, and no additional payments will be made by City due to unanticipated difficulties encountered in performing the actual work.

Is the bidder a:	YES	NO
Section 3 Certified Contractor?	☐	☒
If yes, DUNS #: _____		

Are you, or the business owner related to an elected official or employee of the City? If yes, list individuals' name(s) and relationship(s):	☐	☒

Unless the specifications otherwise state, the following is provided for statistical purposes only.

Is the bidder a:	Yes	No
Woman Owned Company?	☐	☒
Minority Owned Company?	☐	☒

Proponent's Complete Business Name (If Proponent Is DBA Include Full Proponent DBA):

CITY OF WYOMING

PROJECT CONTRACT
CITY OF WYOMING, MICHIGAN

This Contract is made as of the Effective Date between City and Contractor.

City means the City of Wyoming, a Michigan municipal corporation, of 1155 28th St SW, Wyoming, MI 49509.

Contractor means: VANDER KODDE CONSTRUCTION
[Name of contracting entity]

A MI CORPORATION
[State and type of entity, e.g., corporation, limited liability company, etc.]

441 44TH ST SW
[Contractor's street address]

GRAND RAPIDS, MICH. 49548
[Contractor's city, state & zip]

Contractor's personnel means Contractor's directors, members, partners, officers, employees, subcontractors, agents and representatives and any other individuals or entities Contractor engages to provide services under the Contract.

Effective Date means: 5/19/26, 202_.

Goods means any parts, equipment, supplies, materials, or other items or services the City is acquiring from Contractor as itemized or stated in the RFP as modified by the Proposal.

Proposal means Contractor's Bid/Proposal attached as Exhibit B.

RFP means the Request for Bids/Proposals attached as Exhibit A.

Standard Terms means "City Contract Standard Terms and Conditions" portion of the RFP, including the Risk Allocation and Insurance Provisions.

Work means the services described and specified the RFP as modified by the Proposal.

TERMS AND CONDITIONS

In exchange for the consideration in and referred by this Contract, the parties agree:

1. Contractor will perform the Work and supply the Goods as detailed in the RFP as modified by the Proposal.
2. City will pay the Contractor in accordance with the RFP as modified by the Proposal.
3. Contractor represents and warrants, except for those specifically waived or modified in this paragraph, Contractor is complying with and will comply with the Standard Terms. Waived or modified conditions are as follows:

None.
[Identify those the City Attorney has agreed may be waived or the City attorney approved modifications or write "None."

4. If this Contract is for a public improvement project costing $50,000 or more, performance and payment bonds in an amount equal to the Contract amount are required and must be provided before beginning any Work.
5. This is the only agreement between the parties regarding City engagement of Contractor to perform the Work and supply the goods. There are no other agreements, representations, or warranties except as stated in the RFP as modified by the Proposal. This contract can be amended only in writing signed by both City and Contractor.

City and Contractor have signed this Contract as of the Effective Date.

City of Wyoming

By: _____
John Shay, City Manager

Date signed: _____, 20__

Approved as to form:

_____
Gregory T. Stremers, City Attorney

Contractor: Vander Kodde Construction

By: _____
[Signature officer, director, or principal of Contractor]

Tim Vander Kodde V-P
[Typed/Printed Name & Title of Person Signing for Contractor]

Date signed: 4-20, 2026

Bid/Proposal Form, Continued

	Pay Item	Units	Bid Unit	Bid Price
1	Bid Amount	LSUM	1	$118,175.00

Total Bid (written out) ONE HUNDRED EIGHTEEN THOUSAND ONE HUNDRED SEVENTY-FIVE

A full schedule will be required of the winning bidder prior to contract award.

Estimated Start Date: 7/15/2026 **Estimated Completion Date:** 9/30/2026

Vander Kodde Construction
[Proponent's Complete Business Name]

[If Proponent is DBA Include Full Proponent DBA Here]

[Signature for proponent]

[2nd signature for proponent]

Tim VanderKodde V-P
[Printed name and title of person signing]

Tim VanderKodde
[Printed name and title of 2nd person signing]

Date signed: 4/20/26

441-44th St
[Proponent's street address]

616-538-7470
[Proponent's business phone]

Grand Rapids MI 49548
[City] [State] [Zip]

RECEIVED APR 21 2026 Wyoming City Clerk

616-780-4800
[Cell phone number(s) of person(s) signing for proponent]

jack@vanderkoddeconstruction.com
[E-mail address(s) of person(s) signing for proponent]

Corporation
[Proponent's form of business – e.g. partnership, corporation, limited liability company, professional corporation and the state in which it was formed]

CITY OF
WYOMING | FINANCE

1155 28th Street SW, Wyoming, MI 49509
616.530.7225 | Fax 616.249.3486 | wyomingmi.gov

ADDENDUM - BID/PROPOSAL FOR CITY HALL CANOPY PROJECT

BID DUE: 11:00 AM; Tuesday, April 21, 2026

ADDENDUM #1

Please see separate sheet below.

The Addendum shall be part of and be incorporated into this bid/proposal.

Bidders/Proposers must complete this addendum and attach to your bid/proposal. If your bid/proposal has already been submitted, return the addendum to the Clerk's Office in a sealed envelope with the name of the bid/proposal and your company name written on the outside of the envelope.

VANDER KODDE CONSTRUCTION
COMPANY NAME

616-538-7470 | 616-780-4560 | jack@vanderkoddeconstruction.com
BUSINESS PHONE | CELL PHONE | EMAIL ADDRESS (REQUIRED)

JACK TOLMAN | [signature] | 4/20/2026
NAME (PLEASE PRINT) | SIGNATURE (REQUIRED) | DATE

1. Page 1: This project does not have any new doors or door hardware.
2. Page 2: Existing carpet and base shall remain. No flooring scope of work is required.
3. Page 3: No new door hardware is required for this project.
4. Page 4: Curb with integral bollards to remain. Brick removals/exterior demo on City Hall to be limited to as necessary for track system installation.
5. Page 5: Standard pavement cross section for City is 12 inches of Class II (Sand) then 6 inches of 21AA Modified (natural stone) then the HMA paving.
6. The stone landscape area shall start at the edge of the new concrete paving and extend to the west outside corner of the building - sloping down to the west.
   3" deep stone bed with 1"-2" dia. stone over commercial grade landscape fabric over 6" of compacted sand base. Place 4" perforated PVC pipe on stone bed and cover with 3"-4" dia. stone.
   Connect 4" perforated PVC pipe to new 16"x16"x16" polyethylene yard drain with perforated bottom set in grass at 4 ft. from corner of building.
   The intent is to have the canopy downspout drain toward french drain.

7. Page 7: Approximate saw cut limits at outer edges of curb lines are shown on plan sheet A1. New curb line will be approximately 5 feet from building. Additional saw cuts adjacent to the bollards and guardrail may be necessary to leave that section of curb in place.
8. Existing Voting and Payment Box shall be salvaged. The City may temporarily relocate them or provide alternative options for residents. The light fixture shall be removed (not salvaged). A new light fixture shall be provided on the canopy.
9. Bid bond not required,
10. Performance bond IS required.
11. Davis-Bacon Wages do not apply.

CITY OF WYOMING | FINANCE

1155 28th Street SW, Wyoming, MI 49509
616.530.7225 | Fax 616.249.3486 | wyomingmi.gov

ADDENDUM - BID/PROPOSAL FOR CITY HALL CANOPY PROJECT

BID DUE: 11:00 AM; Tuesday, April 21, 2026

ADDENDUM #2

Subject: Clarification of Signage and Electrical Scope – Sheet A2
Regarding the note on Sheet A2 stating, "provide illuminated open sign," the scope of work is modified as follows:

- **Procurement:** The illuminated open sign shall be **Owner-Furnished (OFOI)**. The Contractor is not responsible for the purchase or delivery of this unit.
- **Electrical Requirement:** The Contractor shall furnish and install a dedicated **electrical outlet/receptacle** at the sign location to facilitate the connection of the sign, notwithstanding any notes suggesting a direct hard-wired connection.

The Addendum shall be part of and be incorporated into this bid/proposal.

Bidders/Proposers must complete this addendum and attach to your bid/proposal. If your bid/proposal has already been submitted, return the addendum to the Clerk's Office in a sealed envelope with the name of the bid/proposal and your company name written on the outside of the envelope.

VANDER HAAGE CONSTRUCTION
COMPANY NAME

616-538-7470 | 616-780-4860 | jack@vanderhaageconstruction.com
BUSINESS PHONE | CELL PHONE | EMAIL ADDRESS (REQUIRED)

JACK JOUMAN | [signature] | 4/20/2026
NAME (PLEASE PRINT) | SIGNATURE (REQUIRED) | DATE

CITY OF WYOMING | FINANCE

1155 28th Street SW, Wyoming, MI 49509
616.530.7225 | Fax 616.249.3486 | wyomingmi.gov

ADDENDUM - BID/PROPOSAL FOR CITY HALL CANOPY PROJECT

BID DUE: 11:00 AM; Tuesday, April 21, 2026

ADDENDUM #2

Subject: Trax Carrier System Clarification

- The City will purchase the Trax Carrier System, and the contractor will be responsible for coordinating with Bavis Fabacraft for installation.

Subject: Clarification of Signage and Electrical Scope – Sheet A2 Regarding the note on Sheet A2 stating, "provide illuminated open sign," the scope of work is modified as follows:

- Procurement: The illuminated open sign shall be Owner-Furnished (OFOI). The Contractor is not responsible for the purchase or delivery of this unit.
- Electrical Requirement: The Contractor shall furnish and install a dedicated electrical outlet/receptacle at the sign location to facilitate the connection of the sign, notwithstanding any notes suggesting a direct hard-wired connection.

The Addendum shall be part of and be incorporated into this bid/proposal.

Bidders/Proposers must complete this addendum and attach to your bid/proposal. If your bid/proposal has already been submitted, return the addendum to the Clerk's Office in a sealed envelope with the name of the bid/proposal and your company name written on the outside of the envelope.

VANDER HEIDE CONSTRUCTION
COMPANY NAME

616-538-7470 | 616-780-4860 | jack@vanderheideconstruction.com
BUSINESS PHONE | CELL PHONE | EMAIL ADDRESS (REQUIRED)

JACK JOHNSON | [signature] | 4/20/2026
NAME (PLEASE PRINT) | SIGNATURE (REQUIRED) | DATE

April 20, 2026

City of Wyoming
1155 – 28th Street SW
P.O. Box 905
Wyoming, MI 49509

CANOPY PROJECT QUALIFICATIONS

- Base bid includes installation of Polygon Canopy only. Canopy provided by others, including gutters & downspouts. Anchor bolts by others.
- Base bid does not include furnishing or installation of the Bavis Fabacraft Trax Carrier System.
- Transaction drawer rework / relocation by others.
- Anything for liquidated damages not included in base bid. It is unknown the delivery date on the polygon structure or the Bavis Carrier System.
- Alternate to install Electric Roof Heat Caple in canopy gutter & downspout. Circuit within 50' of canopy. **ADD $2,980.00**
- Flooring repair not included. Existing flooring to remain.
- Electrical permit drawings not included.

Submitted by,

Jack Jolman
Vander Kodde Construction Co Inc
jack@vanderkoddeconstruction.com
C 616.780.4860

April 20, 2026

CITY OF WYOMING - CANOPY PROJECT

SUBCONTRACTOR LIST

STAKING	BURGESS SURVEYING
TESTING	SOILS & STRUCTURES
EXCAVATING	STEENWYK EXCAVATING
ASPHALT	STEENWYN EXCAVATING
CONCRETE	SCHEPERS CONCRETE
STEEL	CUSTOM STEEL
CANOPY INSTALLATION	ONDER CONSTRUCTION
LPDA	SCHEPERS BROTHERS
PAINTING	ECKHOFF & DEVRIES
COUNTERTOP	GRAND VALLEY WOOD PRODUCTS
ELECTRIC	SWANSON ELECTRIC
HVAC	MOORE MECHANICAL
FIRE PROTECTION	TOTAL FIRE PROTECTION
JOINT SEALANTS	WICK'S CAULKING

Docusign Envelope ID: 154C0FED-682D-8AD0-8273-34B547931ECD

CITY OF WYOMING

CITY STANDARD CONTRACT

CITY OF WYOMING, MICHIGAN
(MORE THAN $8,500)
(NO RFP)

This Contract is made as of the Effective Date between City and Contractor.

City means the City of Wyoming, a Michigan municipal corporation, of 1155 28th St SW, Wyoming, MI 49509.

Contractor means: Bavis Fabacraft, Inc.
[Name of contracting entity]
An Ohio corporation
[State and type of entity, *e.g.*, corporation, limited liability company, etc.]
201 Grandin Road
[Contractor's street address]
Maineville, OH 45039
[Contractor's city, state & zip]

Contractor's personnel means Contractor's directors, members, partners, officers, employees, subcontractors, agents and representatives and any other individuals or entities Contractor engages to provide services under the Contract.

Effective Date means: May 19, 2026 . Normally this is the day after the Council meeting at which it is approved.

Goods means any parts, equipment, supplies, materials, or other items or services the City is acquiring from Contractor as itemized or stated in the Proposal.

Proposal means Contractor's Bid/Proposal attached as Exhibit B.

Standard Terms means "City Contract Standard Terms and Conditions" attached as Exhibit A.

Work means the services described and specified the Proposal.

TERMS AND CONDITIONS

In exchange for the consideration in and referred by this Contract, the parties agree:

1. Contractor will perform the Work and supply the Goods as detailed in the Proposal.
2. City will pay the Contractor in accordance with the Proposal.
3. Contractor represents and warrants, except for those specifically waived or modified in this paragraph, Contractor is complying with and will comply with the Standard Terms. Waived or modified conditions are as follows:

   This contract adopts Bavis Standard Drive-thru Scope of Work Addendum:
   [Identify those the City Attorney has agreed may be waived or the City attorney approved modifications or write "None."]

4. If this Contract is for a public improvement project costing $50,000 or more, performance and payment bonds in an amount equal to the Contract amount are required and must be provided before beginning any Work.
5. This is the only agreement between the parties regarding City engagement of Contractor to perform the Work and supply the goods. There are no other agreements, representations, or warranties except as stated in the Proposal. This contract can be amended only in writing signed by both City and Contractor.

City and Contractor have signed this Contract as of the Effective Date.

City of Wyoming

By: _____
John Shay, City Manager

Date signed: _____, 20__

Approved as to form:

_____
Gregory T. Stremers, City Attorney

Bavis Fabacraft

DocuSigned by:
By: Penny Sumpter
D33BF61AC73E445...
[Signature officer, director, or principal of Contractor]

_____
[Typed/Printed Name & Title of Person Signing for Contractor]

Date signed: 5/22/2026, 20__

Docusign Envelope ID: 154C0FED-682D-8AD0-8273-34B547931ECD

EXHIBIT A
CITY CONTRACT STANDARD TERMS AND CONDITIONS

These Terms and Conditions apply to this contract. Contractor attests it complies with and promises it will comply with these Terms and Conditions.

1. Legal Compliance. Contractor and all Contractor's personnel must comply with all applicable (i) laws, rules, regulations, codes, and ordinances, (ii) license and permit requirements, and (iii) orders of any governmental agency, official or court of competent jurisdiction. This includes, for example, complying with federal OSHA and Michigan MIOSHA safe practices, and with applicable federal and state labor laws, rules, and regulations.

2. Permits and Inspections. Unless the Proposal states otherwise, Contractor shall, without expense to City, obtain all licenses and permits required to lawfully perform the Work under the contract and furnish copies of those licenses and permits to City before commencing Work. Contractor shall also ensure all inspections required by local, state, and federal agencies and codes are performed.

3. Grant Compliance. If state or federal grant funds are a source of payment for the project, Contractor promises to comply with grant agreement terms and conditions that apply to the contract. If grant funds are withdrawn or cancelled for any reason this Contract is nullified.

A. If funds for the Work come from the United States Department of Housing and Urban Development (**HUD**), the following apply:

1. Under HUD Fair Labor Standards Act Provisions, the most recent wage determination for Kent County, Michigan will apply to all wages Contractor pays for any Work on the project. For 2025 (it may be updated), that is General Decision Number MI20260088 dated 01/2/2026, https://sam.gov/wage-determination/MI20260088/0.

2. Contractor will be required to prepare and maintain adequate financial records in a form satisfactory to City that reflect all costs and expenses incurred in performing this Contract and records of the use of all amounts paid pursuant to this Contract. Contractor's financial records and reports must conform to the regulations found at 2 CFR Part 200 entitled "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, Final Guidance," https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200.

3. If project costs are $200,000 or more, HUD Section 3 provisions may require training and employment of low- and very low-income persons. See 24 CFR 75.3(a)(iii) (https://www.hud.gov/sites/dfiles/FPM/documents/Section-3-FAQs.pdf).

B. If they are applicable, Contractor shall comply with Davis-Bacon Act, other prevailing wage, Buy American, and any other requirements in grants or other funds used to pay Contractor or for other parts of the project. This includes, for example, employment, recordkeeping, purchasing, sourcing, and other compliance.

4. Qualifications. Contractor represents and promises that:

A. Contractor and Contractor's personnel will have and maintain all licenses, registrations, certifications, memberships, or other approvals needed to perform the Work and supply materials required by the contract.

B. Contractor, any subcontractor, and their respective principals, owners, officers, shareholders, key employees, directors, members and partners: (i) are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by a federal department or agency; (ii) have not within the last 3-years been convicted of or have a judgment against them for fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a contract or transaction with a governmental entity; (iii) have not within the last 3 years violated federal or state antitrust statutes or committed embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property; (iv) are not presently indicted for or otherwise criminally charged by a governmental entity with commission of any of the offenses enumerated in this certification; and (v) have not within the last 3-years had one or more contracts or transactions with a governmental entity terminated for cause or default.

C. If the contract is for a HUD CDBG or another federal or state funded project, neither Contractor nor any of its subcontractors on the HUD list of debarred and suspended participants (https://www.hud.gov/program_offices/general_counsel/limited_denial_participation_hud_funding_disqualifications). Unless waived by City's purchasing director, Contractor and all subcontractors will register on the Federal SAM Registry available at: https://usfcr.com. Contractor and all subcontractors are not on and will remain off the Federal System for Award Management list of persons and entities ineligible for federal contracts.

D. Neither Contractor nor any subcontractor is an "Iran linked business" under Michigan's Iran economic sanctions act, 2012 PA 517.

5. Nondiscrimination and Respect. City is committed to fairness, impartiality, courtesy, respect, and nondiscrimination in all City programs, benefits, and actions, including City contracts and activities that contractors or others engage in for or on behalf of City, Accordingly:

A. Contractor in (i) employment actions, (ii) soliciting, bidding or contracting with subcontractors, or (iii) soliciting, bidding or contracting for materials will not discriminate based on race, color, religion, national origin, age, sex, gender, gender identity or expression, height, weight, marital status, familial status, mental or physical disability, genetic information, or other reason prohibited by law that is unrelated to the ability to perform the duties of a job or position.

B. Contractor will comply with applicable state and federal laws, rules, regulations, and other requirements regarding discrimination.

C. If Contractor will engage with others on City's behalf, Contractor must (i) ensure all persons are treated with fairness, impartiality, courtesy and respect, and in a manner that does not discriminate based on race, color, religion, national origin, age, sex, gender, gender identity or expression, height, weight, marital status, familial status, mental or physical disability, genetic information, or any other reason prohibited by law, and (ii) if any engaged individuals speak English less than very well, Contractor must use language assistance services in communications.

D. Contractor certifies it does not operate any programs promoting DEI that violate any applicable federal anti-discrimination laws.

E. Contractor must include these requirements in subcontracts and supply contracts and reasonably enforce compliance with them.

F. Noncompliance with this provision is a material breach of this Contract that can result in (i) withholding payments to Contractor, (ii) Contract cancellation, termination, or suspension, in whole or in part, and (iii) Contractor's ineligibility for future City contracts.

G. Contractor must retain and, upon request, provide City access to and copies of all information and reports required by this provision that a state or federal agency determine are pertinent to ascertain compliance. If information required of Contractor is in the sole possession of another who fails or refuses to furnish it, Contractor must so certify to City.

6. Ethical Standards. To the best of Contractor's knowledge after reasonable inquiry:

A. Contractor and Contractor's personnel, as well as any parent, affiliate, or subsidiary organization of Contractor has not engaged in and shall refrain from: (i) holding or acquiring an interest that would conflict with this contract; (ii) attempting to or appearing to influence any City elected or appointed officer or employee by a direct or indirect offer of anything of value; or (iii) paying or agreeing

to pay a person, other than its personnel, any consideration contingent upon the award of the contract.

B. No owner, director, officer, member, partner, or key employee of Contractor or of any parent, affiliate, or subsidiary organization or subcontractor of Contractor is a spouse, parent, child, grandchild, or sibling of the mayor, city council member, or another City elected or appointed officer except as already disclosed in writing to City when submitting its proposal.

C. Contractor will immediately notify City of any subsequently discovered violation of the standards in this section.

7. Media Releases. Media or other releases (including promotional literature and commercial advertisements) pertaining to the contract or the project to which it relates shall not be made without the City Manager's prior written approval and only in accordance with the written terms provided in that approval.

8. Payment to Contractor.

A. Contractor and all subcontractors, suppliers and consultants shall, before beginning the Work, submit by email to City's Finance Department at Acct_Info@wyomingmi.gov a completed IRS W-9 form (available at www.IRS.gov).

B. Payments to Contractor will be made in accordance with the Proposal. If no other terms are provided, payment of an invoice to City will generally be made within 30 days after all required information is submitted provided the design professional (if one is identified in the specifications or contract) and authorized City representative agree the Work has been performed, materials or equipment delivered, and other actions taken as provided in the contract and in accordance with any plans and specifications.

C. Payment disputes will be resolved as provided in §16. City will pay undisputed amounts and the disputed amount will be held in a non-interest-bearing account until the dispute is resolved.

9. Intellectual Property. Contractor guarantees the sale or use of articles, software, copies, records, or other intellectual property provided under or used to perform the contract will not infringe any copyright, patent, trademark, or other intellectual property rights. Contractor will, without expense to City, defend every action brought against City or City's officers or employees for any alleged infringement of intellectual property rights by reason of their sale or use as part of the contract and will pay all costs, damages, and profits recoverable in any action.

10. Materials and Equipment Information, Quality, Disposal, and Related Requirements. If the Proposal includes the use, installation, or acquisition of materials, equipment, supplies or other items:

A. Unless otherwise stated in the Proposal, all materials, equipment, supplies, and items shall be new, the best of their respective kind, and free from defects.

B. Specifications provided by City are the minimum acceptable. When specific manufacturer and model numbers are used, they establish a desired design, type of construction, quality, functional capability, and/or performance level. If the Proposal included alternates, City will be the sole judge of equivalency.

C. Contractor shall provide City all manufacturer parts lists, assembly, and maintenance information, and all other documents provided by the manufacturer for such items, and ensure all related warranties are held by or assigned to City.

D. If quantities are listed in the RFP, they are based on estimated needs. City reserves the right to increase or decrease quantities to meet actual needs.

E. Contractor's failure to meet specified delivery schedules a or promptly replace rejected materials renders Contractor liable for all costs in excess of the bid price(s) when alternate procurement is necessary. Excess costs will include administrative costs. Prices shall be delivered F.O.B. destination freight prepaid to any location specified in the specifications and included in the Proposal pricing unless otherwise specified in the RFP or expressly stated in the Proposal.

F. Unless the Proposal expressly states otherwise, Contractor will remove and dispose of all materials, equipment, or other items demolished, removed, or replaced during the Work and cleanup and remove all debris resulting from the Work. Disposal will comply with laws, rules, and regulations applicable to such disposal. Contractor will keep and, upon request, provide City copies of required manifests or other disposal documentation.

11. Restoration. Unless the Proposal states otherwise, Contractor will restore, without expense to City, any property damaged during or as a result of any Work to a condition similar and equal to that existing before such damage. If Contractor fails to make such restoration, City may, after 48-hours' notice to Contractor, make such restoration, and deduct the cost City incurs to do so from amounts due Contractor.

12. Access to Work. City personnel and representatives must always have access to all the Work and be furnished such information and assistance by Contractor as reasonably needed or desired to inspect the Work.

A. Taxes. City is generally exempt from federal and state taxes, including state sales and use taxes. A copy of City's certificate of tax exemption can be requested by contacting City's Finance Department. Invoices must be separated to show the amount added for taxes of any kind if applicable. Taxes, wherever indicated and applicable to any purchase, will not be subject to trade or cash discounts. On construction projects state sales taxes are applicable on materials only.

13. Records. Because City is a public entity that receives funds from other governmental agencies: (i) City is required to retain, be able to obtain, and/or audit records related to City contracts and (ii) Michigan's Freedom of Information Act generally requires that City disclose to those requesting them copies of all requested documents relating to the bid/proposal and any resulting contract. Contractor shall retain copies of all records related to the contract, including, without limitation, the items supplied or used in performance of the contract, and all work under the contract for at least 7 years after completion of the contract. Contractor shall, within 5 City business days of a City request, allow inspection, auditing and copying of all retained records.

14. Assignment/Beneficiaries. None of Contractor's rights or duties may be assigned or delegated without City's prior written consent. This contract will be binding on Contractor's successors and permitted assigns. No other persons are intended to be beneficiaries of this contract.

15. Independent Contractor. Contractor and Contractor's personnel are wholly independent of City. None of them shall be or be represented as City officers or employees. Contractor is solely responsible Contractor's personnel's acts, omissions, and statements. Contractor is solely responsible for any compensation and benefits to be provided Contractor's personnel for Work under the contract. Except for payment of the contract price, City has no responsibility to supervise, compensate or insure Contractor or Contractor's personnel.

16. Disputes/Remedies. Unless the RFP states otherwise provide the following applies to any dispute under this Contract:

A. In case of Contractor's default, City may procure the articles or services from other sources and hold Contractor responsible for any excess costs occasioned by the default. Such action will only be (i) when time is off the essence due to impending weather conditions, upcoming seasonal changes, permit durational limits, scheduled events, conflicts with other projects, or other circumstances City reasonably determines makes time of the essence and (ii) after written notice to Contractor with an opportunity to appeal the decision to the City Manager or the City Manager's designee.

B. Before filing a lawsuit, a party must first notify the party in writing stating the provision involved, stating the actions or failure to act that did not comply with the provision, and proposing the action to be taken to address the alleged non-compliance. The party receiving that notice shall, within 14 days, respond in writing detailing any reasons why it disagrees that it has failed to comply with the contract or stating what actions it has taken or is taking to

address the noncompliance and prevent recurrence. Both parties shall meet within 14 days after the date of the response in an effort to resolve any continuing dispute.

C. A party need not undertake the procedure provided in subsection 16.B if it has previously done so with respect to any noncompliance with the same contract provision.

D. Jurisdiction and venue for any dispute shall be solely in state courts in Kent County, Michigan.

E. In addition to any other remedies to which a party may be entitled, the prevailing party shall be entitled to recover all actual reasonable costs, including for example and without limitation, filing fees, expert consultation and witness fees and expenses, attorneys' fees, discovery expenses, copying costs, exhibit preparation costs, and any other actual reasonable costs incurred to investigate, bring, maintain or defend any action from its first discovery or first notice of it through all collection and appellate proceedings.

F. To resolve discrepancies within this Contract, precedence shall be given in the following order: (i) the contract form and these Terms, (ii) the RFP including specifications, instructions to bidders, and general bid information without conditions or changes, (iii) the Proposal, (iv) the RFP drawings, and (v) City Standard Specifications for Construction\Prequalification at https://www.wyomingmi.gov/About-Wyoming/City-Departments/Public-Works/Engineering/Construction-Specifications. Figure dimensions on drawings take precedence over scale dimensions. Detailed drawings take precedence over general drawings.

17. Risk Allocation.

A. Contractor is solely responsible for (i) the means and methods of the work and services provided under the contract, (ii) the conduct of its officers, employees, subcontractors, and consultants, and (iii) for any injuries or property damage occurring as a result of its Work under and performance of the contract.

B. Contractor shall hold City and City's officers and employees harmless from, indemnify them for, and defend them against any claims made by persons other than the City as a result of Contractor's Work under or performance of this Contract. Contractor shall reimburse the City for or pay in the City's stead costs the City incurs as a result of claims, demands, judgments, administrative actions, or any order to pay any amounts made or entered against the City or City officers or employees as a result of Contractor's Work under or performance of this Contract.

18. Insurance.

A. Contractor shall provide the following insurance:

REQUIRED LIMITS	ADDITIONAL REQUIREMENTS
COMMERCIAL GENERAL LIABILITY	
Minimal Limits: $2,000,000 Each Occurrence Limit $2,000,000 Personal & Advertising Injury Limit $2,000,000 General Aggregate Limit $2,000,000 Products/Completed Operations	Coverage shall include these extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent Contractors Coverage; (D) Broad Form General Liability Extensions or equivalent, if not already included; (E) deletion of all Explosion, Collapse, and Underground (EXU) Exclusions, if applicable. Coverage shall be primary and any other insurance shall be secondary and/or excess.
AUTOMOBILE LIABILITY INSURANCE	
Minimal Limits (include hired and non-owned automobile coverage): $2,000,000 per person $2,000,000 per occurrence	Coverage of shall be primary and any other insurance shall be secondary and/or excess.
WORKERS' COMPENSATION/ EMPLOYERS' LIABILITY	
Minimal Limits: $500,000 per occurrence	Coverage shall be in accordance with all applicable Michigan statutes. Waver of subrogation, except where waiver is prohibited by law.
EXCESS/UMBRELLA INSURANCE	
Required liability limits may be obtained by using an Excess/Umbrella Liability policy in addition to the primary liability policy(ies).	If coverage limits are satisfied by an Excess and/or Umbrella policy, coverage must follow form of the primary liability policy(ies). Coverage shall be primary and any other insurance shall be secondary and/or excess.
OWNERS CONTRACTORS PROTECTIVE	
Coverage is required if the amount stated below is more than $0. Amount required $_____.	The City of Wyoming shall be "Named Insured" on said coverage. A 30 day, 10 day for non-payment of premium, Notice of Cancellation shall be endorsed onto this policy. In lieu of this requirement, a per project aggregate on the Commercial General Liability policy may be acceptable for jobs requiring a $1,000,000 liability limit.
ENVIRONMENTAL/POLLUTION LIABILITY	
Coverage is required if the amount stated below is more than $0. Amount required $_____.	Coverage shall include, but not be limited to, loading/unloading, transportation, storage, and removal of all hazardous waste/material. If this policy is claims made form, then the contractor shall be required to keep the policy in force, or purchase "tail" coverage, for a minimum of 3 years after the termination of this contract. Coverage shall be primary and any other insurance shall be secondary and/or excess.
BUILDERS RISK PROPERTY INSURANCE	
Coverage is required if checked "yes." Yes_____ No_____ Amount required: Full Contract Amount.	Contractor shall procure and maintain during the term of construction a policy of Builders Risk Property Insurance in the full amount of the project. Policy shall be on an All-Risk form and cover all property under a Replacement Cost basis. Policy shall also name the City of Wyoming as Loss Payee.

B. Commercial General Liability, Automobile Liability, Excess/Umbrella Insurance, Environmental Pollution Insurance shall include an endorsement stating the following shall be Insureds or Additional Insureds and certificate holders: (i) City of Wyoming, (ii) all City of Wyoming elected and appointed officers, employees, volunteers, board members, and commission members, (iii) authorities created by the City of Wyoming, (iv) board members, officers, and employees of authorities created by the City of Wyoming, and (v) authorized agents of the foregoing.

19. General Terms.

A. These terms and conditions may not be amended or modified except in writing signed by Contractor and City. These terms and conditions shall not be affected by any course of dealing. The captions are for reference and will not affect the interpretation of these terms and conditions.

B. This contract is made in Kent County, Michigan and shall be governed by and interpreted in accordance with Michigan law.

C. Reference by office to a City officer includes that City officer's designee(s).

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EXHIBIT B
PROPOSAL

Docusign Envelope ID: 154C0FED-682D-8AD0-8273-34B547931ECD

BAVIS FABACRAFT

Bavis Sales and Service
201 Grandin Road
Maineville OH 45039
Phone: 513-677-0500
Fax: 513-677-0552

Quote	9369
Date	04/27/2026
Due Date	05/27/2026
Page	1

Bill To:

City of Wyoming

1155 28th St Sw
Wyoming MI 49509-2825
US

Ship To:

City of Wyoming

1155 28th St Sw
Wyoming MI 49509-2825
US

Customer Ref No.	Customer ID	Sales Person	Shipping Method	Tracking Number	Payment Terms
ity of Wyoming lane 2	C021097	Marcus Brewer	Freight Line		Cash in Advance

Sales Order	Item	Description	Quantity	Price	Ext Price
	04922992	tive Carrier Audio Authority Audio Video 20FT Horizc	1.00	$ 15,046.12	$ 15,046.12
	04031995	---CC HORIZONTAL ENCLOSURE	1.00	$ 8,622.24	$ 8,622.24
	22131011	-AA PIGTAIL SET	1.00	$ 58.26	$ 58.26
	27000996	-CUST VIDEO HEAD LG MONITOR	1.00	$ 5,672.00	$ 5,672.00
	27001592	-CC VIDEO ENCLOSURE MOUNT	1.00	$ 373.75	$ 373.75
	22123021	AA SMALL TELLER CONSOLE	1.00	$ 1,891.13	$ 1,891.13
	22122021	AA SMALL TELLER VIDEO DISPLAY	1.00	$ 4,505.00	$ 4,505.00
	00853151	-14FT GRAY PATCH CABLE W/GND	3.00	$ 184.00	$ 552.00
	32100040	LARGE CRATE	1.00	$ 1,412.00	$ 1,412.00
	19000009	INSTALLATION	1.00	$ 3,640.00	$ 3,640.00
		OutBoundFreight		$ -	$ 2,800.00

Subtotal	$ 44,572.50
Tax	$ -
Total	$ 44,572.50

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BAVIS FABACRAFT

Bavis Sales and Service
201 Grandin Road
Maineville OH 45039
Phone: 513-677-0500
Fax: 513-677-0552

Quote	9369
Date	04/27/2026
Due Date	05/27/2026
Page	2

Bill To:

City of Wyoming

1155 28th St Sw
Wyoming MI 49509-2825
US

Ship To:

City of Wyoming

1155 28th St Sw
Wyoming MI 49509-2825
US

Customer Ref No.	Customer ID	Sales Person	Shipping Method	Tracking Number	Payment Terms
City of Wyoming lane 2	C021097	Marcus Brewer	Freight Line		Cash in Advance

Sales Order	Item	Description	Quantity	Price	Ext Price

Payment Terms (check one):

____ 100% of total amount due upon Purchaser's execution of this Quotation.

____ 50% of total amount due upon Purchaser's execution of this Quotation with the remaining 50% due prior to shipment.

Additional payment terms are set forth in the Terms (as defined below). If Purchaser fails to timely pay the above amounts within thirty (30) days after Purchaser's execution of this Quotation, Bavis reserves the right to increase the pricing set forth above.

