A PROJECT OF THE
PEORIA PARK DISTRICT
PEORIA, ILLINOIS

INCLUSIVE BATHROOM & SITE IMPROVEMENTS

GLEN OAK PARK
PEORIA, ILLINOIS

PROJECT # 23-074
AUGUST 27, 2024

PROJECT MANUAL

PACKAGE #_____

PROJECT MANUAL INCLUDING SPECIFICATIONS FOR:

INCLUSIVE BATHROOM & SITE IMPROVEMENTS
GLEN OAK PARK
PEORIA, ILLINOIS

ARCHITECT/ENGINEER: MULLER 2
ATTN: MARK STROMBERG
700 N SANGAMON
CHICAGO, IL 60642
TELEPHONE: 312-432-4180

OWNER: PLEASURE DRIVEWAY AND PARK DISTRICT OF PEORIA, PEORIA, ILLINOIS

TRUSTEES:
ROBERT L. JOHNSON, SR., PRESIDENT
TIMOTHY L. BERTSCHY
STEVE MONTEZ
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PROJECT MANAGER: MARY HARDEN
PLANNING, DESIGN & CONSTRUCTION DIVISION
BRADLEY PARK EQUIPMENT SERVICE
1314 N. PARK ROAD
PEORIA, ILLINOIS 61604
TELEPHONE: (309) 686-3386

ADMINISTRATIVE STAFF:
EMILY CAHILL, EXECUTIVE DIRECTOR
BRENT WHEELER, DEPUTY DIRECTOR
MATT FREEMAN, SUPERINTENDENT OF PARKS
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BECKY FREDRICKSON, SUPERINTENDENT OF PLANNING, DESIGN AND CONSTRUCTION
SHALESSE PIE, SUPERINTENDENT OF HUMAN RESOURCES
SCOTT LOFTUS, SUPERINTENDENT OF RECREATION

****

Address all communications regarding this work to the project manager listed above.

ADVERTISEMENT FOR BIDS

Sealed bids will be received by the Peoria Park District, Peoria, Illinois, hereinafter known as the Owner, for the following project:

INCLUSIVE BATHROOM & SITE IMPROVEMENTS
GLEN OAK PARK
PEORIA, IL

It is the intent of the Owner to receive Base Bids & Alternates for the project listed above.

Sealed bids will be received until 1:30pm prevailing time on Tuesday, September 10, 2024, by the Owner, at the Peoria Park District Administrative Office, 1125 W. Lake Ave., Peoria, Illinois 61614. (The Board Room clock shall be the official time keeping device in respect to the bid submission deadline.)

An electronic file including Bid Documents is available at www.peoriaparks-planning.org at no charge. Bid Documents, including Plans, Specifications and Interpretations for this project may be obtained at the Planning, Design & Construction Department, Bradley Park Equipment Service, 1314 N. Park Road, Peoria, IL 61604. Telephone (309) 686-3386. A non-refundable plan deposit of two hundred fifty dollars ($250.00) will be charged for each printed set of Bid Documents.

A list of planholders can be obtained upon request. This information will be available up to twenty-four (24) hours prior to the scheduled bid opening time. **After that deadline, no information pertaining to the project will be given.**

A 10% Bid Bond is required, and is to be included with the Bid Proposal. The successful Bidder will be required to furnish a 100% Performance Bond and a 100% Labor and Materials Payment Bond within ten (10) days of formal Award of Contract.

The general prevailing rate of wage for the Peoria area shall be paid for each craft or type of worker needed to execute this contract or perform this work as required by the State of Illinois Department of Labor. Additionally, it is required that provisions of the Illinois Preference Act, the Illinois Drug Free Workplace Act, and the Substance Abuse Prevention on Public Works Act must be adhered to. Bidders are also advised that contract documents for this project include the non-discrimination, equal opportunity and affirmative action provisions in the Human Rights Act and rules and regulations of the Department of Human Rights. The Peoria Park District is an AA/EEO organization and encourages participation by minority and female-owned firms.

The Peoria Park District reserves the right to reject any or all bids, waive technical deficiencies, informalities or irregularities or rebid any project.

PLEASURE DRIVEWAY AND PARK DISTRICT
OF PEORIA, ILLINOIS

BY: ROBERT L. JOHNSON, SR., President

BY: ALICIA WOODWORTH, Secretary

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SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

1. INSTRUCTIONS TO BIDDERS

A. "Instructions to Bidders", AIA Document A701, 2018 Editions, published by the American Institute of Architects, including revisions adopted before date of this Project Manual, is hereby made part of these specifications with same force and effect as though set forth in full.

B. The following modifies, changes, deletes from or adds to the **Instructions to Bidders** (AIA Document A701, 2018 Edition). Where any Article of the Instructions to Bidders is modified or any Paragraph, Subparagraph or Clause thereof is modified or deleted by these Supplementary Conditions, the unaltered provisions of that Article, Paragraph, Subparagraph or Clause shall remain in effect.

C. Parenthesis ( ) indicates the appropriate section and Subparagraph of the Instructions to Bidders which each paragraph of the Supplementary Instructions to Bidders modifies or refers to.

2. PROJECT DESCRIPTION

A. The Project description generally is as follows:

1. **BASE BID: Construction of a four-stall inclusive restroom, including plumbing, mechanical and electrical, concrete sidewalk installation, and the installation of an owner owned, pre-manufactured hexagonal picnic shelter.**

2. **ALTERNATES:**
Add Alternate 1: In lieu of standard CMU use pre-face CMU with cove base on the restroom interior.

B. **PRE-BID MEETING :**

1. A pre-bid meeting will be held on Tuesday, September 3, 2024 at 10:30 am.

3. CODES AND PERMITS

A. **COSTS ASSOCIATED WITH REGULATORY COMPLIANCE**. All Work performed in connection with this Project shall be in compliance with the requirements of all applicable local, state, and federal laws, regulations, and rules, as well as the requirements of the Construction Documents. The Bid Price shall reflect all costs of compliance to those requirements, whether or not specifically stated in the Construction Documents or specific sections of the Project Manual.

B. **PERMITS/FEES**. Work shall not commence until all required building (and/or other) permits have been secured by the Contractor and copies of these permits submitted to the Owner's Representative. Cost of permits is to be included in the Bid Price.

4. BID GUARANTY

The bid must be accompanied by a Bid Guaranty which shall not be less than 10% of the amount of the Bid. At the option of the Bidder, the 10% Guaranty may be a Certified Check, Cashier's Check, or a Bid Bond. The Bid Bond shall be secured by a Guaranty or a Surety Company acceptable to the Owner. No bid will be considered unless it is accompanied by the required Guaranty. Funds must be made payable to the order of the Owner. Cash deposits will not be accepted. The Bid Guaranty shall ensure the execution of the Agreement and the furnishing of the Surety Bond or Bonds by the successful Bidder, all as required by the Contract Documents.

5. AWARD OF CONTRACT/REJECTION OF BIDS:

The Contracts will be awarded on the basis of Paragraph 5.3 of the Instructions to Bidders and Paragraph 16 of the Supplementary Instructions to Bidders. The Bidders to whom the awards are made will be notified at the earliest possible date. The Owner, however, reserves the right to reject any and all Bids, to accept any combination of base bids and alternates and to waive any technical deficiencies, informalities, or irregularities in Bids received whenever such rejection or waiver is in its interest.

No bid shall be withdrawn for a period of sixty (60) days after the opening of bids without the consent of the Owner. The failure of the Bidder to submit a Bid Bond, Certified Check or Cashier's Check in the full amount to cover all proposals bid upon shall be sufficient cause for rejection of his bid. The award will be made contingent upon submittal and evaluation of Contractor's Qualification Statement if requested, Bonds, Certificate of Insurance, Contractor Certifications, including Certification of Compliance of Listed Provisions and Laws, Peoria Park District Certificate of Equal Employment Opportunity Compliance for Contractors and Vendors, Workforce Profile, Company Ownership Certification, Minority/Women Owned Contact Sheet, Contractor/Subcontractor Workforce Plan, etc.

6. EXECUTION OF AGREEMENT:

Following the award and within ten (10) days after the prescribed forms are prepared and presented for signature by the Owner's Representative, the successful Bidder shall execute and return to the Owner's Representative the Agreement in the form included in the Contract Documents in such number of copies as the Owner may require. The Owner’s Representative will provide Notice to Proceed after all bonds and any other required documents have been received by the Park District.

7. PERFORMANCE BOND/LABOR AND MATERIAL PAYMENT BOND & INSURANCE

A. **BONDS REQUIRED**. Having satisfied all conditions of award as set forth elsewhere in these Documents, the successful Bidder shall, within ten (10) calendar days after award of contract, furnish Surety Bonds in penal sums, each not less than the amount of the Contract as awarded as security for the faithful performance of the Contract (Performance Bond), and for the payment (Labor and Materials Payment Bond) of all persons, firms or corporations to whom the Contractor may become legally indebted for labor, materials, tools, equipment or services employed or used by him in performing the work.

B. **FORM OF BONDS**. **Such bonds shall be in the same form as the samples included in the Project Manual** and shall bear the same date as or a date subsequent to that of the Agreement. The current Power of Attorney for the person who signs for any Surety Company shall be attached to such Bonds. Bonds shall be signed by a Guaranty or Surety Company acceptable to the Owner.

C. **COST OF PERFORMANCE BOND/LABOR AND MATERIAL PAYMENT BOND**. All costs for the Performance Bond/Labor and Material Payment Bond shall be included in the submitted Bid Price.

D. **INSURANCE.** Insurance requirements for this project are addressed both in the Supplementary General Conditions and in "Attachment A.6", in the "Exhibits" section of this Project Manual.

a) In respect to the property ("builders risk") insurance coverages referenced in the Supplementary General Conditions: the successful Bidder will be required to provide such coverages as the work of the Project will be accomplished by one general/prime contractor.

E. **TIME FRAMES.** The successful Bidder shall, within ten (10) days after award of contract by the Board of Trustees, submit Proof of Insurance coverages/Bonds in the form and amounts required to the Owner's Representative. Should the Bidder be unable to provide the required Proof of Insurance(s)/Bonds within the specified ten day period the Owner reserves the right, at its sole discretion, to withdraw its award of contract from that Bidder.

8. DEFAULT

A. The failure of the successful Bidders to execute the Agreement, supply the required Bonds or proof of required insurance coverage(s) within (ten) 10 days after award of contract, or within such extended period as the Owner may grant based upon reasons determined sufficient by the Owner, may constitute a default. In such case, award of contract will be transferred to the second lowest bidder.

9. CONTRACTOR'S QUALIFICATION STATEMENT

A. Contractor's Qualification Statement (AIA Document 305) shall be submitted by low bidder for evaluation prior to award of contract if so requested by the Owner or his representatives.

10. LIST OF SUBCONTRACTORS/PRODUCT & EQUIPMENT SUBSTITUTIONS

A. Each Bidder shall submit a "SUBCONTRACTORS LIST" proposed to be used in the execution of the Work. If there will be no subcontractors, the Bidder shall state "No Subcontractors" on this form. The completed form is due with the Bid Proposal.

1) Identify the trade name, address, telephone number, and category of work of each subcontractor.

2) Failure to submit the "Subcontractors List" with the Bid Proposal may result in the rejection of the Bid.

3) Delete Subparagraphs (6.3.1.1) from AIA A701.

B. The Bidder, by submission of a signed bid form, agrees to install all products and equipment by brand name or names specified in the Technical Specifications sections of this Project Manual. "Or equal" substitutions will be allowed only if approved in writing prior to the bid opening and listed in the "Substitutions" section of the Bid Form.

11. CONTRACT ADMINISTRATION FORMS/COSTS OF FORMS

A. **REQUIRED FORMS**. The following AIA forms will be used (AIA forms will be supplied by the Owner if requested, and charged to the Contractor at cost) in the administration of the project:

1) **AIA Document A310**: "Bid Bond", February 1970 edition

2) **AIA Document A305**: "Contractor's Qualification Statement", 1986 edition

3) **AIA Document G702**: "Application and Certificate of Payment", May 1992 edition

4) **AIA Document G703**: "Continuation Sheet", May 1992 edition

B. **OTHER FORMS**. Other contract administration forms (to be provided by the Owner unless otherwise noted) required for use in the Project are:

1) **Subcontractors List**

2) **Contractor's Affidavit**

3) **Performance Bond**

4) **Labor and Material Payment Bond**

5) **Lien Waiver Forms**

6) **Certified Payroll Form**

Please Note: Illinois State Law has changed. As a Contractor on a public works project, Contractor must submit certified payroll directly to the Illinois Department of Labor. See details at **https://www2.illinois.gov/idol/laws-rules/conmed/pages/prevailing-wage-portal.aspx**

The first time submitting certified payroll to this site requires additional set-up time and specialized forms that must be used.

After submitting certified payroll directly to the Illinois Department of Labor, Contractor will receive a PDF proof of submittal. A copy of this PDF proof of submittal is required with pay applications to Owner.

7) Insurance Forms: As required in Attachment A (at end of Project Manual) (will not be provided by Owner)

8) Agreement Between Owner and Contractor

Examples of these forms are included in the Project Manual.

12. CONSTRUCTION TIME AND LIQUIDATED DAMAGES CLAUSE:

PROJECT COMPLETION. The Agreement will include the following paragraph(s) or language substantially the same, regarding construction time and liquidated damages:

1) LIQUIDATED DAMAGES: Owner and Contractor recognize that time is of the essence of this Agreement and that Owner will suffer financial loss if the Work is not Substantially Complete within the time specified below, plus any extensions thereof allowed in accordance with Article 8 of the General Conditions. They also recognize the delays, expense and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time.

2) Accordingly, instead of requiring any such proof, Owner and Contractor agree that as Liquidated Damages for delay (but not as a penalty) Contractor shall pay Owner TWO HUNDRED AND FIFTY DOLLARS ($250.00) for each calendar day that expires after two hundred forty-eight calendar days from Notice of Award until Substantial Completion is attained. The work is tentatively scheduled to begin on September 26, 2024 and be at Substantial Completion by June 1, 2025.

3) After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work necessary to achieve Final Completion within ten (10) calendar days or any proper extension thereof granted by Owner, Contractor shall pay Owner TWO HUNDRED AND FIFTY DOLLARS ($250.00) dollars for each day that expires after the time specified.

4) Owner and Contractor agree that the per day liquidated damage amounts set forth in subparagraphs "2" and "3" of this section constitute a reasonable forecast of the financial losses, actual costs and increased expenses the Owner may incur as a result of delayed Substantial or Final Completion of the Project.

13. PROJECT MANUAL/PLANS & SITE VISITATION

A. A set of Bid Documents may be examined, at no charge, at the office of the Owner's Representative.

B. **PLAN DEPOSIT**. An electronic file including Bid Documents is available at www.peoriaparks-planning.org at no charge. A printed set of Bid Documents, including Plans, Specifications and Interpretations for this project may be obtained at the Planning, Design & Construction Department, Bradley Park Equipment Service, 1314 N. Park Road, Peoria, IL 61604. Telephone (309)686-3386. A non-refundable plan deposit of two hundred fifty dollars ($250.00) will be charged for each printed set of Bid Documents.

C. **FAMILIARITY WITH BID DOCUMENTS & SITE VISITATION**. Bidders, by submission of their Bids, represent that they have visited the site to acquaint themselves with the local conditions in which the Work is to occur, and that they are familiar with all the requirements of the Project, as defined in the Project Manual and the Plan(s).

14. OTHER MODIFICATIONS TO AIA-701/OTHER CONDITIONS

A. Add the following sentence to **(4.1.7**): "Bidder shall submit two (2) completed copies of Bid Form and retain one (1) copy for his files."

B. Delete **(4.2.1)**

C. Delete Section **(6.2)** - "Owner's Financial Capability"

D. In reference to (**7.2.1**), the Peoria Park District reserves the right of final approval of bonding companies. Replace the first Sentence with "The Bidder shall deliver the required bonds to the Owner not later than ten days following the date of execution of the Contract."

E. Delete paragraph **(7.1.3).**

15. EQUAL EMPLOYMENT OPPORTUNITY/SEXUAL HARASSMENT

A. It is a goal of the Peoria Park District to encourage participation of minorities and women on Peoria Park District construction projects through contracts and workforce. Good Faith Effort must be made to encourage the use of minority and women owned businesses as sub-contractors and suppliers on the project.

On all bids $50,000.00 and over, see requirements listed in **Attachment B "Solicitation and Hiring for Qualifying Construction Contracts & Forms"**.

On all bids less than $50,000.00, complete and submit the following listed forms (provided in Attachment B) with the Bid. Failure to submit the forms may result in rejection of the bid.

1. "**Peoria Park District Certificate of Equal Employment Opportunity Compliance for Contractors and**

Vendors" Form

2. "**Workforce Profile**" Form

3. **"Company Ownership Certification"** Form

B. Effective July 1, 1993, every party to a public contract and every party bidding on public contracts is required to have a written **"Sexual Harassment Policy".** The Sexual Harassment Policy must contain:

1) A definition of sexual harassment under state law;

2) A description of sexual harassment utilizing examples;

3) A formalized complaint procedure;

4) A statement of victim's rights;

5) Directions on how to contact the Illinois Department of Human Rights **- Illinois companies**. Out-of-State companies must include directions on how to contact the enforcement agency within their state. Companies that issue a standard policy for all business locations must prepare an addendum providing directions on how to contact the appropriate enforcement agency.

6) A recitation that there cannot be any retaliation against employees who elect to file charges.

Recommendation: Your **"Sexual Harassment Policy"** should be drafted in language easy to understand and any revisions should be reviewed by legal counsel. A copy of your policy should be posted in a prominent and accessible location to assure all employees will be notified of the company's position.

In order to conduct business with the Peoria Park District, you must have a written "Sexual Harassment Policy" that conforms to the Act.

FAILURE TO DO SO WILL DISQUALIFY YOU AS AN ELIGIBLE VENDOR.

16. BID SUBMISSION

A. **DATE, TIME & PLACE OF RECEIVING BIDS**. Bids will be received until the date and time listed in the "Advertisement for Bids", at which time they will be publicly opened, read aloud and recorded. The Bid Opening will be held at the place listed in the "Advertisement for Bids".

B. **REQUIRED ITEMS**. The following items must be included as part of the "BID":

1) Two (2) signed copies of the **BID FORM**. (Retain the third copy for your files.)

2) The **SUBCONTRACTORS LIST**. (Submit form and state "No Subcontractors" on the form, if none will be used.)

3) The **PEORIA PARK DISTRICT CERTIFICATE OF EQUAL EMPLOYMENT OPPORTUNITY COMPLIANCE FOR CONTRACTORS AND VENDORS** form.

4) The **WORKFORCE PROFILE** form.

5) The **COMPANY OWNERSHIP CERTIFICATION** form.

6) The **CERTIFICATION OF COMPLIANCE OF THE LISTED PROVISIONS AND LAWS** form.

7) Completed **W-9.**

8) The **BID GUARANTY.**

9) If the bid is over $50,000.00, the **MINORITY/WOMEN OWNED CONTACT SHEET** form**.**

10**)** If the bid is over $50,000.00, the **CONTRACTOR/SUBCONTRACTOR WORKFORCE PLAN** form.

C. **BID SUBMISSION**. The "BID" shall be enclosed in envelopes (outer and inner), both of which shall be sealed and clearly labeled with the following information, in order to prevent premature opening of the bid:

- "PROPOSAL"
- NAME OF PROJECT
- NAME OF BIDDER
- DATE/TIME OF BID OPENING

END OF SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

Bid From: _____

PROJECT NO. 23-074
BID FOR: INCLUSIVE BATHROOM & SITE IMPROVEMENTS
LOCATION: GLEN OAK PARK

BID FORM

BID TO: PEORIA PARK DISTRICT

UNDERSIGNED:

1. Acknowledges receipt of:

   A. Project Manual and Drawings for:

   _____

   B. Addenda: No. _____ through No. _____

2. Has examined facility and the bid documents and shall be responsible for performing work specifically required of him by all parts of bidding documents including specifications for entire project, even though such work may be included as related requirements specified in other divisions or sections.

3. And agrees to enter into and execute Contract with Owner, if awarded on basis of this bid, and to:

   A. Furnish Bonds and Insurance required by the Bidding & Contract Documents.

   B. Accomplish work in accord with Contract.

   C. Complete work within specified Contract time.

4. **CONTRACT TIME**: Contractor agrees to Substantially Complete ALL WORK as required by the Contract Documents per the Supplementary General Conditions and Supplementary Instructions to Bidders.

5. **BASE BIDS**:
   A. Base Bid:
   Bidder agrees to perform all building and site work, as set forth in the Project Manual and Drawings for the sum of:

   _____ Dollars ($_____.____)

6. **ALTERNATES:**
   Bidder agrees to perform all building and/or site work items as set forth below. The prices submitted may be accepted either at the time of Base Bid approval or up to no later than ninety (90) days after award of the Bid; however, if not approved at the time of the award of the Base Bid, the contract times as set forth in the Project Manual and Drawings will be adjusted to compensate for the additional time taken in award of the Alternate:

   A. Add Alternate #1: In lieu of standard CMU use pre-face CMU with cove base on the restroom interior.

_____

_____ Dollars ($_____._____)

7. **PROPOSED SUBSTITUTION LIST:**

Base Bid(s) and Alternates are understood to include only those product brands, items, and elements which are specified in the Bid Documents. The following is a list of substitute products, equipment or methods of construction which the Bidder proposes to furnish on this project, with difference in price being added or deducted from Base Bid(s).

Bidder understands that acceptance of any proposed substitution which has not been approved as an "equal" to the product brand, item, or element specified prior to bid opening is at Owner's option. Approval or rejection of any substitutions listed below will be indicated before executing Contract.

ITEM	ADD	DEDUCT
_____	$_____	$_____
_____	$_____	$_____
_____	$_____	$_____

8. **BIDDERS CHECKLIST:**

Did you visit the site?	Yes	No
Is Bid Security enclosed? (If applicable)	Yes	No
Is Peoria Park District Certificate of Equal Employment Opportunity Compliance for Contractors enclosed?	Yes	No
Is Workforce Profile enclosed?	Yes	No
Is Company Ownership Certification enclosed?	Yes	No
If the bid is $50,000.00 or over, the Minority/Women Owned Contact Sheet enclosed?	Yes	No
If the bid is $50,000.00 or over, the Contractor/Subcontractor Workforce Plan enclosed?	Yes	No
Is Subcontractors List enclosed?	Yes	No
Is Certification of Compliance of the Listed Provisions and Laws form enclosed?	Yes	No
Is a completed W-9 enclosed?	Yes	No

9. **BIDDER INFORMATION**:

Bid From: _____

PROJECT NO. 23-074
BID FOR: INCLUSIVE BATHROOM & SITE IMPROVEMENTS
LOCATION: GLEN OAK PARK

NAME OF BIDDER:_____

ADDRESS: _____

CITY, STATE, ZIP: _____

TELEPHONE NO.: _____

BY: _____
(Signature of Authorized Official)

TITLE: _____

BIDDER'S SEAL

WITNESS: _____

END OF BID FORM

SUBCONTRACTORS LIST

The following tabulation of Subcontractors shall be attached and made a condition of the Bid. The Bidder expressly understands and agrees to the following provisions:

A. If awarded a Contract as a result of this Bid, the subcontractors used in the prosecution of the work will be those listed below.
B. The following list includes all subcontractors, known at the time of the Bid, who will perform work on this project.
C. The subcontractors listed below are financially responsible and are qualified to perform the work required.
D. The subcontractors listed below comply with the requirements of the Contract Documents.
E. Any substitutions in the subcontractors listed below shall be requested in writing by the Contractor and must be approved in writing by the Owner. No sub-subcontractors will be allowed unless specifically stated on the form. All pertinent financial, performance, insurance and other applicable information shall be submitted with the request for substitution(s). Owner shall respond to such requests within 14 calendar days following the submission of all necessary information to the full satisfaction of the Owner.
F. Failure to submit the list of Subcontractors as stated herein shall constitute a material variation from the Invitation to Bid; and any such Bid may be rejected by the Owner.

Subcontractor Name	Telephone/Email	Area of Work	Minority/Women Owned Business (Yes/No)	Dollar Amount of Contract

BIDDER: _____

END OF SUBCONTRACTORS LIST

CERTIFICATION OF COMPLIANCE

OF THE LISTED PROVISIONS AND LAWS

1) Illinois Drug Free Workplace Act of 1991

2) The Substance Abuse Prevention on Public Works Act Public Act 95-0635:
Prohibits the use of drugs and alcohol while performing work on a public works project.

The Contractor/Subcontractor has signed collective bargaining agreement for all of its employees that deal with the subject matter or the Contractor/Subcontractor has a prevention program that meets or exceeds the requirements of the Public Act for all employees not covered by a collective bargaining agreement.

3) Safety Compliance:
Contractor/Subcontractors will comply with any and all prevailing occupational safety and health standards. Such compliance may include a training component or require a written program of compliance.

4) Illinois Criminal Code, Illinois Compiled Statutes 720 ILCS 5/33E-3 and 5/33E-4:
Contractor/Subcontractor has not been barred from bidding on public contract as a result of bid rigging or bid rotating.

The undersigned representative of the Contractor/Vendor hereby certifies to comply with the laws and provisions listed above.

_____
Contractor/Subcontractor

_____
Name of Authorized Representative (type or print)

_____
Signature of Authorized Representative

_____
Date

Form **W-9**
(Rev. March 2024)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

Go to *www.irs.gov/FormW9* for instructions and the latest information.

Give form to the requester. Do not send to the IRS.

Before you begin. For guidance related to the purpose of Form W-9, see *Purpose of Form*, below.