Terms and Conditions of Quotation:

This Quotation is governed by the Terms and Conditions of Quotation and Sale found at **https://www.bavis.com/terms** (the "Terms"), which Terms are incorporated by reference and made a part hereof. By signing in the place provided below, you acknowledge and agree as follows: (a) the individual signing this Quotation is authorized to represent and bind the purchasing entity named above (the "Purchaser") to this Quotation and the Terms, and by signing below, the Purchaser agrees to and is hereby bound by this Quotation and the Terms; (b) this Quotation and the Terms constitute the entire agreement of Purchaser and **Bavis expressly objects to, and rejects, any other terms and conditions** (including without limitation, any terms and conditions of Purchaser's purchase order) that are different from, or in addition to, the Terms; (c) Purchaser acknowledges and agrees that Bavis may update the Terms from time to time by posting updated Terms to the link provided above; and (d) Purchaser may obtain the current version of the Terms by clicking on the link provided above, by calling Bavis at (513) 677-0500, and/or by emailing Bavis at **info@bavis.com**. To accept this Quotation, please sign and return this Quotation before the expiration date set forth above by Docusign, email or facsimile. If paying with a check, please make all checks payable to Bavis Sales and Service, Inc.

Purchaser: _____

Signature: _____

Name: Troy Rinks

Title: _____

Date: _____

Accepted: **BAVIS FABACRAFT INC., doing business as Bavis Sales and Service, Inc.**

Signature: DocuSigned by: Larry Sumpter D33BF61AC73E445...

Name: Larry Sumpter

Title: CEO

Date: 5/22/2026

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Bavis
Standard Drive-thru Scope of Work Addendum:

Update: 2023-2

Overview:

This addendum supplements and modifies the Subcontract/Executed Contract between (Contractor) and Bavis Sales and Service, 201 Grandin Road, Maineville, Ohio 45039 (Bavis). **If there are any conflicts between the Subcontract and this addendum, the terms of this addendum shall prevail.**

Background:

Each Contractor has its own set of contractual requirements. However, the prices quoted for (Contractor) are based on a specific set of conditions and scope of work required to hold costs down for the equipment and installation. **Therefore, regardless of a Contractors specific requirement, this addendum overrides the contract so that the terms and conditions of the Contractor's agreement conform to the needs and scope of work in the cited bid.** If other options are required, additional addendums will be added, and changes in cost must be made to accommodate those further needs or scope.

Purpose:

The purpose of this addendum is to spell out what products are to be provided, conditions of the bid, and the scope of work included in the proposal. Further, it spells out what work is the responsibility of each party, so there is no confusion about conflicts. It addresses the consequences of not meeting specific objectives. Finally, it offers cost associated with particular items which are not part of the bid. If additional requirements are needed, please contact Bavis to discuss how those items may be managed.

Bavis is a manufacturer and not a subcontractor. Bavis does not maintain a Contractor's License nor any City, County, Local or State Business Licenses outside of Ohio. Therefore, no licenses can be provided. If local permits are expected, Bavis needs to be provided that information from Contractor prior to execution of the contract.

Scope of Work:

Deliver and install items detailed in Bavis Sales and Service bid/proposal/quote number ( ). **The bid along with the Bavis Sales and Service Conditions and Terms of Sales, and Presite Checklist are made part of the contract to supply the specified items for this location specified in the bid.**

The installation may occur in two trips to the site. On the first trip, the installer will install the window and drawer.

During the second trip (if applicable), the remaining products will be delivered and installed. There are no other trips or labor included in this contract.

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The Contractor is responsible for providing an estimate by email to Bavis of when the equipment will be needed on-site at the time of contract signing so we can plan our production schedule. In any case, a minimum of 21 days' notice must be provided to ship the equipment before installation. Additionally, all required payments must be received before shipment of equipment.

Along with notice to install, the Contractor must complete and provide the Bavis Fabacraft **Presite Checklist** document and send it to Bavis with the request for installation. All required items on this form must be completed before installation will be scheduled. The fact that each requirement has been completed must be indicated by checking the appropriate block. An authorized representative of the company must sign the document. It is the Contractor's responsibility to ensure that only authorized representatives sign and return this form to Bavis. A blank copy of this document is made part of this addendum as Attachment #2. Attachment #3 contains the manufacturer's specifications for the openings to be put in the building by the Contractor before arriving on-site for the installation.

Once on-site, the installers will check the opening to ensure that it meets the specification and install the window and drawer. If necessary, on a later visit to the site, which is the responsibility of the Contractor to schedule with a reasonable lead time of two weeks or more, the remaining products will be installed.

Exceptions:

If the installer arrives on site and the required items on the Presite Checklist are not complete or if not completed to the required specification, then Bavis will not install the equipment. **The Contractor will be charged a "redo fee" based on lost travel, labor cost and administrative fees, which must be paid in full before a subsequent visit is made to complete the installation.** If in subsequent trips, everything is not ready as specified, the charge will be levied again.

Note that once the Contractor has been charged the "redo fee," no subsequent installation attempt will be made until the "redo fee" is paid in full.

Responsibilities of Bavis: (as applicable)

1. Shipping and transportation of the equipment to the site FOB.
2. Removal of all crating and packaging materials.
3. Disposal of all crating and packaging materials.
   Installation of the window into a pre-completed building opening that is within the manufacturer's specifications.
4. Installation of the Transaction Drawer and audio panel into the pre-completed building opening that is within the manufacturer's specifications.
5. Installation of Audio system into audio panel

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Responsibilities of the Contractor:

1. **Provide a rough window opening in the building which meets the manufacturer's specification to accept the drive-thru window and drawer.** (See Attachment #3)
2. Provide a safe work environment required to install the window and drawer. A safe work environment includes but is not limited to **a paved surface from the delivery point of the window and drawer to the outside of the rough opening created in "1" above.**
3. **Provide a clear path to move the window and drawer into place at the rough opening on the paved surface.**
4. Rough window opening must be designed and presented in such a fashion to accept the required anchors to hold the window in place.
5. **The Contractor is responsible for all coordination with Bavis. Bavis will only have personnel on-site during installation.** Construction meetings are the responsibility of the Contractor. If Bavis is required to be present during construction meetings, the meetings will be by virtual means or the Contractor agrees to compensate Bavis on a home portal to the meeting portal basis, plus travel costs of $150/per hour. This expense is payable within 30 days of the invoice. Past due invoices for this expense will automatically delay installation. Please contact Bavis to coordinate presence at meeting if required.
6. All finish work is the responsibility of the Contractor.
7. All caulking is the responsibility of the Contractor.
8. The Contractor is to provide 120VAC power for standard tools during installation.
9. The Contractor is to provide all electrical connections required for the audio system and Electric Transaction Drawer. See specifications for details.
10. The Contractor is to provide the position for the vehicle detector above the window. If mounted on the ceiling and ceiling height exceeds 12', the Contractor to provide a man lift to access the ceiling.

Insurance:

Bavis will provide an insurance certificate. Below is a summary of the limits. Please see the certificate for specific details. Where the certificate and this document varies, the certificate represents what is agreed to:

Commercial General Liability:
Each Occurrence $1,000,000, Damage to rented premises $1,000,000, Med Exp (any one person) $10,000, Personal and ADV Injury $1,000,000, General Aggregate $2,000,000, and Products – COMP/OP AGG $2,000,000

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Automotive Liability:
Combined single Limit $1,000,000

Umbrella Liability:
Each Occurrence $3,000,000 and Aggregate $3,000,000

Workers Compensation and Employers' Liability:
Per Statute OH GAP, E.L Each Accident $1,000,000, E. L Disease – E.L. Employee $1,000,000, E.L Disease – Policy Limit $1,000,000

Installation Floater:
Any one installation $50,000

Additional insurance may be available at an additional cost if required. Please contact Bavis for details.

Any requirements of the contract over this addendum are null and void.

Warranty on Products:

The terms and conditions of each warranty are included with the product. Those written limited product warranties are the only warranty offered. Different warranty coverages are available but are not part of this agreement regardless of contract terms and conditions.

Payment Terms:

Minimum of 50% of the total invoice paid with order
Balance of the total invoice before shipment to site

Any costs associated with payment are to be paid by the Contractor.

Signed:

Troy Rinks	DocuSigned by: Larry Sumpter D33BF61AC73E445...
Contractor	**Larry Sumpter, CEO** Bavis Sales and Service
	5/22/2026
Date	**Date**

End of Addendum.

CITY OF WYOMING

CITY PURCHASING CONTRACT
CITY OF WYOMING, MICHIGAN
(MORE THAN $7,500)

This Contract is made as of the Effective Date between the City and the Supplier.

City means the City of Wyoming, a Michigan municipal corporation of 1155 28th St SW, Wyoming, MI 49509.

Effective Date means: June 2, 2026.

Items means the parts, equipment, or other items the City is purchasing as stated in the Proposal.

Proposal means Supplier's Bid/Proposal attached as Exhibit B.

Standard Terms means "City Contract Standard Terms and Conditions" is Exhibit A, including the Risk Allocation and Insurance Provisions.

Supplier means: Penchura, LLC
[Name of supplying entity]
A Michigan limited liability company
[State and type of entity, *e.g.*, corporation, limited liability company, etc.]
889 S Old US 23
[Supplier's street address]
Brighton, MI 48114
[Supplier's city, state & zip]

TERMS AND CONDITIONS

In exchange for the consideration in and referred by this Contract, the parties agree:

1. Supplier will supply the Items as detailed in the Proposal.

2. City will pay the Supplier in accordance with the Proposal.

3. Supplier represents and warrants, except for those listed in this paragraph as inapplicable or that are modified by this paragraph, Supplier is complying with and will comply with the Standard Terms. Inapplicable conditions are as follows:

This contract is for $43,220.00. The City of Wyoming is tax exempt.

4. This is the only agreement between the parties regarding the Purchase that is the subject of the Proposal and there are no other agreements, representations, or warranties except as are stated in the Proposal. This contract can be amended only in writing signed by both City and Supplier.

City and Supplier have signed this Contract as of the Effective Date.

City of Wyoming

By: _____
John Shay, City Manager

Approved as to form:

_____
Gregory T. Stremers, City Attorney

Penchura, LLC

By: _____
[Signature officer, director, or principal of Supplier]
CARL PIETILA SALES
[Typed/Printed Name & Title of Person Signing for Supplier]

Date signed: 5/19, 2026

EXHIBIT A
CITY CONTRACT STANDARD TERMS AND CONDITIONS

These Terms and Conditions apply to this contract. Supplier attests it complies with and promises it will comply with these Terms and Conditions.

1. Legal Compliance. Supplier and all Supplier's personnel must comply with all applicable (i) laws, rules, regulations, codes, and ordinances, (ii) license and permit requirements, and (iii) orders of any governmental agency, official or court of competent jurisdiction. This includes, for example, complying with federal OSHA and Michigan MIOSHA safe practices, and with applicable federal and state labor laws, rules, and regulations.

2. Qualifications. Supplier represents and promises that:

A. Supplier and Supplier's personnel must have and maintain all licenses, registrations, certifications, memberships, or other approvals needed to perform the Work and supply materials required by the contract.

B. Supplier and its principals, owners, officers, shareholders, key employees, directors, members and partners: (i) are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by a federal department or agency; (ii) have not within the last 3-years been convicted of or have a judgment against them for fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a contract or transaction with a governmental entity; (iii) have not within the last 3 years violated federal or state antitrust statutes or committed embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property; (iv) are not presently indicted for or otherwise criminally charged by a governmental entity with commission of any of the offenses enumerated in this certification; and (v) have not within the last 3-years had one or more contracts or transactions with a governmental entity terminated for cause or default.

C. If the contract is for a HUD CDBG or another federal or state funded project, neither Supplier nor any of its subcontractors on the HUD list of debarred and suspended participants (https://www.hud.gov/program_offices/general_counsel/limited_denial_participation_hud_funding_disqualifications). If grant funds are withdrawn or cancelled for any reason this Contract is nullified. Unless waived by City's purchasing director, Supplier and all subcontractors will register on the Federal SAM Registry available at: https://usfcr.com. Supplier and all subcontractors are not on and will remain off the Federal System for Award Management list of persons and entities ineligible for federal contracts.

D. Supplier is not an "Iran linked business" under Michigan's Iran economic sanctions act, 2012 PA 517.

3. Nondiscrimination and Respect. City is committed to fairness, impartiality, courtesy, respect, and nondiscrimination in all City programs, benefits, and actions, including City contracts and activities that contractors or others engage in for or on behalf of City, Accordingly:

A. Supplier in (i) employment actions, (ii) soliciting, bidding or contracting with subcontractors, or (iii) soliciting, bidding or contracting for materials will not discriminate based on race, color, religion, national origin, age, sex, gender, gender identity or expression, height, weight, marital status, familial status, mental or physical disability, genetic information, or other reason prohibited by law that is unrelated to the ability to perform the duties of a job or position.

B. Noncompliance with this provision is a material breach of this Contract that can result in (i) withholding payments to Supplier, (ii) Contract cancellation, termination, or suspension, in whole or in part, and (iii) Supplier's ineligibility for future City contracts.

C. Supplier must retain and, upon request, provide City access to and copies of all information and reports required by this provision that a state or federal agency determine are pertinent to ascertain compliance. If information required of Supplier is in the sole possession of another who fails or refuses to furnish it, Supplier must so certify to City.

4. Ethical Standards. To the best of Supplier's knowledge after reasonable inquiry:

A. Supplier and Supplier's personnel, as well as any parent, affiliate, or subsidiary organization of Supplier has not engaged in and shall refrain from: (i) attempting to or appearing to influence any City elected or appointed officer or employee by a direct or indirect offer of anything of value, or (ii) paying or agreeing to pay a person, other than its personnel, any consideration contingent upon the award of the contract.

B. No owner, director, officer, member, partner, or key employee of Supplier or of any parent, affiliate, or subsidiary organization or subcontractor of Supplier is a spouse, parent, child, grandchild, or sibling of the mayor, city council member, or another City elected or appointed officer except as already disclosed in writing to City when submitting its proposal.

C. Supplier will immediately notify City of any subsequently discovered violation of the standards in this section.

5. Media Releases. Media or other releases (including promotional literature and commercial advertisements) pertaining to the contract or the project to which it relates shall not be made without the City Manager's prior written approval and only in accordance with the written terms provided in that approval.

6. Payment to Supplier.

A. Supplier and all subcontractors, suppliers and consultants shall, before beginning the Work, submit by email to City's Finance Department at Acct_Info@wyomingmi.gov a completed IRS W-9 form (available at www.IRS.gov).

B. Payments to Supplier will be made in accordance with the Proposal. If no other terms are provided, payment of an invoice to City will generally be made within 30 days after and invoice all required information is submitted to City.

C. Payment disputes will be resolved as provided in §13. City will pay undisputed amounts and the disputed amount will be held in a non-interest-bearing account until the dispute is resolved.

7. Intellectual Property. Supplier guarantees the sale or use of articles, software, copies, records, or other intellectual property provided under or used to perform the contract will not infringe any copyright, patent, trademark, or other intellectual property rights. Supplier will, without expense to City, defend every action brought against City or City's officers or employees for any alleged infringement of intellectual property rights by reason of their sale or use as part of the contract and will pay all costs, damages, and profits recoverable in any action.

8. Information, Quality, and Related Requirements.

A. Unless otherwise stated in the Proposal, all items shall be new, the best of their respective kind, and free from defects.

B. Supplier shall provide City all manufacturer parts lists, assembly, and maintenance information, and all other documents provided by the manufacturer for the items, and ensure all related warranties are held by or assigned to City.

C. Supplier's failure to meet specified delivery schedules or promptly replace rejected materials renders Supplier liable for all costs in excess of the bid price(s) when alternate procurement is necessary. Excess costs will include administrative costs. Prices shall be delivered F.O.B. destination freight prepaid to any location specified in the specifications and included in the Proposal pricing unless otherwise specified in the RFP or expressly stated in the Proposal.

9. Taxes. City is generally exempt from federal and state taxes, including state sales and use taxes. A copy of City's certificate of tax exemption can be requested by contacting City's Finance Department. Invoices must be separated to show the amount

added for taxes of any kind if applicable. Taxes, wherever indicated and applicable to any purchase, will not be subject to trade or cash discounts.

10. Records. Because City is a public entity that receives funds from other governmental agencies: (i) City is required to retain, be able to obtain, and/or audit records related to City contracts and (ii) Michigan's Freedom of Information Act generally requires that City disclose to those requesting them copies of all requested documents relating to this contract. Supplier shall retain copies of all records related to this contract for at least 7 years after completion of the contract. Supplier shall, within 5 City business days of a City request, allow inspection, auditing and copying of all retained records.

11. Assignment/Beneficiaries. None of Supplier's rights or duties may be assigned or delegated without City's prior written consent. This contract will be binding on Supplier's successors and permitted assigns. No other persons are intended to be beneficiaries of this contract.

12. Independent Contractor. Supplier and Supplier's personnel are wholly independent of City. None of them shall be or be represented as City officers or employees. Supplier is solely responsible Supplier's personnel's acts, omissions, and statements. Supplier is solely responsible for any compensation and benefits to be provided Supplier's personnel for Work under the contract. Except for payment of the contract price, City has no responsibility to supervise, compensate or insure Supplier or Supplier's personnel.

13. Disputes/Remedies. The following applies to all disputes under this contract:

A. In case of Supplier's default, City may procure the items from other sources and hold Supplier responsible for excess costs occasioned by the default. Such action will only be (i) when time is off the essence due to impending weather conditions, upcoming seasonal changes, permit durational limits, scheduled events, conflicts with other projects, or other circumstances City reasonably determines makes time of the essence and (ii) after written notice to Supplier with an opportunity to appeal the decision to the City Manager.

B. Before filing a lawsuit, a party must first notify the other party in writing stating the provision involved, stating the actions or failure to act that did not comply with the provision, and proposing the action to be taken to address the alleged non-compliance. The party receiving that notice shall, within 14 days, respond in writing detailing any reasons why it disagrees that it has failed to comply with the contract or stating what actions it has taken or is taking to address the noncompliance and prevent recurrence. Both parties shall meet within 14 days after the date of the response in an effort to resolve any continuing dispute.

C. A party need not undertake the procedure provided in subsection 13.B if it has previously done so with respect to any noncompliance with the same contract provision.

D. Jurisdiction and venue for any dispute shall be solely in state courts in Kent County, Michigan.

E. In addition to any other remedies to which a party may be entitled, the prevailing party shall be entitled to recover all actual reasonable costs, including for example and without limitation, filing fees, expert consultation and witness fees and expenses, attorneys' fees, discovery expenses, copying costs, exhibit preparation costs, and any other actual reasonable costs incurred to investigate, bring, maintain or defend any action from its first discovery or first notice of it through all collection and appellate proceedings.

14. Risk Allocation. Supplier is solely responsible for (i) the means and methods of providing the items under the contract, (ii) the conduct of its officers, employees, subcontractors, and consultants, and (iii) for any injuries or property damage suffered by Supplier or Supplier's officers, employees, and agents.

A. Supplier shall hold City and City's officers and employees harmless from, indemnify them for, and defend them against any claims made by persons other than the City as a result of actions, errors, or omission of Supplier or Supplier's officers, employees, and agents while providing the items under this Contract.

15. Insurance.

A. Supplier shall maintain the following insurance:

REQUIRED LIMITS	ADDITIONAL REQUIREMENTS
COMMERCIAL GENERAL LIABILITY	
Minimal Limits: $2,000,000 Each Occurrence Limit $2,000,000 Personal & Advertising Injury Limit $2,000,000 General Aggregate Limit $2,000,000 Products/Completed Operations	Coverage shall include the following extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent Suppliers Coverage; and (D) Broad Form General Liability Extensions or equivalent, if not already included. Coverage afforded shall be primary and any other insurance that may be in effect shall be secondary and/or excess.
AUTOMOBILE LIABILITY INSURANCE	
Minimal Limits (include hired and non-owned automobile coverage): $2,000,000 per person $2,000,000 per occurrence	Coverage afforded shall be primary and any other insurance that may be in effect shall be secondary and/or excess.
WORKERS' COMPENSATION/ EMPLOYERS' LIABILITY	
Minimal Limits: $500,000 per occurrence	Coverage shall be in accordance with all applicable Michigan statutes. Waver of subrogation, except where waiver is prohibited by law.
ENVIRONMENTAL/POLLUTION LIABILITY	
Coverage is required if any of the items being purchased are hazardous or toxic substances or materials or contain hazardous or toxic substances or materials. Amount required $2,000,000.	Coverage shall include, but not be limited to, loading/unloading, transportation, storage, and removal of all hazardous waste/material. If this policy is claims made form, then the Supplier keep the policy in force, or purchase "tail" coverage, for a minimum of 3 years after the termination of this contract. Coverage afforded shall be primary and any other insurance that may be in effect shall be secondary and/or excess.

16. General Terms.

A. These terms and conditions may not be amended or modified except in writing signed by Supplier and City. These terms and conditions shall not be affected by any course of dealing. The captions are for reference and will not affect the interpretation of these terms and conditions.

B. This contract is made in Kent County, Michigan and shall be governed by and interpreted in accordance with Michigan law.

C. Reference by office to a City officer includes that City officer's designee(s).

Exhibit B

Proposal

Penchura LLC

Make all P.O.s, Contracts, and Checks to:
Penchura, L.L.C.
889 S. Old US 23
Brighton, MI 48114

Proposal

Date	Project #
5/14/2026	26-1005-1

Bill To	Ship To
The Architectural Group Jay Miedema 3100 Prairie St SW Grandville, MI 49418	The Architectural Group Jay Miedema 3100 Prairie St SW Grandville, MI 49418

Customer Contact	Customer Phone	Customer Fax	Terms	P.O. No.	Rep
	616-531-7040		50/50 w-Credit App		CRP

Item	Description	Qty	Weight	Price	Total
Poligon	Poligon 12'x20' Gullwing Structure ~ Multi-Rib ~Gutter ~Anchor Bolts ~Engineering and Drawings (Footing is not included) ~ Freight			43,220.00	43,220.00T
Poligon Note	Poligon Structures not paid in full within 30 days will be subject to 5% fee				

Proposal good for 30 days.
Ship Via: common carrier
Delivery contact name and number: _____

Customer signature below constitutes a purchase order.

_____

Subtotal	$43,220.00
Sales Tax (6.0%)	~~$2,593.20~~ **Tax Exempt**
Total	~~$45,813.20~~

Credit Card fee of 3% on all payments using a CC.
AMX fee of 5% on all payments using AMX

889 S. Old US 23, Brighton, MI 48114
Office: (810) 229-6245 Fax: (810) 229-6256 Toll Free: (888) 778-7529

Michigan Department of Treasury
3372 (Rev. 02-25)

Michigan Sales and Use Tax Certificate of Exemption

This exemption claim should be completed by the purchaser, provided to the seller, and is not valid unless the information in all four sections is complete. Do not send a copy to Treasury unless one is requested.

SECTION 1: TYPE OF PURCHASE Check one of the following:

☐ A. One-Time Purchase
Order or Invoice Number: _____

☐ C. Blanket Certificate
Expiration Date (maximum of four years): _____

☒ B. Blanket Certificate, Recurring Business Relationship

The purchaser completing this form hereby claims exemption from tax on the purchase of tangible personal property or services purchased from the seller named below. This claim is based upon: the purchaser's proposed use of the property or services; OR the purchaser's exempt status.

Seller's Name and Address

SECTION 2: ITEMS COVERED BY THIS CERTIFICATE

Check one of the following:

1. ☒ All items purchased.
2. ☐ Limited to the following items: _____

SECTION 3: BASIS FOR EXEMPTION CLAIM

Check one of the following:

1. ☐ For Lease. Purchaser will lease the property and elects to pay tax based on rental receipts. Enter sales tax license or use tax registration number: _____
2. ☐ For Resale at Retail. Enter Sales Tax License Number: _____
3. ☐ Direct Pay - Authorized to pay use tax on qualified transactions directly to Michigan Treasury under account number: _____

The following exemptions DO NOT require the purchaser to provide a number:

4. ☐ Agricultural Production. Enter percentage: _____%
5. ☒ Government Entity (U.S. or its instrumentalities, State of Michigan or its political subdivisions), Nonprofit School, Nonprofit Hospital, Church or House of Religious Worship (circle type of organization)
6. ☐ Contractor (provide *Michigan Sales and Use Tax Contractor Eligibility Statement* (Form 3520)).
7. ☐ For Resale at Wholesale.
8. ☐ Industrial Processing. Enter percentage: _____%
9. ☐ Nonprofit Internal Revenue Code Section 501(c)(3), 501(c)(4), or 501(c)(19) Exempt Organization.
10. ☐ Nonprofit Organization with an authorized letter issued by Michigan Department of Treasury prior to July 17, 1998 (sales tax) or June 13, 1994 (use tax).
11. ☐ Rolling Stock purchased by an Interstate Motor Carrier.
12. ☐ Other (explain): _____

SECTION 4: CERTIFICATION

I declare, under penalty of perjury, that the information on this certificate is true, that I have consulted the statutes, administrative rules and other sources of law applicable to my exemption, and that I have exercised reasonable care in assuring that my claim of exemption is valid under Michigan law. In the event this claim is disallowed, I accept full responsibility for the payment of tax, penalty and any accrued interest, including, if necessary, reimbursement to the vendor for tax and accrued interest.

Business Name		Type of Business (see codes on page 2)
City of Wyoming		05
Business Address	**City, State, ZIP Code**	
1155 28th St SW, PO Box 905	Wyoming, MI 49509	
Business Telephone Number (include area code)	**Name (Print or Type)**	
(616) 530-7201	Jodi L. Yenchar	
Signature	**Title**	**Date Signed**
Jodi Yenchar	Finance Director	01/08/2026

06/01/26
Finance/LAJ

RESOLUTION NO._____

RESOLUTION TO ACCEPT A BID FOR THE
2026 WYOMING RESURFACING PROJECT

WHEREAS:

1. As detailed in the attached staff report, bids were accepted for the 2026 Wyoming resurfacing project.
2. It is recommended City Council accept the bid from Michigan Paving and Materials Co. in the total amount of $2,683,485.22.
3. It is also recommended City Council approve a contingency in the amount of $135,000.00.

NOW, THEREFORE, BE IT RESOLVED:

1. City Council awards the bid for the 2026 Wyoming resurfacing project to Michigan Paving and Materials Co.
2. City Council approves the contingency.
3. City Council authorizes the City Manager to sign the contract.

Moved by Councilmember:
Seconded by Councilmember:
Motion Carried Yes
No

I certify that the foregoing Resolution was adopted by the City Council for the City of Wyoming, Michigan at a regular session held on: June 1, 2026.

_____
Kelli A. VandenBerg, Wyoming City Clerk

ATTACHMENTS:
Staff Report
Contract/Proposal

CITY OF WYOMING | PUBLIC WORKS

2660 Burlingame Ave. SW, Wyoming, MI 49509
616.530.7260 | Fax 616.249.3478 | wyomingmi.gov

STAFF REPORT

Date: May 20, 2026

Subject: 2026 Wyoming Resurfacing Project – Award of Bid

From: Jeffrey Oonk, City Engineer

CC: Aaron Vis, Director of Public Works

Meeting Date: June 1, 2026

RECOMMENDATION:

It is recommended the City Council award the 2026 Wyoming Resurfacing Project to Michigan Paving and Materials Co. in the amount of $2,683,485.22 and approve a contingency of $135,000.00 for a total of $2,818,485.22.

ALIGNMENT WITH STRATEGIC PLAN:

- Pillar 3 – Stewardship
  Goal 3 – Improve city infrastructure and service reliability

DISCUSSION:

Part of the City of Wyoming's annual major maintenance of streets includes rotomilling and resurfacing asphalt pavement. The 2026 Wyoming Resurfacing Program includes locations throughout the City as shown on the attached map. These streets are currently in need of repair to extend the life of the roadway.

The City received three (3) bids for the 2026 Wyoming Resurfacing Project. The low bid was submitted by Michigan Paving and Materials Co., in the amount of $2,683,485.22, which is 4.6% above the engineer's estimate of $2,564,746.09.

TABULATION:

Rank	Bidder	Total Bid	% Over Low	% Over Est.
0	ENGINEER'S ESTIMATE	$2,564,746.09	-4.42%	0.00%
1	(_23) Michigan Paving & Materials Co.	$2,683,485.22	0.00%	4.62%
2	(00253) Rieth-Riley Construction Co., Inc.	$2,811,826.22	4.78%	9.63%
3	(01393) Wyoming Excavators, Inc.	$3,095,890.00	15.36%	20.70%

BUDGET IMPACT:

Street resurfacing can be financed out of the Local Streets Fund Account No. 203-441-46300-972.510, but a budget amendment is necessary.

CITY OF WYOMING BUDGET AMENDMENT

Date: June 1, 2026 **Budget Amendment No. 029**

To the Wyoming City Council:

A budget amendment is requested to transfer $1,600,000 of budgetary authority from Major Streets to Local Streets to provide the necessary funds for the 2026 resurfacing projects.

Description/Account Code	Current	Increase	Decrease	Amended
Local Streets Fund				
Public Works - Street Maintenance - Capital Outlay Resurfacing				
203-441-46300-972.510	$ 2,385,494.00	$ 1,600,000.00	$ -	$ 3,985,494.00
Transfer from Major Streets Fund				
203-699.002	$ 500,000.00	$ 1,600,000.00	$ -	$ 2,100,000.00
Fund Balance/Working Capital (Fund 203)		$ -	$ -	
Major Streets Fund				
Public Works - Street Maintenance - Capital Outlay Street Resurfacing				
202-441-46300-972.510	$ 3,346,639.00		$ 1,600,000.00	$ 1,746,639.00
Transfer to Local Streets Fund				
202-441-48400-995.002	$ 500,000.00	$ 1,600,000.00		$ 2,100,000.00
Fund Balance/Working Capital (Fund 202)		-	-	

Recommended: Jodi Yenchar
Finance Director

City Manager

Motion by Councilmember _____, seconded by Councilmember _____ that the General Appropriations Act for Fiscal Year 2025-2026 be amended by adoption of the foregoing budget amendment.

Motion carried: Yes _____, No _____

I hereby certify that at a _____ meeting of the Wyoming City Council duly held on _____ the foregoing budget amendment was approved.

City Clerk

06/01/26
Finance/LAJ

RESOLUTION NO._____

RESOLUTION TO EXTEND THE BID FOR THE PURCHASE OF HVAC SUPPLIES

WHEREAS:

1. The Wastewater Treatment Plant and Drinking Water Plant require a significant amount of consumable HVAC supplies for routine replacements, repairs, and maintenance of the heating and cooling systems.
2. As detailed in the attached staff report, City Council awarded the bid for the purchase of HVAC supplies to Johnstone Supply – Muskegon Group on November 3, 2025 via resolution #28565 through June 15, 2026.
3. It is recommended City Council accept an offer from Johnstone Supply – Muskegon Group extending their current bid pricing through December 31, 2026.

NOW, THEREFORE, BE IT RESOLVED:

1. City Council extends the bid for HVAC supply through December 31, 2026.
2. City Council does hereby waive the provisions of Sections 2-252, 2-253, 2-254, and 2-256 of the City Code regarding publication and posting of bid notices, notification of bidders and the bid opening procedure.

Moved by Councilmember:
Seconded by Councilmember:
Motion Carried Yes
No

I hereby certify that the foregoing Resolution was adopted by the City Council for the City of Wyoming, Michigan at a regular session held on: June 1, 2026.

_____
Kelli A. VandenBerg, Wyoming City Clerk

ATTACHMENTS:
Staff Report
Letter

CITY OF WYOMING | PUBLIC WORKS

Wastewater Treatment Plant | 2350 Ivanrest Ave. SW, Wyoming, MI 49509
616.261.3550 | wyomingmi.gov

STAFF REPORT

Date: May 5, 2026

Subject: Purchase of HVAC Supplies

From: Dan Kleinheksel, Utility Maintenance Manager

CC: Aaron Vis, Director of Public Works

Meeting Date: June 1, 2026

RECOMMENDATION:

It is recommended that the City Council extend the bid contract price hold date with Johnstone Supply – Muskegon Group for the purchase of HVAC supplies, up to $15,000.00 annually per utility plant.

ALIGNMENT WITH STRATEGIC PLAN:

- PILLAR 3 – STEWARDSHIP
  - GOAL 3 – Improve City infrastructure and service reliability

DISCUSSION:

The Drinking Water Plant and Wastewater Treatment Plant require a significant amount of consumable HVAC supplies for routine replacements, repairs, and maintenance of their heating and cooling systems. Each facility operates a diverse range of HVAC equipment, including industrial dehumidifiers, boilers, chillers, and rooftop units. Regular replacement of HVAC components is essential to ensure reliable system operation.

To meet these needs, the City solicited bids for HVAC supplies, which included more than 70 routinely used items. On November 3, 2025, via Resolution No. 28565, City Council awarded the bid to Johnstone Supply. Per their original bid, pricing was held through June 15, 2026. With that date approaching, Johnstone Supply reviewed the pricing and has offered to extend the price hold through December 31, 2026.

Because the pricing remains unchanged, it is recommended that the City Council extend the bid contract price hold date with Johnstone Supply – Muskegon Group for the purchase of HVAC supplies, up to $15,000.00 annually per utility plant.

BUDGET IMPACT:

Funds exist in the various Drinking Water Plant and Wastewater Treatment Plant accounts including 591-537-55300-775.000 and 590-536-54300-775.000.

May 7, 2026

Dan Kleinheksel

Utility Maintenance Manager

City of Wyoming

O 616.738.4957 |C 616.377.8969

dankleinheksel@wyomingmi.gov

Dan,

I am happy to report that no changes are necessary with the pricing contract we currently have. I have extended the pricing to expire on 12/31/26. Obviously, I will review in November so we work ahead of the expiration. Thanks.

Jeff J Meehleder | Sales Leader | Johnstone Supply Muskegon Group

1840 Industrial Blvd, Muskegon, MI 49442 | Tel 231.777.2727 Cell 616.299.0827 | Buy Online At johnstonesupply.com

Muskegon | Grand Rapids | Holland | Kalamazoo | Comstock Park | Benton Harbor | South Bend | Elkhart | Lansing | Jackson | Traverse City | Petoskey

Our Vision: *"To be our customers' preferred wholesaler by exceeding expectations through quality service, added value and caring employees."*

06/01/26
Finance/LAJ

RESOLUTION NO._____

RESOLUTION FOR AWARD OF BIDS

WHEREAS:

1. Formal bids have been obtained on the below listed items.
2. The bids received have been reviewed and evaluated per the attached staff reports.

NOW, THEREFORE, BE IT RESOLVED:

1. City Council awards the bids for the listed items as recommended in the attached staff reports and summarized below.

Item	Recommended Bidder	Cost
Electric Gate Operator Replacement	Straight Line Fence	$9,550.00
IDEXX Laboratory Testing Supplies	IDEXX Distribution, Inc.	Bid prices as shown in the attached staff report.
Long Line Pavement Markings	Michigan Pavement Markings, LLC	Bid prices as shown in the attached staff report.
Miscellaneous Pavement Markings	Michigan Pavement Markings, LLC	Bid prices as shown in the attached staff report.

2. City Council authorizes a 20% contingency for the electric gate operator replacement.
3. City Council authorizes a $5,000.00 contingency for the long line pavement markings.
4. City Council authorizes a $5,000.00 contingency for the miscellaneous pavement markings.
5. City Council authorizes the City Manager to sign the contracts.

Moved by Councilmember:
Seconded by Councilmember:
Motion Carried Yes
No

I certify that the foregoing Resolution was adopted by the City Council for the City of Wyoming, Michigan at a regular session held on: June 1, 2026.

_____
Kelli A. VandenBerg, Wyoming City Clerk

ATTACHMENTS:
Staff Reports
Tabulation Sheet
Contracts

Resolution No._____

CITY OF WYOMING | PUBLIC WORKS

Drinking Water Plant | 16700 New Holland St., Holland, MI 49424
616.399.6511 | wyomingmi.gov

STAFF REPORT

Date: May 18, 2026

Subject: Electric Gate Operator Replacement

From: Dan Kleinheksel, Utility Maintenance Manager

CC: Aaron Vis, Director of Public Works

Meeting Date: June 1, 2026

RECOMMENDATION:

It is recommended that the City Council award the bid for replacement of the Gezon Pumping Station electric gate operator to Straight Line Fence, LLC in the amount of $9,550.00, plus a 20% contingency for up to a total amount of $11,500.00.

ALIGNMENT WITH STRATEGIC PLAN:

- PILLAR 3 – STEWARDSHIP
    - GOAL 3 – Improve City infrastructure and service reliability.

DISCUSSION:

The Gezon Pump Station uses an electric gate operator to automatically open and close the access gate, ensuring both reliable entry and security for the site. The existing operator has significantly worn components, has required repeated repair, and has reached the end of its useful life. To maintain dependable access and safeguard the facility, replacement of the operator is recommended.

Specifications for replacement equipment, including required safety devices, were developed by staff and advertised on the City's website. On May 12, 2026, one bid was received from Straight Line Fence, LLC in the amount of $9,550.00. Staff reviewed the bid for compliance with the specifications and found it to be acceptable.

Therefore, it is recommended that the City Council award the bid for the Electric Gate Operator Replacement to Straight Line Fence, LLC in the amount of $9,550.00, plus a 20% contingency, for a total amount of $11,500.00.

BUDGET IMPACT:

Adequate funds exist in Drinking Water Plant account #591-537-55900-930.000.

ELECTRIC GATE OPERATOR REPLACEMENT CONTRACT

CITY OF WYOMING, MICHIGAN

This Contract is made as of the Effective Date between City and Contractor.

City means the City of Wyoming, a Michigan municipal corporation, of 1155 28th St SW, Wyoming, MI 49509.

Contractor means: Straight Line Fence
[Name of contracting entity]
A MI LLC
[State and type of entity, *e.g.*, corporation, limited liability company, etc.]
85 Chestnut St SW
[Contractor's street address]
Grand Rapids, MI 49503
[Contractor's city, state & zip]

Contractor's personnel means Contractor's directors, members, partners, officers, employees, subcontractors, agents and representatives and any other individuals or entities Contractor engages to provide services under the Contract.

Effective Date means: May 8, 2026

Goods means any parts, equipment, supplies, materials, or other items or services the City is acquiring from Contractor as itemized or stated in the RFP as modified by the Proposal.

Proposal means Contractor's Bid/Proposal attached as Exhibit B.

RFP means the Request for Bids/Proposals attached as Exhibit A.

Standard Terms means "City Contract Standard Terms and Conditions" portion of the RFP, including the Risk Allocation and Insurance Provisions.

Work means the services described and specified the RFP as modified by the Proposal.

TERMS AND CONDITIONS

In exchange for the consideration in and referred by this Contract, the parties agree:

1. Contractor will perform the Work and supply the Goods as detailed in the RFP as modified by the Proposal.
2. City will pay the Contractor in accordance with the RFP as modified by the Proposal.
3. Contractor represents and warrants, except for those specifically waived or modified in this paragraph, Contractor is complying with and will comply with the Standard Terms. Waived or modified conditions are as follows:

N/A
[Identify those the City Attorney has agreed may be waived or the City attorney approved modifications or write "None."

4. If this Contract is for a public improvement project costing $50,000 or more, performance and payment bonds in an amount equal to the Contract amount are required and must be provided before beginning any Work.
5. This is the only agreement between the parties regarding City engagement of Contractor to perform the Work and supply the goods. There are no other agreements, representations, or warranties except as stated in the RFP as modified by the Proposal. This contract can be amended only in writing signed by both City and Contractor.

City and Contractor have signed this Contract as of the Effective Date.

City of Wyoming

By: _____
John Shay, City Manager

Date signed: _____, 20__

Approved as to form:

Gregory T. Stremers, City Attorney

Contractor: Straight Line Fence

By: Amanda Donigan
[Signature officer, director, or principal of Contractor]
Amanda Donigan, General Manager
[Typed/Printed Name & Title of Person Signing for Contractor]

Date signed: 5-8, 2026

REQUEST FOR BIDS/PROPOSALS

The City of Wyoming, Michigan (**City**) is requesting bids/proposals for the items, services, or project generally referred to as:

Electric Gate Operator Replacement

as more particularly described and detailed in the plans and specifications attached to this Request for Bids/Proposals (the "Work").

DUE DATE AND TIME

The City Clerk will receive bids/proposals for the Work submitted by the date and time stated below in accordance with this Request for Bids/Proposals:

Due date and time:	**Tuesday, May 12, 2026, 11:00 a.m., local time**
Place:	**Wyoming City Clerk's Office** **Wyoming City Hall** **1155 28th Street SW** **Wyoming, MI 49509-0905**

If using United States Post Office for delivery, add PO Box 905 to the mailing address above.

All bids/proposals must include the fully signed Bid/Proposal Form and all other required information submitted in a sealed envelope and plainly labeled: "Bid/Proposal for Electric Gate Operator Replacement."

Proponents are solely responsible for ensuring delivery by the required date and time. Any bid/proposal, even if in route by U.S. Mail or by courier service or if held by the U.S. Postal Service or a courier for pick-up by City staff, that is received in the Clerk's Office after the required date and time, will not be opened and will be returned to the bidder/proponent. **Bids/proposals will not be accepted by e-mail or other electronic delivery.**

PRE-BID MEETING

A pre-bid meeting be held. Attendance is not required.

Date and time: Wednesday, April 29, 2026, 3:00 p.m., local time

Place: Gezon Pump Station
5591 Gezon Court
Wyoming, MI 49519

QUESTIONS, INTERPRETATIONS AND ADDENDA

Questions about or requests for interpretation of this request for bids/proposals, any of the plans and specifications, or any bid/proposal requirements may be directed via e-mail to Dan.Kleinheksel@WyomingMI.gov. No questions or interpretations will be issued later than 4 days before the due date for bids. Questions will not be answered by phone or in other oral communication. City will endeavor, but is not required to, email a copy of any addenda, answers to questions or interpretations that may be of general interest to potential bidders/proponents who have provided a valid email address and requested notification of this specific bid/proposal via City's e-Bidder system. Addenda will also be available on City's website and at City's Purchasing Department, 1155 28th Street SW, Wyoming, MI 49509.

It is the bidder's/proponent's responsibility to make inquiry as to changes or addenda issued. All changes and addenda will become part of the specifications and all bidders/proponents will be bound by issued changes and addenda.

BID/PROPOSAL REQUIREMENTS

All bids/proposals shall remain valid for at least 90 days after submission.

Any bidder may withdraw its bid at any time prior to the scheduled time for the bid opening. A written request to withdraw shall be delivered to City's Purchasing Department prior to award.

All proponents are responsible for the following in preparing and submitting a bid/proposal:

1. Reviewing and being familiar with this request for bid/proposal and all plans and specifications, including any issued addenda and any interpretations, and attending any pre-bid meeting. Addenda to and interpretations of this request for bids/proposals will be posted on City's website when issued. No addenda or interpretations will be issued later than 4 days before the due date for bids/proposals.
2. Reviewing the plans and specifications to determine if Davis-Bacon Act or other prevailing wage requirements, low- and moderate-income worker, women and minority owned business, Buy America, or other requirements apply.
3. Reviewing standard terms and conditions and, if provided, the contract that will be signed.
4. If applicable, being familiar with the Work site and Work site conditions.
5. In submitting a bid/proposal, the proponent accepts full responsibility for its conclusions relative to the nature and probable difficulties of performing the work specified, and no additional payments will be made by City due to unanticipated difficulties encountered in performing the actual work.
6. Specifications and plans referred to in this bid/proposal document are for reference only and need not be returned with the bid/proposal. They will, however, be part of the contract documents.

ALL BIDS/PROPOSALS MUST:

1. Be typed or clearly printed in ink.
2. Be free of erasures or corrections except those initialed by the bidder/proponent.
3. Include the bid/proposal form and all other required forms fully completed and signed, including any detailed pricing information.
4. Be received by the date and time specified on page one of this bid/proposal document.
5. Be in a sealed envelope labeled as required on page one of this bid/proposal document.
6. Include a cover letter that lists all enclosures.
7. Include the original signature(s) of one or more individuals authorized to bind the proponent.
   A. All bids must include the business name as it appears on the records of the Michigan Department of Licensing and Regulatory Affairs Corporation Online Filing System. If the business is using an assumed name, the proper business name must also be provided.
   B. Businesses must also provide the state in which they were organized, *e.g.*, Michigan, Delaware, etc. and the type of entity, *e.g.*, corporation, partnership, limited liability company, limited partnership, or other business form.
   C. Both the bid/proposal and contract must be signed by an individual with the authority to bind the bidder/proponent. If there is a question about signing authority, City may seek verification of that authority.
8. Include any bid bond or other security required by the specifications.
   A. The bid bond (if required) must be signed by the bidder/surety with the signature of an individual(s) authorized to bind the bidder and surety.
   B. Attorneys-in-fact signing bid bonds must file with each bond a certified effective dated copy of their powers-of-attorney.
9. Include prices meeting the following requirements:
   A. Prices must be stated in units of quantity specified in the plans, specifications, and request for bid/proposal. In case of any discrepancy in amounts in the bid/proposal, the quoted unit price will govern.
   B. If a lump sum bid price is requested, the bidder/proponent shall submit a lump sum price for performing each phase of any Work specified in the plans and specifications as a turnkey project. Nothing shall remain to be

purchased or supplied other than items the plans and specifications indicate will be separately purchased. If any items, accessories, or groups of items required to perform the work specified are not specifically indicated in the plans and specifications, the successful bidder/proponent must furnish those items, accessories, or groups of items, and include them in the lump sum bid price submitted.

C. If the proposal is for professional or other services provided under a retainer and there are exceptions to what the retainer covers, those exceptions must be specifically stated. If professional or other services are to be provided on an hourly basis, the hourly rate(s) should be specified, and billing must be in 1/10 hour increments. If the proposal is for a not-to-exceed amount, that must be stated.

D. If the bid or proposal is for a fixed fee or not-to-exceed amount and site visits, meeting attendance, or other items are to be limited, that limitation must be clearly stated.

E. If incidental costs are to be charged in addition to other amounts, those costs to be charged, including any multipliers and mark-ups, must be clearly listed.

F. If travel costs are to be charged in addition to other amounts, the basis for such expenses shall be stated. City reserves the right to require City pre-approval of lodging, transportation, and other travel costs.

G. Bid prices for equipment, goods or other items must include all delivery charges.

10. If required by the specifications, include:

    A. The manufacturer and/or model number(s) of specified equipment.

    B. The warranties or guarantees provided for any work, equipment, and other items.

    C. The number of calendar days required for delivery of any equipment, goods, or other items.

11. Include a proposed schedule for beginning and completing all Work in accordance with the plans and specifications. The schedule may propose specific dates or may be a timeline based on the date(s) of the contract award and notice to proceed. If the bid/proposal is only for the purchase of goods or equipment and does not include any Work, the delivery time must be provided as stated in 10.C above.

12. Identify any part of the specifications, standard terms and conditions, or contract terms which the proponent is unable to meet or which the proponent wishes to see modified. If modifications are requested, the bid/proposal must include the proposed language for the requested modification.

13. Include the names, addresses, and other contact information for, and responsible contacts for each subcontractor or consultant the proponent will use for the Work. City reserves the right to approve or disapprove of all subcontractors and consultants.

14. If the bid/proposal includes Work (and not just for the purchase of goods or equipment), include a list and information for key personnel of the proponent who will be involved in the Work.

15. If the bid/proposal includes Work (and not just for the purchase of goods or equipment), include a list of similar projects, services, or work the proponent has provided within the last 5 years including:

    A. The name(s) of the proponent's client(s) or customer(s),

    B. A description of the work performed,

    C. A description of the overall project,

    D. The date(s) the proponent performed the work, and

    E. The name(s), position(s), and contact information for one or more individual(s) familiar with the proponent's work for each client or customer.

16. If the bid/proposal includes Work (and not just for the purchase of goods or equipment), include a detailed description of the proponent's experience, expertise, personnel, equipment, and other capabilities for performing the work as required by the specifications.

17. Identify and provide e-mail, telephone, and cell phone information for one or more of the proponent's personnel familiar with the bid/proposal and, if the bid/proposal includes Work (and not just for the purchase of goods or equipment), the proponent's work on similar endeavors who is authorized to speak for the proponent.

CONSIDERATION OF BIDS/PROPOSALS

BID OPENING AND TABULATION

Bids/proposals will be publicly opened and read immediately following the due date and time stated above. Bids/proposals will be tabulated by City staff working in conjunction with any design professional or other consultant identified in the specifications or contract document(s).

Results of the bid/proposal openings are generally available on City's website www.wyomingmi.gov within 2-3 business days after scheduled bid/proposal opening.

CITY'S RESERVATION OF RIGHTS

City reserves the rights to do any or all of the following:

1. Cancel any bid, order, and/or contract in whole or in part without penalty due to failure of a proponent/contractor to comply with the specifications.
2. Reject any or all bids.
3. Waive any irregularities, nonconformities, or technicalities of any bid.
4. Correct any bid during tabulation so a discrepancy in computing the amount of the bid is resolved by using quoted unit prices.
5. Review the experience, qualifications, and other information about any proponent and any identified subcontractor or consultant submitted as part of the bid/proposal.
6. Inquire of others about any bidder/proponent, identified subcontractor(s) or consultant(s), and their personnel.
7. Require background checks of the personnel of any proponent or identified subcontractor or consultant of any proponent to be undertaken at the expense of the proponent.
8. Negotiate with one or more selected proponent(s).
9. Award the bid and/or contract in a manner and to such proponent as deemed to be in City's best interests.

GENERAL DESCRIPTION OF CONSIDERATION PROCESS

Consideration of bids/proposals typically involves (i) review and tabulation of the bids/proposals and accompanying information, (ii) review of bid alternates and any provided samples, (iii) recommendation from any design professional engaged by City (if identified in the plans and specifications), (iv) contacts of references and those for whom proponents have previously worked, (v) recommendation by the City Manager or the City Manager's designee (often a department director) to the City Council, (vi) finalization of contract documents with and the signature(s) of the recommended proponent, and (vii) City Council award of the contract. City is not obligated to follow and may deviate from this typical process as deemed in City's best interests.

CONSIDERATION FACTORS

While contract price/cost is an important factor in consideration of any bid/proposal, (i) the proponent's experience, expertise, and reputation, (ii) previous City experience with the proponent, (iv) the experience, expertise, reputation, and previous City experience with the proponent's identified subcontractors, consultants, and personnel, and (v) other factors may be as or more important to the award of a bid/proposal and/or contract.

CITY CONTRACT STANDARD TERMS AND CONDITIONS

These Terms and Conditions apply to any contract awarded pursuant to the request for bids/proposals. By submitting a signed bid/proposal, the proponent attests it complies with and promises it will comply with these Terms and Conditions, except to the extent the proponent's bid/proposal identifies any contract term(s) the proponent is unable to meet or the proponent wishes to see modified and for which it proposes specific modifications.

Because these are contract terms and conditions, the term "Contractor" is used to refer to the proponent to whom the contract is awarded.

1. Legal Compliance. Contractor, all Contractor's subcontractors and suppliers, all Contractor's consultants, and all their respective personnel must comply with all applicable (i) laws, rules, regulations, codes, and ordinances, (ii) license and permit requirements, and (iii) orders of any governmental agency, official or court of competent jurisdiction. This includes, for example and without limitation, complying with federal Occupational Safety and Health

Administration (OSHA) and Michigan Occupational Safety and Health Act (MIOSHA) safe practices, and with applicable federal and state labor laws, rules, and regulations.

2. Permits and Inspections. Unless the plans and specifications or the submitted bid/proposal states otherwise, Contractor shall, without expense to City, obtain all licenses and permits required to lawfully perform the Work under the contract and furnish copies of those licenses and permits to City before commencing Work. Contractor shall also ensure all inspections required by local, state, and federal agencies and codes are performed.

3. Grant Compliance. If state or federal grant funds are identified in the plans and specifications or contract form as a source of payment for any part of the project, Contractor (i) represents it has reviewed the grant agreement and (ii) will comply with any grant agreement terms and conditions that apply to the contract. If grant funds are withdrawn or cancelled for any reason this Contract is nullified.

   A. If some or all of the funds for the Work come from the United States Department of Housing and Urban Development (**HUD**), the following apply:

      1. Under HUD Fair Labor Standards Act Provisions, the most recent wage determination for Kent County, Michigan will apply to all wages Contractor pays for any Work on the project. General Decision Number MI20260088 dated 01/2/2026, https://sam.gov/wage-determination/MI20260088/0.
      2. Contractor will be required to prepare and maintain adequate financial records in a form satisfactory to City that reflect all costs and expenses incurred in performing this Contract and records of the use of all amounts paid pursuant to this Contract. Contractor's financial records and reports must conform to the regulations found at 2 CFR Part 200 entitled "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, Final Guidance," https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200.
      3. If project costs are $200,000 or more, HUD Section 3 provisions may require training and employment of low- and very love-income persons. See 24 CFR 75.3(a)(iii) (https://www.hud.gov/sites/dfiles/FPM/documents/Section-3-FAQs.pdf).

   B. If the Request for Bids/Proposals indicates they are applicable, Contractor shall fully comply with Davis-Bacon Act, other prevailing wage, Buy American, and any other requirements in grants or other funds used to pay Contractor or for other parts of the project. This includes, for example and not for limitation, all employment, recordkeeping, purchasing, sourcing, and other compliance.

4. Qualifications. Contractor represents and promises that:

   A. Contractor, any personnel engaged by Contractor, any subcontractor and consultant of Contractor, and any personnel engaged by such subcontractors and consultants, must have and maintain all licenses, registrations, certifications, memberships, or other approvals needed to perform the Work and supply materials required by the contract.

   B. Contractor, any subcontractor, and their respective principals, owners, officers, shareholders, key employees, directors, members and partners: (i) are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by a federal department or agency; (ii) have not within the last 3-years been convicted of or have a judgment against them for fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a contract or transaction with a governmental entity; (iii) have not within the last 3 years violated federal or state antitrust statutes or committed embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property; (iv) are not presently indicted for or otherwise criminally charged by a governmental entity with commission of any of the offenses enumerated in this certification; and (v) have not within the last 3-years had one or more contracts or transactions with a governmental entity terminated for cause or default.

   C. If the contract is for a HUD Community Development Block Grant (**CDBG**) or other federal and/or state funded project, neither Contractor nor any of its subcontractors on the HUD listing of debarred and suspended participants (https://www.hud.gov/program_offices/general_counsel/limited_denial_participation_hud_funding_disqualifications). Unless waived by City's purchasing director, Contractor and all subcontractors will register on the Federal SAM Registry available at: https://usfcr.com. Contractor and all subcontractors are not on and will remain off the Federal System for Award Management list of persons and entities ineligible for federal contracts.

   D. Neither Contractor nor any of its subcontractors is an "Iran linked business" under Michigan's Iran Economic Sanctions Act, 2012 PA 517.

5. Nondiscrimination and Respect. City is committed to fairness, impartiality, courtesy, respect, and nondiscrimination in all City programs, benefits, and actions, including City contracts and activities that contractors or others engage in for or on behalf of City, Accordingly:

   A. Contractor in (i) employment actions, (ii) soliciting, bidding or contracting with subcontractors, or (iii) soliciting, bidding or contracting for materials will not discriminate based on race, color, religion, national origin, age, sex, gender, gender identity or expression, height, weight, marital status, familial status, mental or physical disability, genetic information, or other reason prohibited by law that is unrelated to the ability to perform the duties of a job or position.

   B. Contractor will comply with applicable state and federal laws, rules, regulations, and other requirements regarding discrimination.

   C. If Contractor will engage with others on City's behalf, Contractor must (i) ensure all persons are treated with fairness, impartiality, courtesy and respect, and in a manner that does not discriminate based on race, color, religion, national origin, age, sex, gender, gender identity or expression, height, weight, marital status, familial status, mental or physical disability, genetic information, or any other reason prohibited by law, and (ii) if any engaged individuals speak English less than very well, Contractor must use language assistance services in communications.

   D. Contractor certifies it does not operate any programs promoting DEI that violate any applicable federal anti-discrimination laws.

   E. Contractor must include these requirements in subcontracts and supply contracts and reasonably enforce compliance with them.

   F. Noncompliance with this provision is a material breach of this Contract that can result in (i) withholding payments to Contractor, (ii) Contract cancellation, termination, or suspension, in whole or in part, and (iii) Contractor's ineligibility for future City contracts.

   G. Contractor must retain and, upon request, provide City access to and copies of all information and reports required by this provision that a state or federal agency determine are pertinent to ascertain compliance. If information required of Contractor is in the sole possession of another who fails or refuses to furnish it, Contractor must so certify to City.

6. Ethical Standards. To the best of Contractor's knowledge after reasonable inquiry:

   A. Contractor and its directors, members, partners, officers and employees, as well as any parent, affiliate, or subsidiary organization or subcontractor of Contractor has not engaged in and shall refrain from: (i) holding or acquiring an interest that would conflict with this contract; (ii) attempting to influence or appearing to influence any City elected or appointed officer or employee by a direct or indirect offer of anything of value; or (iii) paying or agreeing to pay any person, other than its employees and consultants, any consideration contingent upon the award of the contract.

   B. No owner, director, officer, member, partner, or key employee of Contractor or of any parent, affiliate, or subsidiary organization or subcontractor of Contractor is a spouse, parent, child, grandchild, or sibling of the mayor, city council member, or another City elected or appointed officer except as already disclosed in writing to City when submitting its proposal.

   C. Contractor will immediately notify City of any subsequently discovered violation of the standards in this section.

7. Media Releases. Media or other releases (including promotional literature and commercial advertisements) pertaining to the contract or the project to which it relates shall not be made without the City Manager's prior written approval and only in accordance with the written terms provided in that approval.

8. Payment to Contractor.

   A. Contractor and all subcontractors, suppliers and consultants shall, before beginning the Work, submit by email to City's Finance Department at Acct_Info@wyomingmi.gov a completed IRS W-9 form (available at www.IRS.gov).

   B. Payments to Contractor will be made in accordance with the contract and specifications. If no other terms are provided, payment of an invoice to City will generally be made within 30 days after all required information is submitted provided the design professional (if one is identified in the specifications or contract) and authorized City representative agree the Work has been performed, materials or equipment delivered, and other actions taken as provided in the contract and in accordance with any plans and specifications.

C. Payment disputes will be resolved as provided in the contract. Unless other provisions apply, City will pay the undisputed amount and the disputed amount will be held in a non-interest-bearing account until the dispute is resolved.

9. Intellectual Property. Contractor guarantees the sale or use of articles, software, copies, records, or other intellectual property provided under or used to perform the contract will not infringe any copyright, patent, trademark or other intellectual property rights. Contractor will, without expense to City, defend every action brought against City or City's officers or employees for any alleged infringement of intellectual property rights by reason of their sale or use as part of the contract and will pay all costs, damages, and profits recoverable in any action.

10. Materials and Equipment Information, Quality, Disposal, and Related Requirements. If the plans, specifications, or contract call for the use, installation, or acquisition for City use of any materials, equipment, supplies or other items:

    A. Unless otherwise stated in the plans, specifications, or bid/proposal, all materials, equipment, supplies, and items supplied under the contract shall be new, the best of their respective kind, and free from defects.

    B. Specifications in this request for bids/proposals are the minimum acceptable. When specific manufacturer and model numbers are used, they are to establish a desired design, type of construction, quality, functional capability, and/or performance level. When alternates are bid, they must be identified by manufacturer, stock number, and other information necessary to establish equivalency. City will be the sole judge of equivalency.

    C. City reserves the right to request samples. Contractor shall provide requested samples to City at Contractor's expense within 10 days of bid opening. Samples will not be returned.

    D. Contractor shall provide City all manufacturer parts lists, assembly, and maintenance information, and all other documents provided by the manufacturer for any items provided or installed under the contract, and ensure all related warranties are held by or assigned to City.

    E. If quantities are listed in the request for bids/proposals, the quantities are based on estimated needs. City reserves the right to increase or decrease quantities to meet actual needs.

    F. Failure of Contractor to adhere to delivery schedules as specified or to promptly replace rejected materials shall render the Contractor liable for all costs in excess of the bid price(s) when alternate procurement is necessary. Excess costs will include administrative costs. Prices shall be delivered F.O.B. destination freight prepaid to any location specified in the specifications and included in the bid/proposal pricing unless otherwise specified in the bid or expressly stated in Contractor's proposal/bid.

    G. Unless the specifications or proposal expressly state otherwise, Contractor will remove and dispose of all materials, equipment, or other items demolished, removed, or replaced during the Work and cleanup and remove all debris resulting from the Work. Disposal will comply with laws, rules and regulations applicable to such disposal. Contractor will retain and, upon request, provide the City copies of any required manifest or other disposal documentation.

11. Restoration. Unless the plans and specifications state otherwise, Contractor will restore, without expense to City, any property damaged during or as a result of any Work to a condition similar and equal to that existing before such damage. If Contractor fails to make such restoration, City may, after 48-hours' notice to Contractor, make such restoration, and deduct the cost City incurs to do so from amounts due Contractor.

12. Access to Work. City personnel, City's design professional(s), and City representatives will always have access to all parts of the Work and be furnished such information and assistance by Contractor as reasonably needed or desired to make a complete and detailed inspection of the Work.

13. Taxes. City is generally exempt from federal and state taxes, including state sales and use taxes. A copy of City's certificate of tax exemption can be requested by contacting City's Finance Department.

    A. Invoices must be separated to show the amount added for taxes of any kind if applicable.

    B. Taxes, wherever indicated and applicable to any purchase, will not be subject to trade or cash discounts.

    C. On construction projects state sales taxes are applicable on materials only.

14. Records. Because City is a public entity that receives funds from other governmental agencies: (i) City is required to retain, be able to obtain, and/or audit records related to City contracts and (ii) Michigan's Freedom of Information Act generally requires that City disclose to those requesting them copies of all requested documents relating to the bid/proposal and any resulting contract. Contractor shall retain copies of all records related to the contract, including, without limitation, the items supplied or used in performance of the contract, and all work under the contract for at

least 7 years after completion of the contract. Contractor shall, within 5 City business days of a City request, allow inspection, auditing and copying of all retained records.

15. Assignment/Beneficiaries. Unless otherwise expressly provided in the contract:

    A. None of Contractor's rights or duties may be assigned or delegated without City's prior written consent.

    B. This contract will be binding on Contractor's successors and permitted assigns.

    C. No other individuals or entities are intended to be beneficiaries of this contract.

16. Independent Contractor. Contractor and Contractor's subcontractors and consultants are wholly independent of City. None of their personnel shall be or be represented to be City officers or employees. Contractor is solely responsible for the acts, omissions, and statements of Contractor's personnel and the personnel of Contractor's subcontractors and consultants. Contractor is solely responsible for any compensation and benefits to be provided Contractor's personnel for services or work provided under the contract. Except for payment of the contract price, City has no responsibility to supervise, compensate or insure Contractor, Contractor's subcontractors or consultants or any of their personnel.

17. Disputes/Remedies. Unless the contract or specifications otherwise provide the following applies to any dispute about the bid/proposal, contract award, or any resulting contract:

    A. In case of Contractor's default, City may procure the articles or services from other sources and hold Contractor responsible for any excess costs occasioned by the default. Such action will only be (i) when time is off the essence due to impending weather conditions, upcoming seasonal changes, permit durational limits, scheduled events, conflicts with other projects, or other circumstances City reasonable determines makes time of the essence and (ii) after written notice to Contractor with an opportunity to appeal the decision to the City Manager or the City Manager's designee.

    B. Before filing any lawsuit, a party must first notify the party in writing stating the provision involved, stating the actions or failure to act that did not comply with the provision, and proposing the action to be taken to address the alleged non-compliance. The party receiving that notice shall, within 14 days, respond in writing detailing any reasons why it disagrees that it has failed to comply with the contract or stating what actions it has taken or is taking to address the noncompliance and prevent recurrence. Both parties shall meet within 14 days after the date of the response in an effort to resolve any continuing dispute.

    C. A party need not undertake the procedure provided in subsection 17.B if it has previously done so with respect to any noncompliance with the same contract provision.

    D. Jurisdiction and venue for any dispute shall be solely in the state courts in Kent County, Michigan. All parties agree to this jurisdiction and venue.

    E. In addition to any other remedies to which any party may be entitled, the prevailing party shall be entitled to recover all actual reasonable costs, including for example and without limitation, filing fees, expert consultation and witness fees and expenses, attorneys' fees, discovery expenses, copying costs, exhibit preparation costs, and any other actual reasonable costs incurred to investigate, bring, maintain or defend any action from its first discovery or first notice of it through all collection and appellate proceedings.

    F. Discrepancies in Plans and Specifications

        1. Any discrepancies found in the Plans and Specifications must be immediately reported to the contact identified on page 2 of this Request for Bids/Proposals document, who will correct such discrepancies, errors, or omissions in writing.

        2. In resolving discrepancies among two or more sections of the Contract Documents, precedence shall be given in the following order:

            - Contract
            - Bid Proposal on City's Form - without any additions or changes
            - Technical Bid Specifications
            - Instructions to Bidders
            - General Bid Information
            - Drawings
            - City of Wyoming Standard Specifications for Construction\Prequalification Documents https://www.wyomingmi.gov/About-Wyoming/City-Departments/Public-Works/Engineering/Construction-Specifications.

3. Figure dimensions on Drawings shall take precedence over scale dimensions. Detailed Drawings shall take precedence over general Drawings.

18. General Terms.

A. These terms and conditions may not be amended or modified except in writing signed by Contractor and City. These terms and conditions shall not be affected by any course of dealing.

B. The captions are for reference and will not affect the interpretation of these terms and conditions.

C. The contract is made in Kent County, Michigan.

D. These terms and conditions and the rights and obligations of the parties under them shall be governed by, and interpreted in accordance with, the laws of the state of Michigan.

E. Reference by office to any City officer includes that City officer's designee(s).

RISK ALLOCATION AND INSURANCE

1. Risk Allocation.

A. Contractor is solely responsible for (i) the means and methods of the work and services provided under the contract, (ii) the conduct of its officers, employees, subcontractors and consultants, and (iii) for any injuries or property damage occurring as a result of its Work under and performance of the contract.

B. Contractor shall hold City and City's officers and employees harmless from, indemnify them for, and defend them against any claims made by persons other than the City as a result of Contractor's Work under or performance of this Contract. Contractor shall reimburse the City for or pay in the City's stead any costs the City incurs as a result of claims, demands, judgments, administrative actions, or any order to pay any amounts made or entered against the City or City officers or employees as a result of Contractor's Work under or performance of this Contract.

C. For professional services contracts with a Michigan-licensed architect, professional engineer, landscape architect, or professional surveyor, Contractor's obligation under 1.B shall be limited as provided by 1966 PA 165, MCL 691.991.

2. Insurance.

A. Unless otherwise provided in the specifications, Contractor shall provide the following insurance:

REQUIRED LIMITS	ADDITIONAL REQUIREMENTS
COMMERCIAL GENERAL LIABILITY	
Minimal Limits: $2,000,000 Each Occurrence Limit $2,000,000 Personal & Advertising Injury Limit $2,000,000 General Aggregate Limit $2,000,000 Products/Completed Operations	Coverage shall include the following extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent Contractors Coverage; (D) Broad Form General Liability Extensions or equivalent, if not already included; (E) deletion of all Explosion, Collapse, and Underground (EXU) Exclusions, if applicable. Shall include an endorsement stating the following shall be *Insureds or Additional Insureds and certificate holders*: (i) City of Wyoming, (ii) all City of Wyoming elected and appointed officers, employees, volunteers, board members, and commission members, (iii) authorities created by the City of Wyoming, (iv) board members, officers, and employees of authorities created by the City of Wyoming, and (v) all authorized agents of the foregoing. Coverage afforded to the required insureds or additional insured shall be primary and any other insurance that may be in effect shall be secondary and/or excess.
AUTOMOBILE LIABILITY INSURANCE	
Minimal Limits (include hired and non-owned automobile coverage): $2,000,000 per person $2,000,000 per occurrence	Shall include an endorsement stating the following shall be *Insureds or Additional Insureds and certificate holders*: (i) City of Wyoming, (ii) all City of Wyoming elected and appointed officers, employees, volunteers, board members, and commission members, (iii) authorities created by the City of Wyoming, (iv) board members, officers, and employees of authorities created by the City of Wyoming, and (v) all authorized agents of the foregoing. Coverage afforded to the required insureds or additional insured shall be primary and any other insurance that may be in effect shall be secondary and/or excess.
WORKERS' COMPENSATION/ EMPLOYERS' LIABILITY INSURANCE	

REQUIRED LIMITS	ADDITIONAL REQUIREMENTS
Minimal Limits: $500,000 per occurrence	Coverage shall be in accordance with all applicable Michigan statutes Waver of subrogation, except where waiver is prohibited by law.
EXCESS/UMBRELLA INSURANCE	
	Required liability limits may be obtained by using an Excess/Umbrella Liability policy in addition to the primary liability policy(ies). If coverage limits are satisfied by an Excess and/or Umbrella policy, coverage must follow form of the primary liability policy(ies). Shall include an endorsement stating the following shall be *Insureds or Additional Insureds and certificate holders*: (i) City of Wyoming, (ii) all City of Wyoming elected and appointed officers, employees, volunteers, board members, and commission members, (iii) authorities created by the City of Wyoming, (iv) board members, officers, and employees of authorities created by the City of Wyoming, and (v) all authorized agents of the foregoing. Coverage afforded to the required insureds or additional insured shall be primary and any other insurance that may be in effect shall be secondary and/or excess.
OWNERS CONTRACTORS PROTECTIVE	
Coverage is required if the amount stated below is more than $0. Amount required $_____.	The City of Wyoming shall be "Named Insured" on said coverage. A 30 day, 10 day for non-payment of premium, Notice of Cancellation shall be endorsed onto this policy. In lieu of this requirement, a per project aggregate on the Commercial General Liability policy may be acceptable for jobs requiring a $1,000,000 liability limit.
ENVIRONMENTAL/POLLUTION LIABILITY	
Coverage is required if the amount stated below is more than $0. Amount required $___0___.	Coverage shall include, but not be limited to, loading/unloading, transportation, storage, and removal of all hazardous waste/material. If this policy is claims made form, then the contractor shall be required to keep the policy in force, or purchase "tail" coverage, for a minimum of 3 years after the termination of this contract. Shall include an endorsement stating the following shall be *Insureds or Additional Insureds and certificate holders*: (i) City of Wyoming, (ii) all City of Wyoming elected and appointed officers, employees, volunteers, board members, and commission members, (iii) authorities created by the City of Wyoming, (iv) board members, officers, and employees of authorities created by the City of Wyoming, and (v) all authorized agents of the foregoing. Coverage afforded to the required insureds or additional insured shall be primary and any other insurance that may be in effect shall be secondary and/or excess.
BUILDERS RISK PROPERTY INSURANCE	
Coverage is required if checked "yes." Yes_____ No__x___ Amount required: Full Contract Amount.	Contractor shall procure and maintain during the term of construction a policy of Builders Risk Property Insurance in the full amount of the project. Policy shall be on an All Risk form, and cover all property under a Replacement Cost basis. Policy shall also name the City of Wyoming as Loss Payee.