Print or type. See ***Specific Instructions*** on page 3.

1 Name of entity/individual. An entry is required. (For a sole proprietor or disregarded entity, enter the owner's name on line 1, and enter the business/disregarded entity's name on line 2.)

2 Business name/disregarded entity name, if different from above.

3a Check the appropriate box for federal tax classification of the entity/individual whose name is entered on line 1. Check only **one** of the following seven boxes.

☐ Individual/sole proprietor ☐ C corporation ☐ S corporation ☐ Partnership ☐ Trust/estate

☐ LLC. Enter the tax classification (C = C corporation, S = S corporation, P = Partnership) . . . . .

Note: Check the "LLC" box above and, in the entry space, enter the appropriate code (C, S, or P) for the tax classification of the LLC, unless it is a disregarded entity. A disregarded entity should instead check the appropriate box for the tax classification of its owner.

☐ Other (see instructions)

3b If on line 3a you checked "Partnership" or "Trust/estate," or checked "LLC" and entered "P" as its tax classification, and you are providing this form to a partnership, trust, or estate in which you have an ownership interest, check this box if you have any foreign partners, owners, or beneficiaries. See instructions . . . . . ☐

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any)

Exemption from Foreign Account Tax Compliance Act (FATCA) reporting code (if any)

(Applies to accounts maintained outside the United States.)

5 Address (number, street, and apt. or suite no.). See instructions.

Requester's name and address (optional)

6 City, state, and ZIP code

7 List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. See also *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number

			–		–				

or

Employer identification number

		–							

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and, generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here	**Signature of U.S. person**	**Date**

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to *www.irs.gov/FormW9*.

What's New

Line 3a has been modified to clarify how a disregarded entity completes this line. An LLC that is a disregarded entity should check the appropriate box for the tax classification of its owner. Otherwise, it should check the "LLC" box and enter its appropriate tax classification.

New line 3b has been added to this form. A flow-through entity is required to complete this line to indicate that it has direct or indirect foreign partners, owners, or beneficiaries when it provides the Form W-9 to another flow-through entity in which it has an ownership interest. This change is intended to provide a flow-through entity with information regarding the status of its indirect foreign partners, owners, or beneficiaries, so that it can satisfy any applicable reporting requirements. For example, a partnership that has any indirect foreign partners may be required to complete Schedules K-2 and K-3. See the Partnership Instructions for Schedules K-2 and K-3 (Form 1065).

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS is giving you this form because they

must obtain your correct taxpayer identification number (TIN), which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid).
- Form 1099-DIV (dividends, including those from stocks or mutual funds).
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds).
- Form 1099-NEC (nonemployee compensation).
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers).
- Form 1099-S (proceeds from real estate transactions).
- Form 1099-K (merchant card and third-party network transactions).
- Form 1098 (home mortgage interest), 1098-E (student loan interest), and 1098-T (tuition).
- Form 1099-C (canceled debt).
- Form 1099-A (acquisition or abandonment of secured property).

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

Caution: If you don't return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See *What is backup withholding*, later.

By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued);

2. Certify that you are not subject to backup withholding; or

3. Claim exemption from backup withholding if you are a U.S. exempt payee; and

4. Certify to your non-foreign status for purposes of withholding under chapter 3 or 4 of the Code (if applicable); and

5. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting is correct. See *What Is FATCA Reporting*, later, for further information.

Note: If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien;
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;
- An estate (other than a foreign estate); or
- A domestic trust (as defined in Regulations section 301.7701-7).

Establishing U.S. status for purposes of chapter 3 and chapter 4 withholding. Payments made to foreign persons, including certain distributions, allocations of income, or transfers of sales proceeds, may be subject to withholding under chapter 3 or chapter 4 of the Code (sections 1441–1474). Under those rules, if a Form W-9 or other certification of non-foreign status has not been received, a withholding agent, transferee, or partnership (payor) generally applies presumption rules that may require the payor to withhold applicable tax from the recipient, owner, transferor, or partner (payee). See Pub. 515, Withholding of Tax on Nonresident Aliens and Foreign Entities.

The following persons must provide Form W-9 to the payor for purposes of establishing its non-foreign status.

- In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the disregarded entity.
- In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the grantor trust.
- In the case of a U.S. trust (other than a grantor trust), the U.S. trust and not the beneficiaries of the trust.

See Pub. 515 for more information on providing a Form W-9 or a certification of non-foreign status to avoid withholding.

Foreign person. If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person (under Regulations section 1.1441-1(b)(2)(iv) or other applicable section for chapter 3 or 4 purposes), do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Pub. 515). If you are a qualified foreign pension fund under Regulations section 1.897(l)-1(d), or a partnership that is wholly owned by qualified foreign pension funds, that is treated as a non-foreign person for purposes of section 1445 withholding, do not use Form W-9. Instead, use Form W-8EXP (or other certification of non-foreign status).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a saving clause. Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items.

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.

2. The treaty article addressing the income.

3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.

4. The type and amount of income that qualifies for the exemption from tax.

5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if their stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first Protocol) and is relying on this exception to claim an exemption from tax on their scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

Backup Withholding

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 24% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include, but are not limited to, interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third-party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester;

2. You do not certify your TIN when required (see the instructions for Part II for details);

3. The IRS tells the requester that you furnished an incorrect TIN;

4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only); or

5. You do not certify to the requester that you are not subject to backup withholding, as described in item 4 under "*By signing the filled-out form*" above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code*, later, and the separate Instructions for the Requester of Form W-9 for more information.

See also *Establishing U.S. status for purposes of chapter 3 and chapter 4 withholding*, earlier.

What Is FATCA Reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all U.S. account holders that are specified U.S. persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code*, later, and the Instructions for the Requester of Form W-9 for more information.

Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you are no longer tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account, for example, if the grantor of a grantor trust dies.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of $50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a $500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Line 1

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account (other than an account maintained by a foreign financial institution (FFI)), list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9. If you are providing Form W-9 to an FFI to document a joint account, each holder of the account that is a U.S. person must provide a Form W-9.

• **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

Note for ITIN applicant: Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040 you filed with your application.

• **Sole proprietor.** Enter your individual name as shown on your Form 1040 on line 1. Enter your business, trade, or "doing business as" (DBA) name on line 2.

• **Partnership, C corporation, S corporation, or LLC, other than a disregarded entity.** Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2.

• **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. Enter any business, trade, or DBA name on line 2.

• **Disregarded entity.** In general, a business entity that has a single owner, including an LLC, and is not a corporation, is disregarded as an entity separate from its owner (a disregarded entity). See Regulations section 301.7701-2(c)(2). A disregarded entity should check the appropriate box for the tax classification of its owner. Enter the owner's name on line 1. The name of the owner entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on line 2. If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

Line 2

If you have a business name, trade name, DBA name, or disregarded entity name, enter it on line 2.

Line 3a

Check the appropriate box on line 3a for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box on line 3a.

IF the entity/individual on line 1 is a(n) . . .	THEN check the box for . . .
• Corporation	Corporation.
• Individual or • Sole proprietorship	Individual/sole proprietor.
• LLC classified as a partnership for U.S. federal tax purposes or • LLC that has filed Form 8832 or 2553 electing to be taxed as a corporation	Limited liability company and enter the appropriate tax classification: P = Partnership, C = C corporation, or S = S corporation.
• Partnership	Partnership.
• Trust/estate	Trust/estate.

Line 3b

Check this box if you are a partnership (including an LLC classified as a partnership for U.S. federal tax purposes), trust, or estate that has any foreign partners, owners, or beneficiaries, and you are providing this form to a partnership, trust, or estate, in which you have an ownership interest. You must check the box on line 3b if you receive a Form W-8 (or documentary evidence) from any partner, owner, or beneficiary establishing foreign status or if you receive a Form W-9 from any partner, owner, or beneficiary that has checked the box on line 3b.

Note: A partnership that provides a Form W-9 and checks box 3b may be required to complete Schedules K-2 and K-3 (Form 1065). For more information, see the Partnership Instructions for Schedules K-2 and K-3 (Form 1065).

If you are required to complete line 3b but fail to do so, you may not receive the information necessary to file a correct information return with the IRS or furnish a correct payee statement to your partners or beneficiaries. See, for example, sections 6698, 6722, and 6724 for penalties that may apply.

Line 4 Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space on line 4 any code(s) that may apply to you.

Exempt payee code.

• Generally, individuals (including sole proprietors) are not exempt from backup withholding.

• Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.

• Corporations are not exempt from backup withholding for payments made in settlement of payment card or third-party network transactions.

• Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space on line 4.

1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2).

2—The United States or any of its agencies or instrumentalities.

3—A state, the District of Columbia, a U.S. commonwealth or territory, or any of their political subdivisions or instrumentalities.

4—A foreign government or any of its political subdivisions, agencies, or instrumentalities.

5—A corporation.

6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or territory.

7—A futures commission merchant registered with the Commodity Futures Trading Commission.

8—A real estate investment trust.

9—An entity registered at all times during the tax year under the Investment Company Act of 1940.

10—A common trust fund operated by a bank under section 584(a).

11—A financial institution as defined under section 581.

12—A middleman known in the investment community as a nominee or custodian.

13—A trust exempt from tax under section 664 or described in section 4947.

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for . . .	THEN the payment is exempt for . . .
• Interest and dividend payments	All exempt payees except for 7.
• Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
• Barter exchange transactions and patronage dividends	Exempt payees 1 through 4.
• Payments over $600 required to be reported and direct sales over $5,000[1]	Generally, exempt payees 1 through 5.[2]
• Payments made in settlement of payment card or third-party network transactions	Exempt payees 1 through 4.

[1] See Form 1099-MISC, Miscellaneous Information, and its instructions.

[2] However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

Exemption from FATCA reporting code. The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) entered on the line for a FATCA exemption code.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37).

B—The United States or any of its agencies or instrumentalities.

C—A state, the District of Columbia, a U.S. commonwealth or territory, or any of their political subdivisions or instrumentalities.

D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i).

E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i).

F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state.

G—A real estate investment trust.

H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940.

I—A common trust fund as defined in section 584(a).

J—A bank as defined in section 581.

K—A broker.

L—A trust exempt from tax under section 664 or described in section 4947(a)(1).

M—A tax-exempt trust under a section 403(b) plan or section 457(g) plan.

Note: You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns. If this address differs from the one the requester already has on file, enter "NEW" at the top. If a new address is provided, there is still a chance the old address will be used until the payor changes your address in their records.

Line 6

Enter your city, state, and ZIP code.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have, and are not eligible to get, an SSN, your TIN is your IRS ITIN. Enter it in the entry space for the Social security number. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN.

If you are a single-member LLC that is disregarded as an entity separate from its owner, enter the owner's SSN (or EIN, if the owner has one). If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note: See *What Name and Number To Give the Requester*, later, for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at *www.SSA.gov*. You may also get this form by calling 800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at *www.irs.gov/EIN*. Go to *www.irs.gov/Forms* to view, download, or print Form W-7 and/or Form SS-4. Or, you can go to *www.irs.gov/OrderForms* to place an order and have Form W-7 and/or Form SS-4 mailed to you within 15 business days.

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and enter "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, you will generally have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note: Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon. See also *Establishing U.S. status for purposes of chapter 3 and chapter 4 withholding*, earlier, for when you may instead be subject to withholding under chapter 3 or 4 of the Code.

Caution: A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, 4, or 5 below indicates otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code*, earlier.

Signature requirements. Complete the certification as indicated in items 1 through 5 below.

1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983. You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions. You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third-party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), ABLE accounts (under section 529A), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account) other than an account maintained by an FFI	The actual owner of the account or, if combined funds, the first individual on the account[1]
3. Two or more U.S. persons (joint account maintained by an FFI)	Each holder of the account
4. Custodial account of a minor (Uniform Gift to Minors Act)	The minor[2]
5. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee[1]
b. So-called trust account that is not a legal or valid trust under state law	The actual owner[1]
6. Sole proprietorship or disregarded entity owned by an individual	The owner[3]
7. Grantor trust filing under Optional Filing Method 1 (see Regulations section 1.671-4(b)(2)(i)(A))**	The grantor*
8. Disregarded entity not owned by an individual	The owner
9. A valid trust, estate, or pension trust	Legal entity[4]
10. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
11. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
12. Partnership or multi-member LLC	The partnership
13. A broker or registered nominee	The broker or nominee
14. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
15. Grantor trust filing Form 1041 or under the Optional Filing Method 2, requiring Form 1099 (see Regulations section 1.671-4(b)(2)(i)(B))**	The trust

[1] List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

[2] Circle the minor's name and furnish the minor's SSN.

[3] You must show your individual name on line 1, and enter your business or DBA name, if any, on line 2. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

[4] List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.)

* **Note:** The grantor must also provide a Form W-9 to the trustee of the trust.

** For more information on optional filing methods for grantor trusts, see the Instructions for Form 1041.

Note: If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records From Identity Theft

Identity theft occurs when someone uses your personal information, such as your name, SSN, or other identifying information, without your permission to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax return preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity, or a questionable credit report, contact the IRS Identity Theft Hotline at 800-908-4490 or submit Form 14039.

For more information, see Pub. 5027, Identity Theft Information for Taxpayers.

Victims of identity theft who are experiencing economic harm or a systemic problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 877-777-4778 or TTY/TDD 800-829-4059.

Protect yourself from suspicious emails or phishing schemes. Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to *phishing@irs.gov*. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 800-366-4484. You can forward suspicious emails to the Federal Trade Commission at *spam@uce.gov* or report them at *www.ftc.gov/complaint*. You can contact the FTC at *www.ftc.gov/idtheft* or 877-IDTHEFT (877-438-4338). If you have been the victim of identity theft, see *www.IdentityTheft.gov* and Pub. 5027.

Go to *www.irs.gov/IdentityTheft* to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and territories for use in administering their laws. The information may also be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payors must generally withhold a percentage of taxable interest, dividends, and certain other payments to a payee who does not give a TIN to the payor. Certain penalties may also apply for providing false or fraudulent information.

P L E A S E B E A D V I S E D !

Every party to a public contract and every party bidding on public contracts are required to have a written sexual harassment policy that contains:

(1)a statement that sexual harassment is illegal;

(2)a definition of sexual harassment under state law:

(3)a description of sexual harassment utilizing examples;

(4)an internal formalized complaint process, including penalties;

(5)the legal recourse, investigative and complaint process available through the Department of Human Rights and the Illinois Human Rights Commission;

(6)directions on how to contact the Illinois Department of Human Rights and Illinois Human Rights Commission – **Illinois companies.** **Out-of-State** companies must include directions on how to contact the enforcement agency within their state. Companies that issue a standard policy for all business locations must prepare an addendum providing directions on how to contact the appropriate enforcement agency.

(7)a recitation that there cannot be any retaliation against employees who elect to file charges, as provided in Sections 6-101 and 6-101.5 of the Illinois Human Rights Act.

Recommendation: Your sexual harassment policy should be drafted in language easy to understand and any revisions should be reviewed by legal counsel. A copy of your policy should be posted in a prominent and accessible location to assure all employees will be notified of the company's position.

In order to conduct business with the THE PEORIA PARK DISTRICT, you must have a written sexual harassment policy that conforms to the Illinois Human Rights Act and/or the laws of your jurisdiction.

FAILURE TO DO SO
WILL DISQUALIFY YOU AS AN ELIGIBLE VENDOR!!!

SAMPLE ADDENDUM

Peoria Park District
Planning, Design and Construction Department
1314 N. Park Road
Peoria, IL 61604
Telephone: (309) 686-3386

ADDENDUM NO.

PROJECT TITLE:

ISSUANCE DATE:

LOCATION:

The proposed Contract Documents for this Work are modified as follows:

I. GENERAL INFORMATION:

II. **DRAWINGS**: (Delete/Change/Modify/Etc.)

III. **PROJECT MANUAL/SPECIFICATIONS**.:
(Delete/Change/Modify/Etc.)

IV. **INVITATION TO BID**: (Delete/Change/Modify/Etc.)

END OF ADDENDUM NO. _____

(Addendum may be bound into Project Manual, attached to front cover, faxed, mailed, emailed or delivered to bidders.)

Addendum No. _____
Page 1 of 1

Pleasure Driveway and Park District of Peoria, Illinois

Sample Agreement Between Owner and Contractor

This **AGREEMENT** for

INCLUSIVE BATHROOM & SITE IMPROVEMENTS
GLEN OAK PARK
PEORIA, IL

is made as of the 25TH day of September in the year of Two Thousand Twenty-Four (2024)

Between the Owner:

PLEASURE DRIVEWAY AND PARK DISTRICT OF PEORIA, ILLINOIS
1125 W. LAKE AVENUE
PEORIA, IL 61614

And the Contractor:

The Owner's Representative is:

PLANNING, DESIGN AND CONSTRUCTION DEPARTMENT
1314 N. PARK ROAD
PEORIA, IL 61604

The Architect or Engineer is:

MULLER 2
700 N SANGAMON
CHICAGO, IL 60642

The Owner and Contractor agree as follows:

I. THE CONTRACT DOCUMENTS. The Contract Documents consist of this AGREEMENT, the Plans/Drawings for the Project dated August 27, 2024, all sections of the Project Manual dated August 27, 2024, including but not limited to the Instructions and Supplementary Instructions to Bidders, the Bid Form, the General Conditions (2017 AIA Document A201) and Supplementary General Conditions, the General Requirements, the Specifications, and other documents as enumerated in Section 10 and Attachment #1 of this AGREEMENT**,** and including addenda issued prior to the execution of this AGREEMENT. The Contract Documents form the CONTRACT between the Owner and the Contractor. The CONTRACT represents the entire and integrated contract for the construction of the Work of the Project between the parties hereto and supersedes prior proposals, contracts, negotiations, or representations, either written or oral.

II. THE WORK OF THE CONTRACT. The Contractor shall execute the entire Work described in the Contract Documents, unless modified in Section XI of this AGREEMENT**.**

III. BASIS OF PAYMENT. The Work of the CONTRACT shall be performed on a Lump Sum basis.

IV. CONTRACT SUM. The Owner shall pay the Contractor the sum of

(and incorporates the acceptance of bid alternates as defined in sub-paragraph "A", below) for the Contractor's performance of the Work required by the Contract Documents, subject to modifications made by Owner approved Change Orders. If this CONTRACT calls for a unit price basis of payment, the contract sum stated above shall be adjusted by Change Order based upon multiplying the unit prices submitted by the Contractor on the Bid Form (and included herein as an Attachment to this CONTRACT) times (x) the actual quantities installed.

A. ACCEPTANCE OF ALTERNATES. The contract sum stated above is based on the acceptance of the following alternates, which are described in the Project Manual:

ITEM	ADD	DEDUCT

V. DATES OF COMMENCEMENT AND COMPLETION OF THE WORK. The Owner's Representative will issue a written Notice to Proceed with the Work of the Project after receiving the required Performance Bond, Labor and Material Payment Bond, and Certificate of Insurance (in proper form and providing the required coverages and amounts from a company [or companies] acceptable to the Owner, and naming the Owner as an Additional Insured), and any other pre-construction submittals required by the Contract Documents. The Contractor hereby acknowledges and agrees that failure to provide such submittals in a timely manner shall not be cause to adjust the date(s) for completion of the Work.

A. LIQUIDATED DAMAGES. Owner and Contractor recognize that time is of the essence of this CONTRACT and that Owner will suffer financial loss if the Contractor has not achieved Substantial Completion and Final Completion of the Work within the time specified below, plus any extensions thereof allowed in accordance with Article 8 of the General Conditions. They also recognize the delays, expense and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time.

B. SUBSTANTIAL COMPLETION. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as Liquidated Damages for delay (but not as a penalty), Contractor shall pay Owner two hundred fifty dollars dollars ($250.00) for each calendar day that expires after two hundred eighty-four (284) calendar days from Notice of Award until Substantial Completion is attained. The work is tentatively scheduled to begin on September 26, 2024 and be at Substantial Completion by June 1, 2025.

C. FINAL COMPLETION. After Substantial Completion if Contractor shall neglect, refuse, or fail to complete the remaining Work necessary to achieve Final Completion within ten (10) calendar days or any proper extension thereof granted by Owner, Contractor shall pay Owner two hundred fifty dollars ($250.00) for each day that expires after the time specified.

VI. PROGRESS PAYMENTS, REDUCTION OF RETAINAGE AND FINAL PAYMENT.

A. Unless otherwise specified elsewhere in the Contract Documents, the Contractor may submit monthly applications for progress payments ("Application for Payment") to the Owner's Representative. Each Application for Payment must be certified by the Architect or Engineer (if applicable), or the Owner's Representative if an Architect or Engineer has not been engaged for construction phase services. An Application for Payment shall be for a period of no less than one calendar month ending on the last day of the month, unless otherwise approved in writing by the Owner's Representative. Application forms shall be subject to Owner's approval. Each Application for Payment shall be based upon the Schedule of Values submitted by the Contractor, in accordance with the Contract Documents. The Schedule of Values shall be approved by the Owner's Representative and the Architect or Engineer (if applicable) in advance of the Contractor's first Application for Payment and the approved schedule shall be used by the Contractor as the basis for submitting payment requests. The Owner's Representative and/or Architect/Engineer's (if applicable) approval of the Schedule of Values shall not constitute a complete check for accuracy, and shall not relieve the Contractor from responsibility for errors of any sort.

B. An Application for Payment (certified by the Architect or Engineer, if applicable) shall be submitted to the Owner's Representative no later than the fifth (5th) day of the month following the period for which the application is being submitted. In such case, the Owner shall make the progress payment to the Contractor not later than the twentieth day of the next month. A progress payment request on an Application for Payment (certified by the Architect or Engineer, if applicable) received by the Owner's Representative after the fifth (5th) day of a month shall be made by the Owner not later than forty-five days after receipt by the Owner's Representative.

C. Based upon its review of the certified (by the Architect or Engineer, if applicable) Application for Payment, the Owner shall make a progress payment to the Contractor in such amount as the Owner reasonably determines is properly due, subject to a retainage of ten percent (10%) of the value of the Work completed and covered by the Application for Payment, less the aggregate of previous payments in each case. In determining the amount properly due, the Owner shall consider the value of labor, materials and equipment incorporated in the Work, or properly allocable to materials and equipment suitably stored at the site or at some other location previously agreed upon in writing by the parties. The Owner's Representative shall have the sole right to determine that materials or equipment stored off-site have been properly delivered, protected, and/or secured. The Owner's Representative (or the Architect or Engineer, if applicable) may nullify or withhold a Certificate of Payment, in whole or in part, for the reasons set forth in Section 9.5 of the General Conditions. Upon Substantial Completion of the Work, the Owner shall pay the Contractor a sum sufficient to increase the total payments to ninety-five percent (95%) of the Contract Sum, less such amounts as the Owner's Representative shall determine for incomplete work and unsettled claims.

VII. Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner when **1)** the Contract has been fully performed by the Contractor except for the Contractor's responsibility to correct nonconforming Work as provided in Subparagraph 12.2.2 of the General Conditions and to satisfy other requirements, if any, which necessarily survive final payment; and **2)** a final Certificate of Payment has been issued by the Architect/Engineer or Owner's Representative; such final payment shall be made by the Owner not more than forty-five (45) days after the receipt of the final Certificate of Payment by the Owner.

VIII. CHANGE ORDERS. The Owner and Contractor agree that changes in the Work are sometimes required and necessary, and that timely: **a)** submission of proposed changes in the Work or the scope of Work by the Owner, **b)** pricing by the Contractor, **c)** review by the Owner's Representative and/or Architect/Engineer, and **d)** final approval by the Owner are necessary in order to assure that the Work of the Project is completed on schedule. The Contractor hereby acknowledges and agrees that an increase in the scope of the Work does not grant or imply an increase in the Contract Time, unless specifically so stated on the final approved Change Order. The Contractor also agrees that any and all Work which deviates from the plans and specifications and/or results in additional Work performed by Contractor's forces, including those of his sub-contractor's, will not result in additional expense to the Owner, unless **finally approved both by the Owner and the Architect/Engineer (if applicable) prior to the additional Work being performed.** No claim for an addition to the Contract Sum shall be valid unless approved by a written Change Order signed by the Owner and the architect/engineer (if applicable) **prior to the additional Work being performed.**

IX. TERMINATION OR SUSPENSION. The CONTRACT may be terminated by the Owner or the Contractor as provided by Article 14 of the General Conditions. The Work may be suspended by the Owner as provided in Article 14 of the General Conditions.

X. ENUMERATION OF CONTRACT DOCUMENTS. The Contract Documents, except for modifications issued after the execution of this Agreement, consist of:

A. this Standard Form of Agreement Between Owner and Contractor, of the Pleasure Driveway and Park District of Peoria, Illinois.

B. the Plans or Drawings titled Inclusive Bathroom and Site Improvements, dated August 27, 2024, and enumerated in ATTACHMENT #1 - "LIST OF DRAWINGS".