B. Policy(ies), as described above which require City or any of City's personnel to be named or additional insureds, shall be endorsed to state the following: "30 days advance written notice of cancellation, non-renewal, reduction, and/or material change shall be sent to: City of Wyoming, Purchasing Department, 1155 – 28th Street SW, Wyoming, MI 49509-0905." Upon the City's request, Contractor will provide to the City's Purchasing Department copies of all certificates of insurance, policies, and endorsements.

C. Upon the City's request, Contractor must prove that all subcontractors performing Work have the same types and amounts of coverage required of Contractor or that subcontractors are included under Contractor's policy.

D. All insurance providers shall be rated "A" rated or better by the A.M. Best Company.

E. The City reserves the right to amend or require additional types and amounts of coverage or provisions depending on the nature of the Work.

BONDS AND LIENS

1. Bid Bond.

   A. A bid bond is not required for this project

   B. If a bid bond is required, it must be in the amount of 5.0% of the bid amount and in the form of EJCDC bid bond form C-430 or another form acceptable to the City attorney. As an alternative to the bid bond, City will accept a cashier's check to the City in the amount of 5.0% of the bid amount or an irrevocable standby letter of credit in the amount of 5.0% of the bid amount that is in a form and substance acceptable to the City Attorney.

2. Payment Bond.

   A. Payment bonds are required for any contract exceeding $50,000 for the construction, alteration, or repair of any City building, public work or improvement. Payment bonds must be in the full amount of the contract price. Payment bonds must be in the form of EJCDC payment bond form C-615 or another form acceptable to the City attorney. Payment bonds must be provided before any notice to proceed is issued.

   B. If a multi-year contract, the bond amount shall be equal to the total bid for the first contract year and updated annually to reflect the bid price for each subsequent year.

3. Performance Bond.

   A. Performance bonds are required for any contract exceeding $50,000 for the construction, alteration, or repair of any City building, public work or improvement. Performance bonds must be in the full amount of the contract price. Performance bonds must be in the form of EJCDC performance bond form C-610 or another form acceptable to the City attorney. Performance bonds must be provided before any notice to proceed is issued.

   B. If a multi-year contract, the bond amount shall be equal to the total bid for the first contract year and updated annually to reflect the bid price for each subsequent year.

4. No Liens. Under Michigan law, construction liens cannot be placed on public projects or property on which they are built. Therefore, Contractor must not place, allow to be placed, or suffer to be placed any lien against the project or the property on which it is constructed. If a subcontractor, supplier, or laborer places any lien against the project or the property on which it is constructed, Contractor must, immediately after learning of it, take all steps needed to secure the lien's release and must indemnify City for any costs City incurs to secure release of the lien.

SPECIFIC REQUIREMENTS

GENERAL

1. The work contained in this contract consists of the replacement of one electric gate operator serving the Gezon Pump Station located at 5591 Gezon Court, Wyoming, MI 49519.
2. All bidders are required to examine the work site as well as the bid specifications to arrive at a clear understanding of the Work to be performed.
3. Contractor must have a minimum of five (5) years of experience in related work in similar conditions. References of similar work experience shall be provided upon request.
4. Contractor will be responsible for disposal of equipment, parts, and material and shall comply with codes, ordinances, regulations, and anti-pollution laws.
5. Contractor must clean the site, remove all tools, appliances, construction equipment and machinery, and surplus materials within 48 hours of project completion. All property not designated for alteration must be restored to its original condition.
6. Contractor must guarantee all work against defective workmanship and materials for a period of one year subsequent to the date of project completion. The contractor must promptly repair, replace, or rebuild any finished work in which defects of materials or workmanship may appear or to which damage may occur because of such defects during the one-year period subsequent to the date of completion at no cost.
7. Provide submittals for all equipment and materials prior to installation.
8. Provide one digital and two hardcopy O&M manuals.
9. Project shall be complete and ready for final payment by June 30, 2026. Liquidated damages associated with failure to meet the aforementioned date are $750 per day.
10. Project is self-funded. No Davis-Bacon, prevailing wage, or Buy American requirements.

WORK

1. Purchase & delivery of base bid (1) new LiftMaster INSL24UL. Alternate manufacturers as determined equal by Owner prior to bid based on full shop drawing and specification review.
2. Coordinate schedule with Owner for replacement of the existing gate operator.
3. Remove and dispose of (1) existing gate operator.
4. Inspect existing gate, rollers, and fence components. Report deficiencies.
5. Provide and install new LiftMaster INSL24UL in accordance with manufacturer's instructions.
6. Provide and install new chain in accordance with manufacturer's instructions.
7. Provide and install new LiftMaster safety devices required for code compliance in accordance with manufacturer's instructions.
8. Provide and install all necessary materials for mounting of new equipment.
9. Perform all electrical modifications and wiring connections for power and existing security access system.
10. Adapt to existing remote-control system.
11. Adjust, calibrate, and test gate operator and opening devices to confirm proper gate function.
12. Demonstrate operation and programming of operators to Owner.
13. Clean up the work area and restore the site to its pre-project condition.

GATE OPERATOR

1. LiftMaster
    a. Model: INSL24UL.
    b. Operation: Gear driven.
    c. Rated duty cycle: Continuous duty.
    d. Meet UL 325, UL 991, ASTM F2200, and CAS C22.2 No. 247.
    e. Power: 240 VAC, single phase.
    f. Traveling Speed: 6-12 inches per second.
    g. Motor: 24 VDC, continuous duty type, sized to gate conditions.
    h. Battery backup: 7Ah.
    i. Rated for heavy gates up to 2200 lbs. and 70 ft.
    j. Gate Safety Sensors
        i. LMRRUL Heated Photo Eye
        ii. Entrapment and Safety Protection
    k. Manual Disconnect for allowing gate to be opened manually when released.
    l. 14 ga. steel, weatherproof (NEMA 3R rated) cabinet.

m. UL Listed
n. Warranty: Gate operators shall be free from defects in materials and/or workmanship for period of 5 years.

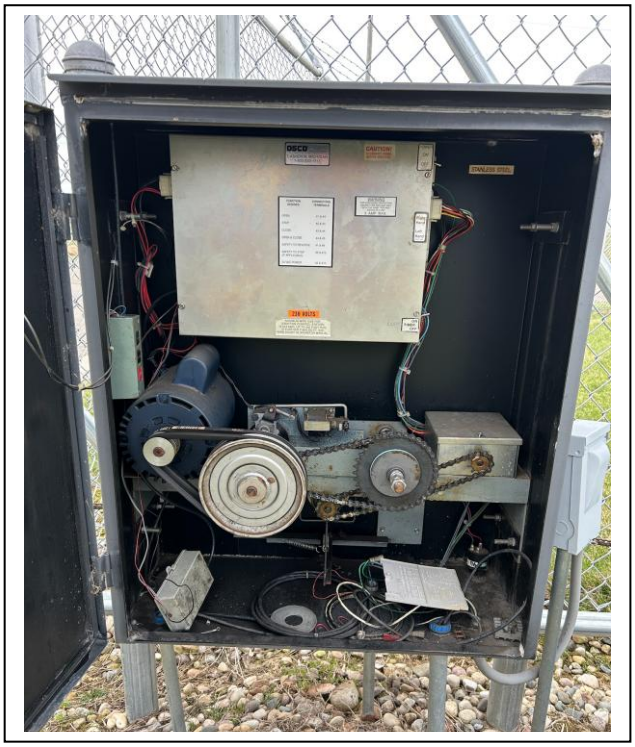
PHOTOS

a. Existing electric gate operator









CONTRACT FORM

This Contract Form on the next page will be completed and signed by the selected bidder/proponent after bidding but before the contract is submitted to the City Council for approval. The contract signed by the bidder and accompanied by all required bonds, insurance certificates, and any other required documents must be provided before it is signed by the Mayor and Clerk and approved as to form by the City Attorney. The Contractor will be provided a copy of the fully signed contract.

BID/PROPOSAL FORM

ELECTRIC GATE OPERATOR REPLACEMENT

The proponent identified below submits the attached bid/proposal materials, including the price(s) stated on the attached bid form.

By signing this bid/proposal form, the proponent identified below represents, attests and promises, the proponent:

1. Has reviewed and is familiar with all plans and specifications, including any issued addenda and any interpretations, and any information provided at any pre-bid meeting.
2. Has reviewed, meets, and will comply with all the Standard Terms and Conditions except those specifically stated in the materials submitted with this bid/proposal form, including, without limitation, all of the applicable insurance and bonding requirements.
3. If applicable, is familiar with the Work site and Work site conditions.
4. Accepts full responsibility for its conclusions relative to the nature and probable difficulties of performing the work specified, and no additional payments will be made by City due to unanticipated difficulties encountered in performing the actual work.

Is the bidder a:	YES	NO
Section 3 Certified Contractor?	[ ]	[X]
If yes, DUNS #: _____		

Are you, or the business owner related to an elected official or employee of the City?	[ ]	[X]
If yes, list individuals' name(s) and relationship(s):		

Unless the specifications otherwise state, the following is provided for statistical purposes only.

Is the bidder a:	YES	NO
Woman Owned Company?	[ ]	[X]
Minority Owned Company?	[ ]	[X]

Proponent's Complete Business Name (If Proponent Is DBA Include Full Proponent DBA):

Straight Line Fence, LLC

ELECTRIC GATE OPERATOR REPLACEMENT

In submitting this Bid, Bidder represents, as set forth in the Agreement, that:

A. Bidder has examined and carefully studied the Bidding Documents, the other related data identified in the Bidding Documents, and the following Addenda, receipt of all which is hereby acknowledged.

Addendum No.	Addendum Date
N/A	N/A

B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local and site conditions that may affect cost, progress, and performance of the Work.

C. Bidder is familiar with and is satisfied as to all federal, state and local Laws and Regulations that may affect cost, progress and performance of the Work.

A lump sum bid price shall be submitted for performing the work specified herein as a turnkey project. If any items, accessories or groups of items required to perform the work specified are not specifically indicated herein, it shall be the
bidder's responsibility to furnish said items, accessories or groups of items, and include them in the lump sum bid price submitted.

State bid price as per the specifications included herein.

LUMP SUM BID PRICE:

Nine Thousand, Five Hundred and Fifty (use words) Dollars $ 9,550.00 (in figures)

State the brand/model (required): Liftmaster INSUL24UL

Reminder: All warranties must be included with bid/proposal

Proponent's Complete Business Name (If Proponent Is DBA Include Full Proponent DBA):

Straight Line Fence, LLC

Bid/Proposal Form Continued

Straight Line Fence, LLC
[Proponent's Complete Business Name]

Straight Line Fence
[If Proponent is DBA include Full Proponent DBA Here]

Amanda Dooyer
[Signature for proponent]

Jeanne Vaughn
[2nd signature for proponent]

Amanda Dooyer General manage
[Printed name and title of person signing]

Jeanne Vaughn, Notary
[Printed name and title of 2nd person signing]

Date signed: 5/8/2026

845 Chestnut St SW
[Proponent's street address]

616-443-2550
[Proponent's business phone]

Grand Rapids, MI 49503
[City] [State] [Zip]

616-443-2550
[Cell phone number(s) of person(s) signing for proponent]

RECEIVED MAY 12 2026 Wyoming City Clerk

amanda@straightlinefences.com
[E-mail address(s) of person(s) signing for proponent]

Limited Liability Company
[Proponent's form of business – *e.g.* partnership, corporation, limited liability company, professional corporation and the state in which it was formed]

WARRANTY

LiftMaster 7 year residential / 5 year commercial Limited Warranty

LiftMaster ("Seller") warrants to the first purchaser of this product, for the structure in which this product is originally installed, that it is free from defect in materials and/or workmanship for a period of 7 year residential / 5 year commercial from the date of purchase [and that the CSL24UL is free from defect in materials and/or workmanship for a period of 7 year residential / 5 year commercial from the date of purchase]. The proper operation of this product is dependent on your compliance with the instructions regarding installation, operation, maintenance and testing. Failure to comply strictly with those instructions will void this limited warranty in its entirety.

If, during the limited warranty period, this product appears to contain a defect covered by this limited warranty, call **1-800-528-2806**, toll free, before dismantling this product. Then send this product, pre-paid and insured, to our service center for warranty repair. You will be advised of shipping instructions when you call. Please include a brief description of the problem and a dated proof-of-purchase receipt with any product returned for warranty repair. Products returned to Seller for warranty repair, which upon receipt by Seller are confirmed to be defective and covered by this limited warranty, will be repaired or replaced (at Seller's sole option) at no cost to you and returned pre-paid. Defective parts will be repaired or replaced with new or factory-rebuilt parts at Seller's sole option.

ALL IMPLIED WARRANTIES FOR THE PRODUCT, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE 7 YEAR RESIDENTIAL / 5 YEAR COMMERCIAL LIMITED WARRANTY PERIOD SET FORTH ABOVE [EXCEPT THE IMPLIED WARRANTIES WITH RESPECT TO THE CSL24UL, WHICH ARE LIMITED IN DURATION TO THE 7 YEAR RESIDENTIAL / 5 YEAR COMMERCIAL LIMITED WARRANTY PERIOD FOR THE CSL24UL, AND NO IMPLIED WARRANTIES WILL EXIST OR APPLY AFTER SUCH PERIOD. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. THIS LIMITED WARRANTY DOES NOT COVER NON-DEFECT DAMAGE, DAMAGE CAUSED BY IMPROPER INSTALLATION, OPERATION OR CARE (INCLUDING, BUT NOT LIMITED TO ABUSE, MISUSE, FAILURE TO PROVIDE REASONABLE AND NECESSARY MAINTENANCE, UNAUTHORIZED REPAIRS OR ANY ALTERATIONS TO THIS PRODUCT), LABOR CHARGES FOR REINSTALLING A REPAIRED OR REPLACED UNIT, OR REPLACEMENT OF BATTERIES.

THIS LIMITED WARRANTY DOES NOT COVER ANY PROBLEMS WITH, OR RELATING TO, THE GATE OR GATE HARDWARE, INCLUDING BUT NOT LIMITED TO THE GATE SPRINGS, GATE ROLLERS, GATE ALIGNMENT OR HINGES. THIS LIMITED WARRANTY ALSO DOES NOT COVER ANY PROBLEMS CAUSED BY INTERFERENCE. ANY SERVICE CALL THAT DETERMINES THE PROBLEM HAS BEEN CAUSED BY ANY OF THESE ITEMS COULD RESULT IN A FEE TO YOU.

UNDER NO CIRCUMSTANCES SHALL SELLER BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES ARISING IN CONNECTION WITH USE, OR INABILITY TO USE, THIS PRODUCT. IN NO EVENT SHALL SELLER'S LIABILITY FOR BREACH OF WARRANTY, BREACH OF CONTRACT, NEGLIGENCE OR STRICT LIABILITY EXCEED THE COST OF THE PRODUCT COVERED HEREBY. NO PERSON IS AUTHORIZED TO ASSUME FOR US ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF THIS PRODUCT.

Some states do not allow the exclusion or limitation of consequential, incidental or special damages, so the above limitation or exclusion may not apply to you. This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

STRAIGHT LINE FENCE

PHONE: 616-443-2550
FAX: 616-608-5521
845 CHESTNUT ST SW
GRAND RAPIDS, MI 49503
STRAIGHTLINEFENCES.COM

May 7, 2026

To: City of Wyoming
From: Aaron Bakker / Straight Line Fence
Re: Gezon Pump Station

Remove and Replace Gate Operator $ 9,550.00

- Remove existing operator and set posts for new operator
- Furnish and Install Liftmaster INSL24UL Slide Gate Operator with battery backup
- (2) Monitored Safety Edges
- (1) Retro-reflective photo eye
- Reconnect existing access controls and remote reciever
- Gate will be UL compliant
- Electric and conduit provided by other

_____ _____

Approval Signature Date

_____ _____

Printed Name PO Number

- Not included are bonds, permits, prevailing wage, staking or layout, clearing, grading, core drilling, etc.
- Payment terms: Net 30
- Because of unstable material prices, we can hold this price for 10 days.

Straight Line Fence is not responsible for unmarked utilities including sprinkler lines

Thank you for the opportunity to quote this work. If you have any questions, please contact me at 616-443-2550 or by email aaron@straightlinefences.com.

CITY OF WYOMING | PUBLIC WORKS

Wastewater Treatment Plant | 2350 Ivanrest Ave. SW, Wyoming, MI 49509
616.261.3550 | wyomingmi.gov

Staff Report

Date:	May 20, 2026
Subject:	Award of Bid for IDEXX Laboratory Testing Supplies
From:	Peter Minnich, Laboratory Services Manager
CC:	Aaron Vis, Director of Public Works
Meeting Date:	June 1, 2026

RECOMMENDATION:

It is recommended that City Council award the bid for IDEXX Laboratory Testing Products to IDEXX Distribution, Inc., up to an estimated amount of $128,000.00.

ALIGNMENT WITH STRATEGIC PLAN:

- PILLAR 3 – STEWARDSHIP
  - GOAL 3 – Improve city infrastructure and service reliability

DISCUSSION:

The Drinking Water and Wastewater Treatment Plant laboratories utilize IDEXX consumable supplies to perform microbiological analyses required for regulatory compliance, distribution system monitoring, and process control. The laboratories currently perform the Quanti-Tray and SimPlate methods, which are proprietary IDEXX technologies with no equivalent alternatives available on the market. In addition, sample bottles, coliform testing media, and sterile dilution water are purchased from IDEXX to support standardization, compatibility, and quality assurance. These methods are approved by the U.S. EPA for generating reportable drinking water and wastewater data and provide highly accurate results with minimal turnaround time and labor.

Standing monthly orders are in place to ensure the laboratories receive the IDEXX supplies needed for routine, predictable sampling. Additional products are procured periodically to support emergency sampling events, construction-related monitoring, and other non-routine analytical needs that may increase sample volume. The estimated annual amount is based on the previous year’s usage but may vary depending on operational demands.

On Tuesday, May 12, 2026, the City Clerk received one bid for IDEXX laboratory testing supplies from IDEXX Distribution, Inc. Ninety-nine invitations to bid were issues, and nineteen prospective bidders downloaded the bid specifications

TABULATION:

Items Shipping to 16700 New Holland St. Holland, MI 49424				
			IDEXX Distribution, Inc.	
Item Description	**IDEXX Product Number**	**Quantity**	**Per Unit Price**	**Total**
Colilert (200-test pack)	98-12973-00	36	$1,451.93	$52,269.48
Colilert 18 (200-test pack)	98-08877-00	2	$1,570.32	$3,140.64
Colisure (200-test pack)	98-13174-00	2	$2,247.48	$4,494.96
120 mL Shrink-Banded Vessels with Sodium Thiosulfate (200 pack)	98-09221-00	36	$221.04	$7,957.44
Quanti-Tray (100 pack)	98-21378-00	12	$286.00	$3,432.00
Quanti-Tray/2000 (100 pack)	98-21675-00	6	$385.00	$2,310.00
SimPlate for HPC, multidose kit (100 tests, 10 media vessels and SimPlates)	98-05761-01	48	$484.00	$23,232.00
Sterile Water	98-09444-01	60	$55.43	$3,325.80
Colilert and Colilert-18 P/A Comparator	98-11682-00	1	$23.00	$23.00
Colilert and Coliler-18 Quanti-Tray Comparator (51-well tray)	98-09226-00	1	$42.00	$42.00
Items for Shipping to 2350 Ivanrest Ave SW Wyoming, MI 49418				
			IDEXX Distribution, Inc.	
Item Description	**IDEXX Product Number**	**Quantity**	**Per Unit Price**	**Total**
Colilert 18 (200-test pack)	98-08877-00	6	$1,570.32	$9,421.92
120 mL Shrink-Banded Vessels without Sodium Thiosulfate (200 pack)	98-09222-00	6	$204.67	$1,228.02
Quanti-Tray/2000 (100 pack)	98-21675-00	12	$385.00	$4,620.00
Sterile Water	98-09444-01	9	$55.43	$498.87
Total				**$115,996.13**

Additional IDEXX Brand Discount	Varies

BUDGET IMPACT:

Funds for the purchase of IDEXX laboratory testing supplies are available in the Water Fund Lab Services account 591-537-55310-740.000 and the Sewer Fund Lab Services account 590-536-54310-740.000.

CITY OF WYOMING

IDEXX LABORATORY TESTING PRODUCTS
CITY PURCHASING CONTRACT
CITY OF WYOMING, MICHIGAN

This Contract is made as of the Effective Date between the City and the Supplier.

"City" means the City of Wyoming, a Michigan municipal corporation of 1155 28th St SW, Wyoming, MI 49509.

"Contractor" means: IDEXX Distribution, Inc.
[Name of supplying entity]
A MA Corporation
[State and type of entity, e.g., corporation, limited liability company, etc.]
One IDEXX Drive
[Supplier's street address]
Westbrook, ME 04092
[Supplier's city, state & zip]

Effective Date means: June 2, 2026.

"Items" means the parts, equipment, or other items the City is purchasing from the Supplier as itemized in the Proposal.

"Proposal" means the Supplier's bid/proposal attached as Exhibit B.

RFP means the Request for Bids/Proposals attached as Exhibit A.

Standard Terms means "City Contract Standard Terms and Conditions" portion of the RFP, including the Risk Allocation and Insurance Provisions.

TERMS AND CONDITIONS

In exchange for the consideration in and referred by this Contract, the parties agree:

1. Contractor will supply the Items as detailed in the RFP and Proposal.
2. City will pay the Contractor in accordance with the RFP and Proposal.
3. Contractor represents and warrants, except for those listed in this paragraph as inapplicable or that are modified by this paragraph, Contractor is complying with and will comply with the Standard Terms. Inapplicable conditions are as follows:

   Standard Terms Sections 10.G-Removal and Disposing of Materials, 11-Restoration, and 12-Access to Work do not apply this Contract,

4. This is the only agreement between the parties regarding the Purchase that is the subject of the RFP and Proposal and there are no other agreements, representations, or warranties except as are stated in the RFP and Proposal. This contract can be amended only in writing signed by both City and Contractor.

City and Contractor have signed this Contract as of the Effective Date.

City of Wyoming

By:_____
John Shay, City Manager

Date signed: _____, 20__

Approved as to form:

_____
Gregory T. Stremers, City Attorney

Contractor: IDEXX Distribution, Inc.

By: X _____
[Signature officer, director, or principal of Contractor]
Chun-Ming Chen VP General Manager
[Typed/Printed Name & Title of Person Signing for Contractor]

Date signed: 4/29, 2026

5/5/2026

Wyoming City Clerk's Office

Wyoming City Hall

1155 28th Street SW

Wyoming, MI 49509-0905

Re: IDEXX Laboratory Testing Products Proposal

Enclosed please find our response to the IDEXX Laboratory Testing Products proposal.

Please note the following redlines for your review:

Page 7 – Letter F

FOB Origin – prepaid, with freight added to the invoice as a separate line item based on order quantities.

Insurance redlines are attached.

If you have any questions, please feel free to contact me at 1-800-321-0207, extension 64472.

Thank you for choosing IDEXX.

Sincerely,

Luciana Thys

Luciana Thys

Sales Support Specialist

2. In resolving discrepancies among two or more sections of the Contract Documents, precedence shall be given in the following order:
   - Contract
   - Bid Proposal on City's Form - without any additions or changes
   - Technical Bid Specifications
   - Instructions to Bidders
   - General Bid Information
   - Drawings
   - City of Wyoming Standard Specifications for Construction\Prequalification Documents https://www.wyominggmi.gov/About-Wyoming/City-Departments/Public-Works/Engineering/Construction-Specifications.
3. Figure dimensions on Drawings shall take precedence over scale dimensions. Detailed Drawings shall take precedence over general Drawings.

18. General Terms.
   A. These terms and conditions may not be amended or modified except in writing signed by Contractor and City. These terms and conditions shall not be affected by any course of dealing.
   B. The captions are for reference and will not affect the interpretation of these terms and conditions.
   C. The contract is made in Kent County, Michigan.
   D. These terms and conditions and the rights and obligations of the parties under them shall be governed by, and interpreted in accordance with, the laws of the state of Michigan.
   E. Reference by office to any City officer includes that City officer's designee(s).

RISK ALLOCATION AND INSURANCE

1. Risk Allocation.
   A. Contractor is solely responsible for (i) the means and methods of providing the items under the contract, (ii) the conduct of its officers, employees, subcontractors and consultants, and (iii) for any injuries or property damage suffered by Contractor or Contractor's officers, employees, subcontractors and consultants while providing the items under this Contract.
   B. Contractor shall hold City and City's officers and employees harmless from, indemnify them for, and defend them against any claims made by persons other than the City as a result of actions, errors, or omission of Contractor or Contractor's officers, employees, subcontractors and consultants while providing the items under this Contract.

1. Insurance.
   A. Unless otherwise provided in the specifications, Contractor shall provide the following insurance:

REQUIRED LIMITS	ADDITIONAL REQUIREMENTS
COMMERCIAL GENERAL LIABILITY	
Minimal Limits: $2,000,000 Each Occurrence Limit $2,000,000 Personal & Advertising Injury Limit $2,000,000 General Aggregate Limit [2] ~~$2,000,000 Products/Completed Operations~~	Coverage shall include the following extensions: (A) Contractual Liability; (B) [1] ~~Products-and-Completed-Operations~~; (C) Independent Contractors Coverage; and (D) Broad Form General Liability Extensions or equivalent, if not already included. Coverage afforded shall be primary and any other insurance that may be in effect shall be secondary and/or excess.
AUTOMOBILE LIABILITY INSURANCE	
Minimal Limits (include hired and non-owned automobile coverage): $[3]000,000 per person [4] ~~$~~2,000,000 per occurrence	Coverage afforded shall be primary and any other insurance that may be in effect shall be secondary and/or excess.
WORKERS' COMPENSATION/ EMPLOYERS' LIABILITY INSURANCE	

Summary of Comments on City of Wyoming Bid 2343 HD.pdf

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Number: 1 Author: Heather D'Auteuil Subject: Cross-Out Date: 4/14/2026 5:36:40 PM

Number: 2 Author: Heather D'Auteuil Subject: Cross-Out Date: 4/14/2026 5:36:33 PM

Number: 3 Author: Heather D'Auteuil Subject: Cross-Out Date: 4/14/2026 5:37:13 PM
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Number: 4 Author: Heather D'Auteuil Subject: Cross-Out Date: 4/14/2026 5:37:24 PM
$1,000,000

REQUEST FOR BIDS/PROPOSALS

The City of Wyoming, Michigan (**City**) is requesting bids/proposals for the items, services, or project generally referred to as:

IDEXX Laboratory Testing Products

as more particularly described and detailed in the plans and specifications attached to this Request for Bids/Proposals (the "Work").

DUE DATE AND TIME

The City Clerk will receive bids/proposals for the Work submitted by the date and time stated below in accordance with this Request for Bids/Proposals:

Due date and time:	**Tuesday, May 12, 2026, 11:00 a.m., local time**
Place:	**Wyoming City Clerk's Office** **Wyoming City Hall** **1155 28th Street SW** **Wyoming, MI 49509-0905**

If using United States Post Office for delivery, add PO Box 905 to the mailing address above.

All bids/proposals must include the fully signed Bid/Proposal Form and all other required information submitted in a sealed envelope and plainly labeled: "Bid/Proposal for IDEXX Laboratory Testing Products."

Proponents are solely responsible for ensuring delivery by the required date and time. Any bid/proposal, even if in route by U.S. Mail or by courier service or if held by the U.S. Postal Service or a courier for pick-up by City staff, that is received in the Clerk's Office after the required date and time, will not be opened and will be returned to the bidder/proponent. **Bids/proposals will not be accepted by e-mail or other electronic delivery.**

PRE-BID MEETING

A pre-bid meeting will not be held.

QUESTIONS, INTERPRETATIONS AND ADDENDA

Questions about or requests for interpretation of this request for bids/proposals, any of the plans and specifications, or any bid/proposal requirements may be directed via e-mail to peter.minnich@wyomingmi.gov. No questions or interpretations will be issued later than 4 days before the due date for bids. Questions will not be answered by phone or in other oral communication. City will endeavor, but is not required to, email a copy of any addenda, answers to questions or interpretations that may be of general interest to potential bidders/proponents who have provided a valid email address and requested notification of this specific bid/proposal via City's e-Bidder system. Addenda will also be available on City's website and at City's Purchasing Department, 1155 28th Street SW, Wyoming, MI 49509.

It is the bidder's/proponent's responsibility to make inquiry as to changes or addenda issued. All changes and addenda will become part of the specifications and all bidders/proponents will be bound by issued changes and addenda.

BID/PROPOSAL REQUIREMENTS

All bids/proposals shall remain valid for at least 90 days after submission..

IF THE BID IS FOR EQUIPMENT, PARTS, COMPONENTS, SUPPLIES, OR SERVICES TO BE PROVIDED ON AN AS-NEEDED, OR WHEN-ORDERED BASIS, BID PRICING MUST REMAIN IN EFFECT FOR THE ENTIRE CONTRACT TERM.

If it is an annual contract, pricing must be good for 1 year after the date the contract is approved and signed by City. If the contract term is longer than 1 year, the pricing must be good for the entire contract term. IF ANNUAL OR MORE FREQUENT PRICE ADJUSTMENTS ARE PROPOSED, THEY MUST BE INCLUDED IN THE BID/PROPOSAL.

Any bidder may withdraw its bid at any time prior to the scheduled time for the bid opening. A written request to withdraw shall be delivered to City's Purchasing Department prior to award.

All proponents are responsible for the following in preparing and submitting a bid/proposal:

1. Reviewing and being familiar with this request for bid/proposal and all plans and specifications, including any issued addenda and any interpretations, and attending any pre-bid meeting. Addenda to and interpretations of this request for bids/proposals will be posted on City's website when issued. No addenda or interpretations will be issued later than 4 days before the due date for bids/proposals.
2. Reviewing the plans and specifications to determine if Davis-Bacon Act or other prevailing wage requirements, low- and moderate-income worker, women and minority owned business, Buy America, or other requirements apply.
3. Reviewing standard terms and conditions and, if provided, the contract that will be signed.
4. If applicable, being familiar with the Work site and Work site conditions.
5. In submitting a bid/proposal, the proponent accepts full responsibility for its conclusions relative to the nature and probable difficulties of performing the work specified, and no additional payments will be made by City due to unanticipated difficulties encountered in performing the actual work.
6. Specifications and plans referred to in this bid/proposal document are for reference only and need not be returned with the bid/proposal. They will, however, be part of the contract documents.

ALL BIDS/PROPOSALS MUST:

1. Be typed or clearly printed in ink.
2. Be free of erasures or corrections except those initialed by the bidder/proponent.
3. Include the bid/proposal form and all other required forms fully completed and signed, including any detailed pricing information.
4. Be received by the date and time specified on page one of this bid/proposal document.
5. Be in a sealed envelope labeled as required on page one of this bid/proposal document.
6. Include a cover letter that lists all enclosures.
7. Include the original signature(s) of one or more individuals authorized to bind the proponent.
   A. All bids must include the business name as it appears on the records of the Michigan Department of Licensing and Regulatory Affairs Corporation Online Filing System. If the business is using an assumed name, the proper business name must also be provided.
   B. Businesses must also provide the state in which they were organized, *e.g.*, Michigan, Delaware, etc. and the type of entity, *e.g.*, corporation, partnership, limited liability company, limited partnership, or other business form.
   C. Both the bid/proposal and contract must be signed by an individual with the authority to bind the bidder/proponent. If there is a question about signing authority, City may seek verification of that authority.
8. Include any bid bond or other security required by the specifications.
   A. The bid bond (if required) must be signed by the bidder/surety with the signature of an individual(s) authorized to bind the bidder and surety.

B. Attorneys-in-fact signing bid bonds must file with each bond a certified effective dated copy of their powers-of-attorney.

9. Include prices meeting the following requirements:

   A. Prices must be stated in units of quantity specified in the plans, specifications, and request for bid/proposal. In case of any discrepancy in amounts in the bid/proposal, the quoted unit price will govern.

   B. If a lump sum bid price is requested, the bidder/proponent shall submit a lump sum price for performing each phase of any Work specified in the plans and specifications as a turnkey project. Nothing shall remain to be purchased or supplied other than items the plans and specifications indicate will be separately purchased. If any items, accessories, or groups of items required to perform the work specified are not specifically indicated in the plans and specifications, the successful bidder/proponent must furnish those items, accessories, or groups of items, and include them in the lump sum bid price submitted.

   C. If the proposal is for professional or other services provided under a retainer and there are exceptions to what the retainer covers, those exceptions must be specifically stated. If professional or other services are to be provided on an hourly basis, the hourly rate(s) should be specified, and billing must be in 1/10 hour increments. If the proposal is for a not-to-exceed amount, that must be stated.

   D. If the bid or proposal is for a fixed fee or not-to-exceed amount and site visits, meeting attendance, or other items are to be limited, that limitation must be clearly stated.

   E. If incidental costs are to be charged in addition to other amounts, those costs to be charged, including any multipliers and mark-ups, must be clearly listed.

   F. If travel costs are to be charged in addition to other amounts, the basis for such expenses shall be stated. City reserves the right to require City pre-approval of lodging, transportation, and other travel costs.

   G. Bid prices for equipment, goods or other items must include all delivery charges.

10. If required by the specifications, include:

   A. The manufacturer and/or model number(s) of specified equipment.

   B. The warranties or guarantees provided for any work, equipment, and other items.

   C. The number of calendar days required for delivery of any equipment, goods, or other items.

11. Include a proposed schedule for beginning and completing all Work in accordance with the plans and specifications. The schedule may propose specific dates or may be a timeline based on the date(s) of the contract award and notice to proceed. If the bid/proposal is only for the purchase of goods or equipment and does not include any Work, the delivery time must be provided as stated in 10.C above.

12. Identify any part of the specifications, standard terms and conditions, or contract terms which the proponent is unable to meet or which the proponent wishes to see modified. If modifications are requested, the bid/proposal must include the proposed language for the requested modification.

13. Include the names, addresses, and other contact information for, and responsible contacts for each subcontractor or consultant the proponent will use for the Work. City reserves the right to approve or disapprove of all subcontractors and consultants.

14. If the bid/proposal includes Work (and not just for the purchase of goods or equipment), include a list and information for key personnel of the proponent who will be involved in the Work.

15. If the bid/proposal includes Work (and not just for the purchase of goods or equipment), include a list of similar projects, services, or work the proponent has provided within the last 5 years including:

   A. The name(s) of the proponent's client(s) or customer(s),

   B. A description of the work performed,

   C. A description of the overall project,

   D. The date(s) the proponent performed the work, and

   E. The name(s), position(s), and contact information for one or more individual(s) familiar with the proponent's work for each client or customer.

16. If the bid/proposal includes Work (and not just for the purchase of goods or equipment), include a detailed description of the proponent's experience, expertise, personnel, equipment, and other capabilities for performing the work as required by the specifications.
17. Identify and provide e-mail, telephone, and cell phone information for one or more of the proponent's personnel familiar with the bid/proposal and, if the bid/proposal includes Work (and not just for the purchase of goods or equipment), the proponent's work on similar endeavors who is authorized to speak for the proponent.

CONSIDERATION OF BIDS/PROPOSALS

BID OPENING AND TABULATION

Bids/proposals will be publicly opened and read immediately following the due date and time stated above. Bids/proposals will be tabulated by City staff working in conjunction with any design professional or other consultant identified in the specifications or contract document(s).

Results of the bid/proposal openings are generally available on City's website www.wyomingmi.gov within 2-3 business days after scheduled bid/proposal opening.

CITY'S RESERVATION OF RIGHTS

City reserves the rights to do any or all of the following:

1. Cancel any bid, order, and/or contract in whole or in part without penalty due to failure of a proponent/contractor to comply with the specifications.
2. Reject any or all bids.
3. Waive any irregularities, nonconformities, or technicalities of any bid.
4. Correct any bid during tabulation so a discrepancy in computing the amount of the bid is resolved by using quoted unit prices.
5. Review the experience, qualifications, and other information about any proponent and any identified subcontractor or consultant submitted as part of the bid/proposal.
6. Inquire of others about any bidder/proponent, identified subcontractor(s) or consultant(s), and their personnel.
7. Require background checks of the personnel of any proponent or identified subcontractor or consultant of any proponent to be undertaken at the expense of the proponent.
8. Negotiate with one or more selected proponent(s).
9. Award the bid and/or contract in a manner and to such proponent as deemed to be in City's best interests.

GENERAL DESCRIPTION OF CONSIDERATION PROCESS

Consideration of bids/proposals typically involves (i) review and tabulation of the bids/proposals and accompanying information, (ii) review of bid alternates and any provided samples, (iii) recommendation from any design professional engaged by City (if identified in the plans and specifications), (iv) contacts of references and those for whom proponents have previously worked, (v) recommendation by the City Manager or the City Manager's designee (often a department director) to the City Council, (vi) finalization of contract documents with and the signature(s) of the recommended proponent, and (vii) City Council award of the contract. City is not obligated to follow and may deviate from this typical process as deemed in City's best interests.

CONSIDERATION FACTORS

While contract price/cost is an important factor in consideration of any bid/proposal, (i) the proponent's experience, expertise, and reputation, (ii) previous City experience with the proponent, (iv) the experience, expertise, reputation, and previous City experience with the proponent's identified subcontractors, consultants, and personnel, and (v) other factors may be as or more important to the award of a bid/proposal and/or contract.

CITY CONTRACT STANDARD TERMS AND CONDITIONS

These Terms and Conditions apply to any contract awarded pursuant to the request for bids/proposals. By submitting a signed bid/proposal, the proponent attests it complies with and promises it will comply with these Terms and

Conditions, except to the extent the proponent's bid/proposal identifies any contract term(s) the proponent is unable to meet or the proponent wishes to see modified and for which it proposes specific modifications.

Because these are contract terms and conditions, the term "Contractor" is used to refer to the proponent to whom the contract is awarded.

1. Legal Compliance. Contractor, all Contractor's subcontractors and suppliers, all Contractor's consultants, and all their respective personnel must comply with all applicable (i) laws, rules, regulations, codes, and ordinances, (ii) license and permit requirements, and (iii) orders of any governmental agency, official or court of competent jurisdiction. This includes, for example and without limitation, complying with federal Occupational Safety and Health Administration (OSHA) and Michigan Occupational Safety and Health Act (MIOSHA) safe practices, and with applicable federal and state labor laws, rules, and regulations.

2. Permits and Inspections. Unless the plans and specifications or the submitted bid/proposal states otherwise, Contractor shall, without expense to City, obtain all licenses and permits required to lawfully perform the Work under the contract and furnish copies of those licenses and permits to City before commencing Work. Contractor shall also ensure all inspections required by local, state, and federal agencies and codes are performed.

3. Grant Compliance. If state or federal grant funds are identified in the plans and specifications or contract form as a source of payment for any part of the project, Contractor (i) represents it has reviewed the grant agreement and (ii) will comply with any grant agreement terms and conditions that apply to the contract. If grant funds are withdrawn or cancelled for any reason this Contract is nullified.

   A. If some or all of the funds for the Work come from the United States Department of Housing and Urban Development (**HUD**), the following apply:

      1. Under HUD Fair Labor Standards Act Provisions, the most recent wage determination for Kent County, Michigan will apply to all wages Contractor pays for any Work on the project. General Decision Number MI20260088 dated 01/2/2026, https://sam.gov/wage-determination/MI20260088/0.
      2. Contractor will be required to prepare and maintain adequate financial records in a form satisfactory to City that reflect all costs and expenses incurred in performing this Contract and records of the use of all amounts paid pursuant to this Contract. Contractor's financial records and reports must conform to the regulations found at 2 CFR Part 200 entitled "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, Final Guidance," https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200.
      3. If project costs are $200,000 or more, HUD Section 3 provisions may require training and employment of low- and very love-income persons. See 24 CFR 75.3(a)(iii) (https://www.hud.gov/sites/dfiles/FPM/documents/Section-3-FAQs.pdf).

   B. If the Request for Bids/Proposals indicates they are applicable, Contractor shall fully comply with Davis-Bacon Act, other prevailing wage, Buy American, and any other requirements in grants or other funds used to pay Contractor or for other parts of the project. This includes, for example and not for limitation, all employment, recordkeeping, purchasing, sourcing, and other compliance.

4. Qualifications. Contractor represents and promises that:

   A. Contractor, any personnel engaged by Contractor, any subcontractor and consultant of Contractor, and any personnel engaged by such subcontractors and consultants, must have and maintain all licenses, registrations, certifications, memberships, or other approvals needed to perform the Work and supply materials required by the contract.

   B. Contractor, any subcontractor, and their respective principals, owners, officers, shareholders, key employees, directors, members and partners: (i) are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by a federal department or agency; (ii) have not within the last 3-years been convicted of or have a judgment against them for fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a contract or transaction with a governmental entity; (iii) have not within the last 3 years violated federal or state antitrust statutes or committed embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property; (iv) are not presently indicted for or otherwise criminally charged by a governmental entity with commission of any of the offenses enumerated in this certification; and (v) have not within the last 3-years had one or more contracts or transactions with a governmental entity terminated for cause or default.

C. If the contract is for a HUD Community Development Block Grant (**CDBG**) or other federal and/or state funded project, neither Contractor nor any of its subcontractors on the HUD listing of debarred and suspended participants (https://www.hud.gov/program_offices/general_counsel/limited_denial_participation_hud_funding_disqualifications). Unless waived by City's purchasing director, Contractor and all subcontractors will register on the Federal SAM Registry available at: https://usfcr.com. Contractor and all subcontractors are not on and will remain off the Federal System for Award Management list of persons and entities ineligible for federal contracts.

D. Neither Contractor nor any of its subcontractors is an "Iran linked business" under Michigan's Iran Economic Sanctions Act, 2012 PA 517.

5. Nondiscrimination and Respect. City is committed to fairness, impartiality, courtesy, respect, and nondiscrimination in all City programs, benefits, and actions, including City contracts and activities that contractors or others engage in for or on behalf of City, Accordingly:

A. Contractor in (i) employment actions, (ii) soliciting, bidding or contracting with subcontractors, or (iii) soliciting, bidding or contracting for materials will not discriminate based on race, color, religion, national origin, age, sex, gender, gender identity or expression, height, weight, marital status, familial status, mental or physical disability, genetic information, or other reason prohibited by law that is unrelated to the ability to perform the duties of a job or position.

B. Contractor will comply with applicable state and federal laws, rules, regulations, and other requirements regarding discrimination.

C. If Contractor will engage with others on City's behalf, Contractor must (i) ensure all persons are treated with fairness, impartiality, courtesy and respect, and in a manner that does not discriminate based on race, color, religion, national origin, age, sex, gender, gender identity or expression, height, weight, marital status, familial status, mental or physical disability, genetic information, or any other reason prohibited by law, and (ii) if any engaged individuals speak English less than very well, Contractor must use language assistance services in communications.

D. Contractor certifies it does not operate any programs promoting DEI that violate any applicable federal anti-discrimination laws.

E. Contractor must include these requirements in subcontracts and supply contracts and reasonably enforce compliance with them.

F. Noncompliance with this provision is a material breach of this Contract that can result in (i) withholding payments to Contractor, (ii) Contract cancellation, termination, or suspension, in whole or in part, and (iii) Contractor's ineligibility for future City contracts.

G. Contractor must retain and, upon request, provide City access to and copies of all information and reports required by this provision that a state or federal agency determine are pertinent to ascertain compliance. If information required of Contractor is in the sole possession of another who fails or refuses to furnish it, Contractor must so certify to City.

6. Ethical Standards. To the best of Contractor's knowledge after reasonable inquiry:

A. Contractor and its directors, members, partners, officers and employees, as well as any parent, affiliate, or subsidiary organization or subcontractor of Contractor has not engaged in and shall refrain from: (i) holding or acquiring an interest that would conflict with this contract; (ii) attempting to influence or appearing to influence any City elected or appointed officer or employee by a direct or indirect offer of anything of value; or (iii) paying or agreeing to pay any person, other than its employees and consultants, any consideration contingent upon the award of the contract.

B. No owner, director, officer, member, partner, or key employee of Contractor or of any parent, affiliate, or subsidiary organization or subcontractor of Contractor is a spouse, parent, child, grandchild, or sibling of the mayor, city council member, or another City elected or appointed officer except as already disclosed in writing to City when submitting its proposal.

C. Contractor will immediately notify City of any subsequently discovered violation of the standards in this section.

7. Media Releases. Media or other releases (including promotional literature and commercial advertisements) pertaining to the contract or the project to which it relates shall not be made without the City Manager's prior written approval and only in accordance with the written terms provided in that approval.

8. Payment to Contractor.

   A. Contractor and all subcontractors, suppliers and consultants shall, before beginning the Work, submit by email to City's Finance Department at Acct_Info@wyomingmi.gov a completed IRS W-9 form (available at www.IRS.gov).

   B. Payments to Contractor will be made in accordance with the contract and specifications. If no other terms are provided, payment of an invoice to City will generally be made within 30 days after all required information is submitted provided the design professional (if one is identified in the specifications or contract) and authorized City representative agree the Work has been performed, materials or equipment delivered, and other actions taken as provided in the contract and in accordance with any plans and specifications.

   C. Payment disputes will be resolved as provided in the contract. Unless other provisions apply, City will pay the undisputed amount and the disputed amount will be held in a non-interest-bearing account until the dispute is resolved.

9. Intellectual Property. Contractor guarantees the sale or use of articles, software, copies, records, or other intellectual property provided under or used to perform the contract will not infringe any copyright, patent, trademark or other intellectual property rights. Contractor will, without expense to City, defend every action brought against City or City's officers or employees for any alleged infringement of intellectual property rights by reason of their sale or use as part of the contract and will pay all costs, damages, and profits recoverable in any action.

10. Materials and Equipment Information, Quality, Disposal, and Related Requirements. If the plans, specifications, or contract call for the use, installation, or acquisition for City use of any materials, equipment, supplies or other items:

    A. Unless otherwise stated in the plans, specifications, or bid/proposal, all materials, equipment, supplies, and items supplied under the contract shall be new, the best of their respective kind, and free from defects.

    B. Specifications in this request for bids/proposals are the minimum acceptable. When specific manufacturer and model numbers are used, they are to establish a desired design, type of construction, quality, functional capability, and/or performance level. When alternates are bid, they must be identified by manufacturer, stock number, and other information necessary to establish equivalency. City will be the sole judge of equivalency.

    C. City reserves the right to request samples. Contractor shall provide requested samples to City at Contractor's expense within 10 days of bid opening. Samples will not be returned.

    D. Contractor shall provide City all manufacturer parts lists, assembly, and maintenance information, and all other documents provided by the manufacturer for any items provided or installed under the contract, and ensure all related warranties are held by or assigned to City.

    E. If quantities are listed in the request for bids/proposals, the quantities are based on estimated needs. City reserves the right to increase or decrease quantities to meet actual needs.

    F. Failure of Contractor to adhere to delivery schedules as specified or to promptly replace rejected materials shall render the Contractor liable for all costs in excess of the bid price(s) when alternate procurement is necessary. Excess costs will include administrative costs. Prices shall be delivered F.O.B. destination freight prepaid to any location specified in the specifications and included in the bid/proposal pricing unless otherwise specified in the bid or expressly stated in Contractor's proposal/bid.

    G. Unless the specifications or proposal expressly state otherwise, Contractor will remove and dispose of all materials, equipment, or other items demolished, removed, or replaced during the Work and cleanup and remove all debris resulting from the Work. Disposal will comply with laws, rules and regulations applicable to such disposal. Contractor will retain and, upon request, provide the City copies of any required manifest or other disposal documentation.

11. Restoration. Unless the plans and specifications state otherwise, Contractor will restore, without expense to City, any property damaged during or as a result of any Work to a condition similar and equal to that existing before such damage. If Contractor fails to make such restoration, City may, after 48-hours' notice to Contractor, make such restoration, and deduct the cost City incurs to do so from amounts due Contractor.

12. Access to Work. City personnel, City's design professional(s), and City representatives will always have access to all parts of the Work and be furnished such information and assistance by Contractor as reasonably needed or desired to make a complete and detailed inspection of the Work.

13. Taxes. City is generally exempt from federal and state taxes, including state sales and use taxes. A copy of City's certificate of tax exemption can be requested by contacting City's Finance Department.

    A. Invoices must be separated to show the amount added for taxes of any kind if applicable.

    B. Taxes, wherever indicated and applicable to any purchase, will not be subject to trade or cash discounts.

    C. On construction projects state sales taxes are applicable on materials only.

14. Records. Because City is a public entity that receives funds from other governmental agencies: (i) City is required to retain, be able to obtain, and/or audit records related to City contracts and (ii) Michigan's Freedom of Information Act generally requires that City disclose to those requesting them copies of all requested documents relating to the bid/proposal and any resulting contract. Contractor shall retain copies of all records related to the contract, including, without limitation, the items supplied or used in performance of the contract, and all work under the contract for at least 7 years after completion of the contract. Contractor shall, within 5 City business days of a City request, allow inspection, auditing and copying of all retained records.

15. Assignment/Beneficiaries. Unless otherwise expressly provided in the contract:

    A. None of Contractor's rights or duties may be assigned or delegated without City's prior written consent.

    B. This contract will be binding on Contractor's successors and permitted assigns.

    C. No other individuals or entities are intended to be beneficiaries of this contract.

16. Independent Contractor. Contractor and Contractor's subcontractors and consultants are wholly independent of City. None of their personnel shall be or be represented to be City officers or employees. Contractor is solely responsible for the acts, omissions, and statements of Contractor's personnel and the personnel of Contractor's subcontractors and consultants. Contractor is solely responsible for any compensation and benefits to be provided Contractor's personnel for services or work provided under the contract. Except for payment of the contract price, City has no responsibility to supervise, compensate or insure Contractor, Contractor's subcontractors or consultants or any of their personnel.

17. Disputes/Remedies. Unless the contract or specifications otherwise provide the following applies to any dispute about the bid/proposal, contract award, or any resulting contract:

    A. In case of Contractor's default, City may procure the articles or services from other sources and hold Contractor responsible for any excess costs occasioned by the default. Such action will only be (i) when time is off the essence due to impending weather conditions, upcoming seasonal changes, permit durational limits, scheduled events, conflicts with other projects, or other circumstances City reasonable determines makes time of the essence and (ii) after written notice to Contractor with an opportunity to appeal the decision to the City Manager or the City Manager's designee.

    B. Before filing any lawsuit, a party must first notify the party in writing stating the provision involved, stating the actions or failure to act that did not comply with the provision, and proposing the action to be taken to address the alleged non-compliance. The party receiving that notice shall, within 14 days, respond in writing detailing any reasons why it disagrees that it has failed to comply with the contract or stating what actions it has taken or is taking to address the noncompliance and prevent recurrence. Both parties shall meet within 14 days after the date of the response in an effort to resolve any continuing dispute.

    C. A party need not undertake the procedure provided in subsection 17.B if it has previously done so with respect to any noncompliance with the same contract provision.

    D. Jurisdiction and venue for any dispute shall be solely in the state courts in Kent County, Michigan. All parties agree to this jurisdiction and venue.

    E. In addition to any other remedies to which any party may be entitled, the prevailing party shall be entitled to recover all actual reasonable costs, including for example and without limitation, filing fees, expert consultation and witness fees and expenses, attorneys' fees, discovery expenses, copying costs, exhibit preparation costs, and any other actual reasonable costs incurred to investigate, bring, maintain or defend any action from its first discovery or first notice of it through all collection and appellate proceedings.

    F. Discrepancies in Plans and Specifications

        1. Any discrepancies found in the Plans and Specifications must be immediately reported to the contact identified on page 2 of this Request for Bids/Proposals document, who will correct such discrepancies, errors, or omissions in writing.

2. In resolving discrepancies among two or more sections of the Contract Documents, precedence shall be given in the following order:

   - Contract
   - Bid Proposal on City's Form - without any additions or changes
   - Technical Bid Specifications
   - Instructions to Bidders
   - General Bid Information
   - Drawings
   - City of Wyoming Standard Specifications for Construction\Prequalification Documents https://www.wyomingmi.gov/About-Wyoming/City-Departments/Public-Works/Engineering/Construction-Specifications.

3. Figure dimensions on Drawings shall take precedence over scale dimensions. Detailed Drawings shall take precedence over general Drawings.

18. General Terms.

A. These terms and conditions may not be amended or modified except in writing signed by Contractor and City. These terms and conditions shall not be affected by any course of dealing.

B. The captions are for reference and will not affect the interpretation of these terms and conditions.

C. The contract is made in Kent County, Michigan.

D. These terms and conditions and the rights and obligations of the parties under them shall be governed by, and interpreted in accordance with, the laws of the state of Michigan.

E. Reference by office to any City officer includes that City officer's designee(s).

RISK ALLOCATION AND INSURANCE

1. Risk Allocation.

A. Contractor is solely responsible for (i) the means and methods of providing the items under the contract, (ii) the conduct of its officers, employees, subcontractors and consultants, and (iii) for any injuries or property damage suffered by Contractor or Contractor's officers, employees, subcontractors and consultants while providing the items under this Contract.

B. Contractor shall hold City and City's officers and employees harmless from, indemnify them for, and defend them against any claims made by persons other than the City as a result of actions, errors, or omission of Contractor or Contractor's officers, employees, subcontractors and consultants while providing the items under this Contract.

1. Insurance.

A. Unless otherwise provided in the specifications, Contractor shall provide the following insurance:

REQUIRED LIMITS	ADDITIONAL REQUIREMENTS
COMMERCIAL GENERAL LIABILITY	
Minimal Limits: $2,000,000 Each Occurrence Limit $2,000,000 Personal & Advertising Injury Limit $2,000,000 General Aggregate Limit $2,000,000 Products/Completed Operations	Coverage shall include the following extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent Contractors Coverage; and (D) Broad Form General Liability Extensions or equivalent, if not already included. Coverage afforded shall be primary and any other insurance that may be in effect shall be secondary and/or excess.
AUTOMOBILE LIABILITY INSURANCE	
Minimal Limits (include hired and non-owned automobile coverage): $2,000,000 per person $2,000,000 per occurrence	Coverage afforded shall be primary and any other insurance that may be in effect shall be secondary and/or excess.
WORKERS' COMPENSATION/ EMPLOYERS' LIABILITY INSURANCE	

REQUIRED LIMITS	ADDITIONAL REQUIREMENTS
Minimal Limits: $500,000 per occurrence	Coverage shall be in accordance with all applicable Michigan statutes. Waver of subrogation, except where waiver is prohibited by law.
EXCESS/UMBRELLA INSURANCE	
	Required liability limits may be obtained by using an Excess/Umbrella Liability policy in addition to the primary liability policy(ies). If coverage limits are satisfied by an Excess and/or Umbrella policy, coverage must follow form of the primary liability policy(ies). Coverage afforded shall be primary and any other insurance that may be in effect shall be secondary and/or excess.
ENVIRONMENTAL/POLLUTION LIABILITY	
Coverage is required if any of the items being purchased are hazardous or toxic substances or materials or contain hazardous or toxic substances or materials.. Amount required $2,000,000.	Coverage shall include, but not be limited to, loading/unloading, transportation, storage, and removal of all hazardous waste/material. If this policy is claims made form, then the contractor shall be required to keep the policy in force, or purchase "tail" coverage, for a minimum of 3 years after the termination of this contract. Coverage afforded shall be primary and any other insurance that may be in effect shall be secondary and/or excess.

B. Policy(ies), as described above which require City or any of City's personnel to be named or additional insureds, shall be endorsed to state the following: "30 days advance written notice of cancellation, non-renewal, reduction, and/or material change shall be sent to: City of Wyoming, Purchasing Department, 1155 – 28th Street SW, Wyoming, MI 49509-0905." Upon the City's request, Contractor will provide to the City's Purchasing Department copies of all certificates of insurance, policies, and endorsements.

C. Upon the City's request, Contractor must prove that all subcontractors performing Work have the same types and amounts of coverage required of Contractor or that subcontractors are included under Contractor's policy.

D. All insurance providers shall be rated "A" rated or better by the A.M. Best Company.

E. The City reserves the right to amend or require additional types and amounts of coverage or provisions depending on the nature of the Work.

BONDS AND LIENS

1. Bid Bond.

   A. A bid bond is not required for this project.

   B. If a bid bond is required, it must be in the amount of 5.0% of the bid amount and in the form of EJCDC bid bond form C-430 or another form acceptable to the City attorney. As an alternative to the bid bond, City will accept a cashier's check to the City in the amount of 5.0% of the bid amount or an irrevocable standby letter of credit in the amount of 5.0% of the bid amount that is in a form and substance acceptable to the City Attorney.

2. Payment Bond.

   A. Payment bonds are required for any contract exceeding $50,000 for the construction, alteration, or repair of any City building, public work or improvement. Payment bonds must be in the full amount of the contract price. Payment bonds must be in the form of EJCDC payment bond form C-615 or another form acceptable to the City attorney. Payment bonds must be provided before any notice to proceed is issued.

   B. If a multi-year contract, the bond amount shall be equal to the total bid for the first contract year and updated annually to reflect the bid price for each subsequent year.

3. Performance Bond.

   A. Performance bonds are required for any contract exceeding $50,000 for the construction, alteration, or repair of any City building, public work or improvement. Performance bonds must be in the full amount of the contract price. Performance bonds must be in the form of EJCDC performance bond form C-610 or another

form acceptable to the City attorney. Performance bonds must be provided before any notice to proceed is issued.

B. If a multi-year contract, the bond amount shall be equal to the total bid for the first contract year and updated annually to reflect the bid price for each subsequent year.

4. No Liens. Under Michigan law, construction liens cannot be placed on public projects or property on which they are built. Therefore, Contractor must not place, allow to be placed, or suffer to be placed any lien against the project or the property on which it is constructed. If a subcontractor, supplier, or laborer places any lien against the project or the property on which it is constructed, Contractor must, immediately after learning of it, take all steps needed to secure the lien's release and must indemnify City for any costs City incurs to secure release of the lien.

SPECIFIC REQUIREMENTS

IDEXX LABORATORY TESTING PRODUCTS

1. OVERVIEW
   a. The City of Wyoming is soliciting bids for IDEXX laboratory testing products.
2. PRICING
   a. The awarded bidder(s) must be an authorized distributor of IDEXX brand products.
   b. All bidders must provide per-unit pricing for the items listed below. Pricing must include shipping and any other per-order or per-item fees or surcharges.

Items Shipping to:

2350 Ivanrest Ave SW, Wyoming, MI 49418

Item Description	IDEXX Product Number	Estimated Units Per Year
Colilert-18 (200-test pack)	98-08877-00	6
120 mL Shrink-Banded Vessels without Sodium Thiosulfate (200 pack)	98-09222-00	6
Quanti-Tray/2000 (100 pack)	98-21675-00	12
Sterile Water	98-09444-01	9

Items Shipping to:

16700 New Holland St, Holland, MI 49424

Item Description	IDEXX Product Number	Estimated Units Per Year
Colilert (200-test pack)	98-12973-00	36
Colilert-18 (200-test pack)	98-08877-00	2
Colisure (200-test pack)	98-13174-00	2
120 mL Shrink-Banded Vessels with Sodium Thiosulfate (200 pack)	98-09221-00	36
Quanti-Tray (100 pack)	98-21378-00	12
Quanti-Tray/2000 (100 pack)	98-21675-00	6
SimPlace for HPC, multi-dose kit (100 tests, 10 media vessels and SimPlates)	98-05761-01	48
Sterile Water	98-09444-01	60
Colilert and Colilert-18 P/A Comparator	98-11682-00	1
Colilert and Colilert-18 Quanti-Tray Comparator (51-well tray)	98-09226-00	1

c. Bidders are also required to provide a percentage discount from the most recent retail price for other IDEXX brand products not listed above.

d. All pricing must remain in effect through June 30, 2027.

3. ORDERING AND DELIVERY REQUIREMENTS

a. The awarded bidder shall accept orders from authorized representatives of various City of Wyoming departments via purchase order, email, or online ordering.

b. Bidders shall indicate whether they offer an online catalog system. Online ordering is preferred but not required.

- The online catalog must provide product availability and anticipated delivery dates.
- Online orders must be placed through the bidder's secured website.
- The website must display City-specific pricing, including all awarded discounts.

c. No minimum order quantity may be imposed.

d. The awarded bidder is responsible for all delivery charges.

e. The awarded bidder must be able to establish and maintain recurring automatic shipments of Hach items and provide estimated delivery dates.

f. Substitutions are not permitted. If an item is discontinued, the awarded bidder must notify the ordering department(s). No substitutions may be made without prior approval.

g. Exchanges required due to improperly processed order or defective products must be completed on an "even-exchange" basis within 10 calendar days. Return shipping is the responsibility of the bidder.

h. All orders must be delivered to the department listed on the purchase order within 30 calendar days of receipt of order.

- The bidder must notify the ordering department in writing if an item is backordered, discontinued, or otherwise unavailable.

BID/PROPOSAL FORM

IDEXX LABORATORY TESTING PRODUCTS

The proponent identified below submits the attached bid/proposal materials, including the price(s) stated on the attached bid form.

By signing this bid/proposal form, the proponent identified below represents, attests and promises, the proponent:

1. Has reviewed and is familiar with all plans and specifications, including any issued addenda and any interpretations, and any information provided at any pre-bid meeting.
2. Has reviewed, meets, and will comply with all the Standard Terms and Conditions except those specifically stated in the materials submitted with this bid/proposal form, including, without limitation, all of the applicable insurance and bonding requirements.
3. If applicable, is familiar with the Work site and Work site conditions.
4. Accepts full responsibility for its conclusions relative to the nature and probable difficulties of performing the work specified, and no additional payments will be made by City due to unanticipated difficulties encountered in performing the actual work.

Is the bidder a:	YES	NO
Section 3 Certified Contractor?	[X]	[ ]

If yes, DUNS #: 784226511

Are you, or the business owner related to an elected official or employee of the City?	[ ]	[X]

If yes, list individuals' name(s) and relationship(s):

Unless the specifications otherwise state, the following is provided for statistical purposes only.

Is the bidder a:	YES	NO
Woman Owned Company?	[ ]	[X]
Minority Owned Company?	[ ]	[X]

Proponent's Complete Business Name (If Proponent Is DBA Include Full Proponent DBA):

BID/PROPOSAL FORM, CONTINUED

IDEXX LABORATORY TESTING PRODUCTS

State bid prices as per the specifications included herein:

Item Description	IDEXX Product Number	Per Unit Price
Colilert (200-test pack)	98-12973-00	$1,451.93
Colilert-18 (200-test pack)	98-08877-00	$1,570.32
Colisure (200-test pack)	98-13174-00	$2,247.48
120 mL Shrink-Banded Vessels with Sodium Thiosulfate (200 pack)	98-09221-00	$221.04
Quanti-Tray (100 pack)	98-21378-00	$286.00
Quanti-Tray/2000 (100 pack)	98-21675-00	$385.00
SimPlace for HPC, multi-dose kit (100 tests, 10 media vessels and SimPlates)	98-05761-01	$484.00
Sterile Water	98-09444-01	$55.43
Colilert and Colilert-18 P/A Comparator	98-11682-00	$23.00
Colilert and Colilert-18 Quanti-Tray Comparator (51-well tray)	98-09226-00	$42.00
120 mL Shrink-Banded Vessels without Sodium Thiosulfate (200 pack)	98-09222-00	$204.67

State percentage discount from the latest dated retail price for other IDEXX brand products: Discount varies by product and usage

All warranties must be included with bid/proposal.

Bid/Proposal Form Continued

IDEXX Distribution, Inc.
[Proponent's Complete Business Name]

[If Proponent is DBA include Full Proponent DBA Here]

[Signature for proponent]

[2nd signature for proponent]

Chun-Ming Chen - VP General Manager
[Printed name and title of person signing]

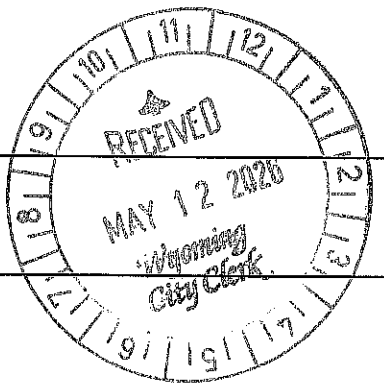
Luciana Thys - Sales Support Specialist
[Printed name and title of 2nd person signing]

Date signed: 4/29/2026

One IDEXX Drive
[Proponent's street address]

800-321-0207
[Proponent's business phone]

Westbrook, ME 04092
[City] [State] [Zip]



NA
[Cell phone number(s) of person(s) signing for proponent]

wlpdsalessupportna@idexx.com
[E-mail address(s) of person(s) signing for proponent]

Corporation, Massachuttes
[Proponent's form of business – *e.g.* partnership, corporation, limited liability company, professional corporation and the state in which it was formed]

CONTRACT FORM

This Contract Form on the next page will be completed and signed by the selected bidder/proponent after bidding but before the contract is submitted to the City Council for approval. The contract signed by the bidder and accompanied by all required bonds, insurance certificates, and any other required documents must be provided before it is signed by the Mayor and Clerk and approved as to form by the City Attorney. The Contractor will be provided a copy of the fully signed contract.

CITY OF WYOMING | PUBLIC WORKS

2660 Burlingame Ave. SW, Wyoming, MI 49509
616.530.7260 | Fax 616.249.3478 | wyomingmi.gov

STAFF REPORT

Date: May 26, 2026

Subject: 2026 Wyoming Long Line Pavement Markings

From: Jeff Oonk, City Engineer

CC: Aaron Vis, Director of Public Works

Meeting Date: June 1, 2026

RECOMMENDATION:

It is recommended the City Council award the 2026 Wyoming Long Line Pavement Markings bid to Michigan Pavement Markings, LLC in the amount of $55,950.00 and approve a contingency of $5,000.00 for a total of $60,950.00.

ALIGNMENT WITH STRATEGIC PLAN:

- Pillar 3 – Stewardship
  - Goal 3 – Improve city infrastructure and service reliability

DISCUSSION:

It is necessary to repaint approximately 150 miles of major street lane lines within the City on an annual basis. These markings, known as “long lines” include yellow centerlines, white dashed lane lines, white edge lines and other lines that can be applied by a pavement marking truck. Other markings (arrows, stop bars, crosswalks, etc) are installed manually and will be done under a separate contract. The City received one bid for long line pavement marking work and the bid was submitted by Michigan Pavement Markings, LLC in the amount of $55,950 which is 6.8% below the engineer’s estimate of $60,000. The single bid contained pricing slightly less than costs to do this work in 2025.



The total expected project cost is $60,950.00 including $5,000.00 in contingency.

TABULATION:

PAY ITEM	Est. QTY.	Unit	Unit Cost	Total
4 inch solid white line	197000	Ft	$ 0.060	$ 11,820.00
4 inch skip white line	93500	Ft	$ 0.065	$ 6,077.50
4 inch solid yellow line	507000	Ft	$ 0.060	$ 30,420.00
4 inch skip yellow line	28500	Ft	$ 0.065	$ 1,852.50
6 inch white line (edge line)	68000	Ft	$ 0.085	$ 5,780.00
			Total Bid	**$ 55,950.00**

BUDGET IMPACT:

Sufficient funds are available in the Major Streets Fund, Traffic Services Repairs and Maintenance Account No. 202-441-47400-930.000.

BID FORM

Bid for 2026 Long Line Pavement Marking Services

The bidder identified below submits the attached bid materials, including the price(s) stated on the Bid Form.

Bid Form.

By signing this Bid Form, the bidder identified below represents, attests and promises, the bidder:

1. Has reviewed and is familiar with all plans and specifications, including any issued addenda and any interpretations, and any information provided at any pre-bid meeting.

2. Has reviewed, meets, and will comply with all the Standard Terms and Conditions except those specifically stated in the materials submitted with this bid form, including, without limitation, all the applicable insurance and bonding requirements.

3. If applicable, is familiar with the Work site and Work site conditions.

4. Accepts full responsibility for its conclusions relative to the nature and probable difficulties of performing the work specified, and no additional payments will be made by the City due to unanticipated difficulties encountered in performing the actual work.

Unless the specifications otherwise state, the following is provided for statistical purposes only.

Is the bidder a:	YES	NO
Woman Owned Company?	☐	☑
Minority Owned Company?	☐	☑
Section 3 Certified Contractor?	☐	☐
If yes, Dunns #: ?		

Are you, or the business owner related to any elected official or employee of the City? ☐ ☑

If yes, list name and relationship: _____

BID FORM, CONTINUED

PAY ITEM	EST. QTY.	UNIT	UNIT COST	TOTAL
4 inch solid white line	???	Ft	0.06	
4 inch skip white line	???	Ft	0.065	
4 inch solid yellow line	???	Ft	0.06	
4 inch skip yellow line	???	Ft	0.065	
6 inch white line (edge line)	???	Ft	0.085	
			Total Bid Amount:	$

CONTACTS:

Primary Contact:

Name: Shannon Nielsen Title: President

Email: snmpm33@gmail.com Phone: 616 260-7828

Back-Up Contact:

Name: Jason Kooiker Title: Office Manager

Email: jkmpm33@gmail.com Phone: 616-260-7772



BID FORM, CONTINUED

Michigan Pavement Markings LLC
LEGAL NAME OF COMPANY

BUSINESS NAME / D.B.A., IF DIFFERENT FROM ABOVE

LLC Michigan
FORM OF BUSINESS and STATE IN WHICH FORMED – e.g. partnership, corporation, limited liability company, professional corporation and the state in which it was formed

P.O. Box 9673
STREET ADDRESS

Wyoming | MI | 49509
CITY | STATE | ZIP CODE

Shannon Nielsen
BID CONTACT NAME (PLEASE PRINT)

616-260-7828 | Same
BUSINESS PHONE | CELL PHONE

Snmpm33@gmail.com | —
EMAIL ADDRESS | FAX NUMBER

Shannon Nielsen | 5-18-26
SIGNATURE FOR BIDDER | DATE

Shannon Nielsen President
PRINTED NAME AND TITLE OF PERSON SIGNING

[signature] | 5-18-26
2ND SIGNATURE FOR BIDDER | DATE

Jason Kooiker Manager
PRINTED NAME AND TITLE OF 2ND PERSON SIGNING

SUBCONTRACTOR PROVISION

18th Dated May 20 26

Contractor may subcontract the item or items of work stipulated below, provided the name and signature of the subcontractor is listed in the space indicated, and providing the contractor and principal subcontractors perform 80% of the work. If Contractor intends to do the work only with its own forces, it must name and perform the work itself.

NAME OF CONTRACTOR OR SUBCONTRACTOR DOING WORK	DESIGNATED ITEM
No Subs	

The undersigned certifies that the Bidder, whose name appears on this proposal, has permission to use our name as Subcontractor for performing the items listed above (JEFF SAID TO REMOVE THIS SECTION EACH TIME).