C. Supplementary and other Conditions of the CONTRACT, and the Specifications, are those found in the Project Manual titled "Inclusive Bathroom and Site Improvements", and dated August 27, 2024 enumerated as follows:

1) Supplementary Instructions to Bidders
2) Contractor's Proposal, as accepted by the Owner
3) General Conditions of the Contract for Construction, AIA Document A201, 2017 Edition
4) Supplementary General Conditions
5) Subcontractor List
6) Certification of Compliance for Listed Provisions and Laws

7) Company Ownership Certification
8) Peoria Park District Certificate of Equal Employment Opportunity Compliance for Contractors and Vendors
9) Workforce Profile
10) Minority/Women Owned Contact Sheet, if bid is over $50,000.00
11) Contractor/Subcontractor Workforce Plan, if bid is over $50,000.00
12) Performance Bond
13) Labor and Material Payment Bond
14) Proof of Insurance
15) Specifications: Division 010000, "General Requirements"; Divisions 020000-350000 as applicable
16) Attachment A.6 - Insurance Requirements
17) Attachment B – Solicitation & Hiring for Qualifying Construction Contracts & Forms
18) Attachment C – Directory of Minority & Women Owned Business Enterprises
19) Attachment D – IDOL Prevailing Wages of Peoria County
20) Proof of Certified Payroll Submitted to IDOL per "The Illinois Prevailing Wage Act"

XI. MISCELLANEOUS PROVISIONS. Other Provisions of this Agreement are as follows:

This AGREEMENT is entered into as of the day and year first written above and is executed in at least three original copies of which one is to be delivered to the Contractor, one to the Architect/Engineer (if any) for use in the administration of the CONTRACT, and one to the Owner.

OWNER:	**CONTRACTOR :**
_____	_____
(Signature)	(Signature)
ROBERT L. JOHNSON, SR., Park Board President	_____
	(Printed Name and Title)
ATTEST:	ATTEST:

ATTACHMENT #1 - LIST OF DRAWINGS

Number	Title	Date
G-000	Cover Sheet	August 27, 2024
G-001	Architectural Notes, Symbols & Abbreviations	August 27, 2024
G-002	Code & Life Safety Analysis	August 27, 2024
C-001	General Notes	August 27, 2024
C-100	Site Demolition Plan	August 27, 2024
C-200	Site Dimension Plan	August 27, 2024
C-300	Site Grading & Utility Plan	August 27, 2024
C-500	Site Details	August 27, 2024
C-501	Site Details	August 27, 2024
A-100	Site Plan	August 27, 2024
A-101	Floor Plan	August 27, 2024
A-102	Roof Plan	August 27, 2024
A-103	Reflected Ceiling Plan	August 27, 2024
A-201	Building Elevations	August 27, 2024
A-202	Wall Sections	August 27, 2024
A-203	Sections & Details	August 27, 2024
A-204	Door Schedule and Details	August 27, 2024
A-205	Interior Elevations	August 27, 2024
S-001	Structural General Notes and Abbreviations	August 27, 2024
S-101	Structural Foundation Plan	August 27, 2024
S-102	Structural Roof Plan	August 27, 2024
S-501	Structural Foundation Details	August 27, 2024
S-502	Structural Framing Details	August 27, 2024
M-101	Mechanical First Floor Plan	August 27, 2024
P-001	Plumbing Title Sheet	August 27, 2024
P-100	Plumbing Underfloor Plan	August 27, 2024
P-101	Plumbing First Floor Plan	August 27, 2024
E-001	Electrical Title Sheet	August 27, 2024
E-100	Electrical Site Plan	August 27, 2024
E-101	Electrical First Floor Plans	August 27, 2024
E-200	Electrical One-Line Schedules and Details	August 27, 2024
E-300	Electrical Specifications	August 27, 2024
AX-101	Shelter Drawings (1 of 4)	August 27, 2024
AX-102	Shelter Drawings (2 of 4)	August 27, 2024
AX-103	Shelter Drawings (3 of 4)	August 27, 2024
AX-104	Shelter Drawings (4 of 4)	August 27, 2024

PERFORMANCE BOND

TO: PLEASURE DRIVEWAY AND PARK DISTRICT OF PEORIA
PEORIA, ILLINOIS

KNOW ALL MEN BY THESE PRESENTS;

That_____
_____
as Principal, and_____
_____as
corporation of the State of _____, as Surety, are held and firmly bound unto the PLEASURE DRIVEWAY AND PARK DISTRICT OF PEORIA, PEORIA, ILLINOIS, as Obligee, in the amount of _____
_____
($_____), for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement dated _____, 20 _____ entered into a contract with Obligee for _____
_____
in accordance with contract documents prepared by the Architect-Engineer, which Contract is by reference made a part hereof and is hereinafter referred to as "the Contract".

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if Principal shall promptly and faithfully perform the Contract and all changes thereof, and during the life of any guaranty or warranty required under the Contract, and, if Principal shall fully secure and protect the Obligee from all liability and from all loss or expense of any kind, including all court costs, engineering fees and attorneys' fees made necessary or arising from the failure, refusal or neglect of Principal to comply with all obligations assumed by Principal in connection with the performance of the Contract and all changes thereof, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

Surety hereby waives notice of any changes in the Contract, including extensions of time for the performance thereof. Whenever Principal shall be and is declared to be in default under the Contract, Obligee having performed Obligee's obligations thereunder, Surety shall, after notice of such default, reserve all rights against all parties, take over and complete the Contract and become entitled to payment of the balance of any monies due or to become due to such defined Principal in accordance with the progress of the work.

A condition of this Bond is that the Principal shall faithfully perform in accordance with the prevailing wage clause provided in the bid specification or Contract pursuant to Illinois Compiled Statutes 820 ILCS 130/1 *et. seq.*

No right of action shall accrue on this Bond to or for the use of any person or corporation other than the Obligee named herein.

Signed and Sealed this _____ day of _____, 20 _____.

CONTRACTOR

_____
Contractor Firm Name

By: _____
Signature

_____
Title

SURETY

_____
Surety Name

By:_____
Attorney-in-Fact

_____
Resident Agent

ATTEST:

_____
Corporate Secretary (Corporations only)

LABOR & MATERIAL PAYMENT BOND

TO: PLEASURE DRIVEWAY AND PARK DISTRICT OF PEORIA
PEORIA, ILLINOIS

KNOW ALL MEN BY THESE PRESENTS:

That: _____
_____
as Principal, and _____
_____
a corporation of the State of _____ as Surety, are held and firmly bound unto the PLEASURE DRIVEWAY AND PARK DISTRICT OF PEORIA, PEORIA, ILLINOIS, as Obligee, for the use and benefit of claimants as hereinafter defined in the amount of _____Dollars ($_____), for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement dated _____, 20 _____, entered into a Contract with Obligee for _____
_____
in accordance with contract documents prepared by the Architect-Engineer which Contract is by reference made a part hereof, and is hereinafter referred to as "the Contract".

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if Principal shall promptly pay for all laborers, workers and mechanics engaged in the work under the Contract, and not less than the general prevailing rate of hourly wages of a similar character in the locality in which the work is performed, as determined by the State of Illinois Department of Labor pursuant to the Illinois Compiled Statutes 820 ILCS 130/1 et. seq. and for all material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise it shall remain in full force and effect.

1. A claimant is defined as any person, firm, or corporation having contracts with the Principal or with any of Principal's subcontractors for labor or materials furnished in the performance of the Contract on account of which this Bond is given.

2. Nothing in this Bond contained shall be taken to make the Obligee liable to any subcontractor, materialman or laborer, or to any other person to any greater extent than it would have been liable prior to the enactment of The Public Construction Bond Act, approved June 20, 1931, as amended; provided further, that any person having a claim for labor and materials furnished in the performance of the Contract shall have no right of action unless he shall have filed a verified notice of such claim with the Obligee within 180 days after the date of the last item of work or the furnishing of the last item of materials, which claim shall have been verified and shall contain the name and address of the claimant, the business address of the claimant within the State of Illinois, if any, or if the claimant be a foreign corporation having no place of business within the State the principal place of business of the corporation, and in all cases of partnership the names and residences of each of the partners, the name of the Contractor for the Obligee, the name of the person, firm or corporation by whom the claimant was employed or to whom such claimant furnished materials, the amount of the claim and a brief description of the public improvement for the construction or installation of which the Contract is to be performed. No defect in the notice herein provided for shall deprive the claimant of its right of action under the terms and provisions of this Bond unless it shall affirmatively appear that such defect has prejudiced the rights of an interested party asserting the same.

3. No action shall be brought on this Bond until the expiration of 120 days after the date of the last item of work or of the furnishing of the last item of material except in cases where the final settlement between the Obligee and the Contractor shall have been made prior to the expiration of the 120 day period, in which case action may be taken immediately following such final settlement; nor shall any action of any kind be brought later than 6 months after the acceptance by the Obligee of the work. Such suit shall be brought only in the circuit court of this State in the judicial district in which the Contract is to be performed.

4. Surety hereby waives notice of any changes in the Contract, including extensions of time for the performance thereof.

5. The amount of this Bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder.

6. The Principal and Surety shall be liable for any attorneys fees, engineering costs, or court costs incurred by the Obligee relative to claims made against this Bond.

Signed and Sealed this _____ day of _____, 20 _____.

CONTRACTOR

Contractor Firm Name:

_____

By: _____
Signature

_____
Title

SURETY

_____

By:_____
Attorney-in-Fact

_____
Resident Agent

ATTEST:

_____
Corporate Secretary (Corporations only)

CONTRACTOR'S AFFIDAVIT

STATE OF ILLINOIS)
) SS
COUNTY OF PEORIA)

TO WHOM IT MAY CONCERN:

THE undersigned, being duly sworn, deposes and says that he is _____
_____ of the _____
who is the contractor for the _____
building located at _____
owned by _____.

That the total amount of the contract including extras is $_____ on which he has received payment of $_____ prior to this payment. That all waivers are true, correct and genuine and delivered unconditionally and that there is no claim either legal or equitable to defeat the validity of said waivers. That the following are the names of all parties who have furnished material or labor, or both, for said work and all parties having contracts or sub-contracts for specific portions of said work or for material entering into the construction thereof and the amount due or to become due to each, and that the items mentioned include all labor and material required to complete said work according to plans and specifications:

NAMES	WHAT FOR	CONTRACT PRICE	AMOUNT PAID	THIS PMT.	BALANCE DUE

TOTAL ALL LABOR AND MATERIAL TO COMPLETE

There are no other contracts for said work outstanding, and that there is nothing due or to become due to any person for material, labor or other work of any kind done or to be done upon or in connection with said work other than above stated.

Signed this _____ day of _____, 20 _____.

Signature: _____

Subscribed and sworn to before me this _____ day of _____, 20 ___.

_____
Notary Public

FINAL WAIVER OF LIEN

STATE OF ILLINOIS)
) SS
COUNTY OF PEORIA)

TO WHOM IT MAY CONCERN:

WHEREAS, the undersigned _____ha_____ been employed by THE PEORIA PARK DISTRICT to furnish material and labor for the _____

at the premises commonly known as _____

located in the City of _____, County of Peoria, State of Illinois.

The undersigned, for and in consideration of _____ ($_____) Dollars, and other good and valuable considerations, the receipt whereof is hereby acknowledged, do_____ hereby waive and release any and all lien or claim or right of lien under the statutes of the State of Illinois relating to mechanics' liens, with respect to and on said above-described premises and improvements thereon and on the money, funds or other considerations due or become due from the owner on account of labor or services, material, fixtures, apparatus or machinery heretofore furnished or which may be furnished at any time hereafter by the undersigned for the above described premises.

Dated this _____ day of _____ 20 _____.

[Affix corporate seal here.]

_____
(Name of sole owner, corporation or partnership)

ATTEST:

_____ _____(SEAL)
(Signature of secretary of corporation) (Signature of sole owner or authorized representative of corporation or partnership)

WAIVER OF LIEN

GENERAL CONTRACTOR'S PARTIAL
TO COVER ONLY CERTAIN PAYMENTS

STATE OF ILLINOIS)
) SS
COUNTY OF PEORIA)

TO ALL WHOM IT MAY CONCERN:

WHEREAS, the undersigned _____ has been employed by THE PEORIA PARK DISTRICT to furnish material and labor for the _____at the premises commonly known as _____

_____

located in the City of Peoria, County of Peoria, and State of Illinois.

NOW, THEREFORE, the undersigned, for and in consideration of the sum of _____ _____ Dollars, and other good and valuable considerations, the receipt whereof is hereby acknowledged by the undersigned, does hereby waive and release to the extent only of the aforesaid amount of _____ Dollars, paid simultaneously herewith, any and all lien or right or claim of lien under the statutes of the State of Illinois relating to mechanics' liens, with respect to and on said above-described premises, and the improvements thereon and on the money, funds, or other consideration due or to become due from the owner on account of labor, services, material, fixtures, apparatus or machinery, furnished by the undersigned, to or on account of the said owner, for the above-described premises, but only to the extent of the payment aforesaid.

Dated this _____ day of _____, 20 _____.

[Affix corporate seal here]

_____
(Name of sole owner, corporation or partnership)

ATTEST:

_____ _____(SEAL)
(Signature of secretary of corporation) (Signature of sole owner or authorized representative of corporation or partnership)

SUB-CONTRACTOR'S FINAL WAIVER OF LIEN

STATE OF ILLINOIS)
) SS
COUNTY OF PEORIA)

TO WHOM IT MAY CONCERN:

WHEREAS, the undersigned _____
(sub-contractor)
ha____ been employed by _____
(general contractor)
to furnish material and labor for the _____ at the

premises commonly known as _____, in the City of _____,

County of Peoria, State of Illinois.

The undersigned, for and in consideration of _____

_____ ($_____) Dollars, and other good and valuable considerations, the receipt whereof is hereby acknowledged, do _____ hereby waive and release any and all lien or claim or right of lien under the statutes of the State of Illinois relating to Mechanics Liens, on the above described premises and improvements thereon and on the money, funds or other considerations due or become due from the owner on account of labor or services, material, fixtures, apparatus or machinery heretofore furnished or which may be furnished at any time hereafter by the undersigned for the above described premises.

Dated this _____ day of _____, 20 _____.

[Affix corporate seal here.]

ATTEST:_____

_____
(Name of sole owner, corporation or partnership)

_____ _____(SEAL)
(Signature of sole owner or authorized representative of corporation of partnership)
(Signature of secretary of corporation)

WAIVER OF LIEN

SUB-CONTRACTOR'S PARTIAL
TO COVER ONLY CERTAIN PAYMENTS

STATE OF ILLINOIS)
) SS
COUNTY OF PEORIA)

TO WHOM IT MAY CONCERN:

THE undersigned, _____
(sub-contractor)
has been employed by _____
(general contractor)
to furnish material and labor for the _____

_____

at the premises commonly known as _____

_____
located in the City of Peoria, County of Peoria, and State of Illinois.

NOW, THEREFORE, the undersigned, for and in consideration of the sum of _____ _____ Dollars, and other good and valuable considerations, the receipt whereof is hereby acknowledged by the undersigned, does hereby waive and release to the extent only of the aforesaid amount of _____ Dollars, paid simultaneously herewith, any and all lien or right or claim of lien under the statutes of the State of Illinois relating to mechanics' liens, with respect to and on said above-described premises, and the improvements thereon and on the money, funds, or other consideration due or to become due from the owner on account of labor, services, material, fixtures, apparatus or machinery, furnished by the undersigned, but only to the extent of the payment aforesaid.

Dated this _____ day of _____, 20 _____.

[Affix corporate seal here.]

_____
(Name of sole owner, corporation or partnership)

ATTEST:

_____ _____(SEAL)
(Signature of secretary of corporation) (Signature of sole owner or authorized representative of corporation or partnership)

A complete copy of AIA Document A201, 2017 Edition, with Supplementary General Conditions incorporated, is available for review in the Peoria Park District's Planning, Design and Construction Office.

SUPPLEMENTARY GENERAL CONDITIONS

1. A. "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION", AIA Document A201, 2017 Edition, published by the American Institute of Architects, including revisions adopted before the date of the Project Manual, is hereby made part of these Specifications with same force and effect as though set forth in full.

B. The following modifies, changes, deletes from or adds to the General Conditions of the Contract for Construction (AIA Document A201, Sixteenth Edition, 2017). Where any Article of the General Conditions is modified or any Paragraph, Subparagraph or Clause thereof is modified or deleted by these Supplementary Conditions, the unaltered provisions of that Article, Paragraph, Subparagraph or Clause shall remain in effect.

C. Parenthesis ( ) indicates the appropriate section and Subparagraph of the General Conditions which each paragraph of the Supplementary General Conditions modifies or refers to.

ARTICLE 1: GENERAL PROVISIONS

1.1 - Basic Definitions

INSERT THE FOLLOWING PHRASE TO PARAGRAPH (1.1.1) AFTER THE WORDS "The Contract Documents consist of the Agreement Between Owner and Contractor (hereinafter the Agreement) and consists of the Agreement,":

"the Contractor's Bid, the Advertisement for Bids, the Instructions to Bidders, sample forms and addenda relating to these,"

DELETE THE LAST SENTENCE OF PARAGRAPH (1.1.1).

PARAGRAPH (1.1.8) IN THE HEADING DELETE "Initial Decision Maker" SUBSTITUTE "Initial Recommendation Maker"

PARAGRAPH (1.1.8) DELETE "Initial Decision Maker" **AND SUBSTITUTE** "Initial Recommendation Maker"

IN PARAGRAPH (1.1.8) REPLACE "decisions" **WITH** "recommendations"**.**

1.2 - Correlations and intent of the Contract Documents

ADD THE FOLLOWING SENTENCES TO END OF PARAGRAPH (1.2.1):

The Contractor shall notify the Owner's Representative immediately if discrepancies are discovered. Full-size or large-scale details or drawings shall govern small-scale drawings that the former are intended to amplify. Dimensions from drawings shall not be determined by scale or rule. Where the Drawings and Specifications conflict with each other or with themselves, the Owner's Representative (in consultation with the Architect, if any) will decide which conflicting requirement governs. Should discrepancies or doubt occur, Contractor shall not proceed with the Work without clarification from the Owner. Contractor shall request clarification in a reasonable time to avoid delays and increases in the Contract Sum.

ADD THE FOLLOWING PARAGRAPHS TO SECTION (1.2):

1.2.4 If any item or material shown on the Drawings is omitted from the Specifications, or vice-versa (except when the Drawings and Specifications clearly exclude such omitted item), and when such item or material is clearly required to complete the detail shown or specified, the Contractor shall furnish and install such item or material of the type and quality established by the balance of the detail shown and specified at no increase to the Contract Sum.

1.2.5 Where a typical or representative detail is shown on the Drawings, this detail shall constitute the standard for workmanship and materials throughout those parts of the Work.

1.2.6 Any Summary of Work as outlined in the Specifications shall not be deemed to limit the work required by the Contract Documents. The Contractor and each Subcontractor shall be responsible for carefully examining all Drawings, including all details, plans, elevations, sections, schedules and diagrams for each particular type of work, and for coordinating the Work described in the Drawings, with the related Specifications. The Contractor shall also be responsible for determining the exact scope of work for each type of work per the Contract Documents and Contractor shall endeavor to check cross-references of work excluded from any division. The Contract Sum is deemed to be based on a complete installation. When additional details or instructions are clearly required to complete the work, the Contractor is deemed to have made an allowance in the Contract Sum for completion of such Work consistent with the local standard of care.

1.2.7 The Drawings are intended to show the arrangement, design and extent of the Work and are schematic in nature. They are not to be scaled for roughing-in measurements or used as shop drawings.

1.5 – Ownership and Use of Drawings, Specifications, and Other Instruments of Service

ADD THE FOLLOWING PARAGRAPH TO SECTION (1.5):

1.5.3 Neither any oral representation by or oral agreement with any officer, agent, or employee of Owner or Architect before execution of this Contract shall affect or modify any of the Contractor's rights or obligations hereunder. Contractor is not aware of any facts that make misleading or inaccurate in any material respect any information Owner or Architect has furnished to Contractor which would have a material adverse affect on the Contract Time or Contract Sum which Contractor has not advised Owner or Architect of, and if, during the course of the performance of the Work, Contractor learns of any such facts it will so advise Owner. Contractor shall not be entitled to any adjustments in the Contract Time or the Contract Sum as a consequence of Contractor's breach of the terms of this Subparagraph.

1.7 – Digital Data use and Transmission

DELETE THE SECOND SENTENCE IN PARAGRAPH (1.7).

1.8 – Building Information Models Use and Reliance

DELETE PARAGRAPH (1.8) IN ITS ENTIRETY.

ARTICLE 2: OWNER

2.3 – Information and Services Required of the Owner

DELETE PARAGRAPH (2.3.4) IN ITS ENTIRETY.

2.4 – Owner's Right to stop the Work

ADD THE FOLLOWING SENTENCE AT THE END OF PARAGRAPH (2.4):

"The Owner shall not be liable for any extra cost incurred by the Contractor by such an order."

2.5 – Owner's Right to Carry Out the Work

IN PARAGRAPH (2.5), IN THE SECOND SENTENCE, DELETE "Such action by the Owner and amounts charged to the Contractor are both subject to prior approval of the Architect and".

ARTICLE 3: CONTRACTOR

3.2 - Review of Contract Documents and Field Conditions by Contractor

IN PARAGRAPH (3.2.2, 3.2.3, AND (3.2.4) AFTER THE WORD "Architect**" ADD THE WORDS "**and Owner**".**

ADD THE FOLLOWING PARAGRAPH TO SECTION (3.2):

3.2.5 Before starting any work, the Contractor shall examine work performed by others to which his work adjoins or is applied to and report to the Owner's Representative any conditions that will prevent the satisfactory accomplishment of his work. Failure to notify the Owner's Representative of deficiencies or faults in preceding work prior to commencing work shall constitute acceptance thereof and waiver of any claim of its unsuitability.

3.4 – Labor and Materials

ADD THE FOLLOWING PARAGRAPHS TO SECTION (3.4):

3.4.4 Before ordering any material or doing any Work, the Contractor shall verify all measurements at the Project site and he shall be responsible for the correctness of same. No extra charge or compensation will be allowed to the Contractor on account of any difference between actual dimensions and the measurements shown on the Project Drawings.

3.4.5 The Contractor shall carefully inspect all materials delivered on and to the Project site and reject defective materials without waiting for the Owner's Representative or other representative of Owner to observe the materials.

3.5 - Warranty

ADD THE FOLLOWING PARAGRAPHS TO SECTION (3.5):

3.5.3 The Contractor agrees to assign to the Owner any and all manufacturer's warranties relating to materials and equipment furnished as part of the Work and further agrees to perform the Work in such manner so as to preserve any and all such manufacturer's warranties subject to installation directives and other terms of the Contract Documents. The Contractor agrees to deliver to the Owner, upon final payment, such assignments along with or as part of a reference manual, in form and detail reasonably acceptable to Owner, showing all such warranties and guarantees provided by

the Contractor and Subcontractors. Such warranties and guarantees shall commence no sooner than the date of purchase from the supplier.

3.5.4 The warranty of Contractor provided in Paragraph 3.5 shall in no way limit or abridge the warranties of the suppliers of equipment and systems which are to comprise a portion of the Work, if they are broader, and all of such warranties shall be in form and substance as required by the Contract Documents. Contractor shall take no action or fail to act in any way which results in the termination or expiration of such third party warranties or which otherwise results in prejudice to the rights of the Owner under such warranties subject to installation directives and other terms of the Contract Documents. Contractor agrees to provide all notices required for the effectiveness of such warranties and shall include provisions in the contracts with the providers and manufacturers of such systems and equipment whereby Owner shall have a direct right of enforcement of such warranty obligations.

3.6 - Taxes

IN PARAGRAPH (3.6), DELETE THE WORD "Sales".

ADD THE FOLLOWING AT THE END OF PARAGRAPH (3.6):

The Peoria Park District is exempt from Federal, State and Local taxes. A certificate of exemption will be furnished upon request.

3.10 - Contractor's Construction and Submittal Schedules

IN PARAGRAPH (3.10.2), IN THE FIRST SENTENCE BEFORE THE WORD "Architect's approval" **ADD THE WORDS** "Owner's and".

IN PARAGRAPH (3.10.2), IN THE SECOND SENTENCE BEFORE THE WORD "Architect's" **ADD THE WORDS** "Owner's and".

IN PARAGRAPH (3.10.2), IN THE THIRD SENTENCE BEFORE THE WORD "Architect" **ADD THE WORDS** "Owner's Representative and".

ADD THE FOLLOWING PARAGRAPHS TO SECTION (3.10):

3.10.4 The construction schedule shall provide for the most expeditious and practicable execution of the Work. The Contractor shall also work closely with the Owner to confirm that the construction schedule accurately reflects the status of the Project. The Contractor's construction schedule shall be updated every month by the Contractor and submitted to the Owner.

.1 Whenever it becomes apparent from the updated construction schedule that any substantial completion previously established by the construction schedule cannot be met, the Contractor shall, at the Owner's request, take any or all of the following actions with no increase to the Contract Sum or Contract Time (unless the delay is caused by an event set forth in paragraph 8.3 of these General Conditions thereby permitting adjustment of the Contract Sum and/or Contract Time:

.1.1 Increase construction manpower to substantially return the Project to schedule;

.1.2 Increase the number of working hours per shift, shifts per day or the amount of construction equipment or any combination of the foregoing which will substantially return the Project to schedule;

.1.3 Reschedule activities to concurrently accomplish activities, to the maximum degree practicable, in the time required by the Contract Documents.

If the Contractor fails to take any of these actions Owner shall have the notice and other rights set forth in Paragraph 2.5.

ARTICLE 4: ARCHITECT

4.1 - General

IN PARAGRAPH (4.1.1) DELETE THE FIRST SENTENCE AND SUBSTITUTE THE FOLLOWING:

"The Architect, Owner's Representative, and Owner's Project Manager are defined in Paragraph C of "Section 014200 - General" of "Division 010000 - General Requirements".

4.2 – Administration of the Contract

IN PARAGRAPH (4.2.1) DELETE THE WORDS "and will be an Owner's Representative**".**

IN PARAGRAPH (4.2.5) DELETE THE WORD "Architect's" **AND** "Architect"**AND SUBSTITUTE THE WORDS** "Owner Representative's" **AND** "Owner Representative"**.**

IN PARAGRAPH (4.2.6) IN THE SECOND SENTENCE AFTER THE WORDS "will have authority" **INSERT THE WORDS** "upon written authorization from the Owner".

IN PARAGRAPH (4.2.8) DELETE THE WORD "prepare" **AND SUBSTITUTE THE WORDS** "assist the Owner's Representative in preparing".

IN PARAGRAPH (4.2.9) DELETE THE WORD "Architect" **AND SUBSTITUTE WORDS** "Owner's Representative, assisted by the Architect".

IN PARAGRAPH (4.2.11) IN THE FIRST SENTENCE DELETE THE WORDS "and decide".

IN PARAGRAPH (4.2.12) IN THE FIRST SENTENCE DELETE THE WORD "and decisions".

IN PARAGRAPH (4.2.12) IN THE SECOND SENTENCE DELETE THE WORDS "and initial decisions" **AND** "or decisions".

ADD PARAGRAPH TO SECTION (4.2):

4.2.15 Notwithstanding any other provision of this Agreement to the contrary, the Architect shall have no authority to order or approve any material deviation from the Contract Documents, whether or not such deviation affects the Contract Sum or other Substantial Completion Date (as defined herein). In the event any such deviation is sought, prior written approval from the Owner's Representative and the Owner must be obtained. The Architect may decide quality issues and may approve non-material deviations from the Contract Documents.

ARTICLE 5: SUBCONTRACTORS

5.2 – Award of Subcontracts and Other Contracts for Portions of the Work

IN PARAGRAPH (5.2.1) DELETE THE FIRST SENTENCE AND SUBSTITUTE:

"The subcontractors/suppliers listed by the Contractor on the Subcontractor/Supplier List (submitted with the Bid) shall not be changed without the written consent of the Owner."

IN PARAGRAPH (5.2.1) IN THE SECOND SENTENCE DELETE THE WORDS "Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative".

IN PARAGRAPH (5.2.1) IN THE LAST SENTENCE DELETE THE WORDS "Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative".

ARTICLE 6: CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

6.2 – Mutual Responsibility

IN PARAGRAPH (6.2.2) BEFORE THE WORD "Architect" **ADD THE WORDS** "Owner and".

6.3 – Owner's Right to Clean Up

IN PARAGRAPH (6.3) DELETE THE WORD "Architect" **AND SUBSTITUTE THE WORD** "Owner".

ARTICLE 7: CHANGES IN THE WORK

7.2 – Change Orders

IN PARAGRAPH (7.2.1) DELETE THE WORDS "the Architect" **AND SUBSTITUTE THE WORDS** "the Owner's Representative".

ADD THE FOLLOWING PARAGRAPHS TO SECTION (7.2):

7.2.2 A Change Order shall include all of the Contractor's costs associated therewith.

7.2.3 The Contractor shall not accept any request for a Change Order from any person other than the Owner and may not perform any work asserted to constitute a change in the Work until the Owner has approved the Change Order in writing, unless the Owner authorizes the Contractor, in writing, to proceed with a change prior to the Owner's final approval. Notwithstanding anything to the contrary herein, the Contractor shall not charge for overtime services in the performance of any Change Order Work, unless the Owner has specifically authorized overtime in writing. Owner may competitively bid changes in the Work and Contractor, Subcontractor and suppliers shall provide Owner with all documents Owner requests to facilitate such competitive bidding of changes in the Work.

7.2.4 There shall be no change in the Work, whether an alteration or addition to the Contract Sum or to any amounts due under the Contract Documents or to a change in the Contract Time, unless and until such alteration or addition has been authorized by a written Change Order executed and issued in accordance and compliance with the requirements with this Article 7 or by written authorization to proceed with such change in the Work signed by the Owner or as otherwise provided pursuant to the Contract Documents. The requirements set forth in this Paragraph 7.2.4 are of the essence. No claim that the Owner has been unjustly enriched by any alteration or addition to the Work, whether or not any such unjust enrichment to the Work or to the Owner in fact exists, shall form the basis of any claim for an increase in any amount due under the Contract Documents or a change in the Contract Time, and the terms of a fully-executed Change Order shall be conclusive.

7.3 – Construction Change Directives

IN PARAGRAPH (7.3.1) DELETE THE WORDS "the Architect" **AND SUBSTITUTE THE WORDS** "the Owner's Representative".

IN PARAGRAPH (7.3.4) DELETE THE WORD "determine" **AND SUBSTITUTE THE WORD** "recommend".

IN PARAGRAPH (7.3.6) DELETE THE WORD "Architect" **ADD SUBSTITUTE THE WORDS** "Owner's Representative".

IN PARAGRAPH (7.3.8) IN THE FIRST SENTENCE AFTER THE WORD "Architect" **ADD THE WORDS** "and the Owner's Representative"**.**

IN PARAGRAPH (7.3.9) DELETE THE WORDS "Architect" **AND** "Architect's" **AND SUBSTITUTE THE WORDS** "Owner's Representative" and "Owner's Representative's".

IN PARAGRAPH (7.3.10) DELETE THE WORD "determination" **AND SUBSTITUTE THE WORD** "recommendation".

ARTICLE 8: TIME

8.1 - Definitions

IN PARAGRAPH (8.1.3) DELETE THE WORD "Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative".

8.2 – Progress and Completion

ADD THE FOLLOWING PARAGRAPHS TO SECTION (8.2) .

8.2.4 All work shall be "Substantially Complete" as required by the **Instructions to Bidders** and the **Agreement Between Owner and Contractor.**

8.2.5 It is further agreed that said completion schedule is reasonable, and the Contractor shall prosecute said work regularly, diligently and continuously at such rate of progress as will insure full completion thereof within the time specified.

8.2.6 Provided, however, the following exceptions:

.1 Any preference, priority or allocation order duly issued by the United States Government.

.2 Any unforeseeable cause beyond the control and without the fault or negligence of the Contractor, including acts of God, or of a public enemy, acts of the Owner, acts of another Contractor in performance of a separate contract with the Owner, fire, floods, epidemics, quarantine restrictions, strikes, freight embargoes and unusually severe weather. The criteria on which the unusually severe weather shall be based is the average precipitation/temperatures received in the project area, as recorded over a period of the last five (5) years at the local area United States Weather Station. Any extension of time due to unusually severe weather must be requested by the Contractor on the basis of documented records of the actual precipitation/temperatures during the contract time period, compared with the normal/average for the area. Also, the criteria shall include the number of excessive precipitation or extreme cold days (i.e., days in which the temperature would adversely affect the type of work being

constructed) over the same period and whether or not the Contractor's force worked on said days or stage of construction was affected.

.3 Any delays of subcontractors occasioned by any of the causes specified in this paragraph.

8.2.7 Provided further that the Contractor shall, within seven (7) days from the beginning of any such delay during the performance of the Contract, notify the Owner's Representative in writing of the alleged cause of such delay.

8.3 – Delays and Extensions of Time

IN PARAGRAPH (8.3.1) DELETE THE WORDS "and binding dispute resolution".

IN PARAGRAPH (8.3.1) DELETE THE WORD "determine" **AND SUBSTITUTE THE WORD** "recommend".

ARTICLE 9: PAYMENTS AND COMPLETION

9.2 – Schedule of Values

DELETE PARAGRAPH (9.2) AND SUBSTITUTE THE FOLLOWING UNDER (9.2):

"Where the Contract is based on a stipulated sum or Guaranteed Maximum Price, the Contractor shall submit a schedule of values to the Owner's Representative before the first Application for Payment, allocating the entire Contract Sum to the Various portions of the Work. The schedule of values shall be prepared in the form, and supported by the data to substantiate its accuracy, required by the Architect and Owner's Representative. This schedule, unless objected to by the Architect and Owner's Representative, shall be used as a basis for reviewing the Contractor's Applications for Payment. Any changes to the schedule of values shall be submitted to the Architect and Owner's Representative and supported by such data to substantiate its accuracy as the Architect and Owner's Representative may require, and unless objected to by the Architect and Owner's Representative, shall be used as a basis for reviewing the Contractor's subsequent Applications for Payment."

9.3 – Applications for Payments

IN THE FIRST SENTENCE OF (9.3.1), CHANGE "ten" **TO** "thirty".

IN PARAGRAPH (9.3.1) IN THE FIRST AND SECOND SENTENCE DELETE THE WORD "Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative".

ADD THE FOLLOWING TO THE END OF PARAGRAPH (9.3.1):

"Payment requests shall consist of AIA Documents #702 "Application and Certificate for Payment"; AIA #703 "Continuation Sheet"; Contractors Affidavit of Payment to Subcontractors and Suppliers; Certified Payroll Form; EEO Documents; and Waivers of Lien. (Waivers of Lien are required from the general contractor in the full amount of the current payment application, and from all subcontractors, suppliers, or workers who provide more than $10,000 of project material/labor of the Work. The waiver shall be in the amount(s) listed in the Contractor's Affidavit.) For final payment, the general contractor shall also provide a Waiver of Lien in the full amount of the contract price.

The Waiver of Lien and Contractor Affidavit forms used shall be the Peoria Park District's standard form(s): 1) "Final Waiver of Lien" (for general contractors), 2) "Waiver of Lien - General Contractor's Partial To Cover Only Certain Payments", 3) "Sub-Contractor's Final Waiver of Lien", 4)

"Waiver of Lien - Sub-Contractor's Partial To Cover Only Certain Payments, and 5) "Contractor's Affidavit". (These forms are included in the Project Manual, and are the required Waiver of Lien forms for the project.)

(If the Contractor is unable to provide the required sub-contractor waiver at the time the application for payment is submitted (preferred method) alternatively, it may be provided at the time that payment is delivered by the District. If the sub-contractor waiver(s) still cannot be provided at that time, the District will provide "two-party" checks in which the Contractor and the sub-contractor are named jointly as payees.)

Format of AIA #703 shall follow that of "Schedule of Values". All payment requests shall reflect retainage in the amount of 10% of completed work."

IN PARAGRAPH (9.3.1.1) DELETE THE WORDS "or by interim determination of the Architect, but not yet included in Change Orders".

ADD THE FOLLOWING SUB-PARAGRAPHS TO PARAGRAPH (9.3.1):

9.3.1.3 Upon Substantial Completion, the Owner will pay 95% percent of the amount due to the Contractor on account.

9.3.1.4 Monthly progress payments will be made by the Owner on projects lasting more than sixty days (from award of the bid to the Substantial Completion date given in the Supplementary Instructions to Bidders).

ADD THE FOLLOWING SUB-PARAGRAPHS TO PARAGRAPH (9.3.2):

9.3.2.1 Material stored on site will be considered for payment only when a Schedule of Stored Materials with appropriate values accompany the payment request as an attachment.

9.3.2.2 All material and work covered by partial payments made shall thereupon become the sole property of the Owner, but this provision shall not be construed as relieving the Contractor from the sole responsibility for the care and protection of material and work upon which payments have been made or the restoration of any damaged work, or as a waiver of the contract.

9.4 – Certificates for Payment

IN PARAGRAPH (9.4.1) DELETE THE WORDS "Architect" **AND** "Architect's" **AND SUBSTITUTE THE WORDS "**Owner's Representative" **AND** "Owner's Representative's".

IN PARAGRAPH (9.4.1) DELETE THE PHRASE "with a copy to the Contractor".

IN THE FIRST SENTENCE OF PARAGRAPH (9.4.2) DELETE THE WORD "Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative".

IN THE FIRST SENTENCE OF PARAGRAPH (9.4.2) AFTER THE WORDS "Architect's" **ADD THE WORDS** "and Owner's Representative's".

IN THE THIRD SENTENCE OF PARAGRAPH (9.4.2) DELETE THE WORDS "Architect has" **AND SUBSTITUTE THE WORDS** "Owner's Representative and Architect have".

9.5 – Decisions to Withhold Certification

IN PARAGRAPH (9.5.1) DELETE THE WORDS "Architect" **AND** "Architect's" **AND SUBSTITUTE THE WORDS** "Owner's Representative **AND** "Owner's Representative's".

IN PARAGRAPH (9.5.2) DELETE THE WORD "Architect's" **AND SUBSTITUTE THE WORDS** "Owner's Representative's".

IN PARAGRAPH (9.5.4) DELETE THE WORD "Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative".

9.6 – Progress Payments

IN PARAGRAPHS (9.6.1), (9.6.3), AND (9.6.4) DELETE THE WORDS "Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative".

9.7 – Failure of Payment

IN PARAGRAPH (9.7) DELETE THE WORD "Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative".

IN PARAGRAPH (9.7) DELETE THE WORDS "or awarded by binding dispute resolution".

9.8 – Substantial Completion

IN PARAGRAPH (9.8.2) DELETE THE WORD "Architect" **AND SUBSTITUTE THE WORDS "**Owner's Representative".

IN THE FIRST SENTENCE OF PARAGRAPH (9.8.3) DELETE THE WORD "Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative assisted by the Architect".

IN THE SECOND AND THIRD SENTENCES OF PARAGRAPH (9.8.3) DELETE THE WORDS "Architect's" and "Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative's" and "Owner's Representative".

IN PARAGRAPH (9.8.4) DELETE THE WORD "Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative".

9.9 – Partial Occupancy or Use

IN PARAGRAPH (9.9.1) DELETE THE WORD "Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative".

9.10 – Final Completion and Final Payment

IN PARAGRAPH (9.10.1) IN THE FIRST AND SECOND SENTENCE AFTER THE FIRST TWO APPEARANCES OF THE WORD 'Architect" **ADD THE WORDS** "and Owner's Representative".

IN PARAGRAPH (9.10.1) DELETE THE THIRD AND FOURTH APPEARANCES OF THE WORD "Architect" and "Architect's" **AND SUBSTITUTE THE WORDS** "Owner's Representative" and "Owner's Representative's".

IN PARAGRAPH (9.10.1) AFTER THE FIFTH APPEARANCE OF THE WORD "Architect's" **ADD THE WORDS** "and Owner's Representative's".

IN THE LAST SENTENCE OF PARAGRAPH (9.10.1) DELETE THE WORD "Architect's" **AND SUBSTITUTE THE WORDS** "Owner's Representative's".

IN PARAGRAPH (9.10.2) DELETE THE WORD "Architect" **AND SUBSTITUTE THE WORD** "Owner's Representative".

ADD THE FOLLOWING SUB-PARAGRAPH TO PARAGRAPH (9.10.2):

9.10.2.1 When all items including items noted within Division 10000 General Requirements are found to be complete and in conformance with the Contract Documents, a final payment will be issued.

IN PARAGRAPH (9.10.3) DELETE THE WORD "Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative".

ARTICLE 11: INSURANCE AND BONDS

11.1 – Contractor's Insurance and Bonds

IN PARAGRAPH (11.1.1) IN THE FIRST SENTENCE DELETE THE WORDS "the Agreement or elsewhere in the Contract Documents" **AND SUBSTITUTE THE FOLLOWING WORDS** "Attachment A – Project Specific Insurance Requirements" (which is included in the last section of the Project Manual and the requirements therein shall be made part of the Contract Documents). In addition, if any of the work occurs within fifty feet of an active railroad line and the Contractor's general liability coverages provide for exclusions of coverage when working on or near a railroad, the Contractor shall provide a separate Railroad Protective Liability Insurance Policy naming the railroad as the insured party, with the coverage limits required by that railroad."

IN PARAGRAPH (11.1.1) IN THE LAST SENTENCE, DELETE THE WORDS "the Contract Documents" **AND ADD THE WORDS** "Attachment A".

AT THE END OF PARAGRAPH (11.1.2) ADD THE FOLLOWING:

"The Contractor shall furnish a Performance Bond and a separate Labor and Material Payment Bond, each for one hundred percent (100%) of the Contract Sum. Form of these bonds shall be as provided by the Owner in the Project Manual and no other form will be accepted. The Surety shall be authorized to do business in the State of Illinois and be acceptable to the Owner."

ADD THE FOLLOWING SUB-PARAGRAPHS TO PARAGRAPH (11.1)

11.1.5 The Contractor may, at his option, furnish Owner's Protective Liability Insurance in lieu of naming the Owner Additional Insured on the Contractor's policy, as required above. This insurance shall protect the Owner from claims as set forth in Paragraph 11.1.1 of the General Conditions, and to the limits required herein, as shown in "Attachment A".

11.1.6 The Contractor shall furnish two copies of each of the required Certificates or Endorsements for each copy of the Agreement which shall specifically set forth evidence of all coverage required by the Contract Documents. The form of the Certificate(s) or Endorsement(s) shall be those as required in "Attachment A". The Contractor shall also furnish to the Owner copies of any endorsements which limit coverage, or are subsequently issued amending coverage or limits of coverage.

11.2 – Owner's Insurance

IN PARAGRAPH (11.2.1) DELETE THE FIRST AND SECOND SENTENCE.

ADD THE FOLLOWING TO PARAGRAPH (11.2.1) "If the work of the Project is being completed by one general or prime contractor rather than multiple prime contractors, the Contractor shall purchase and maintain property insurance upon the entire Work at the site to the full replacement value thereof. Such insurance shall be in a company or companies against which the Owner has no reasonable objection. This insurance shall include the interests of the Owner, the Contractor, Subcontractors and Sub-subcontractors in the Work."

DELETE PARAGRAPHS (11.2.2) AND (11.2.3) IN THEIR ENTIRETY.

11.3 – Waiver of Subrogation

DELETE PARAGRAPHS (11.3.1) AND (11.3.2) IN THEIR ENTIRETY.

11.4 – Loss of Use, Business Interruption, and Delay in Completion Insurance

DELETE PARAGRAPH (11.4) IN ITS ENTIRETY:

11.5 – Adjustment and Settlement of Insured Loss

DELETE PARAGRAPHS (11.5.1) AND (11.5.2) IN THEIR ENTIRETY.

ARTICLE 12: UNCOVERING AND CORRECTION OF WORK

12.1 – Uncovering of Work

IN PARAGRAPH (12.1.1) DELETE THE WORD "Architect's" **AND SUBSTITUTE WORDS** "Owner's Representative's and Architect's".

IN PARAGRAPH (12.1.1) DELETE THE WORD "Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative".

IN PARAGRAPH (12.1.2) AFTER THE WORD "Architect" **ADD THE WORDS** "and Owner's Representative".

12.2 – Correction of Work

IN PARAGRAPH (12.2.1) AFTER THE WORD "Architect" **ADD THE WORDS** "and Owner's Representative".

ARTICLE 13: MISCELLANEOUS PROVISIONS

13.4 – Tests and Inspections

IN PARAGRAPH (13.4.4) AFTER THE WORD "Architect" **ADD THE WORDS** "and Owner's Representative".

ARTICLE 14: TERMINATION OR SUSPENSION OF THE CONTRACT

14.1 – Termination by the Contractor

IN SUB-PARAGRAPH (14.1.1.3) DELETE THE WORD "Architect" **AND SUBSTITUTE THE WORDS** "Owner's Representative".

14.2 – Termination by the Owner for Cause

IN PARAGRAPH (14.2.2) DELETE THE PHRASE ", upon certification by the Architect that sufficient cause exists to justify such action,".

IN PARAGRAPH (14.2.4) DELETE THE LAST SENTENCE AND ADD THE FOLLOWING "Upon application, the obligation for payment of the amount to be paid to the Contractor or Owner, as the case may be, shall survive termination of the Contract."

14.4 – Termination by the Owner for Convenience

DELETE PARAGRAPH (14.4.3) IN ITS ENTIRETY AND SUBSTITUTE UNDER (14.4.3):

"In case of such termination for the Owner's convenience, the Contractor shall be entitled to receive payment for Work executed, and costs incurred by reason of such termination. In no event, however, will such amounts exceed the Contract Sum reduced by the amount of prior payments except for increases pursuant to the claims procedure in the Contract Documents. Subcontracts, subsubcontracts, and purchase orders will contain appropriate provisions for termination for convenience under this Paragraph 14.4."

ARTICLE 15: CLAIMS AND DISPUTES

15.1 – Claims

IN THE FIRST SENTENCE OF PARAGRAPH (15.1.2) DELETE "requirements of the binding dispute".

IN PARAGRAPH (15.1.3.1) DELETE "Initial Decision Maker" **AND SUBSTITUTE** "Initial Recommendation Maker"

DELETE THE SECOND SENTENCE IN PARAGRAPH (15.1.3.2) IN ITS ENTIRETY.

DELETE PARAGRAPH (15.1.4.2) IN ITS ENTIRETY AND SUBSTITUTE THE FOLLOWING PARAGRAPH (15.1.4.2):

"The contract Sum and Contract Time may be adjusted in accordance with the Initial Recommendation Maker's recommendation, subject to the right of either party to proceed in accordance with this Article 15. The Owner's Representative will issue Certificates for Payment."

DELETE (15.1.7) IN ITS ENTIRETY.

15.2 – Initial Decision

IN PARAGRAPH (15.2) DELETE IN THE HEADING "Initial Decision" AND SUBSTITUTE "Initial Recommendation".

DELETE PARAGRAPH (15.2.1) IN ITS ENTIRETY AND SUBSTITUTE THE FOLLOWING PARAGRAPH (15.2.1):

"Claims, excluding those where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2 or arising under Sections 10.3 10.4, and 11.5, shall be referred to the Initial Recommendation Maker for initial recommendation. The Architect

will serve as the Initial Recommendation Maker, unless otherwise indicated in the Agreement. Except for those Claims excluded by this Section 15.2.1, an initial recommendation shall be required as a condition precedent to mediation of any Claim. If an initial recommendation has not been rendered within 30 days after the Claim has been referred to the Initial Recommendation Maker, the party asserting the Claim may demand mediation without a decision having been rendered. "

DELETE PARAGRAPH (15.2.2) IN ITS ENTIRETY AND SUBSTITUTE THE FOLLOWING PARAGRAPH (15.2.2):

"The Initial Recommendation Maker will review Claims and within ten days of the receipt of a Claim take one or more of the following actions: (1) request additional supporting data from the claimant or a response with supporting data from the other party, (2) recommend rejecting the Claim in whole or in part, (3) recommend approving the Claim, (4) suggest a compromise, or (5) advise the parties that the Initial Recommendation Maker is unable to recommend a resolution of the Claim if the Initial Recommendation Maker lacks sufficient information to evaluate the merits of the Claim or if the Initial Recommendation Maker concludes that, in the Initial Recommendation Maker's sole discretion, it would be inappropriate for the Initial Recommendation Maker to make recommendation on the Claim."

IN PARAGRAPH (15.2.3) DELETE "Initial Decision Maker" **AND SUBSTITUTE** "Initial Recommendation Maker".

IN PARAGRAPH (15.2.3) IN THE FIRST SENTENCE, DELETE "rendering a decision" **AND SUBSTITUTE** "rendering a recommendation".

IN PARAGRAPH (15.2.4) DELETE "Initial Decision Maker" **AND SUBSTITUTE** "Initial Recommendation Maker".

IN PARAGRAPH (15.2.4) DELETE THE LAST SENTENCE AND SUBSTITUTE THE FOLLOWING "Upon receipt of the response or supporting data, if any, the Initial Recommendation Maker will provide a recommendation regarding the Claim in accordance with Paragraph 15.2.2."

DELETE PARAGRAPH (15.2.5) IN ITS ENTIRETY.

DELETE PARAGRAPH (15.2.6.1) IN ITS ENTIRETY.

15.3 – Mediation

IN PARAGRAPH (15.3.1) DELETE "as a condition precedent to binding dispute resolution".

IN PARAGRAPH (15.3.2) DELETE THE THIRD SENTENCE IN ITS ENTIRETY AND SUBSTITUTE THE FOLLOWING SENTENCE "The request may be made concurrently with the filing of legal or equitable proceedings but, in such event, mediation shall proceed in advance of legal or equitable proceedings which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order."

IN PARAGRAPH (15.3.2) DELETE THE LAST SENTENCE IN ITS ENTIRETY.

DELETE PARAGRAPH (15.3.3) IN ITS ENTIRETY.

IN PARAGRAPH (15.3.4) DELETE THE FIRST SENTENCE IN ITS ENTIRETY.

15.4 – Arbitration

DELETE PARAGRAPHS (15.4.1), (15.4.1.1), (15.4.2), (15.4.3), (15.4.4.1), (15.4.4.2), AND (15.4.4.3) IN THEIR ENTIRETY.

. **ADD THE FOLLOWING <u>ARTICLE 16: LABOR, SAFETY AND WAGE STANDARDS TO THE GENERAL CONDITIONS OF THE CONTRACT:</u>**

ARTICLE 16
LABOR, WAGE, SAFETY, AND OTHER STANDARDS

16.1 LABOR STANDARDS. All employers shall comply with the Employment of Illinois Workers on Public Works Act [30 ILCS 570/1 to 570/7].

16.2 WAGE STANDARDS.

16.2.1 PREVAILING WAGE ACT: Wages and benefits to employees shall comply with all Federal and State of Illinois statutes pertaining to public works projects and specifically: Wages of Employees on Public Works [820 ILCS 130/1 - 12].

16.2.2 Not less than the prevailing rate of wages plus benefits as determined by the Department of Labor shall be paid to all laborers, workers and mechanics performing work under this contract. All contractor's bonds shall include a provision as will guarantee the faithful performance of such prevailing wage clause as provided by this bid specification or contract.

16.2.3 The terms “general prevailing rate of hourly wages”, “general prevailing rate of wages” or “prevailing rate of wages” when used in this Act mean the hourly cash wages plus fringe benefits for training and apprenticeship programs approved by the U.S. Department of Labor, Bureau of Apprenticeship and Training, health and welfare, insurance, vacations and pensions paid generally, in the locality in which the work is being performed, to employees engaged in work of a similar character on public works.