Signed _____ Signed _____

By _____ By _____

Address _____ Address _____

_____ _____

Signed _____ Signed _____

By _____ By _____

Address _____ Address _____

_____ _____

CONTRACT FORM

This Contract Form must be signed by the Bidder and provided as part of the Bid submittal. If the Bidder is selected, the Contract is approved by the City Council, the City receives all bonds, insurance, and other required documents, the City Mayor, Clerk and City Attorney will sign this contract form. A copy will be provided to Contractor.

City Standard Contract for 2026 Long Line Pavement Marking Services

This Contract is made as of the Effective Date between the City and the Contractor.

"Contract Documents" means the bid together with the invitation to bid, bid specifications, city standard terms and conditions, plans, instructions to bidders, bid form, any prequalification submittals filed by the bidder, and other documents comprising of or required in the bid package, City Council resolution, insurance, and any required bonds.

"City" means the City of Wyoming, a Michigan municipal corporation, of 1155 28th Street SW, Wyoming, MI 49509.

"Contractor" means: Michigan Pavement Markings LLC
LEGAL NAME OF COMPANY

BUSINESS NAME / D.B.A., IF DIFFERENT FROM ABOVE

LLC Michigan
FORM OF BUSINESS & STATE IN WHICH FORMED – e.g. partnership, corporation, limited liability company, professional corporation & the state in which it was formed

P.O. Box 9673
ADDRESS

Wyoming MI 49509
CITY STATE ZIP CODE

"Effective Date" means the day after the date the Contract is approved by the City Council and the City receives all bonds, insurance documents, and other documents required from Contractor.

Terms and Conditions

In exchange for the consideration in and referred by this Contract, the parties agree:

1. Contractor will provide the materials and services in accordance with the Contract Documents.
2. City will pay Contractor in accordance with the Contract Documents.
3. Waived or modified specifications are as follows: None
4. This is the only agreement between the parties regarding its subject matter. There are no other agreements, representations or warranties. **No terms and conditions apply other than those expressly and fully stated in the Contract Documents.** This contract can be amended only in writing signed by both City and Contractor.

City and Contractor have signed this Contract as of the Effective Date.

City of Wyoming

By: _____
John Shay, City Manager

Date signed: _____, 202_

Approved as to form: _____
Gregory T. Stremers, City Attorney

Contractor:

Michigan Pavement Markings LLC
[Type or print Contractor's name]

By: Shannon Nielsen
Signature for bidder

Shannon Nielsen
Printed name of person signing for bidder

President
Title of person signing for bidder

Date signed: 5-18, 2026

CITY OF WYOMING | PUBLIC WORKS

2660 Burlingame Ave. SW, Wyoming, MI 49509
616.530.7260 | Fax 616.249.3478 | wyomingmi.gov

STAFF REPORT

Date: May 26, 2026

Subject: 2026 Wyoming Miscellaneous Pavement Markings

From: Jeff Oonk, City Engineer

CC: Aaron Vis, Director of Public Works

Meeting Date: June 1, 2026

RECOMMENDATION:

It is recommended the City Council award the 2026 Wyoming Miscellaneous Pavement Markings bid to Michigan Pavement Markings, LLC in the amount of $116,926.00 and approve a contingency of $5,000.00 for a total of $121,926.00.

ALIGNMENT WITH STRATEGIC PLAN:

- Pillar 3 – Stewardship
  - Goal 3 – Improve city infrastructure and service reliability

DISCUSSION:

It is necessary to repaint miscellaneous pavement markings within the City on a regular basis. These markings, include Arrows, Stop Bars, Crosswalks and other items. These markings are installed manually and not with a pavement marking truck. The City received one bid for miscellaneous pavement marking work and the bid was submitted by Michigan Pavement Markings, LLC in the amount of $116,926.00 which is 11% above the engineer's estimate of $104,606.00. The single bid contained pricing comparable to a recent Kent County Bid and MDOT average unit prices.



The total expected project cost is $121,926.00 including $5,000.00 in contingency.

TABULATION:

PAY ITEM	Est. QTY.	Unit	Unit Cost	Total
Left Turn Arrow	650	Ea	$ 39.00	$ 25,350.00
Right Turn Arrow	120	Ea	$ 39.00	$ 4,680.00
Sharrow	75	Ea	$ 50.00	$ 3,750.00
Combination Arrow	10	Ea	$ 59.00	$ 590.00
Straight Arrow	45	Ea	$ 39.00	$ 1,755.00
24 inch Stop Bar	9400	Ft	$ 1.75	$ 16,450.00
24 inch Cross Walk (Continental)	16,900	Ft	$ 1.75	$ 29,575.00
Bike Lane Symbol	100	Ea	$ 50.00	$ 5,000.00
School Legend	4	Ea	$ 89.00	$ 356.00
Railroad Symbol	48	Ea	$ 95.00	$ 4,560.00
“BUS ONLY” Legend	40	Ea	$ 59.00	$ 2,360.00
Hatching	22,500	Ft	$ 1.00	$ 22,500.00
			Total Bid Amount:	$ 116,926.00

BUDGET IMPACT:

Sufficient funds are available in the Major Streets Fund, Traffic Services Repairs and Maintenance Account No. 202-441-47400-930.000.

BID FORM

Bid for 2026 Long Line Pavement Marking Services

The bidder identified below submits the attached bid materials, including the price(s) stated on the Bid Form.

Bid Form.

By signing this Bid Form, the bidder identified below represents, attests and promises, the bidder:

1. Has reviewed and is familiar with all plans and specifications, including any issued addenda and any interpretations, and any information provided at any pre-bid meeting.

2. Has reviewed, meets, and will comply with all the Standard Terms and Conditions except those specifically stated in the materials submitted with this bid form, including, without limitation, all the applicable insurance and bonding requirements.

3. If applicable, is familiar with the Work site and Work site conditions.

4. Accepts full responsibility for its conclusions relative to the nature and probable difficulties of performing the work specified, and no additional payments will be made by the City due to unanticipated difficulties encountered in performing the actual work.

Unless the specifications otherwise state, the following is provided for statistical purposes only.

Is the bidder a:	YES	NO
Woman Owned Company?	☐	☑
Minority Owned Company?	☐	☑
Section 3 Certified Contractor?	☐	☐

If yes, Dunns #: 7

Are you, or the business owner related to any elected official or employee of the City?	☐	☑

If yes, list name and relationship: _____

BID FORM, CONTINUED

PAY ITEM	EST. QTY.	UNIT	UNIT COST	TOTAL
Left Turn Arrow	650	Ea	39.00	25,350-
Right Turn Arrow	120	Ea	39.00	4,680-
Sharrow	75	Ea	50.00	3,750-
Combination Arrow	10	Ea	59.00	590-
Straight Arrow	45	Ea	39.00	1,755-
24 inch Stop Bar	9400	Ft	1.75	16,450-
24 inch Cross Walk (Continental)	16,900	Ft	1.75	29,575-
Bike Lane Symbol	100	Ea	50.00	5,000.00
School Legend	4	Ea	89.00	356-
Railroad Symbol	48	Ea	95.00	4,560-
"BUS ONLY" Legend	40	Ea	59.00	2,360-
Hatching	22,500	Ft	1.00	22,500-
			Total Bid Amount:	$ 116,926-

CONTACTS:

Primary Contact:

Name: Shannon Nielsen Title: President

Email: snmpm33@gmail.com Phone: 616-260-7828

Back-Up Contact:

Name: Jason Kooiker Title: Office Manager

Email: JKMPM33@gmail.com Phone: 616-260-7772

BID FORM, CONTINUED

Michigan Pavement Markings LLC
LEGAL NAME OF COMPANY

BUSINESS NAME / D.B.A., IF DIFFERENT FROM ABOVE

LLC Michigan
FORM OF BUSINESS and STATE IN WHICH FORMED – e.g. partnership, corporation, limited liability company, professional corporation and the state in which it was formed

P.O. BOX 9673
STREET ADDRESS

Wyoming MI 49509
CITY STATE ZIP CODE

Shannon Nielsen
BID CONTACT NAME (PLEASE PRINT)

616-260-7828 Same
BUSINESS PHONE CELL PHONE

snmpm33@gmail.com —
EMAIL ADDRESS FAX NUMBER

Shannon Nielsen 5-18-26
SIGNATURE FOR BIDDER DATE

Shannon Nielsen President
PRINTED NAME AND TITLE OF PERSON SIGNING

5-18-26
2ND SIGNATURE FOR BIDDER DATE

JASON KOOIKER MANAGER
PRINTED NAME AND TITLE OF 2ND PERSON SIGNING

RECEIVED MAY 26 2026 Wyoming City Clerk

SUBCONTRACTOR PROVISION

15th Dated May 20 26

Contractor may subcontract the item or items of work stipulated below, provided the name and signature of the subcontractor is listed in the space indicated, and providing the contractor and principal subcontractors perform 80% of the work. If Contractor intends to do the work only with its own forces, it must name and perform the work itself.

NAME OF CONTRACTOR OR SUBCONTRACTOR DOING WORK	DESIGNATED ITEM
No Subs	

The undersigned certifies that the Bidder, whose name appears on this proposal, has permission to use our name as Subcontractor for performing the items listed above (JEFF SAID TO REMOVE THIS SECTION EACH TIME).

Signed _____ Signed _____

By _____ By _____

Address _____ Address _____

_____ _____

Signed _____ Signed _____

By _____ By _____

Address _____ Address _____

_____ _____

CONTRACT FORM

This Contract Form must be signed by the Bidder and provided as part of the Bid submittal. If the Bidder is selected, the Contract is approved by the City Council, the City receives all bonds, insurance, and other required documents, the City Mayor, Clerk and City Attorney will sign this contract form. A copy will be provided to Contractor.

City Standard Contract for 2026 Miscellaneous Pavement Marking Services

This Contract is made as of the Effective Date between the City and the Contractor.

"Contract Documents" means the bid together with the invitation to bid, bid specifications, city standard terms and conditions, plans, instructions to bidders, bid form, any prequalification submittals filed by the bidder, and other documents comprising of or required in the bid package, City Council resolution, insurance, and any required bonds.

"City" means the City of Wyoming, a Michigan municipal corporation, of 1155 28th Street SW, Wyoming, MI 49509.

"Contractor" means: Michigan Pavement Markings LLC
LEGAL NAME OF COMPANY

BUSINESS NAME / D.B.A., IF DIFFERENT FROM ABOVE

LLC Michigan
FORM OF BUSINESS & STATE IN WHICH FORMED – e.g. partnership, corporation, limited liability company, professional corporation & the state in which it was formed

P.O. Box 9673
ADDRESS

Wyoming MI 49509
CITY STATE ZIP CODE

"Effective Date" means the day after the date the Contract is approved by the City Council and the City receives all bonds, insurance documents, and other documents required from Contractor.

Terms and Conditions

In exchange for the consideration in and referred by this Contract, the parties agree:

1. Contractor will provide the materials and services in accordance with the Contract Documents.
2. City will pay Contractor in accordance with the Contract Documents.
3. Waived or modified specifications are as follows: None
4. This is the only agreement between the parties regarding its subject matter. There are no other agreements, representations or warranties. **No terms and conditions apply other than those expressly and fully stated in the Contract Documents.** This contract can be amended only in writing signed by both City and Contractor.

City and Contractor have signed this Contract as of the Effective Date.

City of Wyoming

By: _____
John Shay, City Manager

Date signed: _____, 202_

Approved as to form: _____
Gregory T. Stremers, City Attorney

Contractor:

Michigan Pavement Markings LLC
[Type or print Contractor's name]

By: _____
Signature for bidder

Shannon Nielsen
Printed name of person signing for bidder

President
Title of person signing for bidder

Date signed: 5-18, 2026

American Institute of Architects

AIA Document A310

Bid Bond

KNOW ALL MEN BY THESE PRESENTS, that we, Michigan Pavement Markings LLC, as Principal, hereinafter called the Principal, and **Employers Mutual Casualty Company**, duly organized under the laws of the State of Iowa, as Surety, hereinafter called the Surety, is held and firmly bound unto City of Wyoming, as Obligee, hereinafter called the Obligee, in the sum of Five Percent of the Bid Amount (5% of the Bid Amount), for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for: Miscellaneous Pavement Marking

Bid Date: **May 26, 2026**

NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and materials furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this 18th day of May, A.D. 2026.

(Witness)

Michigan Pavement Markings LLC
(Principal)

(Seal)

By: Shawn Nielsen President
(Title)

Employers Mutual Casualty Company
(Surety)

Dianne Wilhelm
Dianne Wilhelm *(Witness)*

(Seal)

Laura J. Northouse
Laura J. Northouse Attorney -in-Fact

P.O. Box 712 • Des Moines, Iowa 50306-0712

EMC INSURANCE

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

KNOW ALL MEN BY THESE PRESENTS, that:

1. Employers Mutual Casualty Company, an Iowa Corporation
2. EMCASCO Insurance Company, an Iowa Corporation
3. Union Insurance Company of Providence, an Iowa Corporation
4. Illinois EMCASCO Insurance Company, an Iowa Corporation
5. Dakota Fire Insurance Company, a North Dakota Corporation
6. EMC Property & Casualty Company, an Iowa Corporation

hereinafter referred to severally as "Company" and collectively as "Companies", each does, by these presents, make, constitute and appoint:

LAURA J. NORTHOUSE

its true and lawful attorney-in-fact, with full power and authority conferred to sign, seal, and execute the Bid Bond

In an amount not exceeding Ten Million Dollars $10,000,000.00

and to bind each Company thereby as fully and to the same extent as if such instruments were signed by the duly authorized officers of each such Company, and all of the acts of said attorney pursuant to the authority hereby given are hereby ratified and confirmed.

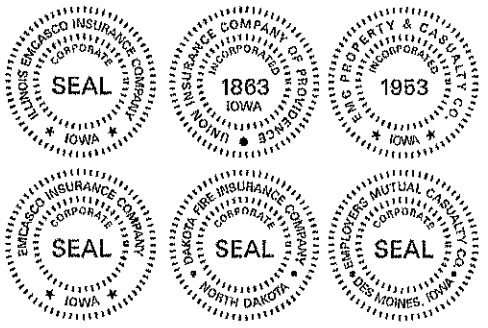
AUTHORITY FOR POWER OF ATTORNEY

This Power-of-Attorney is made and executed pursuant to and by the authority of the following resolution of the Boards of Directors of each of the Companies at the first regularly scheduled meeting of each company duly called and held in 1999:

RESOLVED: The President and Chief Executive Officer, any Vice President, the Treasurer and the Secretary of Employers Mutual Casualty Company shall have power and authority to (1) appoint attorneys-in-fact and authorize them to execute on behalf of each Company and attach the seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof; and (2) to remove any such attorney-in-fact at any time and revoke the power and authority given to him or her. Attorneys-in-fact shall have power and authority, subject to the terms and limitations of the power-of-attorney issued to them, to execute and deliver on behalf of the Company, and to attach the seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof, and any such instrument executed by any such attorney-in-fact shall be fully and in all respects binding upon the Company. Certification as to the validity of any power-of-attorney authorized herein made by an officer of Employers Mutual Casualty Company shall be fully and in all respects binding upon this Company. The facsimile or mechanically reproduced signature of such officer, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power-of-attorney of the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

IN WITNESS THEREOF, the Companies have caused these presents to be signed for each by their officers as shown, and the Corporate seals to be hereto affixed this 22nd day of September , 2022 .

Seals



Scott R. Jean, President & CEO of Company 1; Chairman, President & CEO of Companies 2, 3, 4, 5 & 6

Todd Strother, Executive Vice President Chief Legal Officer & Secretary of Companies 1, 2, 3, 4, 5 & 6

KATHY LOVERIDGE
Commission Number 780769
My Commission Expires
October 10, 2025

On this 22nd day of September , 2022 before me a Notary Public in and for the State of Iowa, personally appeared Scott R. Jean and Todd Strother, who, being by me duly sworn, did say that they are, and are known to me to be the CEO, Chairman, President, Executive Vice President, Chief Legal Officer and/or Secretary, respectively, of each of the Companies above; that the seals affixed to this instrument are the seals of said corporations; that said instrument was signed and sealed on behalf of each of the Companies by authority of their respective Boards of Directors; and that the said Scott R. Jean and Todd Strother, as such officers, acknowledged the execution of said instrument to be their voluntary act and deed, and the voluntary act and deed of each of the Companies.

My Commission Expires October 10, 2025.

Kathy Loveridge

Notary Public in and for the State of Iowa

CERTIFICATE

I, Ryan J. Springer, Vice President of the Companies, do hereby certify that the foregoing resolution of the Boards of Directors by each of the Companies, and this Power of Attorney issued pursuant thereto on 22nd day of September , 2022 , are true and correct and are still in full force and effect.

In Testimony Whereof I have subscribed my name and affixed the facsimile seal of each Company this 18th day of May , 2026 .

Ryan J. Springer Vice President

"For verification of the authenticity of the Power of Attorney you may call (515) 345-7548."

05.04.26
CED/CH

ORDINANCE NO. 10-26

ORDINANCE TO AMEND SECTION 90-515 OF THE CODE OF THE CITY OF WYOMING BY ADDING SUBSECTION (152) TO REZONE 1006 26TH STREET SW FROM PUD-4 GENERAL PLANNED DISTRICT TO R-2 RESIDENTIAL DISTRICT

THE CITY OF WYOMING ORDAINS:

Section 1. That Section 90-515 of the Code of the City of Wyoming is amended by adding subsection (152) to read as follows:

(152) (a) To rezone the following described property at 1006 26th St SW (parcel number 41-17-11-476-002) from PUD-4 General Planned District to R-2 Residential District:

PART SW 1/4 SE 1/4 COM ON S LINE OF 26TH ST 185.12 FT N 89D 49M E FROM NE COR OF LOT 66 OF SHERWOOD FOREST NO. 1 TH S 89D 49M W 65.08 FT TH S 2D 10M E 134 FT TH N 89D 49M E TO A PT S OF BEG TH N 133.92 FT TO BEG * SEC 11 T6N R12W 0.19 A.

Section 2. That this ordinance shall take effect on _____, 2026.

I certify that this ordinance was adopted by the City of Wyoming at a regular session of the City Council held on _____, 2026.

_____
Kelli A. VandenBerg, Wyoming City Clerk

CITY OF WYOMING

Community and Economic Development | 1155 28th St. SW, Wyoming, MI 49509
616.530.7285 | wyomingmi.gov

April 29, 2026

Ms. Kelli A. VandenBerg
City Clerk
Wyoming, MI

Subject: Request for a rezoning from PUD-4 General Planned District to R-2 Residential District at 1006 26th Street SW (Section 11) (Grace Christian University, Grace Bible College).

Recommendation: To approve the subject rezoning request.

Dear Ms. VandenBerg,

The above referenced request was reviewed by the Wyoming Planning Commission at its regular meeting on April 21, 2026. At the meeting, staff recommended approval of the rezoning request and a motion was made by Lamer, supported by Weller, to recommend that City Council approve the proposed rezoning. The motion to approve this rezoning request passed unanimously.

A detailed review of the request is available in the attached Planning Commission minutes and supportive materials. Following, please find some general information.

In 2020, Grace Christian University rezoned approximately 29 acres to PUD-4 for the continued growth and expansion of the institution. Since then, the priorities of the university have shifted concerning student housing. Grace Christian University desires to sell a singular parcel within the PUD, located at 1006 26th Street SW.

This parcel contains a single-family home on an 8,411 sq. ft. lot. The previous zoning district at this property was R-2 Residential District before joining the PUD, and both the parcel and existing building continue to meet minimum requirements in the R-2 Residential District. This property is adjacent to other R-2 zoned properties, and rezoning the parcel would align with the traditional residential future land use status.

No members of the public offered comment.

If approved for the proposed rezoning request, the property owner could sell the property without any further approvals. Planning Commission unanimously approved the PUD amendment to remove the property from the PUD boundary on April 21, 2026. A copy of the proposed rezoning survey is attached to this letter.

Respectfully submitted,



Joel Klaassen, Acting Director of Community and Economic Development
Community and Economic Development Department

Cc: John Shay, City Manager

CITY OF WYOMING | COMMUNITY AND ECONOMIC DEVELOPMENT

1155 28th Street SW, Wyoming, MI 49509
616.530.7285 | wyomingmi.gov

APPLICATION FOR DEVELOPMENT PLAN REVIEW

Proposed Request

- [ ] Construction of a new building
- [ ] Expansion of an existing building
- [ ] New/Expanded Multifamily Development
- [ ] PUD Overall Development Plan/Amendment
- [ ] Other (describe) _____
- [x] Rezoning
- [ ] Special Use
- [ ] Site Condominium Plan
- [ ] Preliminary Plat

Site and Project Information

Project Name: Grace Christian University

Site Address(es): 1006 26th St SW, Wyoming, MI 49509

Parcel Number(s): 41-17-11-476-002

Total Site Area: 0.19 Existing Bldg. Coverage: _____ Proposed Bldg. Coverage: _____

Current Use of Site/Building: Single-family residential dwelling (institution-owned)

Proposed Use of Site/Building: Single-family residential dwelling

Current Zoning District: PUD-4 Proposed Zoning District: R-2

Proposed Number of Units: 1 Proposed Number of Total Parking Spaces: 2 (no change)

Estimated Project Cost: $0 Projected Number of Jobs Created: 0

Mandatory Pre-Application Meeting Date Completed on: 3/4/2026

Waiver(s) Requested: [ ] Yes [x] No

Applicant and Preparer of Development Plan

Applicant: Grace Christian University
Address: 1011 Aldon St. SW
Wyoming, MI 49509
Email: bsherstad@gracechristian.edu
Phone: (616) 261-8572

Preparer/Firm: Brian Sherstad
Address: 1011 Aldon St. SW
Wyoming, MI 49509
Email: bsherstad@gracechristian.edu
Phone: (616) 261-8572

Property Owner

Name: Grace Bible College
Phone: (616) 261-8572

Address: 1011 Aldon St. SW
Wyoming, MI 49509

Signature: _____

GRACE CHRISTIAN UNIVERSITY

PHONE 1 (616) 538-2330
WEBSITE GRACECHRISTIAN.EDU

Grace Christian University Request to Rezone 1006 26th Street to the R-2 District

Concurrent with the request from Grace Chrisitan University to update its Overall Development Plan is this request to rezone the single-family parcel at 1006 26th Street to the R-2 District. Due to changing demographics, declining student enrollment over the past five years and modest growth goals in future years, the University Board of Directors has decided to sell the parcel at 1006 26th Street. Rezoning this parcel to the R-2 District restores it to its original zoning district and eliminates a barrier to selling the house on the open market while it is zoned PUD-4.

Other single-family homes within the University's PUD-4 zone are immediately contiguous to the campus and have strategic value for the future of the University. The University has no plans to request rezoning of additional parcels in the future.

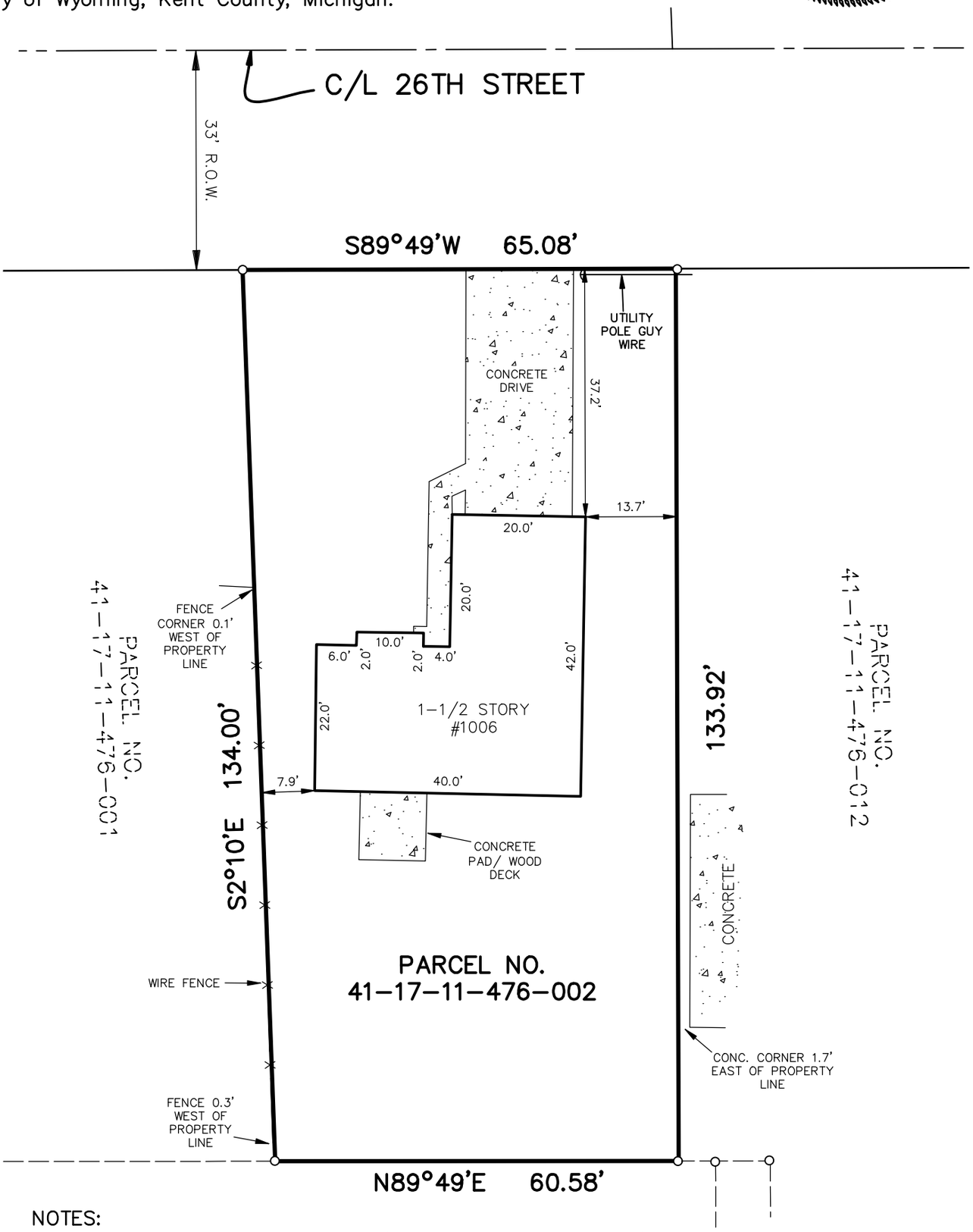
The University is grateful for the action taken by the City of Wyoming to approve the University's PUD-4 zoning in 2020. This approval facilitated the completion of the Grace Townhomes which provides high quality safe housing for up to 116 students. These units along with previously existing housing sufficiently meet the housing needs of students into the near future.

Boundary Survey for: Grace Christian University
ATTN: Brian Shertad
1011 Aldon Street
Grand Rapids, MI 49509

Description:

Part of the SW 1/4 of the SE 1/4 Commencing on the South line of 26th Street 185.12 feet N89°49'E from the NE corner of Lot 66 of Sherwood Forest No. 1, thence S89°49'W 65.08 feet; thence S02°12'E 134.0 feet; thence N89°49'E to a point South of beginning; thence North 133.92 feet to the point of beginning, Section 11, T6N, R12W, City of Wyoming, Kent County, Michigan.

STATE OF MICHIGAN
VINCENT ALAN DOUMA
License No. 4001050433
LICENSED PROFESSIONAL SURVEYOR



NOTES:

1. No title work was furnished for this survey. A commitment for title insurarance should be obtained in order to determine easements, restrictions and other covenants which may affect this property.
2. Legal description and boundary information as shown is based on previous work by Exxel Engineering.

Scale 1" = 20'

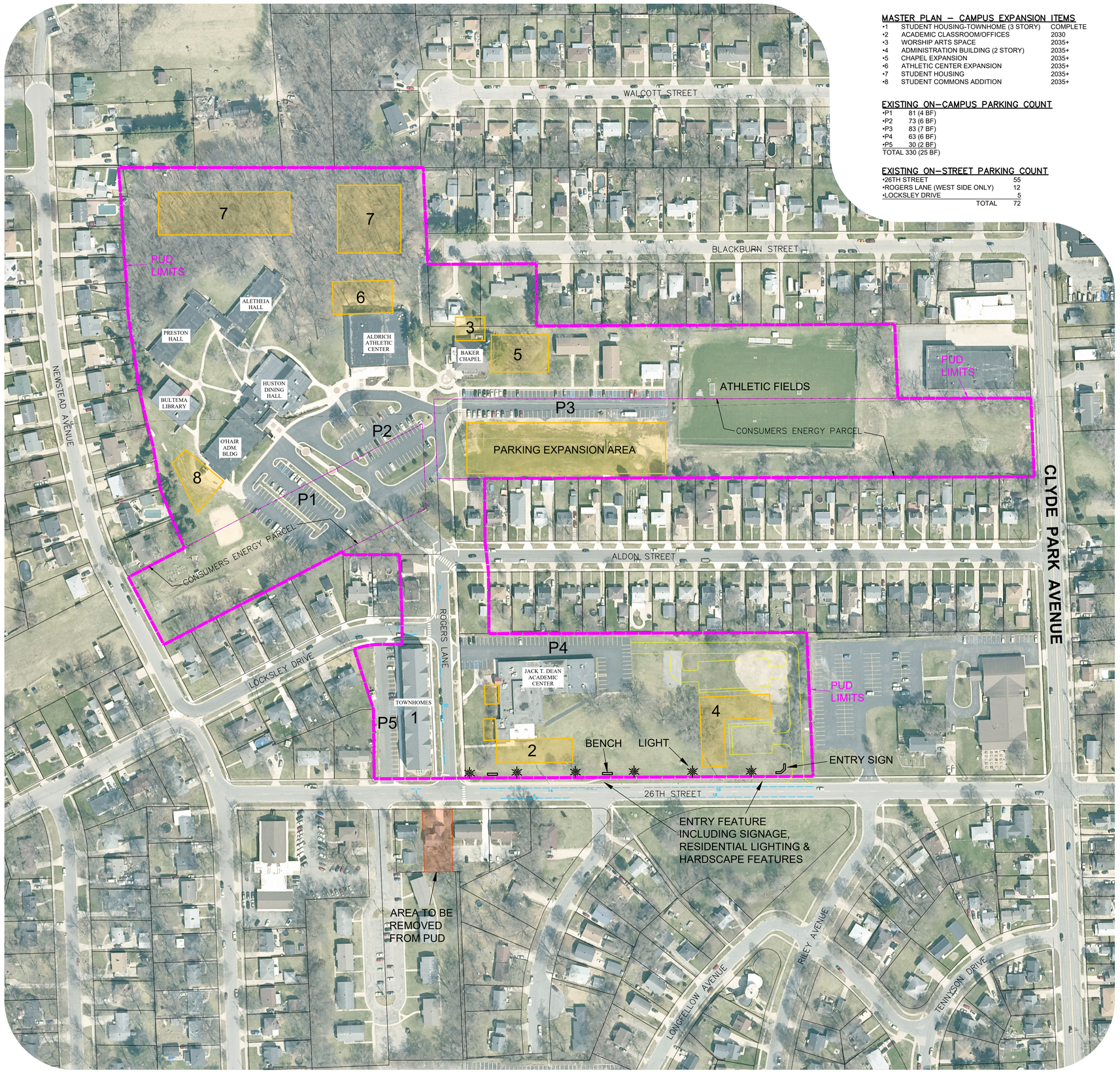
D = Deeded dimension
M = Measured dimension
P = Platted dimension
● = Set iron stake
o = Found iron stake
◒ = Concrete monument
—x— = Fence line

exxel engineering, inc.
planners · engineers · surveyors
5252 Clyde Park, S.W. • Grand Rapids, MI 49509
Phone: (616) 531-3660 www.exxelengineering.com

FILE NO.: 191238E DATE: 03/12/2026

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MASTER PLAN – CAMPUS EXPANSION ITEMS

•1	STUDENT HOUSING-TOWNHOME (3 STORY)	COMPLETE
•2	ACADEMIC CLASSROOM/OFFICES	2030
•3	WORSHIP ARTS SPACE	2035+
•4	ADMINISTRATION BUILDING (2 STORY)	2035+
•5	CHAPEL EXPANSION	2035+
•6	ATHLETIC CENTER EXPANSION	2035+
•7	STUDENT HOUSING	2035+
•8	STUDENT COMMONS ADDITION	2035+

EXISTING ON–CAMPUS PARKING COUNT

•P1	81 (4 BF)
•P2	73 (6 BF)
•P3	83 (7 BF)
•P4	63 (6 BF)
•P5	30 (2 BF)
TOTAL	330 (25 BF)

EXISTING ON–STREET PARKING COUNT

•26TH STREET	55
•ROGERS LANE (WEST SIDE ONLY)	12
•LOCKSLEY DRIVE	5
TOTAL	72

PARCEL DESCRIPTIONS

PARCEL NUMBER: 41-17-11-427-001
PROPERTY ADDRESS: 962 BLACKBURN ST SW
DESCRIPTION
LOTS 36 37 & 38 ALSO THAT PART OF VACATED ALLEY ADJ THERETO ON THE S * CAMPBELL & BREEZE'S ADD

PARCEL NUMBER: 41-17-11-427-002
PROPERTY ADDRESS: 948 BLACKBURN ST SW
DESCRIPTION
LOTS 39 40 & 41 ALSO THAT PART OF VACATED ALLEY ADJ THERETO ON THE S * CAMPBELL & BREEZE'S ADD

PARCEL NUMBER: 41-17-11-428-002
PROPERTY ADDRESS: 959 ALDON ST SW
DESCRIPTION
LOT 25 * ALDON PLAT

PARCEL NUMBER: 41-17-11-429-001
PROPERTY ADDRESS: 958 ALDON ST SW
DESCRIPTION
LOT 24 * ALDON PLAT

PARCEL NUMBER: 41-17-11-403-023
PROPERTY ADDRESS: 2531 ROGERS LANE AVE SW
DESCRIPTION
PART NW 1/4 SE 1/4 COM 27 FT WLY ALONG N LINE OF LOCKSLEY DR /60 FT WIDE/ FROM E 1/8 LINE TH N PAR WITH E 1/8 LINE 132 FT TH W PERP TO E 1/8 LINE 61.4 FT TO A PT 120 FT E OF E LINE OF LOT 22 OF SHERWOOD FOREST TH S 129.4 FT PAR WITH E LINE OF SD LOT TO NLY LINE OF SD DR TH ELY ALONG N LINE OF SD DR 61.65 FT TO BEG * SEC 11 T6N R12W 0.18 A.

PARCEL NUMBER: 41-17-11-429-028
PROPERTY ADDRESS: 2550 ROGERS LANE AVE SW
DESCRIPTION
W 609 FT OF E 1144 FT OF S 1/2 S 1/2 NE 1/4 SE 1/4 * SEC 11 T6N R12W 4.75 A. ALSO LOTS 56 TO 60 INCL * SHERWOOD FOREST NO. 1

PARCEL NUMBER: 41-17-11-404-012
PROPERTY ADDRESS: 2545 ROGERS LANE AVE SW
DESCRIPTION
LOTS 20 & 21 * SHERWOOD FOREST ALSO LOTS 61 & 62 * SHERWOOD FOREST NO. 1

PARCEL TO BE REMOVED FROM PUD:

PARCEL NUMBER: 41-17-11-476-002
PROPERTY ADDRESS: 1006 26TH ST SW
DESCRIPTION
PART SW 1/4 SE 1/4 COM ON S LINE OF 26TH ST 185.12 FT N 89D 49M E FROM NE COR OF LOT 66 OF SHERWOOD FOREST NO. 1 TH S 89D 49M W 65.08 FT TH S 2D 10M E 134 FT TH N 89D 49M E TO A PT S OF BEG TH N 133.92 FT TO BEG * SEC 11 T6N R12W 0.19 A.

PARCEL NUMBER: 41-17-11-403-014
PROPERTY ADDRESS: 1011 ALDON ST SW
DESCRIPTION
PARCEL A: THAT PART OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 11, TOWN 6 NORTH, RANGE 12 WEST, LYING EASTERLY OF SHERWOOD FOREST NO. 2, SECTION 11, TOWN 6 NORTH, RANGE 12 WEST AND NORTHERLY OF THE NORTH LINE OF THE CONSUMERS POWER COMPANY 165 FOOT RIGHT-OF-WAY EXTENDED NORTHEASTERLY TO THE EASTERLY LINE OF THE SAID NORTHWEST 1/4 OF THE SOUTHEAST 1/4, EXCEPTING THEREFROM ALL THAT PART THEREOF WHICH LIES WEST OF A LINE DRAWN BETWEEN THE NORTHEAST CORNER OF LOT 150 AND THE SOUTHEAST CORNER OF LOT 151 OF THE SAID SHERWOOD FOREST NO.2, SECTION 11, TOWN 6 NORTH, RANGE 12 WEST, WYOMING CITY, KENT COUNTY, MICHIGAN. ALSO, THAT PART OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 11, TOWN 6 NORTH, RANGE 12 WEST, DESCRIBED AS: COMMENCING AT THE INTERSECTION OF THE EAST LINE OF SAID NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION WITH THE NORTH LINE OF LOCKSLEY DRIVE; THENCE WEST ALONG THE NORTH LINE OF LOCKSLEY DRIVE 27 FEET; THENCE NORTH PARALLEL TO THE SAID EAST LINE 132 FEET; THENCE WEST AT RIGHT ANGLES 182 FEET MORE OR LESS TO THE EAST LINE OF LOT 22 OF SHERWOOD FOREST PLAT; THENCE NORTH ALONG THE SAID EASTERLY LINE TO THE NORTHEAST CORNER OF SAID LOT 22 AND TO THE SOUTHERLY LINE OF THE CONSUMERS POWER COMPANY RIGHT-OF-WAY; THENCE NORTHEASTERLY ALONG THE EXTENDED SOUTHERLY LINE OF THE SAID CONSUMERS POWER COMPANY RIGHT-OF-WAY TO A POINT WHICH IS 27 FEET WEST OF THE EAST LINE OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION; THENCE NORTHERLY PARALLEL TO AND AT A DISTANCE OF 27 FEET FROM THE SAID EAST LINE OF THE NORTHWEST OF THE SOUTHEAST 1/4 TO THE SOUTH LINE OF PARCEL A, ABOVE DESCRIBED; THENCE NORTHEASTERLY ALONG THE SOUTH LINE OF SAID PARCEL A, ABOVE DESCRIBED, TO THE EAST LINE OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION; THENCE SOUTHERLY ALONG THE SAID EAST LINE TO THE PLACE OF BEGINNING. ALSO THE WEST 1,000 FEET OF THE FOLLOWING DESCRIPTION: THE NORTH 1/2 OF THE SOUTH 1/2 OF THE NORTH 1/2 OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 11, TOWN 6 NORTH, RANGE 12 WEST.

CONSUMERS ENERGY
PARCEL NUMBER: 41-17-11-402-046
PROPERTY ADDRESS: 2537 NEWSTEAD AVE SW
DESCRIPTION
PART OF S 1/2 OF SEC COM AT NE COR OF LOT 38 OF SHERWOOD FOREST TH W 108.58 FT TO ELY LINE OF DEHOOP AVE TH NLY ALONG ELY LINE OF SD AVE 120.55 FT TO SW COR OF LOT 40 OF SD PLAT TH N 62D 23M E TO A PT 27 FT W FROM E 1/8 LINE TH S PAR WITH E 1/8 LINE TO A LINE BEARING N 62D 23M E FROM BEG TH S 62D 23M W TO BEG. EXCEPT THAT PART LYING SOUTHWESTERLY OF THE NORTHEASTERLY LINE OF NEWSTEAD AVENUE. ALSO S 1/4 N 1/2 NE 1/4 SE 1/4 * SEC 11 T6N R12W

DISTRICT REGULATIONS

Section in Ordinance	Title	R-2 Requirement		Proposed PUD
Sec. 90-408A	Development Standards	Minimum Lot Area (1)*		
		8,400 sq.ft.		8,400 sq.ft.
		Minimum Lot Width	65 ft.	65 ft.
		Minimum Front Yard	35 ft.	10 ft.
		Minimum Rear Yard (3)*	35 ft.	20 ft.
		Minimum Side Yard (3)(4)(5)*	7 ft.	7 ft.
		Minimum Combined Side Yard (5)*	18 ft.	18 ft.
		Minimum Ground Floor Building Area per (residential) dwelling unit (8)*		
		One-Story	1,040 sq.ft.	900 sq.ft.
		1½-Story	864 sq.ft.	864 sq.ft.
		Two-Story	672 sq.ft.	672 sq.ft.
		Bi-Level	672 sq.ft.	672 sq.ft.
		Split Level	1,040 sq.ft.	N/A
		Tri-Level	1,040 sq.ft.	N/A
		Maximum Building Height	35 ft.	40 ft (3 story)
		Minimum Number of Parking Spaces/Unit	2	2
		Maximum Lot Coverage	35%	35%
		*refers to notes listed in section 409A below		
Section 90-409A (1)	Specific Requirements	(1) Front setback = average of setback of both adjacent lots		10 ft.
Section 90-409A (2)		(2) 10' sideyard and rear yard greenbelt with berm/fencing for non-residential		Ok except Adj to existing nonresidential parking/uses
Section 90-409A (3)				
Section 90-409A (4)		(3) Side yard building setback 25 feet for non-residential		20 ft.
Section 90-409A (5)		(4) Side yard abutting street shall not be less than 20 feet		10 ft.
Section 90-409A (6)		(5) 25' front yard and secondary front yard greenbelt setback for non-residential		20 ft.
Section 90-409A (8)		(6) Basements required		Basements not required
		(8) Minimum habitable floor 1,040 square feet/unit		900 ft./unit
Section 90-707 Section 90-708	Signs	Signs as permitted in residential districts per section 90-707		Signs as permitted in nonresidential districts per section 90-708

LEGEND

= PROPERTY OWNED BY GRACE UNIVERSITY
= PROPERTY OWNED BY CONSUMERS ENERGY
= EXISTING ON–STREET PARKING

N

0' 50' 100'

SCALE: 1" = 100'
PHOTO: USGS AERIAL FROM 2023

GRACE CHRISTIAN UNIVERSITY

PROPOSED PUD AMENDMENT / MASTER PLAN

GRACE CHRISTIAN UNIVERSITY

FOR: GRACE CHRISTIAN UNIVERSITY
ATTN: BRIAN SHERSTAD
1011 ALDON STREET
GRAND RAPIDS, MI 49509
PART OF THE SE 1/4, SECTION 11, T6N, R12W, CITY OF WYOMING, KENT COUNTY, MICHIGAN

exxel engineering, inc.
planners · engineers · surveyors
5252 Clyde Park, S.W. • Grand Rapids, MI 49509
Phone: (616) 531-3660 www.exxelengineering.com

DATE	REVISION	BY
03/05/26	REMOVED 1006 26TH ST & UPDATED PER TOWNHOME PROJECT	JDR

DRAWN BY: JDR
APPROVED BY: JSV
FILE NO.: 191238E
PROJ. ENG.: JSV
PROJ. SURV.: VAD
DATE: 12/19/2019

SHEET 1 of 1

P:\Projects\2019\191238\Drawings\191238-2026.dwg, PUD, 3/5/2026 11:33:54 AM, jroot

WYOMING PLANNING COMMISSION
AGENDA ITEM
NO. 4

DATE DISTRIBUTED: April 13, 2026

PLANNING COMMISSION DATE: April 20, 2026

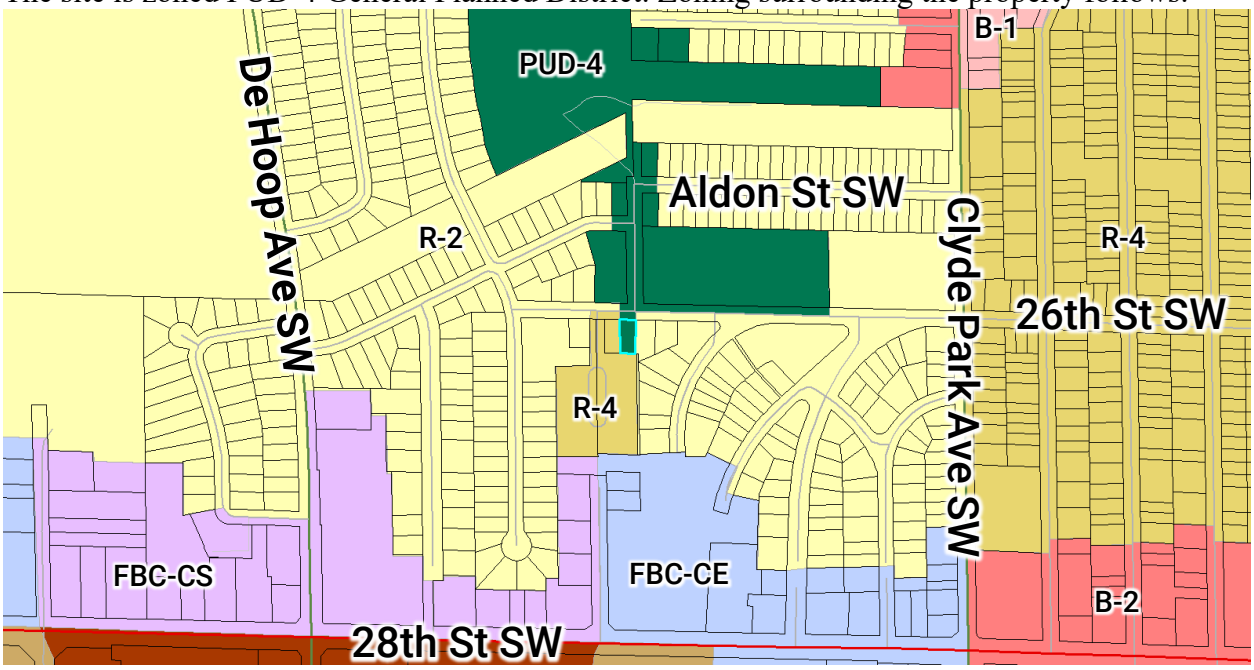
ACTION REQUESTED: Request for Rezoning from PUD-4 General Planned District to R-2 Residential District

REQUESTED BY: Grace Christian University, Brian Sherstad

REPORT PREPARED BY: Joe Blair, Planner II

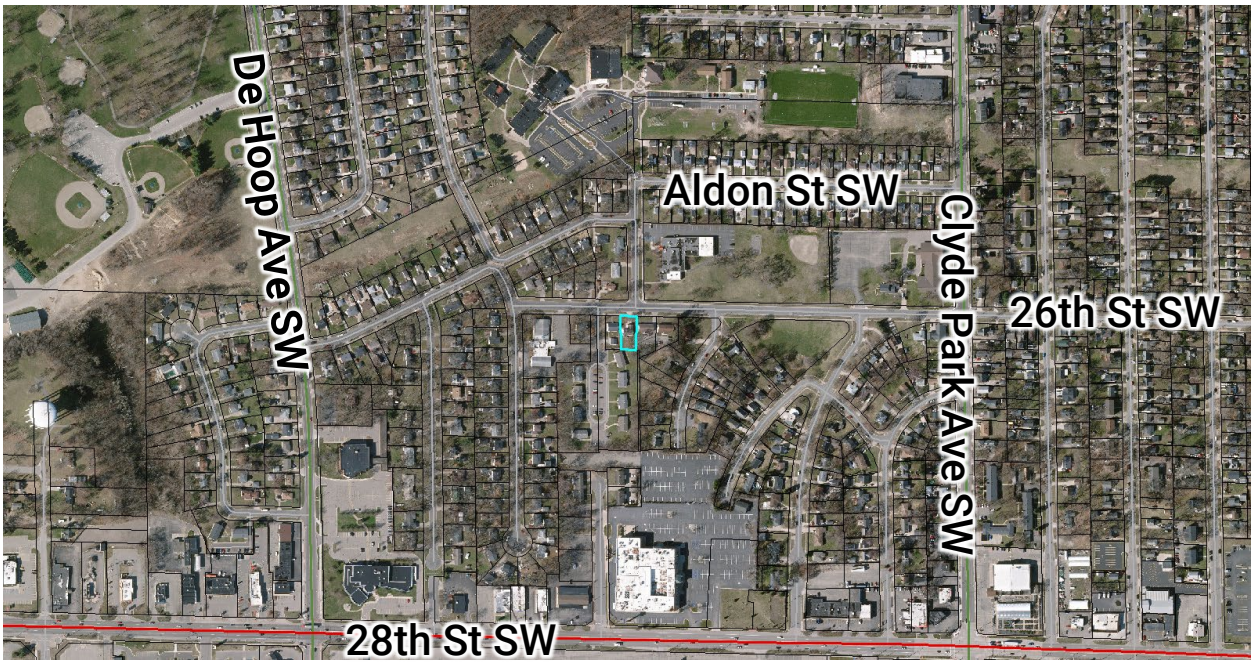
GENERAL LOCATION DESCRIPTION:
Grace Christian University is located between Michael Avenue and Clyde Park Avenue, at 1011 Aldon St SW. The campus makes up 9 parcels containing the school buildings, sports fields, student dorms, and other facilities. The request for rezoning is for the property located at 1006 26th St SW. This parcel is approximately 0.19 acres, or roughly 8,400 square feet, and is located at the corner of Rogers Lane Ave SW and 26th St SW, west of Clyde Park Ave SW and north of 28th St SW.

EXISTING ZONING CHARACTERISTICS:
The site is zoned PUD-4 General Planned District. Zoning surrounding the property follows:



North: R-2 Single Family Residential, R-4 Multi-Family Residential
South: R-2 Single Family Residential, R-4 Multi-Family Residential, FBC-CE, FBC-CS
East: R-2 Single Family Residential, R-4 Multi-Family Residential, B-2 general Business, B-1 Neighborhood Business
West: R-2 Single Family Residential, R-4 Multi-Family Residential, FBC-CS

EXISTING LAND USE:
The site currently has one residential building within the 0.19 acre parcel. Uses surrounding the sites are the following:



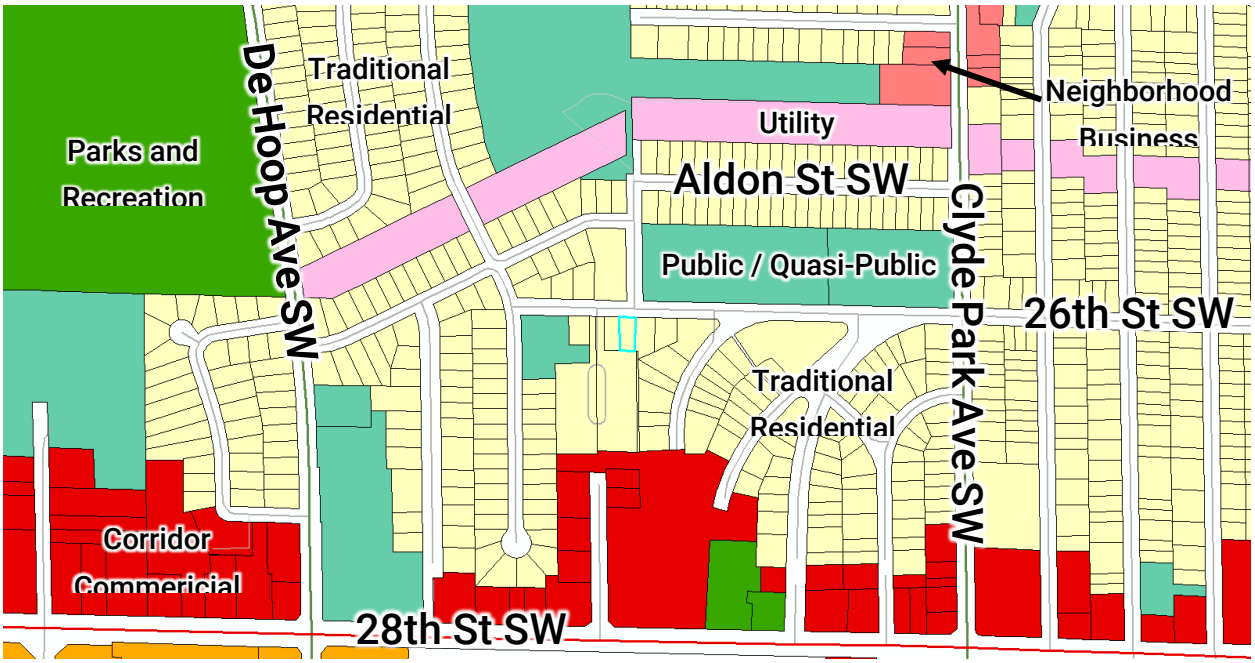
North: Civic – University, Residential – Single Family
South: Residential – Multifamily, Single Family, Commercial – Retail
East: Commercial – Retail, Residential – Single Family
West: Residential – Multifamily, Single Family

PROJECT INFORMATION:
The applicant is proposing to rezone the property at 1006 26th St SW to R-2 Residential District. The parcel is adjacent to existing R-2 zoned parcels to the east along 26th St SW. There are multiple established R-2 neighborhoods within 600 feet of the proposed rezoning, and this parcel was zoned R-2 prior to the PUD's creation in 2020. The applicant intends to sell the property to be used as a residential home.

CONFORMANCE WITH ORDINANCE STANDARDS AND FINDINGS OF FACT:

Section 90-516(6) establishes general review standards for rezonings:

(a) *Consistency with the adopted master plan*;
The City's Master Plan, Wyoming [re] Imagined was adopted in 2021. The future land use map identifies this parcel as Traditional Residential, which includes both single family and duplex dwelling units. The applicant's proposal to return this parcel to R-2 and therefore Traditional Residential, aligns with the adopted Master Plan. This standard is met.



(b) *Compatibility of the allowed uses with existing and future land uses;*
Currently, both PUD-4 and R-2 allow for single family homes. However, with the proposed rezoning, the property would be able to support redevelopment and future residential expansion that would otherwise be constrained by the size of the parcel in combination with the requirements of the PUD-4 standards. This standard is met.

(c) *Capability of the property to be served by public services*;
The property is currently served by public services and utilities.

(d) *Ability of the property to be used as currently zoned*; *and*
The parcel is currently zoned PUD-4, which allows for a number of residential, commercial, and civic uses. However, this parcel is constrained by the fact that it is separated from the remainder of the PUD and of such a small size that expansion of the University use would be difficult to achieve on the property. Additionally, the University would like to sell the home so it can return to being a residentially used parcel, which cannot currently be accomplished within the existing PUD-4 ODP. This standard is met.

(e) *Appropriateness of all uses allowed within the proposed district at the property location.*
Allowable activities within the R-2 Residential District are suitable for this site as the site currently has a single-family home located on it and was zoned R-2 prior to the PUD-4's creation in 2020. This standard is met.

STAFF COMMENTS

(A) *Process*
The Planning Commission is only considering the rezoning of this parcel. The rezoning will receive two readings at City Council.

- April 2 – Planning Commission considers rezoning request.
- May 4 – City Council hears the first reading of the rezoning request.
- June 1 – City Council hears the second reading of the rezoning request.

CONFORMANCE WITH THE CITY OF WYOMING SUSTAINABILITY PRINCIPLES:
Sustainability: The advancement and promotion, with equal priority, of environmental quality, economic strength, and social equity so that a stable and vibrant community can be assured for current and future generations.

The proposed rezoning advances economic strength and social equity through the return of a home to an established residential neighborhood.

PLANNING COMMISSION ACTION:
The Development Review Team recommends the Planning Commission grant the R-2 rezoning request at 1006 26th St SW and recommend the same to City Council.

DEVELOPMENT REVIEW TEAM:
Nicole Hofert, Deputy City Manager
Aaron Vis, Director of Public Works
Lew Manley, Building Official
Kip Snyder, Director of Public Safety
Joel Klaassen, Acting Director of Community and Economic Development

for opportunities to bring housing, maintain green space for the community, and encourage continued business investment in the community.

A vote on the motion passed 6 to 1. Commissioners Gilreath-Watts, Lamer, LaPlaca, Randall, Weller, and Zapata voted yes on the motion. Commissioner Hall voted no on the motion.

Agenda Item No. 4
Request for a rezoning from PUD-4 General Planned District to R-2 Residential District at 1006 26th St SW (Section 11) (Grace Christian University, Grace Bible College)

Blair said that the site is zoned PUD-4 General Planned District and outlined the various uses of the surrounding land.

Blair said that the applicant is proposing to rezone the property at 1006 26th St SW to R-2 Residential District. The parcel is adjacent to existing R-2 zoned parcels to the east along 26th St SW. There are multiple established R-2 neighborhoods within 600 feet of the proposed rezoning, and this parcel was zoned R-2 prior to the PUD's creation in 2020. The applicant intends to sell the property to be used as a residential home.

CONFORMANCE WITH ORDINANCE STANDARDS AND FINDINGS OF FACT:

Section 90-516(6) establishes general review standards for rezonings:

(a) *Consistency with the adopted master plan*;
The City's Master Plan, Wyoming [re] Imagined was adopted in 2021. The future land use map identifies this parcel as Traditional Residential, which includes both single family and duplex dwelling units. The applicant's proposal to return this parcel to R-2 and therefore Traditional Residential, aligns with the adopted Master Plan. This standard is met.

(b) *Compatibility of the allowed uses with existing and future land uses;*
Currently, both PUD-4 and R-2 allow for single family homes. However, with the proposed rezoning, the property would be able to support redevelopment and future residential expansion that would otherwise be constrained by the size of the parcel in combination with the requirements of the PUD-4 standards. This standard is met.

(c) *Capability of the property to be served by public services*;
The property is currently served by public services and utilities.

(d) *Ability of the property to be used as currently zoned*; *and*
The parcel is currently zoned PUD-4, which allows for multiple residential, commercial,

and civic uses. However, this parcel is constrained by the fact that it is separated from the remainder of the PUD and of such small size that expansion of the University use would be difficult to achieve on the property. Additionally, the University would like to sell the home so it can return to being a residentially used parcel, which cannot currently be accomplished within the existing PUD-4 ODP. This standard is met.

(e) *Appropriateness of all uses allowed within the proposed district at the property location.* Allowable activities within the R-2 Residential District are suitable for this site as it currently has a single-family home located on it and was zoned R-2 prior to the PUD-4's creation in 2020. This standard is met.

STAFF COMMENTS

(A) *Process*

The Planning Commission is only considering the rezoning of this parcel. The rezoning will receive two readings at City Council.

- April 21 – Planning Commission considers rezoning request.
- May 4 – City Council hears the first reading of the rezoning request.
- June 1 – City Council hears the second reading of the rezoning request.

Blair said The Development Review Team recommend the Planning Commission grant the R-2 rezoning request at 1006 26th St SW and recommend the same to City Council.

Randall opened the public hearing at 8:09PM. There was no public comment and the hearing was closed.

A motion was made by Lamer, supported by Weller to grant the R-2 rezoning request 1006 28th St SW and recommend the same to City Council.

A vote on the motion passed unanimously.

Agenda Item No. 5

Request to approve an amended Overall Development Plan for Grace Christian University at 1011 Aldon St SW (Section 11) (Grace Christian University)

Blair said the site is zoned PUD-4 General Planned District and outlined the various uses of the surrounding land.

Blair said that the applicant is not proposing a change in the land use of the parcels. The proposal is to remove a parcel from the overall PUD-4 area to sell it. In doing so, the applicant must also

update the Overall Development Plan (ODP) to reflect the new boundaries of the PUD-4, as well as update any of the calculations of open space required therein.

ALIGNMENT WITH MASTER PLAN:
The City's Master Plan, Wyoming [re] Imagined was adopted in 2021. The future land use map identifies the area as a mixture of Traditional Residential, Public/Quasi-Public and Utility. The removal of a Traditional Residential parcel from the PUD-4 area does align with the City's Master Plan as it would allow for the subject parcel to be used again as a residence.

STAFF COMMENTS:

1. Open Space: When the PUD-4 was established in 2020, the required open space percentage for non-greenfield sites was set at 20%. With the removal of the parcel at 1006 26th St SW, there is little change in the percentage of open space provided by the University, and this remains within ordinance requirements.

Blair said the Development Review Team recommends that the Planning Commission amend the Overall Development Plan for Grace Christian University, addressed at 1011 Aldon St SW.

A motion was made by LaPlaca, supported by Lamer to amend the Overall Development Plan for Grace Christian University, addressed at 1011 Aldon St SW.

A vote on the motion passed unanimously.

Agenda Item No. 6
Request to review and reaffirm the City's 2021 Master Plan, Wyoming [re] Imagined

Hyble said that The City's Master Plan, Wyoming [re] Imagined was adopted in 2021. Per the Michigan Planning Enabling Act (MCL 125.3845), Planning Commission must review the master plan every 5 years after its adoption. The Planning Commission can then determine if any amendments are needed or if a new master plan should be started. Any amendments made to the master plan require full adherence to public hearing and review requirements from the Michigan Planning Enabling Act. If no amendments are needed, the Planning Commission can reaffirm the master plan.

Hyble said this review also fulfills a renewal requirement for the Redevelopment Ready Communities (RRC) certification for the City of Wyoming.

STAFF COMMENTS:

(a) Current Plan

05/04/2026
CED/CH

ORDINANCE NO. 11-26

ORDINANCE REQUEST TO AMEND ZONING CODE ARTICLE 4C AND SECTIONS 90-420C "PURPOSE", 90-421C "QUALIFYING CONDITIONS", 90-422C "PRINCIPAL PERMITTED USES", 90-423C "PERMITTED USES AFTER SPECIAL APPROVAL", 90-424C "DEVELOPMENT STANDARDS", 90-511 "APPLICATION PROCEDURES FOR PUD-4", AND 90-512 "REVIEW STANDARDS".

THE CITY OF WYOMING ORDAINS:

Section 1. That Chapter 90, Article 4C of the Code of Ordinances, City of Wyoming, Michigan is amended to read as follows:

ARTICLE 4C. - PLANNED UNIT DEVELOPMENT ZONING DISTRICTS

PUD-1 Low Density Planned Unit Development

PUD-2 Commercial Planned Unit Development

PUD-3 Planned Health Care District

PUD-4 General Planned District

PUD-5 Planned Golf Entertainment District

The location and boundaries of the districts are hereby established on a map entitled "City of Wyoming, Michigan Zoning Map", together with all notations, which map is hereby adopted and made a part of this chapter. The zoning map may be maintained by the city in such form as shall from time to time be deemed appropriate including an electronic database or information system. Unless otherwise shown on the zoning map, the district boundary lines follow lot lines or the centerlines of streets or alleys or such lines extended and the corporate limits of the city as they existed on January 3, 1979, and as subsequently revised. If the exact location of any district boundary line cannot be determined by the zoning map, it shall be resolved by the board of zoning appeals.

Section 2. That Chapter 90, Article 4C, Section 90-420C of the Code of Ordinances, City of Wyoming, Michigan is amended to read as follows:

DIVISION 5. - PUD-5 PLANNED GOLF ENTERTAINMENT DISTRICT

Sec. 90-420C. – Purpose.

The environment of the recreational golf course has changed to necessitate a creative mixture of low-volume commercial uses that are sensitive to adjacent areas. However, golf courses are typically located within primarily residentially zoned areas, and modern golf course operations are not always suitable for typical residential zoning requirements. In order to allow diversified business recreation[1] activities centered around a primary golf course that respects adjacent neighborhoods and existing neighborhood character, the Planned Golf Entertainment District PUD-5 may be permitted.

[1] Business recreation uses are defined exclusively within this PUD as having the following three conditions:

1. Business recreation activities consist of sport uses, fitness- or movement-based activity uses, leisure-based games, training, and celebration and entertainment events.

2. All business recreation activities are private in nature, not available to be accessible to the general public without fee, membership dues, or the like.
3. Retail and restaurant activities are included within this definition only when incidental to the sport, leisure game, or event activity.

Section 3. That Chapter 90, Article 4C, Section 90-421C of the Code of Ordinances, City of Wyoming, Michigan is amended to read as follows:

Sec. 90-421C. – Qualifying conditions.

(a) *Location.* PUD's may be located in any part of the city, except that no portion of an existing PUD-1, PUD-2, or PUD-3 zoned property is eligible to be converted to a PUD-5, subject to meeting all other applicable requirements.
(b) *Purpose.* The applicant shall demonstrate that the PUD will satisfy the purpose listing in Section 90-420C.
(c) Golf Course Status. The primary use of the site shall be a golf course of at least 9 holes utilized for the sport of golf.
(d) *Size.* The PUD shall be made up of at least 40 acres for every 9-holes of golf course. For an 18-hole golf course, the requirement is 80 acres. The PUD may be comprised of more than one parcel provided the activities on all parcels fall under permitted uses or activities that meet the intent of the PUD, and all parcels that are not separated by public rights-of-way shall be merged.
(e) *Housing.* The proposed PUD shall not contain any housing units on any of the property proposed to be used for PUD activities.
(f) *Open Space and Building Coverage.* The proposed open space and building coverage on the PUD shall conform to the requirements of Table 90-424C(1).
(g) *Utilities.* The PUD shall be served by public water and sanitary sewer facilities.
(h) *Ownership and control.* The tract(s) of land for which a PUD application is submitted shall be either in single ownership or the subject of an application filed collectively by all owners of the property. A PUD applicant shall submit written documentation that the owners of all property included within the PUD have consented to the PUD application. Where property is jointly owned, the consent shall be from all owners. Written documentation shall include the signatures of all individuals with an ownership interest and the signature of an officer, member, general partner or other individual authorized to sign on behalf of any entity with an ownership interest. Consent may be demonstrated by signatures on the PUD application or may be in the form of a letter or other signed written documentation consenting to the application or authorizing the applicant to file it.
(i) *Achievement of zoning and economic harmony.* The PUD shall achieve recognizable and substantial benefits that may not be possible under the existing zoning classification(s). At least three of the following benefits shall be accrued to the community as a result of the proposed PUD:
    (1) A complementary mix of land uses or low-volume commercial types within the PUD,
    (2) Preservation of green space and natural features within the PUD,
    (3) Preservation of the character of surrounding neighborhoods,
    (4) Provision of recreational opportunities unique and attractive to the greater metropolitan region.
    (5) Coordinated redevelopment of multiple lots or parcels, and/or
    (6) Creation of a community asset that addresses adjacent neighborhood needs and feedback while serving the greater community.

Section 4. That Chapter 90, Article 4C, Section 90-422C of the Code of Ordinances, City of Wyoming, Michigan is amended to read as follows:

Sec. 90-422C. – Principal permitted uses.

(a) Clubhouses, including locker rooms and offices.
(b) Golf cart and maintenance equipment storage areas.
(c) Snack and beverage stations, incidental to golf operations.
(d) Sit-down eating and drinking establishments.
(e) Virtual golf simulators.

(f) Retail sales ancillary to the golf course use.
(g) Event centers not exceeding 1,000 sq. ft. in size.
(h) Open driving ranges.
(i) Restrooms and weather shelters.

Section 5. That Chapter 90, Article 4C, Section 90-423C of the Code of Ordinances, City of Wyoming, Michigan is amended to read as follows:

Sec. 90-423C. – Permitted uses after special approval.

(a) Tennis and pickleball courts.
(b) Miniature golf.
(c) Covered driving ranges.
(d) Bowling alleys.
(e) Arcades.
(f) Swimming pools.
(g) Retail sales ancillary to business recreation uses.
(h) Event centers larger than 1,000 sq. ft. but not exceeding 6,000 sq. ft.
(i) Warehouses ancillary to golf course retail.
(j) Workout facilities ancillary to business recreation uses.
(j) Business recreation uses similar to the provided uses in Sections 90-422C and 90-423C but not explicitly mentioned may be considered for special use approval if deemed so by the City Planner.

Section 6. That Chapter 90, Article 4C, Section 90-424C of the Code of Ordinances, City of Wyoming, Michigan is amended to read as follows:

Sec. 90-424C. – Development standards.

(a) *Setback requirements.*
    (1) Front and secondary front yard setbacks shall be 35 feet.
    (2) Side and rear yard setbacks shall be 100 feet.
    (3) For restrooms and weather shelters, the minimum setback distance shall be 35 feet from any property line.
(b) *Building lot coverage requirement.* The building lot coverage shall not exceed 1.75% of the total land area, as defined by Table 90-424C(1):

Table 90-424C(1) Permitted Building Lot Coverage for Golf Courses

Use Group	Maximum Building Lot Coverage, whichever is less		Maximum Number of Buildings	Maximum Single Building Size
	Percentage of the 1.75% total land area	Sq. Ft.		
Golf course and business recreation buildings	60%	50,000	5	50,000
Maintenance and warehouse buildings	60%	50,000	5	50,000
Incidental golf course buildings	5%	5,000	3	2,500

(1) Building coverage used for each building or structure is calculated from the ground floor building area. Decks and similar structures without a roof and attached to buildings are not included in this calculation.
(2) When two different use groups exist within a singular building, a floor plan shall be submitted with the overall development plan and site plan to demonstrate the allocation of floor space. Both uses shall each count toward the maximum square footage permitted for each use group. The

larger of the two uses will count toward the maximum number of buildings for that use group.

(3) For 9 hole courses, the maximum number of buildings is limited to 3 golf course and business recreation buildings, 3 maintenance and warehouse buildings, and 1 incidental golf course building.

(c) *Building height requirements.* The maximum building height is 35 ft with no more than two floors.

(d) *Warehouse facility requirements.* Warehouses are required to meet the following requirements:

(1) Any warehouse facility occupying more than 20,000 sq. ft. of ground floor building area or containing any overhead doors shall feature a dedicated business recreation or retail space inside the building.

(a) The dedicated business recreation or retail space included within the storage facility shall consist of at least one third of the ground floor building area of the storage facility.

(2) Overhead doors are limited to two (2) doors per building and must meet the off-street loading requirement of section 90-602.

(3) In any building with loading dock areas adjacent to residential use, the use of a minimum 10-foot berm is required to reduce visual and audio impacts from the loading dock areas. Berming shall be undulating and be located between residential uses and truck bay areas. The berming shall be included in the landscaping plan and is subject to approval by the planning commission.

(4) Deliveries or shipments shall not occur before 6:00 AM or after 10:00 PM.

(e) *Incidental building requirements.* Allowed structures include restrooms, weather shelters, food and beverage station, canopies, and similar uses as deemed by the City Planner.

(f) *Tent requirements.* Tents shall be permitted in accordance with the tent provisions of section 90-326.

(g) *Parking lot requirements.* Any designated parking areas shall be located adjacent to a principal building or major business recreation activity of the PUD.

(1) Setbacks for parking lots shall be at least 50 feet from any adjacent residentially zoned or used property.

(2) Where required parking lots or drive aisles for any use permitted in the PUD are erected, a solid fence or other barrier of material approved by the planning commission. The fence or barrier shall be a minimum of five feet in height and shall be required along parking lots or drive aisles adjacent to residentially used property.

(h) *Composting.* Composting is permitted for materials collected from golf course landscaping and maintenance activities in the PUD, such as: grass clippings, leaves, brush, and yard waste.

(1) All composting activities shall not be visible from the street and shall not be located within building setbacks, required landscape buffers, or any floodplains or wetlands.