16.2.4 PREVAILING WAGE ACT/FOIA
Contractors and subcontractors shall submit proof to the Park District of certified payroll submission to the Illinois Department of Labor on a monthly basis in compliance with the Illinois Prevailing Wage Act. These records will be kept by the Park District for three years and may be reviewed by others through the Freedom of Information Act (FOIA). The Park District will exclude employee’s address, telephone number, and social security number from public inspection.

16.3 SAFETY STANDARDS.

16.3.1 PROTECTION OF PERSONS AND PROPERTY: The Contractor and his subcontractors shall, at all times, comply with applicable provisions of Federal, State and Local laws.

16.3.1.1 The Contractor and his sub-contractors shall have written programs complying with Occupational Safety and Health Administration standards and/or Illinois Department of Labor requirements including, but not limited to the following: hazardous communications, hearing conservation, respirator use, confined space entry, scaffolding, ladders, ventilation, flammable and combustible liquids, and lockout/tagout. The Contractor shall submit documentation of their programs at the request of the Owner's Representative, or Occupational Safety and Health Administration and/or Illinois Department of Labor officials.

16.4 EQUAL EMPLOYMENT OPPORTUNITY/AFFIRMATIVE ACTION/SEXUAL HARASSMENT

16.4.1 During the performance of the contract, the contractor agrees to the following:

16.4.1.1 That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, marital status, national origin or ancestry, age, physical or mental handicap unrelated to ability, or an unfavorable discharge from military service; and further that it will examine all job classifications to determine if minority persons or women are under-utilized and will take appropriate affirmative action to rectify any such under-utilization.

16.4.1.2 That, if it hires additional employees in order to perform his contract or any portion thereof, it will determine the availability (in accordance with the Rules and Regulations of the Illinois Department of Human Rights) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not under-utilized.

16.4.1.3 That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, marital status, national origin or ancestry, age, physical or mental handicap unrelated to ability or an unfavorable discharge from military service.

16.4.1.4 That it will have a written sexual harassment policy to include at the minimum, the following:

16.4.1.4.1 a definition of sexual harassment under the law;

16.4.1.4.2 a description of sexual harassment utilizing examples;

16.4.1.4.3 a formalized complaint procedure;

16.4.1.4.4 a statement of victim's rights;

16.4.1.4.5 directions on how to contact the Illinois Department of Human Rights. Out-of-state companies must provide directions for filing with the enforcement agency within their state. Companies that issue a standard policy for all business locations must prepare an addendum providing directions on how to contact the appropriate enforcement agency; and

16.4.1.4.6 A recitation that there cannot be any retaliation against employees who elect to file charges.

16.4.1.4.7 In addition, it is recommended that the employer post a copy of the sexual harassment policy in a prominent and accessible location and distribute it in a manner to assure notice to all employees on an annual basis.

16.4.1.4.8 The Illinois Human Rights Act specifically provides that all documents may meet, but cannot exceed, the sixth-grade literacy level. Therefore, the employer’s sexual harassment policy must be stated in plain language and in "laymen's terms".

16.4.1.5 That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the contractor's obligations under the Illinois Human Rights Act and the Department's Rules and Regulations. If any such labor organization or representative fails or refuses to cooperate with the contractor in its efforts to comply with such Act and Rules and Regulations, the contractor will promptly so notify the Department and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations thereunder.

16.4.1.6. That it will submit reports as required by the Department's Rules and Regulations, furnish all relevant information as may from time to time be requested by the Department or the contracting agency, and in all respects comply with the Illinois Human Rights Act and the Department's Rules and Regulations.

16.4.1.7. That it will permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency and the Department for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Department's Rules and Regulations.

16.4.1.8. That it will include verbatim or by reference the provisions of this clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so that such provisions will be binding upon such subcontractor. In the same manner as with other provisions of this contract, the contractor will be liable for compliance with applicable provisions of this clause by such subcontractors; and further it will promptly notify the contracting agency and the Department in the event any subcontractor fails or refuses to comply therewith. In addition, the contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

16.4.2 In the event of the contractor's non-compliance with the provisions of the Illinois Human Rights Act, the contractor may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporation, and the contract may be cancelled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulations.

END OF SUPPLEMENTARY GENERAL CONDITIONS

SECTION 010000 - GENERAL

A. SUMMARY OF THE WORK

1. The Work covered under this Contract consists of that work described by the Invitation to Bid, the Instructions/Supplemental Instructions to Bidders, the Bid/Proposal Form, the General/Supplemental Conditions of the Contract, these General Requirements, the Plans, and the Technical Specifications.
2. The Contractor shall be responsible for all items incidental to the scope of the Work intended by the bidding documents as per A.1 above, including but not limited to, expenses incurred by the requirements of various Sections of Division 010000, unless specifically stated otherwise herein.
3. Changes to the Work as required by approved Change Orders shall be at the expense of the Owner, however, requests for additional payments made after the fact will not be considered.

B. OCCUPANCY BY OWNER.

1. The Owner reserves the right to occupy any portion of the project before it has been entirely completed, with the understanding that such occupancy shall in no way constitute acceptance of the work, in whole or in part, or of any work performed under the Contract, provided that such occupancy does not substantially interfere with completion of the work by the Contractor.

SECTION 012300 – ALTERNATES

A. Alternates to the Bid are set forth in the Supplementary Instructions to Bidders and are listed in the Bid Form.

1. Accepted Alternates have been incorporated into the Agreement.

B. Bid Alternate pricing, as set forth in the Supplementary Instructions to Bidders and the Bid Form, shall be good for a minimum of 90 calendar days after the date of the Bid opening, and the Owner reserves the right to accept Alternates up to that time.

SECTION 012600 - CHANGE ORDERS

A. OWNER'S REPRESENTATIVE'S FIELD ORDERS

1. From time to time during progress of the Work the Owner's Representative may issue an "Owner's Representative's Field Order" which interprets the Contract Documents or orders minor changes in the Work without change in Contract Sum or Contract Time.
2. Should the Contractor consider that a change in Contract Sum or Contract Time is required he shall submit an itemized proposal to the Owner's Representative **immediately and before proceeding with the Work**. If the proposal is found to be satisfactory and in proper order, the Field Order will be superseded by a Change Order.

B. PROPOSAL REQUESTS

1. From time to time during the progress of work the Owner's Representative may issue a "Proposal Request" for an itemized quotation for changes to the Work which may result in a change to the Contract Sum or Contract Time. This document **is not a Change Order** and is not a direction to proceed with the changes described therein.

C. CHANGE ORDERS

1. Change Orders are written documents describing changes in the Work, in the Contract Sum, in the Contract Time of Completion, or any combination thereof. Change Orders must be signed by both the Owner and the Architect/Owner's Representative prior to proceeding with the Work subject to the Change Order. **REQUESTS FOR "EXTRA'S" OR OTHER ADDITIONAL PAYMENTS OVER AND ABOVE THE CURRENT CONTRACT SUM WILL NOT BE CONSIDERED WITHOUT THE PRIOR, WRITTEN APPROVAL OF BOTH THE OWNER AND THE OWNER'S REPRESENTATIVE.**
    a) INITIATION. Change Orders may be initiated by a "Field Order" or "Proposal Request" per paragraphs "A" and "B" above. In addition, either the Contractor or Owner (or Owner's Representative) may initiate a Change Order through:
        1) Discovery of a discrepancy in the Contract Documents,
        2) Discovery of concealed conditions or,
        3) Discovery, during the course of the Work, of methods of accomplishing the Work in a better or more economical manner.
    b) PROCESSING CHANGE ORDERS.
        1) Change Orders will be dated and will be numbered in sequence.
        2) The Change Order will describe the change or changes, or will refer to the Proposal Requests or Field Orders involved.
        3) The Owner's Representative will issue three copies of each Change Order to the Contractor.
        4) The Contractor promptly shall sign all three copies and return them to the Owner's Representative.
        5) The Owner and Owner's Representative will retain two signed copies in their files, and will forward one signed copy to the Contractor.
        6) Should the Contractor disagree with the stipulated change in Contract Sum or change in Contract Time of Completion, or both:
            i) The Contractor promptly shall return all three of the Change Orders, unsigned by him, to the Owner's Representative with a letter signed by the Contractor stating the reason or reasons for the Contractor's disagreement.
            ii) The Contractor's disagreement with the Change Order shall not in any way relieve the Contractor of his responsibility to proceed with the change as ordered and to seek settlement of the dispute under pertinent provisions of the Contract Documents.

SECTION 012900 – PAYMENT PROCEDURES

A. SCHEDULE OF VALUES

1. Prior to the start of construction, submit a proposed Schedule of Values to the Owner's Representative which shows a detailed breakdown of the agreed Contract Sum showing values allocated to each of the various parts of the Work, as specified herein and in other provisions of the Contract Documents.
    a) The Schedule of Values is required to be compatible (in the same format) with the Application for Payment "Continuation Sheet", AIA G703.
2. If not requested to submit additional data or to modify the submitted Schedule of Values within ten (10) days of submittal, the initially submitted Schedule shall be deemed approved.

B. APPLICATIONS FOR PAYMENT
1. Progress payments will be made only if specifically called for in the Agreement. In all other cases, the Contractor may submit an Application for Payment (3 copies) upon Substantial Completion (95% of the Contract Sum), with the balance of the Contract Sum to be paid at Final Completion.
    a) **Article 9 of the Supplementary General Conditions defines the documentation required for each payment request.**
    b) Applications for payment shall be delivered to the Owner's Project Manager at:

Department of Planning, Design, and Construction
Peoria Park District
Bradley Park Equipment Service
1314 N. Park Road
Peoria, Illinois 61604

SECTION 013100 - PROJECT MEETINGS

A. PRECONSTRUCTION CONFERENCE
1. Conduct a preconstruction conference prior to the start of the Work, at the location of the Work. Provide attendance by the designated personnel of the Contractor, including Sub-contractor's and/or suppliers of major components of the Work, if requested by the Owner's Representative.
    a) AGENDA. Discuss items of significance that could affect progress including such topics as:
        1) Tentative construction schedule.
        2) Critical Work sequencing.
        3) Designation of responsible personnel.
        4) Procedures for processing field decisions and Change Orders.
        5) Procedures for processing Applications for Payment.
        6) Distribution of Contract Documents.
        7) Submittal of Shop Drawings, Product Data and Samples.
        8) Preparation of record documents.
        9) Use of the premises.
        10) Office, Work and storage areas.
        11) Equipment deliveries and priorities.
        12) Safety procedures.
        13) First aid.
        14) Security.
        15) Housekeeping.
        16) Working hours.
        17) Permits and Permitting Agency Requirements

B. PROJECT MEETINGS
1. Project Meetings will be held per the schedule determined at the Preconstruction Conference, or as needed for proper coordination and administration of the project.
    a) AGENDA
        1) Review and correct or approve minutes of the previous progress meeting.
        2) Review progress of the Work since last meeting, including status of submittals for approval.
        3) Identify problems which impede planned progress.
        4) Develop corrective measures and procedures to regain planned schedule.
        5) Complete other current business.

C. REPORTING
1. Distribute copies of the minutes of each meeting to each party present, and to other parties who should have been present, no later than three business days after each meeting.

SECTION 013300 - SUBMITTALS

A. Requirements for shop drawings, samples, mock-ups, product data, etc., relative to specific elements or components of the work are called out in the various sections of the Technical Specifications.
1. Submit items to allow for Owner's Representative's review and approval, potential re-submission if full approval is not given, ordering, delivery, fabrication time, etc., so as to allow the Work to proceed in a timely manner and in conformance with the project schedule.

B. OTHER CONTRACTOR SUBMITTALS
1. Unless otherwise modified the Contractor shall also submit:
    a) A "bar chart" type proposed construction schedule, within ten days after award of the Bid.
    b) Other submittals as required by other section of Division 010000.

C. Submission of the required Bonds and Certificate of Insurance are to be made prior to the Owner's issuance of a Notice to Proceed.

SECTION 014000 – QUALITY/REGULATORY REQUIREMENTS

A. GENERAL: Contractors shall comply with all laws, rules and regulations governing the work.
1. When Contractor observes that contract documents are at variance with specified codes, notify Owner's Representative in writing immediately. Owner's Representative will issue all changes in accord with General Conditions.
2. When Contractor performs any work knowing or having reason to know that the work is contrary to such laws, rules and regulations and fails to so notify the Owner's Representative, Contractor shall pay all costs arising therefrom. However, it will not be the Contractor's primary responsibility to make certain that the contract documents are in accord with such laws, rules and regulations.

B. SAFETY:
1. Comply with all federal, state, and local laws, rules and regulations governing the installation/construction of the work.
2. Develop and utilize safety program and training for workmen and sub-contractor employees.

C. TESTING
1. TESTS AND INSPECTIONS REQUIRED
a) Provide all tests and inspections required by governmental agencies having jurisdiction, as required by provisions of the Contract Documents and/or as specifically required by sections of the Technical Specifications.
2. PAYMENT FOR TESTING
a) Include within the Contract Sum an amount sufficient to cover all testing, re-testing, and inspections required by the Contract documents and/or the Technical Specifications. Additionally pay for all testing and inspections required by all governmental agencies having jurisdiction.
1) The Owner will pay for any testing and inspecting specifically requested by the Owner's Representative which are over and above those described in Paragraph 1.a) above.
2) When initial tests (over and above those defined by 1.a) above) requested by the Owner's Representative indicate non-compliance with the Contract Documents, costs of initial tests associated with that non-compliance will be deducted by the Owner from the Contract Sum, and subsequent retesting occasioned by the non-compliance shall be performed by the same testing laboratory and the costs thereof shall be paid by the Contractor.
3. WAIVER OF INSPECTION AND/OR TESTS
a) Specified inspections and/or tests may be waived only by the specific written approval of the Owner's Representative, and **such waivers will be expected to result in credit to the Owner equal to normal cost of such inspection and/or test.**

SECTION 014200 - REFERENCE STANDARDS AND DEFINITIONS

A. Copies of Standards: Each entity engaged in construction on the Project is required to be familiar with industry standards applicable to that entity's construction activity. Copies of applicable standards are not bound with the Contract Documents.
1. Where copies of standards are needed for performance of a required construction activity the Contractor shall obtain copies directly from the publication source.
2. Although copies of standards needed for enforcement of requirements may be included as part of required submittals the Architect reserves the right to require the Contractor to submit additional copies as necessary for enforcement of requirements.

B. 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 authority having jurisdiction or other entity applicable to the context of the text provision. Refer to the Encyclopedia of Associations, published by Gale Research Co. available in most libraries.

C. Definitions: Architect, Owner's Representative, and Owner's Project Manager
1. ARCHITECT: The Architect shall be the person or entity designated by the Owner as the Owner's Representative and shall be identified as such in the Agreement Between Owner and Contractor, and is referred to throughout the Contract Documents as if singular in number and masculine in gender.
2. OWNER'S REPRESENTATIVE: The duties of the Owner's Representative as listed in the Project Manual, include but are not limited to, construction phase observation and technical administration services.
a) LIMITS OF AUTHORITY: The Owner's Representative shall be authorized to provide approvals and interpretations concerning the plans, specifications and progress of the Work as bid, but is not authorized to change the scope of the Work on behalf of the Owner.
3. OWNER'S PROJECT MANAGER: The Owner's Project Manager will represent, act on behalf of, and provide interface between the Owner and the Contractor in respect to contract administration and/or other matters which affect the scope of the Work.
a) Unless defined otherwise in the Project Manual, the Owner's Project Manager shall be a designated member of the Planning, Design, and Construction Division of the Peoria Park District.
b) The Owner's Project Manager will also be the Owner's Representative and will provide construction phase observation and technical administration services, if a consultant Architect has not been engaged to do so, by the Owner.

SECTION 015000 – TEMPORARY FACILITIES & CONTROLS

A. MOBILIZATION
1. Furnish all labor, tools, materials, equipment, and incidentals necessary for preparatory work.
2. Provide and establish personnel, equipment, supplies, materials, offices or buildings, and other facilities necessary to work on the project.
3. Demobilize all of the above and remove temporary facilities at the completion of the project.

B. BARRIERS, PROTECTION OF SITE AND PROPERTY
1. GENERAL
a) Owner's improvements to remain, existing utilities, as well as adjacent site improvements shall be protected from damage by barriers, guards and coverings. Damaged work shall be replaced or repaired to condition prevailing at time of signing of contract, at no additional cost to Owner.
b) Provide 6' high, continuous chain link or orange plastic (used materials acceptable) construction fence to prohibit unauthorized personnel or public entry from the site of the Work. (Substitutions may be considered; submit request in writing to the Owner's Representative.)
c) Contractor shall provide, erect and maintain additional planking, fences, protective canopies, railings, shoring, lights, warning signs, etc., as needed for the protection of adjacent property and the public.

2. LANDSCAPE PROTECTION
   a) All live, healthy trees, shrubs, etc. on the site or on the street fronts of the site, not specified to be removed and not interfering with installation of new work required hereunder, shall be protected against injury from construction operations.
   b) All shade trees which are to remain and which are liable to damage during the building operations, shall be properly boxed and protected from damage during the course of construction work as directed by the Park District. **No site-related work shall occur until the required tree protection (fencing, boxing, etc.) has been installed and approved by the Owner or his representative.**
      1) LIQUIDATED DAMAGES: The Owner reserves the right to charge the Contractor for damage to existing trees, and to deduct the charges from the amounts due the Contractor, based on the following schedule:

aa)	Broken limbs 1" or over in diameter:	$50 per caliper inch of limb
bb)	Trenching or grading within the tree dripline or 20' from the trunk, whichever is less, of trees 4" or over in caliper diameter:	$100 per tree/per foot within dripline, or within 20' minimum if applicable
cc)	Damage to tree trunks, including "barking", nicking, gouging, etc.	$150 per caliper inch of tree, per each injury

3. BARRIERS/CONSTRUCTION FENCE MATERIALS
   a) 2" open mesh chain link fence, 72" high minimum, galvanized, with appropriately sized posts; gates where indicated.
   b) Alternate barrier fencing materials may be acceptable, however, no additional payments will be made on account of approval of alternate barrier/safety fencing materials.
   c) Materials may be new or used, if in serviceable condition.
4. WATCHMAN SERVICE
   a) The Owner will not be responsible for loss due to theft or other damage which is not covered under Property Insurance. The Contractor shall make such arrangements for watchman service as he considers necessary and he shall be responsible for all loss or damage of his property, equipment, material, etc., at the site, and he shall make good such damage or loss without any additional cost to the Owner.
5. EXISTING IMPROVEMENTS - PROTECTION
   a) The Contractor shall be entirely responsible for all injuries to water pipes, electric conduits or cables, drains, sewers, gas mains, poles, telephones and telegraph lines, streets, pavements, sidewalks, curbs, culverts, retaining walls, building walls, foundation walls, or other structures of any kind met with during the progress of the Work, and shall be liable for damages to public or private property resulting therefrom.

C. CONSTRUCTION ACCESS, ROADS, AND PARKING AREAS
1. CONTRACTOR'S USE OF PREMISES
   a) The Contractor shall require that all personnel who will enter upon the Owner's property certify their awareness of and familiarity with the requirements of this Section.
2. CONSTRUCTION ACCESS
   a) To avoid traffic conflict with vehicles of the Owner's employees and customers, and to avoid over-loading of streets and driveways elsewhere on the Owner's property, limit the access of trucks and equipment to the route shown (IF SHOWN) on the Drawings as "Access Route". If access route is not shown on the Drawings, coordinate construction access and routes with the Owner's Project Manager.
   b) Do not permit such vehicles to park on any street or other area of the Owner's property except in the area shown on the Drawings as "Contractor's Parking Area". If not shown on the drawings, the Contractor's Parking Area shall be as designated by the Owner's Project Manager.
   c) Provide adequate protection for curbs and sidewalks over which trucks and equipment pass to reach the job site.
3. SECURITY
   a) Restrict the access of all persons entering upon the Owner's property in connection with the Work to the Access Route and to the actual site of the Work.

D. TEMPORARY ENVIRONMENTAL CONTROLS
1. GENERAL
   a) Provide temporary environmental controls at the site of the Work to ensure that construction operations have no harmful effects on adjacent properties and on members of the public who may come in proximity to the Work, and/or the employees of the Owner who are engaged in regular daily tasks and operations and are unable to be relocated to another work site during construction operations.
   b) Owner reserves the right to stop the Work, at the Contractor's expense, until the Contractor provides necessary control measures for the conditions listed below; additionally, the Owner reserves the right to perform or have performed necessary control measures, should the Contractor refuse to do so at the time requested and to deduct the cost of those expenses from the amount due the Contractor.
2. DUST CONTROL
   a) Provide dust control materials to minimize dust from construction operations. Prevent air-borne dust from dispersing into the atmosphere.
3. WATER CONTROL
   a). Control surface water to prevent damage to the project, the site and adjoining properties.
      1) Control fill, grading, and ditching to direct surface drainage away from excavations, pits, tunnels, and other construction areas; direct drainage to proper runoff channels or storm drainage utilities.
   b) Provide, operate and maintain hydraulic equipment of adequate capacity to control surface water.
   c) Dispose of drainage water in a manner to prevent flooding, erosion silting, or runoff of silt or sediment or other damage to all portions of the site or to adjoining properties.
4. RODENT CONTROL
   a) Provide rodent control to prevent infestation of construction or storage areas.
      1) Use methods and materials which will not adversely affect conditions at the site or on adjoining properties.
5. DEBRIS CONTROL
   a) Maintain all areas free of extraneous debris, waste, and rubbish.
6. POLLUTION CONTROL
   a) Prevent contamination of soil, water or atmosphere by the discharge of noxious substances from construction operations.
   b) Provide equipment and personnel, perform emergency measures to contain all spillages, and to remove contaminated soils or liquids.
      1) Excavate and dispose of all contaminated earth off-site. Replace with suitable compacted fill and topsoil.
   c) Take special measures, as necessary, to prevent harmful substances from entering public waters, including lakes, streams, intermittent drainage channels, and storm or sanitary sewers.
7. EROSION CONTROL

a) Plan and execute construction and earthwork in a manner to control surface drainage from cuts and fills, and from borrow and waste disposal areas, to prevent erosion and sedimentation.
   1) Schedule the Work to minimize the areas of bare soil exposed at one time, if possible.
   2) Provide temporary control measures such as berms, dikes, and drains to prevent runoff of silt or sediment from the site.
   3) Comply with Section 015713.

E. PROJECT IDENTIFICATION AND SIGNAGE
1. GENERAL
   a) Provide and install project identification sign, if located and/or called out on the Drawings.
2. SUBMITTALS
   a) Provide shop drawing(s) of proposed sign/sign installation to Owner's Representative for approval, prior to installation
3. INSTALLATION
   a) Provide project sign as detailed on Drawings
   b) If not detailed on Drawings provide project identification sign per the following minimum requirement:
      1) Content
         aa) Name of project
         bb) Name of Owner
         cc) Name of Architect(s) and major consultants
         dd) Names of Contractor and major subcontractors
         ee) Allow additional 200 characters of text explaining the project

      2) Construction
         aa) Size: 4' x 8'
         bb) Materials: Min. 5/8" AC DFPA Exterior Plywood, with (2) 4" x 4" x 12' long pressure treated post supports
         cc) Paint: paint front and back, seal edges, provide content as approved by Owner's Representative. Conform to recognized sign painting standards in selection of paint materials. Use only professional sign painter with three years minimum experience to apply sign graphics and lettering.
      3) Install sign in a manner consistent with length of time of construction operations. Remove sign and fill post holes at project completion.

F. FIELD OFFICES
1. TEMPORARY FACILITIES
   Provide and pay for temporary (new, or used if in serviceable condition) facilities and controls needed for the Work, if called out on the Drawings, which may include, but are not necessarily limited to:
   a) Temporary utilities such as heat, water, electricity, and telephone;
   b) Field office for the Contractor's personnel (required if shown on the Drawings; otherwise at the Contractor's option and expense).
      1) Conform with requirements for Engineer's Field Office Type B, as defined in Article 646.04 of the Standard Specifications for Road and Bridge Construction - Illinois Department of Transportation.
   c) Sanitary facilities;
   d) Enclosures such as tarpaulins, barricades, and canopies;
   e) Temporary fencing of the construction site;
   f) Project sign.
2. Comply with Federal, State, and local codes and regulations.
   a) Maintain temporary facilities and controls in proper and safe condition throughout the progress of the work. The Contractor is responsible for conformance with all safety codes and regulations for all Work under his jurisdiction, including that of Sub-Contractors.
3. Locate temporary facilities as shown on the Drawings, or as approved by the Owner's Representative if not shown on the Drawings.

SECTION 015713 – EROSION & SEDIMENT CONTROL

A. RELATED DOCUMENTS
1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

B. SUMMARY
1. This Section includes the following:
   a) Site erosion and sediment control
   b) Silt fencing
   c) Ditch checks
   d) Erosion control blankets
   e) Culvert and inlet protection
   f) Stabilized entrance
2. Related Sections include the following:
   a) Division 31 – Earthwork.
   b) Division 32 – Exterior Improvements.

3. Erosion and Sediment Control Statement: The Peoria Park District takes the issue of construction related erosion and sediment control extremely seriously. The Peoria Park District is a community leader in the conservation and protection of our area's natural resources. This project will be watched closely by both staff and citizens for compliance with erosion and sediment control regulations and specifications.

C. QUALITY ASSURANCE
1. Materials and methods of construction shall comply with the following standards:
   a) Illinois Department of Transportation
   b) City of Peoria

D. PRODUCTS

1. Silt Fencing

a) Fabric for silt fencing shall consist of woven or nonwoven filaments of polypropylene, polyester, or polyethylene. Fabric shall be resistant to degradation by ultraviolet light and heat exposure. Fabric shall be rot, insect, and mildew proof, and have a high resistance to tearing.

1) Fabric shall comply with the following physical properties:

aa)	Grab tensile strength (lb) – ASTM D4632	200 (min)
bb)	Grab elongation @ break (%) – ASTM D4632	12
cc)	Burst strength (psi) – ASTM D751	250 (min)
dd)	Trapezoidal tear strength (lb) – ASTM D4533	75
ee)	Width (ft)	3.5 (min)
ff)	Weight (oz/sq. yd) – ASTM D3776	4.0
gg)	Equivalent opening size	30 (nonwoven)
hh)	(EOS) sieve no. – Corps of Engrs. CS-02215	50 (woven)

2. Ditch Checks

a) Ditch checks will consist of silt fencing with the addition of wire reinforcement.

b) Wire shall be 9 gauge.

c) Alternate: Straw bales may be used in lieu of silt fencing

3. Posts

a) Posts shall be standard "T" or "U" steel posts or wood with a minimum cross section of 3 square inches. Posts shall be a minimum of 60" in length. Posts shall be driven a minimum of 24" into the ground.

4. Erosion Control Blankets

a) Excelsior Blanket: Excelsior blanket shall consist of a machine produced mat of wood excelsior of 80% 6" or longer fiber length. The wood from which the excelsior blanket is cut shall be properly cured to achieve adequately curled and barbed fibers.

1) The blanket shall be of consistent thickness, with the fiber evenly distributed over the entire area of the blanket. The excelsior blanket shall be covered on the top side with a 90-day biodegradable extruded plastic mesh netting having an approximate minimum opening of 16 x 16 mm (5/8 x 5/8 in.) to an approximate maximum opening of 50 x 25 mm (2 x 1 in.). The netting shall be substantially adhered to the excelsior blanket by a knitting process using biodegradable thread or by an applied degradable adhesive. The netting shall be substantially adhered to the excelsior by a knitting process using biodegradable thread. The netting shall be entwined with the excelsior blanket for maximum strength and ease of handling.

2) The excelsior blanket shall comply with the following:

aa)	Minimum width, $\pm$ 25 mm (1 in.)	600 mm (24 in.)
bb)	Minimum mass $\pm$ 10%	0.34 kg/sm (0.63 lb/sq yd)
cc)	Minimum length of roll, approximately	45 m (150 ft)

3) The excelsior blanket shall be smolder resistant.

5. Culvert And Inlet Protection

a) Culvert protection shall consist of a ditch check immediately upstream of every culvert entrance. Ditch check shall be installed to protect culvert interior from sedimentation.

b) Inlet protection shall consist of purpose made devices by:

Dandy Products, Inc.
P. O. Box 1980
Westerville, Ohio 43086-1980
Phone: 1-800-591-2284
Fax: 740-881-2791
www.dandyproducts.com
dlc@dandyproducts.com

or

NILEX, Inc.
15171 E. Fremont Drive
Centennial, CO 80112
Phone: 1-800-537-4241
Fax: 303-766-1110
www.nilex.com
denver@nilex.com

c) "Or Equal" substitutions may be made with prior approval of Owner's Representative.

6. Stabilized Entrance

a) Stabilized entrance shall consist of coarse aggregate laid over geotextile fabric.

b) Dimensions: 70' long by 14' wide.

c) Geotextile Fabric: as per requirements of "silt fencing".

d) Aggregate: IDOT Class CA-1, CA-2, cA-3, or CA-4.

E. EXECUTION

1. Site Erosion And Sediment Control

a) Contractor is responsible for fulfilling terms of City of Peoria Erosion Control Permit and all applicable portions of the "Erosion, Sediment, and Stormwater Control Ordinance of the City of Peoria".

b) Install control devices as shown on erosion control plan.

c) Install additional measures as needed to control erosion and sedimentation on the site.

2. Silt Fencing Installation

a) Install silt fencing according to details in plans. The silt fence shall be entrenched to a minimum depth of 8".

b) The silt fence shall be installed on the contour, with the ends extending up-slope.

c) Install silt fencing before commencing site clearing work.

3. Ditch Check Installation

a) Install ditch checks according to details in plans.

b) Install ditch checks at locations shown on plans.

c) Install additional ditch checks as needed to control erosion within drainage swales as site conditions and weather dictate.
d) Install ditch checks immediately after swales are graded.

4. Erosion Control Blankets Installation
   a) Install erosion control blankets as needed to control erosion in drainage swales and at the direction of the Owner's Representative.
   b) Anchor stakes shall be driven at a spacing of 2 feet on center.
5. Culvert And Inlet Protection Installation
   a) Install culvert protection at upstream entrances to all culverts.
   b) Install culvert protection to intercept waterborne silt and sediment and prevent it from entering culvert pipes.
   c) Install immediately after culvert installation.
   d) Install inlet protection according to manufacturer's written instructions at each inlet immediately after inlet construction.
6. Stabilized Construction Entrance Installation
   a) Install stabilized construction entrance and other approved measures as necessary to limit tracking of soil on to all paved surfaces.
   b) Comply with all City of Peoria codes limiting tracking of soil on to City streets.
7. Maintenance
   a) Inspect silt fences after each rainfall. Repair fencing, failures, end runs, and erosion cuts immediately.
   b) Remove soil from silt fencing after each rainfall.
   c) Erosion control maintenance and repair shall be considered incidental to the contract.
   d) Tracked soil and sediment shall be removed from all paved surfaces on a daily basis.
   e) Replace or provide new erosion and sediment control measures as needed during construction to provide protection to site and surrounding property for the entire time of construction, or until project is complete.
8. Close-Out
   a) Remove silt fencing and other erosion and sediment control devices after lawn or seeding has been established.
   b) Soil deposits remaining in place after silt fence is no longer required shall be dressed to conform to existing grade, and seeded with appropriate seed material.

SECTION 016000 – PRODUCT REQUIREMENTS

A. MATERIALS AND EQUIPMENT
1. STANDARD SPECIFICATIONS
   a) Reference herein to known standard specifications of governmental agencies or technical societies shall refer to the latest edition of such specifications, adopted and published at date of these Specifications.
2. MANUFACTURED ARTICLES
   a) All manufactured articles, materials and equipment to be incorporated in the work shall be new (unless otherwise specified) and of the quality specified and shall be used, erected, installed, connected, cleaned and conditioned as directed by and in conformity with job conditions to produce the best results obtainable.
      1) Field measurements for all special products and materials which requires close tolerances or fitting into other items or components of the Work shall be taken on the job by the party furnishing the materials.
3. QUALITY ASSURANCE
   a) Per the Supplementary Instructions to Bidders, the Bidder by submission of a signed bid form, agrees to install products and equipment by brand and model name or names specified in the Technical Specifications, Divisions 02-35. Substitutions are allowed only in conformance to the following:
      1) Proprietary Specification Requirement: Where only a single product or manufacturer is named, provide the product indicated. No substitutions will be permitted.
      2) Semiproprietary Specification Requirement: Where two or more products or manufacturers are named, provide one of the products indicated. No substitutions will be permitted
         aa) Where either of the two cases above prevail, and the named product is accompanied by "or approved equal" substitutions will be allowed only upon written approval of the Owner's Representative prior to submission of bids.
      3) Non-Proprietary Specification Requirement: When the Specifications lists products or manufacturers that are available and are accompanied by "or equal", the Contractor may propose any available product that complies with the Specifications' requirements; however, the Owner's Representative shall determine if the produced item complies with those requirements.
      4) Descriptive Specification Requirement: Where Specifications describe a product or assembly listing exact characteristics required, with or without use of a brand, trade, or model name, provide a product or assembly that provides the characteristics and otherwise complies with the Contract Documents.
      5) Performance Specification Requirement: Where Specifications require compliance with performance requirements, provide products or assembly that comply with these requirements and are recommended by the manufacturer for the application indicated.
      6) Compliance with Standards, Codes, and Regulations: Where the Specifications only require compliance with an imposed code, standard, or regulation, select a product that complies with the standard, code, or regulation specified.
   b) VISUAL MATCHING AND SELECTION. Where the Specifications require matching an established sample or call for "as selected", the Owner's Representative's decision will be final on whether a proposed product matches satisfactorily.

B. STORAGE AND PROTECTION
1. GENERAL
   a) Contractor shall provide and maintain:
      1) Storage for materials and equipment to be installed in Project.
      2) Protection and security for stored materials and equipment, on and off site.
      3) Protection of existing on-site elements to remain.
      4) Protection of adjacent properties improvements
2. METHODS
   a) Store off grade and cover with impervious material all moisture or water vulnerable materials.
   b) Store finished products and equipment in an enclosed building, on or off site.
   c) Maintain integrity of shipping cartons until ready for installation.
   d) Provide separate storage for combustible and non-combustible products.

e) Follow storage recommendations of product and equipment manufacturers.
f) Other methods shall be subject to Owner's prior written approval.

3. The Contractor shall maintain an emergency phone number where a contact person can be notified at any time, Sundays and holidays included, of an emergency condition due to the work which requires immediate repair or protection.

C. SUBSTITUTIONS
1. See "SECTION 016000 – A. MATERIALS AND EQUIPMENT" for requirements pertaining to substitution of specified materials, products, equipment, etc.
2. Contractor may propose substitute materials, products, equipment, etc., after award of the Bid; however, such proposals are expected to result in a cost savings to the Owner and/or higher quality Work at no additional cost to the Owner.

D. WARRANTIES AND BONDS
1. GENERAL
a) This Section specifies general administrative and procedural requirements for warranties and bonds required by the Contract Documents, including manufacturer's standard warranties on products and special warranties.
b) Warranties for the Work and products and installations of each Contractor shall be one (1) year unless specified otherwise in the individual Sections of Divisions 02 through 35.
c) Disclaimers and Limitations:
1) Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products, nor does it relieve suppliers, manufacturers, and Contractors required to countersign special warranties with the Contractor.
2) The responsibility of the Contractor in respect to the required warranties shall not be relieved or limited in any way by the failure of installed components, equipment, materials, etc., due to naturally occurring and/or re-occurring conditions at the site or area of the Work including, but not limited to:
aa) ground and soil conditions, especially as related to frost heave;
bb) high wind velocities (except those exceeding velocities normally used for calculating wind loading at the site of the Work);
cc) rain and water damage (unless caused by winds exceeding normal design limits);
dd) ice/snow loading on structures
ee) and other naturally occurring or re-occurring site conditions
3) The Contractor shall notify the Owner's Representative, prior to the award of the contract, of any part or component of the Work that is, in his opinion, not designed to accommodate the existing, naturally occurring, or re-occurring conditions of the site, and whether or not a change in the proposed methods of construction, types of equipment, etc., will affect the bid price.
aa) Should the proposed change in construction methods, equipment type, etc., result in additional expense, the Owner reserves the right to request proposals from the other bidders and to make award the contract based on the bid amount which includes the proposed change.
2. WARRANTY REQUIREMENTS
a) Related Damages and Losses: When correcting warranted Work that has failed, remove and replace other Work that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted Work.
b) 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.

c) 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.
d) Owner's Recourse: Written 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, nor shall warranty periods be interpreted as limitations on time in which the Owner can enforce such other duties, obligations, rights or remedies.
aa) Rejection of Warranties: The Owner reserves the rights to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents.
e) The Owner reserves the right to refuse to accept Work for the Project where a special warranty, certification, or similar commitment is required on such Work or part of the Work, until evidence is presented that entities required to countersign such commitments are willing to do so.
f) For specific warranty requirements related to landscape materials, refer to the applicable Section.
3. SUBMITTALS
a) Submit written warranties to the Owner's Representative prior to the date certified for Substantial Completion. If the Owner's Representative's Certificate of Substantial Completion designates a commencement date for warranties other that the date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of the Owner's Representative.
1) When a designated portion of the Work is completed and occupied or used by the Owner, by separate agreement with the Contractor during the construction period, submit properly executed warranties to the Owner's Representative within fifteen days of completion of that designated portion of the Work.
b) Form of Submittal: At Final Completion, compile two copies of each required warranty and bond 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.
c) 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" paper.
d) Provide heavy paper dividers with celluloid covered tabs for each separate warranty. Mark the tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product, and the name, address and telephone number of the installer.

e) Identify each binder on the front and the spine with the typed or printed title "WARRANTIES AND BONDS", the project title or name, and the name of the Contractor.
f) When operating and maintenance manuals are required for warranted construction, provide additional copies of each required warranty, as necessary, for inclusion in each required manual.

SECTION 017300 – EXECUTION

A. GEOTECHNICAL DATA
1. If the Owner has caused borings or other subsurface investigations to be made, the data or report pursuant to these investigations will be included in the Project Manual, as an Appendix, and labeled as such.
2. The Owner and Owner's Representative do not guarantee the accuracy or validity of the data, nor do they assume any responsibility for the Contractor's interpretation of the data.
3. The Contractor's may, at his option, perform additional subsurface investigation, however, it shall be at the Contractor's sole expense.

B. FIELD ENGINEERING

Provide such field engineering services as are required for proper completion of the Work including, but not limited to:
1. Establishing and maintaining lines and levels
2. Structural design of shores, forms, and similar items provided by the Contractor as part of his means and methods of construction.
3. Verify layout information shown on the Drawings, in relation to the property survey and existing benchmarks and control points. Preserve permanent reference points during construction.

C. COORDINATION OF TRADES AND SUB-CONTRACTORS
1. The Contractor shall be responsible for the proper fitting of all work and for the coordination of the operation of all trades, sub-contractors, or materials and men engaged upon the work. He shall be prepared to guarantee to each of his subcontractors the dimensions which may be required for fitting of their work to all surrounding work and shall do, or cause his agents to do, all cutting, fitting, adjusting and patching necessary to make the several parts of the work come together properly and fit the work to receive, or be received by that of other contractors.
2. When two or more prime contracts are being executed at one time in such manner that the work on one contract may interfere with the work of another, the Owner's Representative shall decide which contractor shall cease work and which shall continue, or whether the work on both contracts may progress at the same time and in what manner.
a) The Contractor shall not cause any unnecessary hindrance or delay to any other contractors on the premises, and shall be responsible for all damages done to the work of other contractors caused by him or by his employees.

D. REFERENCE AND CONTROL POINTS PROVIDED BY OWNER

In addition to layout procedures provided by the Contractor for proper performance of the Contractor's responsibilities:
1. Locate and protect existing control points before starting work on the site.
2. Preserve permanent reference points during progress of the Work.
3. Do not change or relocate reference points or items of the Work without specific approval from the Owner's Representative.
4. Promptly advise the Owner's Representative when a reference point is lost or destroyed, or requires relocation because of other changes in the Work.
5. Upon direction of the Owner's Representative, require the field engineer to replace reference stakes or markers.
6. Locate such replacement according to the original survey control.

E. REFERENCE AND CONTROL POINTS PROVIDED BY THE CONTRACTOR
1. If not provided by the Owner (and defined as the responsibility of the Owner in the Contract Documents) establish sufficient general reference points in the form of permanent bench marks, grade stakes or other markers as will enable the Contractor to proceed with the Work.
2. The Contractor may lay out his own work, or cause the Work to be laid out by a qualified party such as a Registered Land Surveyor or a Professional Engineer, as necessary.
3. The Contractor shall establish and be responsible for all lines, elevations and measurements of the structure utilities, installations, and other Work executed by him under the contract.
a) Exercise proper precautions to verify the figures and dimensions shown on the drawings before laying out the work; be responsible for any error resulting from failure to exercise such precaution.

SECTION 017329 - CUTTING AND PATCHING

A. CHASES AND OPENINGS
1. The Contractor is responsible for the provision and/or coordination of all chases, openings and recesses required by work of his own forces, subcontractors or separate contractors.
a) Each subcontractor or separate contractor shall be responsible for furnishing advance information to the General Contractor as to exact dimensions and locations of such chases and openings, and shall provide and set in place all necessary sleeves, inserts and forms.
b) Openings shall be accurately located, neatly cut, and no larger than necessary. Provide all rebuilding, patching, refinishing and painting required to restore the construction to original condition.
2. Provide shoring, bracing, and support as required to maintain structural integrity of the project.
3. Provide protection from cutting and patching operations as required for other portions of the project; protect the Work and existing improvements in proximity to the cutting and patching operations from the elements.

SECTION 017419 – CONSTRUCTION WASTE MANAGEMENT & DISPOSAL

A. PERIODIC CLEANING
1. Each Contractor shall clean up after his own work as needed and/or ensure that sub-contractors clean up after their work and remove accumulations of waste, debris, and rubbish caused by construction operations.
a) Remove all waste, rubbish and debris on a daily basis (if needed), as they accumulate, and after completion of the Work.

B. PROJECT COMPLETION
1. On completion of the project, the entire job shall be cleaned up and left in perfect condition, including adjacent areas.
a) Marred surfaces shall be patched or repaired and touched up to match adjoining surfaces.

b) All rubbish shall be removed from the site before acceptance.
c) New surfaces and/or exposed elements of the Work shall be protected from stain and marring. These surfaces shall be cleaned to the satisfaction of the Owner's Representative or replaced if said stains or mars are unable to be completely removed

C. GOVERNMENTAL REGULATIONS
1. Conduct cleaning and disposal operations in compliance with Federal, State and local ordinances and anti-pollution laws and regulations.

SECTION 017700 - PROJECT CLOSEOUT

A. GENERAL
Work includes:
1. Substantial Completion.
2. Final Completion
3. Closeout submittals.
4. Instruction

B. SUBSTANTIAL COMPLETION
1. Prepare and submit the list ("punch-list") required by the first sentence of Paragraph 9.8.2 of the General Conditions.
a) Within a reasonable time after receipt of the list the Owner's Representative will inspect to determine status of completion. Should the Owner's Representative determine that the Work is not Substantially Complete:
1) The Owner's Representative will so notify the Contractor, in writing, giving the reasons therefore.
2) Remedy the deficiencies and notify the Owner's Representative when ready for reinspection.
3) The Owner's Representative will reinspect the Work.
b) When the Owner's Representative concurs that the Work is Substantially Complete:
1) The Owner's Representative will prepare a "Certificate of Substantial Completion" on AIA form G704, accompanied by the Contractor's list of items to be completed or corrected, as verified and approved by the Owner's Representative.
2) The Owner's Representative will submit the Certificate to the Owner and to the Contractor for their written acceptance of the responsibilities assigned to them in the Certificate.

C. FINAL COMPLETION
1. Prepare and submit the notice required by the first sentence of Paragraph 9.10.1 of the General Conditions.
a) Verify that the Work is complete including, but not necessarily limited to, the items mentioned in Paragraph 9.8.2 of the General Conditions. Certify that:
1) the Contract Documents have been reviewed;
2) the Work has been inspected for compliance with the Contract Documents;
3) the Work has been completed in accordance with the Contract Documents;
4) equipment and systems have been tested as required, and are operational;
5) the Work is completed and ready for final inspection.
b) The Owner's Representative will make a final inspection to verify status of completion and if all "punch-list" items have been completed, and upon receipt of the Contractor's Final Application for Payment, issue a Certificate of Final Completion. Should the Owner's Representative determine that the Work is incomplete or defective:
1) The Owner's Representative will so notify the Contractor, in writing, listing the incomplete or defective work.
2) Remedy the deficiencies promptly, and notify the Owner's Representative when ready for reinspection.
c) FINAL APPLICATION FOR PAYMENT
1) Submit a final Application for Payment to the Owner's Representative, showing all adjustments to the Contract Sum.
2) If needed, the Owner's Representative will prepare a final Change Order showing adjustments to the Contract Sum which were not made previously by Change Orders.
3) Include final waivers of lien from the Contractor, sub-contractors, and major suppliers.
4) Final payment will not be released until all close-out submittals have been made, final cleaning has been performed, and required instruction(s) to Owner's personnel have been accomplished.

D. CLOSEOUT SUBMITTALS
1. When the Owner's Representative determines that the Work is acceptable under the Contract Documents, he will request the Contractor to make closeout submittals. Closeout submittals include, but are not necessarily limited to:
a) Project record documents described in "Section 017839".
b) Operation and maintenance manuals/data as described in "Section 017823".
c) Warranties and bonds as described in "Section 016000".
d) Keys and keying schedule;
e) Spare parts and materials extra stock;
f) Evidence of compliance with requirements of governmental agencies having jurisdiction including, but not necessarily limited to:
1) Certificates of Inspection, as required
2) Certificate(s) of Occupancy
g) Certificates of Insurance for products and completed operations;
h) Evidence of payment and release of liens.
1) Consent of Surety to Final Payment
2) Contractor's Final Waiver of Lien
3) Separate releases or Waivers of Lien for sub-contractors, suppliers and others with lien rights against the Owner, together with a list of those parties.
i) List of subcontractors, service organizations, and principal vendors, including names, addresses, and telephone numbers where they can be reached for emergency service at all times including nights, weekends, and holidays.

SECTION 017823 - OPERATING/MAINTENANCE MANUALS & INSTRUCTION

A. GENERAL

1. Compile operating/product data and related information appropriate for Owner's maintenance and operation of products and equipment provided under the Contract.
2. Instruct Owner's personnel in operation and maintenance of products, equipment and systems.
3. OPERATIONS AND MAINTENANCE DATA REQUIRED:
    a) Operating and maintenance manuals are required for each area of Work which is listed below, if that area of Work is included within the scope of Work of the project:
        1) HVAC
        2) Plumbing – including water supply, sewage and waste disposal
        3) Electrical
        4) Fire sprinkler system
        5) All Materials and finishes

B. OPERATIONS/MAINTENANCE MANUALS - FORM OF SUBMITTAL
1. Prepare operating and maintenance manuals in the form of an instructional manual, utilizing heavy-duty, durable 3-ring vinyl covered loose-leaf binders, for use by the Owner's operating personnel. Organize into suitable sets of manageable size. Where possible, assemble instructions for similar equipment into a single binder. Provide when drawings or diagrams are required as part of the manual.
2. Provide sturdy manila or kraft envelope, accordion type file folder, or cardboard file boxes, properly labeled, of sufficient size to contain all submittals.
3. Submit one copy of data in final form at least fifteen days before final inspection. This copy will be returned within fifteen days after final inspection, with comments. After final inspection make corrections or modifications to comply with the Owner's Representative's comments and submit three copies of each approved manual to the Owner's Representative
4. WARRANTIES, BONDS AND SERVICE CONTRACTS
    a) Provide a copy of each warranty, bond or service contract in the appropriate manual for the information of the Owner's operating personnel. Provide written data outlining procedures to be followed in the event of product failure. List circumstances and conditions that would affect validity of the warranty or bond. Provide list for each product containing name, address, and phone number of:
        1) Contractor.
        2) Subcontractor.
        3) Maintenance contractor, as appropriate.
        4) Local supply source for parts and replacement.
    b) Identify area of responsibility of each contractor.

C. MANUAL FOR MATERIALS AND FINISHES
1. Submit two (2) copies of complete manual in final form.
2. Refer to individual Specification Sections for additional requirements on care and maintenance of materials and finishes.
3. Content for products, applied materials and finishes:
    a) Manufacturer's data, giving full information on products.
        1) Catalog number, size, composition.
        2) Color and texture designations.
        3) Information for re-ordering special-manufactured products.
4. Instructions for care and maintenance.
    a) Manufacturer's recommendations for types of cleaning agents and methods.
    b) Cautions against cleaning agents and methods detrimental to product.
    c) Recommended cleaning and maintenance schedule.
5. Moisture-Protection and Weather-Exposed Products: Provide complete manufacturer's data with instructions on inspection, maintenance and repair of products exposed to the weather or designed for moisture-protection purposes.
6. Manufacturer's Data: Provide manufacturer's data giving detailed information, including the following, as applicable:
    a) Applicable standards.
    b) Chemical composition.
    c) Installation details.
    d) Inspection procedures.
    e) Maintenance information.
    f) Repair procedures.

D. INSTRUCTION
1. Instruct the Owner's personnel in proper operation and maintenance of systems, equipment, and similar items which were provided as part of the Work including, but not limited to;
    a) Mechanical
    b) Water supply
    c) Electrical service/distribution and lighting
    d) Other items or systems as required in individual sections of the Technical Specifications
2. Instructions for the Owner's Personnel: For instruction of the Owner's operating and maintenance personnel, use experienced instructors thoroughly trained and experienced in the operation and maintenance of the equipment or system involved.

SECTION 017839 - PROJECT RECORD DOCUMENTS (AS-BUILTS)

A. DOCUMENTS REQUIRED AT SITE
1. The Contractor shall maintain at the job site one copy of all Drawings, Specifications, Addenda, approved Shop Drawings, Change Orders, and other Contract modifications.
    a) Each of these project record documents shall be clearly marked **"Project Record Copy"**
    b) Shall be maintained in good condition
    c) shall be available at all times for inspection by the Park District, and shall not be used for construction purposes.

B. Project-record drawings shall be marked up to show significant changes made during construction progress, referenced to visible and accessible features of the structures. Project-record drawings shall be kept current and no work shall be concealed until required information has been recorded.