(2) All composting areas shall be gated and screened with a masonry, solid wood, or metal fence not to exceed six feet in height.

(3) Composting operations shall be managed to prevent offensive odors detectable beyond the property boundary in congruence with section 82-63. Compost piles shall be actively managed and turned as necessary.

(4) Composting operations shall not contain any food waste, biosolids, manure, animal carcasses, hazardous or contaminated materials, or other composting unrelated to the golf course.

(i) *Exterior lighting for recreational activities.* Light shielding measures shall be taken for all exterior lighting so as to not illuminate adjacent properties. Lighting shall be located outside utility easements, and poles supporting lights shall be appropriate for the activity and no taller than 35 ft. Lighting for any recreational use, such as a driving range, shall meet the following requirements:

(1) A lighting plan shall be submitted with a site plan. This plan shall be prepared by a qualified lighting designer and demonstrate how the location, selection, and direction/aiming of any proposed lighting elements will focus light on the business recreation areas, minimizing glare and visibility from neighboring areas. The lighting plan shall include the proposed types of light

fixtures and the intensity of foot-candles at various points on the site, including nearby property lines.

(2) Lighting shall be extinguished by 10:00 PM. Timing or central control devices shall be installed to prevent the lighting from being left on later than one hour after the facility is occupied.

Section 7. That Chapter 90, Article 5, Section 90-511 of the Code of Ordinances, City of Wyoming, Michigan is amended to read as follows:

Sec. 90-511. – Application procedures for PUD-4 and PUD-5.

(a) *Pre-application conference.* Prior to submitting a formal application, the applicant shall schedule a meeting with the city planner to discuss the zoning classification of the site, the applicable requirements and materials, the qualifying conditions, the review procedures and the proposed development concept. The city planner shall notify other appropriate staff. The purpose of this meeting is to discuss the proposed project and provide relevant information to the applicant. However, no statements or representations made at this meeting shall be construed to be a commitment or an assurance of approval on the part of the city.

(b) *Preliminary PUD review and rezoning.* The following procedures shall be followed for the consideration of any PUD request.

(1) *Application.* An application for rezoning to the PUD district shall be submitted to the city planner by the owner, owner's authorized representative or option holder of the property that is the subject of the application. The application shall be filed on a form provided for that purpose, along with a fee established by the city council, and a concept plan and narrative containing the information specified in the following subsections. Incomplete applications will not be accepted and will not be processed or forwarded to the planning commission. The applicant may, at his/her sole discretion, submit a final development plan, as specified in section 90-511(c)(3), in lieu of the concept plan; provided, all other review procedures of section 90-511(b) shall be applicable.

(a) *Concept Plan.* A preliminary concept plan shall be submitted and include the following:

(i) Name, address, phone number and email address of the applicant.

(ii) Name, address, phone number and email address of the professional or firm that prepared the plan.

(iii) Legal description of the property.

(iv) North arrow, scale and title block.

(v) General location map.

(vi) Existing zoning on the subject property and all abutting properties.

(vii) Property boundary survey.

(viii) Adjacent buildings and structures within 100 feet of the property boundaries.

(ix) All perimeter streets abutting the property, including right-of-way width.

(x) Existing topographic conditions (two-foot intervals).

(xi) Existing natural features (woods, ponds, streams, wetlands, slopes greater than 12 percent).

(xii) Approximate location of existing and proposed utilities, including a preliminary utility and drainage concept plan.

(xiii) Proposed uses within the PUD.

(xiv) Conceptual layout of the development illustrating the general location of interior streets, access points to abutting streets, common open spaces, areas to be developed by type of use, parking areas and easements.

(xv) Perspective sketches or photographs of representative building types, illustrating the proposed architectural style and building materials.

(b) *Project narrative.* A written statement shall also be submitted with the application, providing the following information:

(i) Statement of how the PUD meets each of the qualifying conditions specified in section 90-417C.

(ii) Identification of the present owners of all land within the proposed project.

(iii) Explanation of the proposed character of the PUD, including a summary of acreage by use, number and type of dwelling units, gross residential density, area and percent of the project to be preserved as common open space, minimum lot sizes by type of use.

(iv) A complete description of any requested deviations from the minimum spatial or other requirements applying to the property, in accordance with section 90-419C(c).

(v) An explanation of why the proposed development should be given a density bonus, if applicable, in accordance with section 90-419C(d).

(vi) A general description of the proposed development schedule and anticipated phases.

(vii) Intended agreements, provisions and covenants to govern the use of the development, approval of building materials/architectural styles, and open space areas to be preserved.

(viii) A traffic impact analysis, per section 90-504(3), may be required, at the sole discretion of the review authority, as part of the conceptual plan submittal. Otherwise, it shall be required as part of the final site plan application.

(ix) A sewer impact study may be required, at the sole discretion of the review authority, as part of the conceptual plan submittal.

(2) *Planning commission review.* Following receipt of a complete application package, the city planner will cause the application materials to be forwarded to the Planning Commission for review. After submission of a complete application and all required plans and information, the planning commission shall schedule and conduct a public hearing and make a recommendation to the city council regarding the rezoning to PUD and the concept plan, as follows:

(a) *Notice of hearing.* Public notice of the time, date, location and purpose of the hearing shall be provided, in accordance with the requirements of the Michigan Zoning Enabling Act.

(b) *Public hearing.* The planning commission shall conduct a public hearing in accordance with its rules of procedure.

(c) *Recommendation.* Following the public hearing, the commission shall recommend to council that the preliminary concept plan and PUD zoning be approved as presented, approved with supplementary conditions, or denied. The recommendation shall be based on the standards of section 90-512.

(d) *Project representation.* The applicant or authorized representative shall be present at all meetings at which the request is to be considered. If the applicant or authorized representative is not present, the matter may be tabled.

(e) *City council action.* Upon receiving the recommendation from the planning commission, council shall take final action on the request in accordance with the following:

(f) *Public hearing.* Council shall conduct a public hearing, notice of which shall be provided in accordance with the requirements of the Michigan Zoning Enabling Act.

(g) *Action.* Following the public hearing, review of the PUD application and concept plan, and consideration of the planning commission recommendation, council shall approve, approve with supplementary conditions, or deny the preliminary concept plan, or final plan if the applicant chooses that option, and zoning change, based on the standards of section 90-512. In any case, council may table the matter at its discretion for further study.

(h) *Conditions.* Failure of the applicant to comply with any conditions of approval shall be considered a violation of this Ordinance and subject to all applicable enforcement, remedies and penalties provided for in this Ordinance.

(i) *Project representation.* The applicant or authorized representative shall be present at all meetings at which the request is to be considered. If the applicant or authorized representative is not present, the matter may be tabled.

(c) *Final PUD review.* The following procedures shall be followed for the review of the final development plan.

(1) *Timing.* An application for final development plan approval shall be filed not later than 24 months after the date of approval of the concept plan and zoning change, otherwise the concept plan approval shall be considered expired. One extension of up to 12 months may be authorized by the city planner for reason/cause. The applicant shall submit the request for extension in writing, prior to the expiration of the original approval period, to the city planner who shall make a written determination regarding the decision to extend or deny the extension. Both the request and the determination shall be made part of the record.

(2) *Pre-application conference.* Prior to submitting a formal application, the applicant shall schedule a meeting with the city planner to discuss the applicable requirements and materials, compliance with conditions that may have been imposed as part of the concept plan approval, review procedures, and conformance of the final development plan with the approved concept plan. The city planner shall notify other staff, as applicable. The purpose of this meeting is to discuss the proposed project and provide relevant information to the applicant. However, no statements or representations made at this meeting shall be construed to be a commitment or an assurance of approval on the part of the city.

(3) *Application.* An application for approval of the final development plan shall be submitted to the city planner by the property owner or owner's authorized representative. The application shall be filed on a form provided for that purpose, along with a fee established by the city council, including a final development plan and narrative containing the information specified in the following subsections. Incomplete applications will not be accepted and will not be processed or forwarded to the Planning Commission.

(a) *Final plan.* A final development plan, substantially consistent with the approved preliminary concept plan and containing all information required in section 90-504 (site plan), shall be submitted with the required application form. If required, a plat may be submitted concurrently in accordance with the subdivision requirements of this Ordinance.

(b) *Project narrative.* A project narrative shall also accompany the application and final development plan and provide the following:

(i) Proposed covenants and/or deed restrictions governing the use, design, maintenance, ownership, and control of development and common areas;

(ii) Identification of the entity responsible for maintenance of common areas;

(iii) Description of all deviations from the otherwise applicable zoning requirements;

(iv) Net and gross density of any residential component of the project;

(v) Open space calculations, identifying the gross acreage and percent of lands to be preserved as common open space, including calculations by phase of the development, if applicable;

(vi) Restrictions or requirements regarding architectural style and/or building materials;

(vii) Improvements that would be the responsibility of the developer such as construction of roads, parks, utilities, pathways, sidewalks and similar elements; and

(viii) An anticipated development schedule by phase, if applicable.

(4) *Private covenants and restrictions.*

(a) Covenants and restrictions for the property within any PUD district are required and must be recorded with the Kent County Register of Deeds prior to the approval of a plat or issuance of a building permit. These restrictions shall run with the land to ensure that, if subdivided or developed in phases, the covenants and restrictions shall still be enforced.

(b) Covenants and restrictions shall:

(i) Be based on the conditions attached to the approved PUD application;

(ii) Subject each owner or person taking title to land located within the development to the terms and conditions of the covenants and restrictions as well as any other applicable regulations;

(iii) Provide for the ownership, development, management, and maintenance of any private open space, private community parking facilities, private community meeting spaces, or other common areas, as required by section 90-419C(e); and

(iv) Establish a condominium association, homeowner's association, or other entity that can ensure sufficient funding is provided by owners or occupants of the property in the PUD to maintain all private roads and other private infrastructure, signage, sidewalks, pathways, parking areas, green spaces, recreational facilities, community buildings, pools and other amenities within the development. The documentation shall be in a form acceptable to the city planner, city manager and city attorney.

(5) *Phased projects.* If a proposed PUD is to be constructed in two (2) or more phases, final site plan approval may be granted for individual phases; provided, a complete plan for the entire development was first given concept plan approval and that each subsequent phase shall be submitted for final site plan approval and is consistent with the approved concept plan. The planning commission may require additional information beyond what is otherwise required if, in its judgment, more detailed information is necessary due to the size of the development; number of phases proposed; or the interrelationship of roads, utilities or drainage systems within the total site.

(6) *Planning commission action.* Following receipt of a complete application package, the city planner shall cause the application materials to be forwarded to the planning commission for review. Following submission of a complete application and all required plans and information, the planning commission shall consider the application and take action to approve, approve with conditions, disapprove or table the final site plan, based on the review standards of section 90-512 and the site plan standards of section 90-505. The applicant or authorized representative shall be present at all meetings at which the request is to be considered. If the applicant or authorized representative is not present, the matter may be tabled.

(7) *Performance guarantee.* In conjunction with the approval of a final development plan, the petitioner may be required to provide a performance guarantee for all public and common improvements, in accordance with section 90-504(2). The city council may require such financial assurance or the requirement to provide such financial assurance as a condition of approval of the rezoning or overall development plan for the subject site.

(a) The performance guarantee shall address (i) the time(s) for starting and completing the construction and installation of public and common improvements, especially in relationship to issuance of construction and occupancy permits for dwelling, commercial

and other units within the PUD; (ii) provide one or more assurances for funding the costs of constructing and installing those public and common improvements; and (iii) provide funding for the costs of operating, maintaining, repairing, and, as may be needed to comply with applicable legal requirements, replacing or improving those public and common improvements.

(b) The performance guarantee may include one or more of a variety of instruments, documents and methods which shall be in a form and substance acceptable to the city engineer, city planner, city attorney and city manager. The performance guarantee may include one or a combination of such approaches as, for example and not for limitation, the following, provided that together result in meeting the requirements in subsection (a).

(i) An enforceable agreement or enforceable covenants and restrictions recorded with the Kent County Register of Deeds, that no construction or occupancy permit(s) will be issued for certain components of the development until certain public or common improvements are completed.

(ii) Performance or surety bonds, payment bonds, letters of credit, escrowed funds, or other financial assurances that the city or PUD residents or property owners can access to ensure completion of the public or common improvements.

(iii) Provisions for condominium, homeowners', unit owners' or other association with the ability to levy and collect dues, assessments or other fees sufficient to fund the costs of operating, maintaining, repairing, and, as may be needed to comply with applicable legal requirements, replacing or improving those public and common improvements.

(c) It is the intent of this requirement to ensure the public and common area improvements are (i) properly constructed and installed, and (ii) properly operated, maintained, repaired, and, as may be needed to comply with applicable legal requirements, replaced or improved without costs to the city or other governmental entities and without inappropriate or unfairly apportioned costs among the owners and occupants of property within the PUD.

(d) Whether or not the performance guarantee proposed by the PUD applicant: (a) meets the requirements of this section; and (b) results in the appropriate and fair apportioning of costs will be determined by city council based on the recommendation of the planning commission, city engineer, city planner, city attorney and city manager.

(8) *Expiration.* Approval of the final site plan by the Planning Commission shall expire 12 months after the date of that approval, unless substantial construction has been commenced and is continuing. An extension of up to 12 additional months may be granted, in accordance with the requirements of section 90-503(7).

Section 8. That Chapter 90, Article 5, Section 90-512 of the Code of Ordinances, City of Wyoming, Michigan is amended to read as follows:

Sec. 90-512. - Review standards.

In considering a PUD request, the planning commission and/or city council, as applicable, shall find that the proposed development meets all applicable requirements, as well as the following general standards:

(a) PUD *purpose.* The proposed development shall be consistent with the stated purpose of this district, as found in section 90-416C for PUD-4 or section 90-420C for PUD-5.
(b) *Qualifying conditions.* The proposed development shall satisfy each of the qualifying conditions, as stated in section 90-417C for PUD-4 or section 90-421C for PUD-5.
(c) *Master plan.* The PUD shall be consistent with the recommended future land use patterns, goals, and relevant recommendations contained in the City of Wyoming Master Plan.

(d) *Surrounding uses.* The development shall be compatible with the existing and intended uses surrounding the subject property.
(e) *Natural environment.* The design and layout of the PUD shall be harmonious with the natural character of the site and surrounding area and shall employ best management practices to ensure their conservation.
(f) *Public facilities and services.* The proposed development shall not place undue burden on the capacity of public facilities and services such as, but not limited to, roads, fire and police protection, water, sanitary sewer service and drainage.
(g) *Health, safety, and welfare.* The PUD shall not contain uses or conditions of use that may be unduly injurious to the public health, safety or welfare.
(h) *Consistent with all standards and requirements.* The proposed development shall conform to all applicable requirements of this ordinance, unless specifically modified and approved, as authorized by section 90-419C(C) for PUD-4 or section 90-424C for PUD-5.
(i) *Final site plan.* The final site plan is substantially consistent with the representations made and plans shown during the prior preliminary concept plan stage of approval.
(j) *Recognizable and substantial benefits.* Approval of the PUD will result in a recognizable and substantial benefit to the users of the project and to the community which would not otherwise be feasible or achievable under conventional zoning districts. The development shall provide two or more of the benefits specified in section 90-417C(H) for PUD-4 or three or more of the benefits specified in section 90-421C for PUD-5.

Section 9. That this ordinance shall take effect on _____, 2026.

Section 10. That MuniCode shall incorporate this ordinance into the Code of Ordinances, City of Wyoming, Michigan in exactly the format provided without changing any section numbering or other provisions.

I certify that this ordinance was adopted by the City of Wyoming at a regular session of the City Council held on _____, 2026.

_____
Kelli A. VandenBerg, Wyoming City Clerk

Ordinance No. 11-26

CITY OF WYOMING

Community and Economic Development | 1155 28th St. SW, Wyoming, MI 49509
616.530.7285 | wyomingmi.gov

April 29, 2026

Ms. Kelli A. VandenBerg
City Clerk
Wyoming, MI

Subject: Request to amend Zoning Code Article 4C and Sections 90-420C "Purpose", 90-421C "Qualifying conditions", 90-422C "Principal permitted uses", 90-423C "Permitted uses after special approval", 90-424C "Development standards", 90-511 "Application procedures for PUD-4", and 90-512 "Review standards".

Planning Commission Recommendation: To approve the subject Zoning Ordinance amendments.

Dear Ms. VandenBerg,

The above referenced request was reviewed by the Wyoming Planning Commission at its regular meeting on April 21, 2026. At the meeting, a motion was made by Zapata, supported by LaPlaca, to recommend that City Council approve the proposed text amendments. The motion to approve passed 6 to 1.

A detailed review of the request is available in the attached Planning Commission minutes and supportive materials. Following, please find some general information.

Three golf courses currently operate in the City of Wyoming. All the courses are residentially zoned, which limits their growth. The proposed PUD-5 Planned Golf Entertainment District would apply to golf courses that wish to offer complementary, low-volume business recreation activities to support the primary golf course. The purpose of this PUD district is to encourage creative and innovative land development that aligns with the city's desired land use, all of which is not typically possible under traditional zoning.

Residential districts permit golf courses, but courses are required to meet the same accessory building standards as single-family residential parcels. Operating a golf course under these conditions is difficult considering the equipment needed for course maintenance and cart storage alone. These regulations have limited the growth of Wyoming golf courses in the past.

There are additional amenities typically offered by golf courses across the state, such as a wedding venue or restaurant, that allow golf courses to maintain their customer bases and overcome seasonality. Wyoming golf courses desire to offer these complementary business recreation activities that continue their status as low-volume recreational amenities in the community.

The proposed text amendments create the PUD-5 district and set qualifications, permitted uses, building allowances, and review procedures for properties that wish to offer expanded business recreation activities in addition to the primary golf course.

No comments were made during the public hearing.

In the Planning Commission meeting, Commissioner Zapata verified that a golf course could rezone for future residential development. Commissioner LaPlaca asked about the building lot coverage percentage rationale, and Commissioner Lamer asked for Maple Hill's existing lot coverage. Commissioner Weller expressed his support. Commissioner Hall voiced concerns about the ease of future housing development on existing courses, and Commissioner LaPlaca spoke about the value of recreational space. The proposed zoning code text amendments are attached.

Respectfully submitted,



Joel Klaassen, Acting Director of Community and Economic Development
Community and Economic Development Department

Cc: John Shay, City Manager

WYOMING PLANNING COMMISSION
AGENDA ITEM
NO. 3

DATE DISTRIBUTED: April 14, 2026

PLANNING COMMISSION DATE: April 21, 2026

ACTION REQUESTED: Request to amend Zoning Code Article 4C and Sections 90-420C "Purpose", 90-421C "Qualifying conditions", 90-422C "Principal permitted uses", 90-423C "Permitted uses after special approval", 90-424C "Development standards", 90-511 "Application procedures for PUD-4", and 90-512 "Review standards"

REQUESTED BY: Planning Staff

REPORT PREPARED BY: Colton Hyble, Planner I
Julian Edouard, Economic Development Specialist

GENERAL BACKGROUND:

Within the City of Wyoming, there are four Planned Unit Development (PUD) districts adopted by the City to serve both specific and general development types. The purpose of these districts is to encourage creative and innovative land development that aligns with the city's desired land use, all of which is not typically possible under traditional zoning. Three golf courses currently operate in the City of Wyoming. All the courses are residentially zoned, which limits their growth. The proposed PUD-5 Planned Golf Entertainment District would apply to golf courses that wish to offer complementary, low-volume business recreation activities to support the primary golf course.

PURPOSE FOR THE CREATION OF A NEW PUD DISTRICT:

Unique Zoning Challenges

Among the three existing courses in the City of Wyoming, all properties are residentially zoned. Golf courses are permitted in these districts as a special land use, but the courses are required to meet the same code standards as single family residential parcels. This designation constrains golf courses regarding accessory buildings, which are limited to two buildings. While this is typical for a single family parcel, golf courses typically require additional structures beyond the pro shop when considering bathrooms, maintenance, cart and similar storage, and pavilions. Currently, the code acts as a limitation to golf courses that desire the facilities to support golf course activities.

In the past, golf courses within the City have applied for, and were granted, a series of narrowly tailored variances, such as additional accessory buildings, alterations to screening requirements, or permitted signage for the primary building. Many of these variance requests

represent typical golf course operations when considering the nature of the sport and the required equipment that is expected of a modern golf course. Granting repetitive variances for a particular use essentially disqualifies a property from receiving future variances, since the conditions are no longer exceptional or extraordinary. This process has occurred on nearly all of Wyoming's courses. These variances point to the need for specialized regulations for golf courses, as this use is unlike any other residentially zoned use.

Demand and Economic Benefits

Over recent decades, the environment of recreational golf has advanced beyond a course and a simple clubhouse. To maintain a strong customer base and overcome seasonality that is inherent in the state of Michigan, many golf courses have turned to other business recreation activities complementary to a golf course. It is common to eat dinner in a restaurant, play virtual golf, or attend weddings at most golf courses across the state. Despite this, the City's zoning code does not permit these types of activities on residentially zoned properties.

All Wyoming golf courses have expressed the desire to provide these types of business recreation activities. Whether that includes a wedding venue, expanded pro shop, covered driving range, or pickleball courts, increased business recreation activity can benefit the golf course and Wyoming community. The proposed PUD will allow these types of activities if embedded within golf courses.

Neighborhood Sensitivity

Historically, golf courses have been permitted in residential areas because they preserve green space in the community, create recreational amenities, and have low-volume commercial activity. Under traditional zoning, any additional commercial activities would require a commercial zone, which permits various commercial types beyond those that complement a golf course. To ensure that any additional business recreation activities can support golf courses while maintaining the character of the neighborhood, the PUD facilitates specified uses and increased setbacks from residential properties. This permits golf courses to grow without negatively impacting neighboring communities, ultimately continuing their status as low-volume recreational amenities preserving green space.

SPECIFIC REQUIREMENTS:

Qualifications

In order to create a PUD that will benefit golf courses in the City of Wyoming, the essential qualification is a golf course as the primary use. When compared to other PUD types within the City, PUD-5 does not make an allocation for any type of housing to be included in the development. The PUD shall achieve recognizable and substantial benefits that may not be possible under existing zoning. Properties in the new district are intended to meet at least three of the following community impacts:

(1) A complementary mix of land uses or low-volume commercial types within the PUD,
(2) Preservation of green space and natural features within the PUD,
(3) Preservation of the character of surrounding neighborhoods,
(4) Provision of recreational opportunities unique and attractive to the greater metropolitan region.

(5) Coordinated redevelopment of multiple lots or parcels, and/or
(6) Creation of a community asset that addresses adjacent neighborhood needs and feedback while serving the greater community.

All application procedures and review standards will be similar to PUD-4.

Permitted Uses

To address the changing environment of golf, permitted uses within PUD-5 will create parity with both historic and modern golf course operations across the nation. Uses such as golf course retail sales, maintenance storage, and driving ranges will continue to be permitted, and expanded business recreation activities will allow golf courses to offer additional activities to their customer base. These activities include miniature golf, event centers, pickleball courts, virtual simulators, and covered driving ranges.

Building Allowances

To address the limited accessory structure allowance under current zoning, PUD-5 permits increased building coverage based on total land area. By doing so, the PUD is reducing overly burdensome regulations while ensuring golf courses maintain their valued green space. Maximum building lot coverage is 1.75% of the total land area, which can be split among business recreation buildings, maintenance and warehouse buildings, and incidental structures.

Currently, a golf course is limited to the clubhouse and two accessory buildings. PUD-5 permits a total of 13 buildings for an 18-hole golf course. This system allows flexibility tailored to the needs and specialties of each golf course.

PROPOSED ORDINANCE AMENDMENT:

Staff recommends the following attached ordinances. The proposed text amendments have been highlighted in **green** ink.

PLANNING COMMISSION ACTION:

The Development Review Team recommends that Planning Commission adopt the proposed text amendments to Zoning Code Article 4C and Sections 90-420C “Purpose”, 90-421C “Qualifying conditions”, 90-422C “Principal permitted uses”, 90-423C “Permitted uses after special approval”, 90-424C “Development standards”, 90-511 “Application procedures for PUD-4”, and 90-512 “Review standards” and recommend the same to City Council.

DEVELOPMENT REVIEW TEAM:

Nicole Hofert, Deputy City Manager
Aaron Vis, Director of Public Works
Lew Manley, Building Official
Kip Snyder, Director of Public Safety
Joel Klaassen, Acting Director of Community and Economic Development

Weller asked about screening on the north of property and if the developer planned for a fence in between the gasoline station and the housing project.

Gauss replied that the intent is to have future cross-connection for a walkway and access between the sites, so the plan is to have more of a natural barrier such as thicker hedges that does not require maintenance like a fence would.

A vote on the motion passed unanimously.

AGENDA ITEM NO. 3
Request to amend Zoning Code Article 4C and Sections 90-420C "Purpose", 90-421C "Qualifying Conditions", 90-422C "Principal Permitted Uses", 90-423C "Permitted uses after special approval", 90-424C "Development standards", 90-511 "Application procedures for PUD-4", and 90-512 "Review Standards" (Wyoming Planning Staff)

Hyble said that within the City of Wyoming, there are four Planned Unit Development (PUD) districts adopted by the City to serve both specific and general development types. The purpose of these districts is to encourage creative and innovative land development that aligns with the city's desired land use, all of which is not typically possible under traditional zoning. Three golf courses currently operate in the City of Wyoming. All the courses are residentially zoned, which limits their growth. The proposed PUD-5 Planned Golf Entertainment District would apply to golf courses that wish to offer complementary, low-volume business recreation activities to support the primary golf course.

Hyble then outlined the purpose of the creation and specific qualifications of the proposed district.

PURPOSE FOR THE CREATION OF A NEW PUD DISTRICT:
Unique Zoning Challenges

Among the three existing courses in the City of Wyoming, all properties are residentially zoned. Golf courses are permitted in these districts as a special land use, but the courses are required to meet the same code standards as single family residential parcels. This designation constrains golf courses regarding accessory buildings, which are limited to two buildings. While this is typical for a single family parcel, golf courses typically require additional structures beyond the pro shop when considering bathrooms, maintenance, cart and similar storage, and pavilions. Currently, the code acts as a limitation to golf courses that desire the facilities to support golf course activities.

In the past, golf courses within the City have applied for, and were granted, a series of narrowly tailored variances, such as additional accessory buildings, alterations to screening requirements, or permitted signage for the primary building. Many of these variance requests

represent typical golf course operations when considering the nature of the sport and the required equipment that is expected of a modern golf course. Granting repetitive variances for a particular use essentially disqualifies a property from receiving future variances, since the conditions are no longer exceptional or extraordinary. This process has occurred on nearly all of Wyoming's courses. These variances point to the need for specialized regulations for golf courses, as this use is unlike any other residentially zoned use.

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All Wyoming golf courses have expressed the desire to provide these types of business recreation activities. Whether that includes a wedding venue, expanded pro shop, covered driving range, or pickleball courts, increased business recreation activity can benefit the golf course and Wyoming community. The proposed PUD will allow these types of activities if embedded within golf courses.

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Historically, golf courses have been permitted in residential areas because they preserve green space in the community, create recreational amenities, and have low-volume commercial activity. Under traditional zoning, any additional commercial activities would require a commercial zone, which permits various commercial types beyond those that complement a golf course. To ensure that any additional business recreation activities can support golf courses while maintaining the character of the neighborhood, the PUD facilitates specified uses and increased setbacks from residential properties. This permits golf courses to grow without negatively impacting neighboring communities, ultimately continuing their status as low-volume recreational amenities preserving green space.

SPECIFIC REQUIREMENTS:

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In order to create a PUD that will benefit golf courses in the City of Wyoming, the essential qualification is a golf course as the primary use. When compared to other PUD types within the City, PUD-5 does not make an allocation for any type of housing to be included in the development. The PUD shall achieve recognizable and substantial benefits that may not be possible under existing zoning. Properties in the new district are intended to meet at least three of the following community impacts:

(1) A complementary mix of land uses or low-volume commercial types within the PUD,
(2) Preservation of green space and natural features within the PUD,

(3) Preservation of the character of surrounding neighborhoods,
(4) Provision of recreational opportunities unique and attractive to the greater metropolitan region.
(5) Coordinated redevelopment of multiple lots or parcels, and/or
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All application procedures and review standards will be similar to PUD-4.

Permitted Uses

To address the changing environment of golf, permitted uses within PUD-5 will create parity with both historic and modern golf course operations across the nation. Uses such as golf course retail sales, maintenance storage, and driving ranges will continue to be permitted, and expanded business recreation activities will allow golf courses to offer additional activities to their customer base. These activities include miniature golf, event centers, pickleball courts, virtual simulators, and covered driving ranges.

Building Allowances

To address the limited accessory structure allowance under current zoning, PUD-5 permits increased building coverage based on total land area. By doing so, the PUD is reducing overly burdensome regulations while ensuring golf courses maintain their valued green space. Maximum building lot coverage is 1.75% of the total land area, which can be split among business recreation buildings, maintenance and warehouse buildings, and incidental structures.

Currently, a golf course is limited to the clubhouse and two accessory buildings. PUD-5 permits a total of 13 buildings for an 18-hole golf course. This system allows flexibility tailored to the needs and specialties of each golf course.

Hyble said The Development Review Team recommends that Planning Commission adopt the proposed text amendments to Zoning Code Article 4C and Sections 90-420C “Purpose”, 90-421C “Qualifying conditions”, 90-422C “Principal permitted uses”, 90-423C “Permitted uses after special approval”, 90-424C “Development standards”, 90-511 “Application procedures for PUD-4”, and 90-512 “Review standards” and recommend the same to City Council.

Randall opened the public hearing at 7:55PM. There was no public comment and the hearing was closed.

A vote was made by Zapata, supported by LaPlaca to adopt the proposed text amendments to Zoning Code Article 4C and Sections 90-420C “Purpose”, 90-421C “Qualifying conditions”, 90-422C “Principal permitted uses”, 90-423C “Permitted uses after special approval”, 90-424C “Development standards”, 90-511 “Application procedures for PUD-4”, and 90-512 “Review standards” and recommend the same to City Council.

Zapata mentioned that The Pines Golf Course had previously gone before Planning Commission for a residential project. Zapata asked if these changes would preclude a golf course from doing a residential project in the future.

Hyble replied that the properties would have to rezone to the new PUD district and they can always rezone out of it for residential development.

LaPlaca asked why 1.75% lot coverage was chosen.

Hyble explained that was the percentage that was able to accommodate all the different desires of golf courses while not allowing excessive lot coverage or buildings.

Hofert said the project required significant hard work and dedication, not only from staff but also from golf course owners and the county. She noted that all parties worked together to find solutions that understand the future of golf courses and allow the City to support their continued operation.

Lamer asked staff for the existing building lot percentage on Maple Hill.

Hyble said the total lot coverage is approximately 30,000 square feet, so they would still have the ability to expand.

Lamer asked if a second floor would be considered square footage or just the footprint.

Hyble said it is based off the footprint, but building height restrictions would be enforced.

Weller stated that he considered this a good idea to keep golf courses in business and profitable.

Hall said the text amendment proposal is not compatible with the master plan, citing master plan goals to increase housing supply, diversify housing types, and use land strategically. Hall added that housing is a priority, and this district preserves large areas, prohibits housing, and would be more difficult to redevelop for housing due to public concern.

LaPlaca said he understands that perspective and stated the importance of having recreational spaces in the City. LaPlaca spoke in favor of helping golf courses grow and reducing barriers for various types of developments.

Hofert commented on the balanced nature of a desirable community and the purpose of this text amendment to support local businesses and recreational space. Hofert said the master plan looks

for opportunities to bring housing, maintain green space for the community, and encourage continued business investment in the community.

A vote on the motion passed 6 to 1. Commissioners Gilreath-Watts, Lamer, LaPlaca, Randall, Weller, and Zapata voted yes on the motion. Commissioner Hall voted no on the motion.

Agenda Item No. 4
Request for a rezoning from PUD-4 General Planned District to R-2 Residential District at 1006 26th St SW (Section 11) (Grace Christian University, Grace Bible College)

Blair said that the site is zoned PUD-4 General Planned District and outlined the various uses of the surrounding land.

Blair said that the applicant is proposing to rezone the property at 1006 26th St SW to R-2 Residential District. The parcel is adjacent to existing R-2 zoned parcels to the east along 26th St SW. There are multiple established R-2 neighborhoods within 600 feet of the proposed rezoning, and this parcel was zoned R-2 prior to the PUD's creation in 2020. The applicant intends to sell the property to be used as a residential home.

CONFORMANCE WITH ORDINANCE STANDARDS AND FINDINGS OF FACT:

Section 90-516(6) establishes general review standards for rezonings:

(a) *Consistency with the adopted master plan*;
The City's Master Plan, Wyoming [re] Imagined was adopted in 2021. The future land use map identifies this parcel as Traditional Residential, which includes both single family and duplex dwelling units. The applicant's proposal to return this parcel to R-2 and therefore Traditional Residential, aligns with the adopted Master Plan. This standard is met.

(b) *Compatibility of the allowed uses with existing and future land uses;*
Currently, both PUD-4 and R-2 allow for single family homes. However, with the proposed rezoning, the property would be able to support redevelopment and future residential expansion that would otherwise be constrained by the size of the parcel in combination with the requirements of the PUD-4 standards. This standard is met.

(c) *Capability of the property to be served by public services*;
The property is currently served by public services and utilities.

(d) *Ability of the property to be used as currently zoned*; *and*
The parcel is currently zoned PUD-4, which allows for multiple residential, commercial,

06/01/26
CM/NH

ORDINANCE NO. 12-26

ORDINANCE TO AMEND CHAPTER 2, ARTICLE IV, OF THE CODE OF ORDINANCES TO AMEND DIVISION 2, SECTION 2-258 AND SECTION 2-259 TO MODIFY EXISTING PROCUREMENT STANDARDS

THE CITY OF WYOMING ORDAINS:

Section 1. That Chapter 2, Article IV, Division 2, Section 2-258 of the Code of Ordinances, City of Wyoming, Michigan be amended to read as follows:

Sec. 2-258. Waiver of Division Provisions.

Any provision of this division may be waived by the city council whenever it is deemed to be in the best interest of the public health, safety and welfare or in the case of emergency provided the provisions of chapter XII of the Charter are followed.

The following purchases and contracts involving amounts of seven thousand five hundred dollars ($7,500.00) or more do not require competitive procurement:

- electronic, telecommunications, or information technology equipment, software or services which may not be adapted to competitive bidding

Section 2. That Chapter 2, Article IV, Division 2, Section 2-259 of the Code of Ordinances, City of Wyoming, Michigan be amended to read as follows:

Sec. 2-259. Contracts for Repairs and Services.

The procedures as established in this division for bidding shall not be required for the contracting of repairs and services when deemed necessary by the city manager; however, the city manager shall in those cases obtain the lowest and best price. No contract for repairs and services shall be authorized by the city manager except in the case of an emergency when the total price exceeds the sum of $75,000.

For services related to projects approved in the annual CIP, the city manager may approve costs associated with the project up to $250,000 before seeking authorization from council for additional spending.

Section 3. That, if codified by MuniCode, MuniCode shall incorporate this ordinance into the Code of Ordinances, City of Wyoming, Michigan in exactly the format provided without changing any section numbering or other provisions.

Section 4. That this ordinance shall take effect on _____, 2026.

I certify that this ordinance was adopted by the City of Wyoming at a regular session of the City Council held on _____, 2026.

_____
Kelli A. VandenBerg, Wyoming City Clerk

Ordinance No. 12-26
Introduced: 06.01.2026