C. Record-documents shall be submitted in satisfactory condition to the Park District at the completion of the project. **FINAL COMPLETION OF THE PROJECT WILL NOT BE ATTAINED, AND FINAL PAYMENT WILL BE WITHHELD, UNTIL PROJECT "AS-BUILTS" ARE SUBMITTED TO AND APPROVED BY THE OWNER'S REPRESENTATIVE.**

END OF GENERAL REQUIREMENTS

INCLUSIVE BATHROOM & SITE IMPROVEMENTS
GLEN OAK PARK

PEORIA PARK DISTRICT
2218 N PROSPECT RD
PEORIA, IL.61603

PROJECT MANUAL

Issued for Bid

700 N Sangamon
Chicago, IL. 60642
Phone: 312-432-4180
Website: Muller2.com

DOCUMENT 00 01 07

SEALS PAGE

Discipline	Stamp
Architecture	STATE OF ILLINOIS MARK M. STROMBERG 001-017758 LICENSED ARCHITECT EXPIRES: 11/30/2024
Civil	LICENSED PROFESSIONAL ENGINEER KEVIN HEJTMANEK 062-067844 OF ILLINOIS
Structural	LICENSED STRUCTURAL ENGINEER THOMAS L. HARRISON 081-005889 STATE OF ILLINOIS

DOCUMENT 00 31 32

GEOTECHNICAL DATA

1.1 GEOTECHNICAL DATA

A. This Document, with its referenced attachments, is part of the Procurement and Contracting Requirements for the Project. They provide Owner's information for Bidders' convenience and are intended to supplement rather than serve in lieu of Bidders' own investigations. They are made available for Bidders' convenience and information. This Document and its attachments are not part of the Contract Documents.

B. Because subsurface conditions indicated by the soil borings are a sampling in relation to the entire construction area, and for other reasons, Owner, Architect, Architect's consultants, and the firm reporting the subsurface conditions do not warranty the conditions below the depths of the borings or that the strata logged from the borings are necessarily typical of the entire site. Any party using the information described in the soil borings and geotechnical report accepts full responsibility for its use.

C. A Geotechnical Investigation Report for Project, prepared by Midwest Engineering and Testing, Inc., dated May 21, 2024, is available for viewing as appended to this Document 00 31 32.

1. The opinions expressed in this report are those of a geotechnical engineer and represent interpretations of subsoil conditions, tests, and results of analyses conducted by a geotechnical engineer. Owner is not responsible for interpretations or conclusions drawn from the data.
2. Any party using information described in the geotechnical report will make additional test borings and conduct other exploratory operations that may be required to determine the character of subsurface materials that may be encountered.

END OF DOCUMENT

Midwest Engineering and Testing, Inc.
geotechnical - environmental - materials engineers
1701 West Market Street
Bloomington, IL 61701
309-821-0430
FAX 309-821-1242
www.metgeotech.com

May 21, 2024

Ms. Stephanie Coad
Muller & Muller, Ltd.
700 North Sangamon Street
Chicago, Illinois 60642
scoad@muller2.com

Re: Subsurface Exploration and Foundation Recommendations
Proposed Inclusive Bathroom
Glen Oak Park
2218 N. Prospect Road
Peoria, Illinois 61603
MET Project No. B43063

Dear Ms. Coad:

In accordance with your request, Midwest Engineering and Testing, Inc. (MET) has completed a geotechnical exploration and evaluation of the subsurface conditions for the above-referenced project. Our geotechnical report in .pdf format, which includes our findings and recommendations regarding design and construction of the foundation system, is being submitted via e-mail. Hard copies of the report can also be provided, if so desired.

MET appreciates the opportunity to be of service during this phase of the project. If there are any questions or comments you may have regarding the content of this report, or if we may be of any further service, please contact us at your convenience.

Sincerely,

Midwest Engineering and Testing, Inc.

Patrick A. Hahn, P.E.
Geotechnical Department Manager

Daniel E. Tappendorf

Digitally signed by Daniel E. Tappendorf
DN: cn=Daniel E. Tappendorf, o=Midwest Engineering and Testing, Inc., ou=MET, email=dtappendorf@metgeotech.com, c=US
Date: 2024.05.21 13:25:20 -05'00'

Kelsey R. Mueller
Bloomington Division Manager

Daniel E. Tappendorf, P.E.
President

SUBSURFACE EXPLORATION
AND
FOUNDATION RECOMMENDATIONS

Proposed Inclusive Bathroom
Glen Oak Park
2218 N. Prospect Road
Peoria, Illinois 61603

Prepared For

Muller & Muller, Ltd.
700 North Sangamon Street
Chicago, Illinois 60642

May 21, 2024

MET File No. B43063

TABLE OF CONTENTS **Page**

INTRODUCTION

General

This report presents the results of a geotechnical exploration completed for the proposed inclusive bathroom in Peoria, Illinois. A Vicinity Map, Figure 1, is included in the Appendix. The purpose of this study was to document the subsurface conditions, and to establish related parameters for use by design engineers and architects. Included herein are the results of the subsurface exploration, field and laboratory soil test data, and recommendations regarding design and construction of the foundation system.

Scope

The scope of services included a reconnaissance of the site, subsurface exploration, field and laboratory testing of the soil samples collected, and engineering analysis and evaluation of the data. Additionally, area specific geologic maps and literature were reviewed.

Authorization

Authorization to perform this subsurface exploration and analysis was in the form of a fully executed subconsultant agreement between Muller & Muller, Ltd. and Midwest Engineering and Testing, Inc. (MET) and was signed by Catherine E. Muller, President of Muller & Muller, Ltd. on April 9, 2024. The agreement was prepared in response to the MET Proposal No. B24043, dated March 7, 2024, which outlined the scope of services and conditions for performance of the work.

SITE AND PROJECT DESCRIPTION

The project site is located at Glen Oak Park in Peoria, Illinois in a grassy area about 225 feet northwest of the Glen Oak Amphitheatre. The bathroom site has a relatively flat topography with less than 1 foot of relief.

The project involves construction of a new inclusive bathroom. The bathroom will consist of a single-story, slab-on-grade structure, with a concrete pad surrounding the bathroom. The proposed restroom will measure 31 feet by 18 feet at its widest. Relatively light structural loading is anticipated, with shallow continuous and spread footings the anticipated foundation type.

GEOLOGY

General

The geology of the Peoria, Illinois region has been greatly influenced by several major land forming factors. Bedrock and tectonic movements prior to the Pleistocene Period, continental glaciation during the Pleistocene Period, wind action, and man have all contributed to the geologic history of the area.

Bedrock Geology

Bedrock in the project vicinity is generally found at depths of 100 to 200 feet below the ground surface and consists primarily of Pennsylvanian Age deposits associated with the Carbondale Formation. Sandstone, shale, limestone, and coal, are the predominant rock types comprising the formation in this area.

Surficial Geology

The surficial geology in the project vicinity consists of 8 to 12 feet of wind deposited and water-worked loessial material overlying glacial drift associated with the Tiskilwa Till Member of the Wedron Formation. The drift is comprised primarily of glacial till, a compact, heterogeneous mixture of sand and pebbles bound in a matrix of clay or silt, but can also contain inclusions of granular outwash material.

Seismic Considerations

Based upon the soil information obtained in the shallow borings and lacking strength and density information on the soils through a depth of 100 feet, it is our opinion that **Site Class D** as defined in Table 1613.5.2 of the International Building Code (IBC) – 2015 be utilized for design. The project site is located at approximate latitude 40.714332°N and longitude 89.575049°W. At this location, the 0.2 second period (S_S) and 1.0 second period (S_1) spectral acceleration values, as determined from the USGS U.S. Seismic Design Maps Web Application, are 0.143 g and 0.079 g, respectively.

FIELD EXPLORATION

Scope

The subsurface exploration consisted of drilling a total of two (2) soil borings. The borings were advanced to a depth of 16.5 feet below the ground surface in the building footprint. The boring locations are shown on the Boring Location Diagram, Figure 2 in the Appendix. The following sections provide a description of field drilling and testing procedures utilized.

Drilling and Sampling Procedures

The soil borings were performed with a track-mounted drilling rig equipped with a rotary head. Conventional, continuous-flight, hollow-stem augers were used to advance the holes with representative samples obtained employing split-barrel sampling techniques in general accordance with ASTM Procedure D-1586. A sampling interval of 2.5 feet was used through a depth of 15 ft., with 5 ft. intervals thereafter.

Field Tests and Measurements

Standard Penetration Tests: During the sampling procedure, Standard Penetration Tests (SPTs) were performed at regular intervals through the depth of the borings. The SPT value ("N" or blow counts) is defined as the number of blows required to advance a 2-inch O.D., split-barrel sampler a distance of one foot by a 140-pound hammer falling 30-inches. These values provide a useful preliminary indication of the consistency or relative density of most soil deposits and are included on the Soil Boring Logs included in the Appendix.

Water Level Measurements: Water level observations were made during the soil boring operations. Groundwater information is noted on the Soil Boring Logs.

Ground Surface Elevations: The ground surface elevations were estimated using the site survey provided.

LABORATORY TESTING

General

Additional significant characteristics of the foundation materials were determined in the laboratory to provide data on which to classify and quantitatively assess the engineering properties of the soil samples obtained. The types of soils encountered were identified and logged on the boring record. The results of the field and laboratory tests are presented on the Soil Boring Logs.

Laboratory Tests and Measurements

Visual Classification: A soils engineer visually classified all samples in accordance with the Unified Soil Classification System (ASTM D-2488) terminology. An explanation of the symbols used in this system is included in the Appendix to this report.

Moisture Content Tests: The natural moisture content of all samples was determined by ASTM method D-2216 and is recorded on the Soil Boring Logs as a percentage of the dry weight of the soil.

Hand Penetrometer Tests: Cohesive specimens extracted from the split-barrel sampler were tested in the laboratory with a calibrated soil penetrometer. This device provides an approximation of the unconfined compressive strength of the soils, and is useful, along with other soil parameters, in evaluating the soil strength characteristics. The results are listed on the Soil Boring Logs beneath the column labeled "Q_P".

Unconfined Compression Tests: The undrained shear strength of the cohesive soils was determined from unconfined compression tests on specimens obtained from the split-barrel samplers. Soil strength values of samples obtained by the SPT method must also be considered, recognizing that this sampling method provides a representative, but somewhat disturbed sample. The results are listed on the Soil Boring Logs beneath the column labeled "Q_U".

Dry Density Determination: The dry density was determined on the cohesive soils obtained from the split-spoon samples. The results are listed on the Soil Boring Logs beneath the column labeled “Dd”.

DESCRIPTION OF SUBSURFACE CONDITIONS

General

The types of foundation materials encountered at the test boring locations are described on the Soil Boring Logs. The lines delineating the changes in strata on the logs represent an approximate boundary between the various soil classifications. It must be recognized that the soil descriptions are considered representative for the specific test-hole location, but that variation may occur between the sampling intervals and boring locations. A summary of the major soil profile components is described in the following paragraph. A more detailed description and supporting data for each boring location can be found on the individual Soil Boring Logs.

Soil Conditions

The borings encountered 6 to 8 inches of topsoil. Below the topsoil, silty clay of loessial origin was encountered to a depth of about 7 to 10 feet. The loess typically possessed a medium stiff to stiff consistency with moisture contents ranging from 22 to 44 percent. The loess was underlain by glacial drift deposits consisting primarily of silty clay till through the remaining depth explored. The glacial silty clay possessed a very stiff consistency with moisture contents ranging from 13 to 15 percent.

Groundwater Observations

Groundwater was not encountered while drilling. However, upon completion of drilling operations groundwater was found at a depth of 10 feet in boring B-2. It must be recognized that groundwater levels fluctuate with time due to variations in seasonal precipitation, lateral drainage conditions, and soil permeability characteristics.

FOUNDATION DISCUSSION AND RECOMMENDATIONS

General

On the basis of the available soil boring information, it is our opinion that shallow foundations would be suitable for support of the proposed building. A discussion of the foundation design parameters, as well as site preparation and construction considerations, is included in the following sections.

Shallow Foundation Analysis

It is recommended that the proposed structure be founded on typical shallow footings bearing just below frost depth. The loessial and glacial till soils encountered in the borings below the surficial materials are considered suitable for direct foundation support or as subgrade on which to construct structural fill. It is recommended that foundation elements be designed using a maximum net allowable bearing pressures of 2500 PSF and 2000 PSF for spread and continuous footings respectively subject to the minimum dimensions discussed below.

Footings subjected to lateral loads should be dimensioned so that sliding resistance is adequate without including passive pressure. For sliding resistance, a friction coefficient of 0.35 is recommended for concrete on the silty clay soils. The friction coefficient value may be increased to 0.40 if the foundation elements are supported on a base course of crushed stone. Passive resistance in front of footings should not be used because of the possibility of disturbance from frost penetration and utility excavations. It should also be noted that relatively large displacements are necessary to mobilize full passive resistance.

It is possible that soft, loose, or otherwise unsuitable soils may be encountered at the base of the foundation. Any soils of marginal bearing strength encountered during footing excavations should be evaluated by the geotechnical engineer to determine the appropriate remedial options. Typical remedial options include additional undercutting and replacement of the suspect material with granular backfill or lean concrete.

Where the removal and replacement of unsuitable bearing material is considered beneath the foundation base, the excavation must extend laterally 1 foot for each foot of

fill below the foundation base. It is recommended that fill or backfill materials used for this case consist of granular soils that can be categorized as GW, GP, SW or SP under the Unified Soil Classification System. The granular soils are typically easier to place and compact in confined spaces and under potentially wet conditions. Granular backfill should be placed in lift thicknesses not exceeding 8 inches in thickness in a loose state at moisture contents within 3 percentage points of laboratory optimum and compacted to 95 percent of the maximum ASTM D-698 (Standard Proctor) dry density.

If lean concrete is utilized to reestablish the bearing level, bank formed foundations need not be widened, but excavations for formed footings should extend laterally beyond the foundation edge at least six (6) inches in all directions to allow centering of forms and avoid eccentric loading.

All exterior footings should be founded at least 42 inches below grade for frost protection purposes. All footings must be protected from the effects of frost when construction is carried out during the winter months.

It is recommended that individual column footings have a minimum dimension of 24 inches and continuous wall footings, or grade beams have a minimum width of 18 inches. In order to lessen the effects of any slight differential movement that may occur due to variations in the character of the supporting soils and seasonal moisture contents, it is recommended that all footings be suitably reinforced.

In general, the performance of the foundation systems on this site is dependent on the various factors, which have been discussed. Potential, load responsive settlements should remain within tolerable limits (estimated to be less than 1.0 inch) if the suggested design and construction criteria are followed. It is recommended that the preparation and installation of the foundations be monitored and tested by a representative of the soils engineer.

Slab-on-grade

It is recommended that any existing vegetation and organic topsoil be removed prior to the construction of floor slabs or placement of slab supporting fill. After site stripping has been completed, the resulting subgrade should be proof rolled and backfilled in accordance with recommendations contained in the **CONSTRUCTION CONSIDERATIONS** section of this report.

It is recommended that floor slabs be placed on a capillary barrier consisting of well-graded crushed stone, such as IDOT CA-6 gradation, at least 6-inches in thickness. Proper subgrade preparation and adherence to the recommendations regarding fill materials and compaction will allow the use of a subgrade modulus of 125 psi/in.

The floor slab should be suitably reinforced, and proper joints should be provided at the junctions of the slab and foundation system so that a small amount of independent movement can occur without causing damage. Large floor areas should be provided with joints at frequent intervals to compensate for concrete volume changes.

CONSTRUCTION CONSIDERATIONS

Site Preparation

It is recommended that the site preparation in the proposed building pad area include the removal of all existing vegetation and organic topsoil. After the site stripping operations have been completed, the resulting subgrade should be thoroughly inspected and proof rolled to detect any areas of unstable, yielding soils that require remediation.

Subgrade remedial measures for unstable subgrades could include removal and replacement for smaller areas; scarification, drying, and recompaction of wet soils should weather conditions allow; or modification of the subgrade utilizing lime, flyash or cement. If chemical modification of the subgrade is considered, we recommend that the proposed stabilization techniques and materials be reviewed by the geotechnical engineer prior to implementation.

After a stable subgrade has been confirmed, low areas may then be raised to proposed grade with engineered fill. It is recommended that engineered fill materials consist of granular or low plasticity clayey soils, which can be categorized as GW, GP, SW, SP, or CL under the Unified Classification System. Engineered fill should be placed in layers of not more than 8 inches in loose thickness, at moisture contents at or slightly above optimum, and compacted to at least 95 percent of the maximum dry density as determined by ASTM D-698 (Standard Proctor) method of test.

Proper moisture control is essential to reduce the amount of compactive effort necessary to achieve the desired densities. This is especially true of cohesive soils, where scarification and aeration may be required to achieve near-optimum moisture levels prior to compaction. A sheepsfoot roller is generally required for compaction of clayey soils, whereas, a vibratory smooth drum roller is preferred for granular and silty material. Granular backfill compacted with small hand-operated equipment should be used in confined areas.

The evaluation of the subgrade and selection of fill materials for various applications should be done in consultation with the soils engineer. Similarly, the placement and compaction of fill for structural applications should be monitored and tested by a qualified representative of the soils engineer.

Groundwater Control

Based upon the boring information, it is unlikely that groundwater seepage will be encountered in shallow footing excavations. Should any seepage be encountered, filtered sump pumps or other dewatering devices should be made available to control the water and maintain reasonably dry conditions.
Because the foundation materials are subject to deterioration when exposed to free moisture, every effort should be made to keep the soils dry, during and after construction. Site runoff and discharge water from roof drains should be diverted away from the foundation and directed towards on-site retention areas, natural drainage ways or municipal sewer systems. Such measures reduce the potential for the softening and possible erosion of the foundation subgrade soils.

Excavations

All excavations should be performed in accordance with the requirements detailed in the **OSHA Excavation Regulations and Procedures, Section 1926 Subpart P**. Based upon the soil boring data, Type A and B soils were encountered throughout the depths explored.

The maximum allowable slopes for the soil types are shown in the following table.

Soil Type	Maximum Allowable Slopes for Excavations Less than 20 ft. deep Horizontal : Vertical (H:V)
A	¾ : 1
B	1: 1
C	1½:1

All excavations should be monitored by a Competent Person, as defined by the OSHA standard, and appropriate shoring or sloping techniques used to prevent cave-ins.

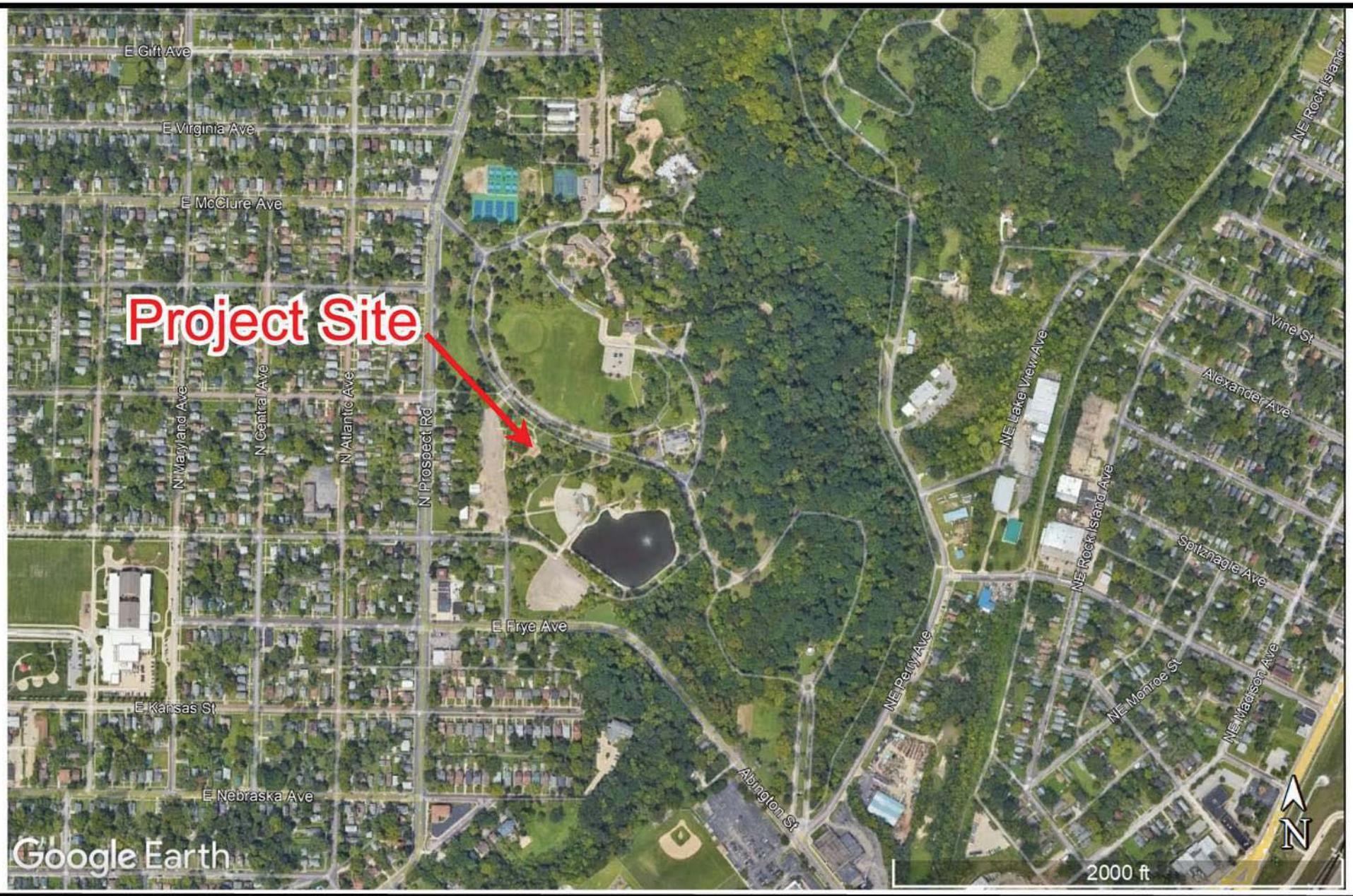
GENERAL COMMENTS

This geotechnical exploration and foundation analysis has been conducted to aid in the evaluation of the foundation conditions for the proposed inclusive bathroom in Peoria, Illinois. The recommendations presented herein are based on the available soil information obtained and the design information provided. Any changes in the soil conditions encountered during construction, or in the building design or location, should be brought to the attention of the soils engineer to determine if modifications in the recommendations are required. The final design plans and specifications should also be reviewed by the soils engineer to determine that the recommendations presented herein have been interpreted and implemented as intended. It is recommended that the earthwork and foundation operations be monitored by the soils engineer, to test and

evaluate the bearing capacities, and the selection, placement, and compaction of controlled fills.

This geotechnical study has been conducted in a manner consistent with that level of care ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. The findings, recommendations, and opinions contained herein have been promulgated in accordance with generally accepted practice in the fields of foundation engineering, soils mechanics, and engineering geology. No other representations, expressed or implied, and no warranty or guarantee is included or intended in this report.

APPENDIX



Midwest Engineering and Testing, Inc.

geotechnical*environmental*materials engineers

Figure 1 - Vicinity Map

Proposed Inclusive Bathroom
Glen Oak Park
2218 N. Prospect Road
Peoria, Illinois

SCALE:	Shown Above
PROJECT NO.:	B43063
DATE:	April 18, 2024
DRAWN BY:	PAH

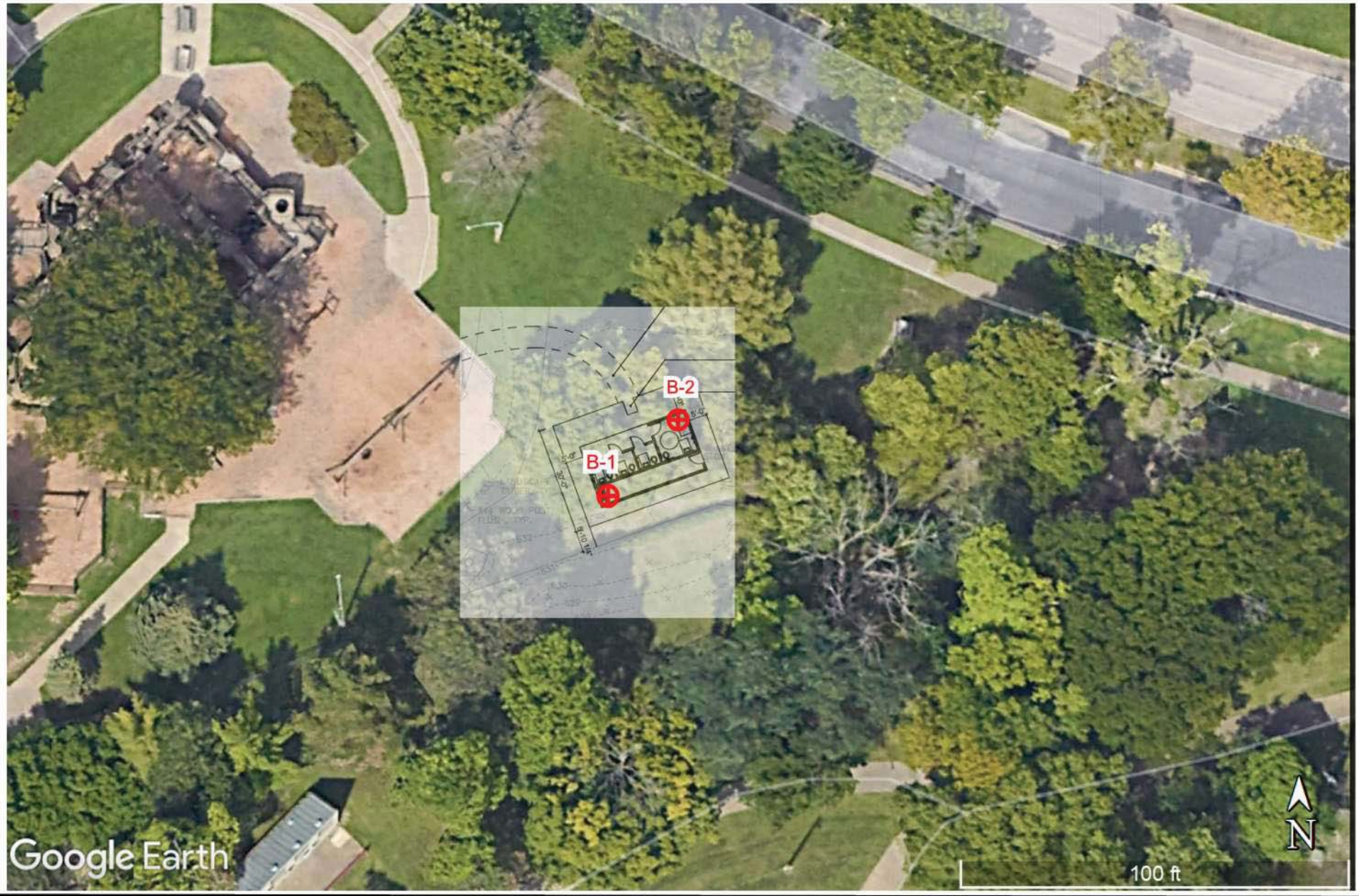


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Figure 2 - Boring Location Diagram

Proposed Inclusive Bathroom
Glen Oak Park
2218 N. Prospect Road
Peoria, Illinois

SCALE: Shown Above

PROJECT NO.: B43063

DATE: April 18, 2024

DRAWN BY: PAH

SOIL BORING LOG

MET Midwest Engineering and Testing, Inc.

Project Name: Proposed Inclusive Bathroom
Location: Glen Oak Park
2218 N. Prospect Road
Peoria, Illinois

Boring: B-1
Project No. : B43063
Date of Boring: May 7, 2024
Field Representative: Dusty Crump

VISUAL SOIL CLASSIFICATION Ground Surface Elevation: 632 ft. FT.	SAMPLE NO.	N	Q_p (tsf)	Q_u (tsf)	MC (%)	Dd (pcf)	REMARKS
6" Topsoil							
Dark brown silty CLAY (CL)	1-SS	8	1.5	0.8	33	81	
Brown silty CLAY (CL)	2-SS	4	1.0	-	31	-	Dry during and upon completion of drilling
5							
Brown-mottled-gray silty CLAY (CL)	3-SS	8	1.8	0.6	24	125	
	4-SS	10	2.0	1.8	14	134	
10							
Brown silty CLAY (CL) with sand trace gravel - Till	5-SS	10	2.5	1.8	15	116	
	6-SS	10	2.5	1.8	14	115	
15							
	7-SS	18	2.5	1.7	14	116	
END OF BORING AT 16.5 FEET							
20							

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

MET Midwest Engineering and Testing, Inc.

Project Name: Proposed Inclusive Bathroom
Location: Glen Oak Park
2218 N. Prospect Road
Peoria, Illinois

Boring: B-2
Project No. : B43063
Date of Boring: May 7, 2024
Field Representative: Dusty Crump

VISUAL SOIL CLASSIFICATION Ground Surface Elevation: 631 ft. FT.	SAMPLE NO.	N	Q_p (tsf)	Q_u (tsf)	MC (%)	Dd (pcf)	REMARKS
8" Topsoil							
Dark brown silty CLAY (CL)	1-SS	9	1.8	0.6	44	67	
	2-SS	6	1.0	0.6	28	89	Dry during drilling
5							
Brown-mottled-gray silty CLAY (CL)	3-SS	8	1.0	0.8	22	108	
	4-SS	11	2.0	1.1	22	129	
10							▼
	5-SS	13	3.5	1.8	15	117	Complete: 10 ft.
Brown silty CLAY (CL) with sand trace gravel - Till	6-SS	10	2.0	0.9	13	113	
15							
	7-SS	10	2.5	1.8	14	118	
END OF BORING AT 16.5 FEET							
20							

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

GENERAL NOTES

SAMPLE IDENTIFICATION

Visual soil classifications are made in general accordance with the Unified Soil Classification System on the basis of textural and particle size categorization, and various soil behavior characteristics. Visual classifications should be substantiated by appropriate laboratory testing when a more exact soil identification is required to satisfy specific project applications criteria.

PARTICLE SIZE ±

Boulders: 8 inches Cobbles: 3 to 8 inches Gravel: 5 mm to 3 inches	Coarse Sand: 2 mm to 4 mm Medium Sand: 0.42 mm to 2 mm Fine Sand: 0.074 to 0.42 mm	Silt: 0.005 mm to 0.074 mm Clay: - 0.005 mm

DRILLING & SAMPLING SYMBOLS

SS: Split-spoon, 2" O.D. by 1 3/8" I.D.
ST: Shelby Tube, 2" O.D. or 3" O.D., as noted in test
AU: Auger Sample
DB: Diamond Bit
CB: Carbide Bit
RB: Roller Bit
WS: Wash Sample
BS: Bag Sample
HA: Hand Auger

SOIL PROPERTY SYMBOLS

N: Standard penetration count, indicating number of blows of a 140 lb. Hammer with a 30-inch drop, required to advance a split-spoon sampler one (1) foot.
Qu: Unconfined compressive strength, tons per square foot (tsf).
Qp: Calibrated hand penetrometer resistance, tsf.
MC: Moisture Content, %
LL: Liquid Limit PL: Plastic Limit PI: Plasticity Index
Dd: Dry density, pounds per cubic foot (pcf).
PID Photoionization Detector (Hnu meter) volatile vapor level, ppm

SOIL RELATIVE DENSITY AND CONSISTENCY CLASSIFICATION

NON-COHESIVE SOILS		COHESIVE SOILS		
Classifier	N-Value Range	Classifier	Qu Range (tsf)	N-Value Range
very loose	0 – 3	very soft	0 – 0.25	0 – 2
loose	3 – 7	soft	0.25 – 0.5	2 – 5
medium dense	7 – 15	medium stiff	0.5 – 1.0	5 – 10
dense	15 – 38	stiff	1.0 – 2.0	10 – 14
very dense	38 +	very stiff	2.0 – 4.0	14 – 32
		hard	4.0 +	32 +

GROUNDWATER

Approximate Groundwater level at time noted on soil boring log, measured in open bore hole unless otherwise noted. Groundwater levels often vary with time, and are affected by soil permeability characteristics, weather conditions, and lateral drainage conditions.

UNIFIED SOIL CLASSIFICATION

MAJOR DIVISIONS			SYMBOL	TYPICAL DESCRIPTION
COARSE GRAINED SOILS	Gravel and Gravelly Soils	Clean Gravels	GW	Well-graded gravels and gravel-sand mixtures
			GP	Poorly-graded gravels and gravel-sand mixtures
		Gravels with Fines	GM	Silty gravels and gravel-sand-silt mixtures
			GC	Clayey gravels and gravel-sand-clay mixtures
	Sand and Sandy Soils	Clean Sands	SW	Well-graded sands and gravelly sands
			SP	Poorly-graded sands and gravelly sands
		Sands with Fines	SM	Silty sands and sand-silt mixtures
			SC	Clayey sands and sand-clay mixtures
FINE GRAINED SOILS	Silts and Clays of Low Plasticity		ML	Inorganic silts or clayey silts of slight plasticity
			CL	Inorganic clays of low to medium plasticity
			OL	Organic silts and organic silty clays of low plasticity
	Silts and Clays of High Plasticity		MH	Inorganic silts of high plasticity
			CH	Inorganic clays of medium to high plasticity
			OH	Organic clays of medium to high plasticity
Highly Organic Soils			PT	Peat, humus and swamp soils with high organic contents

Note: Dual symbols are used to indicate borderline classifications.

SECTION 01 10 00

SUMMARY

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Project information.
2. Work covered by Contract Documents.
3. Contractor's use of site and premises.
4. Work restrictions.
5. Specification and Drawing conventions.

1.2 PROJECT INFORMATION

A. Project Identification: Glen Oak Park Inclusive Bathroom.

1. Project Location: Glen Oak Park, 2218 N Prospect Rd, Peoria, IL 61603

B. Owner: Peoria Park District., 1125 W Lake Ave, Peoria, IL 61614

1. Owner's Representative: Mary Harden mharden@peoriaparks.org.

C. Architect: Muller & Muller, Ltd., 700 N Sangamon, Chicago, IL. 60642, PH: 312-432-4180.

1. Architect's Representative: Stephanie Coad, scoad@muller2.com.

1.3 WORK COVERED BY CONTRACT DOCUMENTS

A. The Work of Project is defined by the Contract Documents and includes, but is not limited to, the following:

1. Construction of new inclusive bathroom.
2. Concrete site work.
3. Installation of an owner provided pre-fab metal picnic shelter.

B. Type of Contract:

1. Project will be constructed under a single prime contract.

1.4 CONTRACTOR'S USE OF SITE AND PREMISES

A. Restricted Use of Site: Contractor shall have limited use of Project site for construction operations as indicated on Drawings by the Contract limits and as indicated by requirements of this Section.

B. Limits on Use of Site: Limit use of Project site to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.

1. Limits on Use of Site: Confine construction operations to be coordinated with owner.
2. Driveways, Walkways and Entrances: Keep driveways and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or for storage of materials.

a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

C. Condition of Existing Grounds: Maintain portions of existing grounds, landscaping, and hardscaping affected by construction operations throughout construction period. Repair damage caused by construction operations.

1.5 WORK RESTRICTIONS

A. Comply with restrictions on construction operations.

1. Comply with limitations on use of public streets, work on public streets, rights of way, and other requirements of authorities having jurisdiction.

B. On-Site Work Hours: Limit work to between 6:30 a.m. to 4 p.m., Monday through Friday, unless otherwise indicated. Work hours may be modified to meet Project requirements if approved by Owner and authorities having jurisdiction.

C. Noise, Vibration, Dust, and Odors: Coordinate operations that may result in high levels of noise and vibration, dust, odors, or other disruption to Owner occupancy with Owner.

1. Notify Owner not less than two days in advance of proposed disruptive operations.
2. Obtain Owner's written permission before proceeding with disruptive operations.

D. Smoking and Controlled Substance Restrictions: Use of tobacco products, alcoholic beverages, and other controlled substances on Project site is not permitted.

1.6 SPECIFICATION AND DRAWING CONVENTIONS

A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:

1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
2. Text Color: Text used in the Specifications, including units of measure, manufacturer and product names, and other text may appear in multiple colors or underlined as part of a hyperlink; no emphasis is implied by text with these characteristics.
3. Hypertext: Text used in the Specifications may contain hyperlinks. Hyperlinks may allow for access to linked information that is not residing in the Specifications. Unless otherwise indicated, linked information is not part of the Contract Documents.

4. Specification requirements are to be performed by Contractor unless specifically stated otherwise.

B. Division 00 Contracting Requirements: General provisions of the Contract, including General and Supplementary Conditions, apply to all Sections of the Specifications.

C. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.

D. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:

1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
2. Abbreviations: Materials and products are identified by abbreviations scheduled on Drawings and published as part of the U.S. National CAD Standard.
3. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this Project Manual.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 23 00

PART 1 -

ALTERNATES

PART 2 - GENERAL

2.1 SUMMARY

A. Section includes administrative and procedural requirements for alternates.

2.2 DEFINITIONS

A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if the Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.

1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternates into the Work. No other adjustments are made to the Contract Sum.

2.3 PROCEDURES

A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.

1. Include, as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation, whether or not indicated as part of alternate.

B. Execute accepted alternates under the same conditions as other Work of the Contract.

C. Schedule: A Part 3 "Schedule of Alternates" Article is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 3 - PRODUCTS (Not Used)

PART 4 - EXECUTION

4.1 SCHEDULE OF ALTERNATES

A. Alternate No. 1: Glazed (Pre-Faced) CMU in lieu of base bid epoxy painted CMU interior restroom walls.

1. Base Bid: Epoxy painting of interior CMU walls in restrooms only as indicated on Drawings and as specified in Section 09 96 11 “High-Performance Coatings (Proprietary Specification)".
2. Alternate: Glazed (Pre-Faced) CMU as indicated on Drawings and as specified in Section 04 20 00 "Unit Masonry."

END OF SECTION

SECTION 03 30 00

CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes cast-in-place concrete, including formwork, reinforcement, concrete materials, mixture design, placement procedures, and finishes.

B. Related Requirements:

1. Section 31 20 00 "Earth Moving" for drainage fill under slabs-on-grade.
2. Section 32 13 13 "Concrete Paving" for concrete pavement and walks.

1.2 DEFINITIONS

A. Cementitious Materials: Portland cement alone or in combination with fly ash and other pozzolans; materials subject to compliance with requirements.

B. W/C Ratio: The ratio by weight of water to cementitious materials.

1.3 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1. Review special inspection and testing and inspecting agency procedures for field quality control, concrete finishes and finishing, cold- and hot-weather concreting procedures, curing procedures, construction contraction and isolation joints, and joint-filler strips, semirigid joint fillers, forms and form removal limitations, vapor-retarder installation, anchor rod and anchorage device installation tolerances, steel reinforcement installation, methods for achieving specified floor and slab flatness and levelness floor and slab flatness and levelness measurement, concrete repair procedures, and concrete protection.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Design Mixtures: For each concrete mixture. Submit alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.

1. Indicate amounts of mixing water to be withheld for later addition at Project site.

C. Steel Reinforcement Shop Drawings: Placing Drawings that detail fabrication, bending, and placement. Include bar sizes, lengths, material, grade, bar schedules, stirrup spacing, bent bar diagrams, bar arrangement, splices and laps, mechanical connections, tie spacing, hoop spacing, and supports for concrete reinforcement.

D. Construction Joint Layout: Indicate proposed construction joints required to construct the structure.

1. Location of construction joints is subject to approval of the Architect.

E. Samples: For vapor retarder.

1.5 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Installer and manufacturer.

B. Material Certificates: For each of the following, signed by manufacturers:

1. Cementitious materials.
2. Admixtures.
3. Form materials and form-release agents.
4. Steel reinforcement and accessories.
5. Curing compounds.
6. Bonding agents.
7. Vapor retarders.
8. Semirigid joint filler.
9. Joint-filler strips.
10. Repair materials.

C. Minutes of preinstallation conference.

1.6 QUALITY ASSURANCE

A. Installer Qualifications: A qualified installer who employs on Project personnel qualified as ACI-certified Flatwork Technician and Finisher and a supervisor who is an ACI-certified Concrete Flatwork Technician.

B. 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."

1.7 PRECONSTRUCTION TESTING

A. Preconstruction Testing Service: Engage a qualified testing agency to perform preconstruction testing on concrete mixtures.

1.8 DELIVERY, STORAGE, AND HANDLING

A. Steel Reinforcement: Deliver, store, and handle steel reinforcement to prevent bending and damage. Avoid damaging coatings on steel reinforcement.

1.9 FIELD CONDITIONS

A. Cold-Weather Placement: Comply with ACI 306.1 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.

1. When average high and low temperature is expected to fall below 40 deg F for three successive days, maintain delivered concrete mixture temperature within the temperature range required by ACI 301.
2. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.
3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in mixture designs.

B. Hot-Weather Placement: Comply with ACI 301 and as follows:

1. Maintain concrete temperature below 90 deg F at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
2. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade uniformly moist without standing water, soft spots, or dry areas.

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. ACI 117.

2.2 FORM-FACING MATERIALS

A. Smooth-Formed Finished Concrete: Form-facing panels that provide continuous, true, and smooth concrete surfaces. Furnish in largest practicable sizes to minimize number of joints.

1. Plywood, metal, or other approved panel materials.

B. Rough-Formed Finished Concrete: Plywood, lumber, metal, or another approved material. Provide lumber dressed on at least two edges and one side for tight fit.

C. Chamfer Strips: Wood, metal, PVC, or rubber strips, 3/4 by 3/4 inch, minimum.

D. 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.

1. Formulate form-release agent with rust inhibitor for steel form-facing materials.

E. 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.

1. Furnish units that leave no corrodible metal closer than 1 inch to the plane of exposed concrete surface.
2. Furnish ties that, when removed, leave holes no larger than 1 inch in diameter in concrete surface.
3. Furnish ties with integral water-barrier plates to walls indicated to receive dampproofing or waterproofing.

2.3 STEEL REINFORCEMENT

A. Reinforcing Bars: ASTM A 615/A 615M, Grade 60, deformed.

B. Epoxy-Coated Reinforcing Bars: ASTM A 615/A 615M, Grade 60, deformed bars, ASTM A 775/A 775M or ASTM A 934/A 934M, epoxy coated, with less than 2 percent damaged coating in each 12-inch bar length.

C. Plain-Steel Welded-Wire Reinforcement: ASTM A 1064/A 1064M, plain, fabricated from as-drawn steel wire into flat sheets.

D. Epoxy-Coated Welded-Wire Reinforcement: ASTM A 884/A 884M, Class A coated, Type 1, plain steel.

2.4 REINFORCEMENT ACCESSORIES

A. Epoxy Repair Coating: Liquid, two-part, epoxy repair coating; compatible with epoxy coating on reinforcement and complying with ASTM A 775/A 775M.

B. Deformed Bar Anchors: Fabricated from ASTM A-496 Steel Wire, Deformed

C. 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 according to CRSI's "Manual of Standard Practice," of greater compressive strength than concrete and as follows:

1. For epoxy-coated reinforcement, use epoxy-coated or other dielectric-polymer-coated wire bar supports.

2.5 CONCRETE MATERIALS

A. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant, obtain aggregate from single source, and obtain admixtures from single source from single manufacturer.

B. Cementitious Materials:

1. Portland Cement: ASTM C 150/C 150M, Type I, gray.
2. Fly Ash: ASTM C 618, Class F or C.

C. Normal-Weight Aggregates: ASTM C 33/C 33M, Class 3S coarse aggregate or better, graded. Provide aggregates from a single source.

1. Maximum Coarse-Aggregate Size: 1 inch 3/4 inch nominal (at beams, columns, walls, suspended slabs, slabs on metal deck, concrete fill on metal stair treads and landing) .
2. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.

D. Air-Entraining Admixture: ASTM C 260/C 260M.

E. Chemical Admixtures: Certified by manufacturer to be compatible with other admixtures and that do not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride.

1. Water-Reducing Admixture: ASTM C 494/C 494M, Type A.
2. Retarding Admixture: ASTM C 494/C 494M, Type B.
3. Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type D.
4. High-Range, Water-Reducing Admixture: ASTM C 494/C 494M, Type F.
5. High-Range, Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type G.
6. Plasticizing and Retarding Admixture: ASTM C 1017/C 1017M, Type II.

F. Water: ASTM C 94/C 94M and potable.

2.6 VAPOR RETARDERS

A. Sheet Vapor Retarder: ASTM E 1745, Class A, except with maximum water-vapor permeance of .01. Include manufacturer's recommended adhesive or pressure-sensitive tape.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

a. Stego Industries, LLC
b. W.R. Meadows, Inc.

2.7 CURING MATERIALS

A. Evaporation Retarder: Waterborne, monomolecular film forming, manufactured for application to fresh concrete.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

a. BASF Corporation; Construction Systems
b. Dayton Superior
c. The Euclid Chemical Company, an RPM Company
d. L & M Construction Chemicals, Inc
e. Sika Corporation
f. W.R. Meadows, Inc

B. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. when dry.

C. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.

D. Water: Potable.

E. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B, nondissipating, certified by curing compound manufacturer to not interfere with bonding of floor covering.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

a. BASF Corporation; Construction Systems
b. Dayton Superior
c. The Euclid Chemical Company, an RPM Company
d. L & M Construction Chemicals, Inc
e. W.R. Meadows, Inc

2.8 RELATED MATERIALS

A. Expansion- and Isolation-Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber or ASTM D 1752, flexible closed cell foam.

B. Semirigid Joint Filler: Two-component, semirigid, 100 percent solids, epoxy resin with a Type A shore durometer hardness of 80 according to ASTM D 2240.

C. Bonding Agent: ASTM C 1059/C 1059M, Type II, nonredispersible, acrylic emulsion or styrene butadiene.

2.9 REPAIR MATERIALS

A. Repair Underlayment: Cement-based, polymer-modified, self-leveling product that can be applied in thicknesses from 1/8 inch and that can be feathered at edges to match adjacent floor elevations.

1. Cement Binder: ASTM C 150/C 150M, portland cement or hydraulic or blended hydraulic cement as defined in ASTM C 219.
2. Primer: Product of underlayment manufacturer recommended for substrate, conditions, and application.
3. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch or coarse sand as recommended by underlayment manufacturer.
4. Compressive Strength: Not less than 4100 psi at 28 days when tested according to ASTM C 109/C 109M.

B. Repair Overlayment: Cement-based, polymer-modified, self-leveling product that can be applied in thicknesses from 1/4 inch and that can be filled in over a scarified surface to match adjacent floor elevations.

1. Cement Binder: ASTM C 150/C 150M, portland cement or hydraulic or blended hydraulic cement as defined in ASTM C 219.
2. Primer: Product of topping manufacturer recommended for substrate, conditions, and application.
3. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch or coarse sand as recommended by topping manufacturer.
4. Compressive Strength: Not less than 5000 psi at 28 days when tested according to ASTM C 109/C 109M.

2.10 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, according to ACI 301.

1. Use a qualified independent testing agency for preparing and reporting proposed mixture designs based on laboratory trial mixtures.

B. Cementitious Materials: For concrete exposed to freezing and thawing cycles with frequent exposure to water and exposure to deicing chemicals, limit percentage, by weight, of cementitious materials other than portland cement in concrete as follows:

1. Fly Ash: 25 percent.
2. Combined Fly Ash and Pozzolan: 25 percent.

C. For reinforced concrete exposed to chloride from deicing chemicals, limit water-soluble, chloride-ion content in hardened concrete to 0.15 percent by weight of cement.

D. Admixtures: Use admixtures according to 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 and parking structure slabs, concrete required to be watertight, and concrete with a w/c ratio below 0.50.

2.11 CONCRETE MIXTURES FOR BUILDING ELEMENTS

A. Strip Footings: Normal-weight concrete.

1. Minimum Compressive Strength: 4000 psi at 28 days.
2. Slump Limit: 4 inches 8 inches for concrete with verified slump of 2 to 4 inches before adding high-range water-reducing admixture or plasticizing admixture, plus or minus 1 inch.

B. Foundation Walls: Normal-weight concrete.

1. Minimum Compressive Strength: 4000 psi at 28 days.
2. Slump Limit: 4 inches 8 inches for concrete with verified slump of 2 to 4 inches before adding high-range water-reducing admixture or plasticizing admixture, plus or minus 1 inch.

C. Slabs-on-Grade: Normal-weight concrete.

1. Minimum Compressive Strength: 5000 psi at 28 days.
2. Maximum W/C Ratio: 0.40.
3. Minimum Cementitious Materials Content: 520 lb/cu. yd..
4. Slump Limit: 4 inches, plus or minus 1 inch.
5. Air Content: 6 percent, plus or minus 1.5 percent at point of delivery for1-inch nominal maximum aggregate size.

2.12 FABRICATING REINFORCEMENT

A. Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."

2.13 CONCRETE MIXING

A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94/C 94M and ASTM C 1116/C 1116M, and furnish batch ticket information.

1. When air temperature is between 85 and 90 deg F, reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.

PART 3 - EXECUTION

3.1 FORMWORK INSTALLATION

A. Design, erect, shore, brace, and maintain formwork, according to ACI 301, to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until structure can support such loads.

B. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117.

C. Limit concrete surface irregularities, designated by ACI 347 as abrupt or gradual, as follows:

1. Class A, 1/8 inch for smooth-formed finished surfaces (surfaces permanently exposed to public view).
2. Class C, 1/2 inch for rough-formed finished surfaces (surfaces permanently concealed).

D. Construct forms tight enough to prevent loss of concrete mortar.

E. Construct forms for easy removal without hammering or prying against concrete surfaces. Provide crush or wrecking plates where stripping may damage cast-concrete surfaces. Provide top forms for inclined surfaces steeper than 1.5 horizontal to 1 vertical.

1. Install keyways, reglets, recesses, and the like, for easy removal.
2. Do not use rust-stained steel form-facing material.

F. Set edge forms, bulkheads, and intermediate screed strips for slabs to achieve required elevations and slopes in finished concrete surfaces. Provide and secure units to support screed strips; use strike-off templates or compacting-type screeds.

G. Provide temporary openings for cleanouts and inspection ports where interior area of formwork is inaccessible. Close openings with panels tightly fitted to forms and securely braced to prevent loss of concrete mortar. Locate temporary openings in forms at inconspicuous locations.

H. Chamfer exterior corners and edges of permanently exposed concrete.

I. Form openings, chases, offsets, sinkages, keyways, reglets, blocking, screeds, and bulkheads required in the Work. Determine sizes and locations from trades providing such items.

J. Clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, and other debris just before placing concrete.

K. Retighten forms and bracing before placing concrete, as required, to prevent mortar leaks and maintain proper alignment.

L. Coat contact surfaces of forms with form-release agent, according to manufacturer's written instructions, before placing reinforcement.

3.2 EMBEDDED ITEM INSTALLATION

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.

3.3 VAPOR RETARDER INSTALLATION

A. Sheet Vapor Retarders: Place, protect, and repair sheet vapor retarder according to ASTM E 1643 and manufacturer's written instructions.

1. Lap joints 6 inches and seal with manufacturer's recommended tape.

3.4 STEEL REINFORCEMENT INSTALLATION

A. General: Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.

1. 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.

C. 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.

D. Set wire ties with ends directed into concrete, not toward exposed concrete surfaces.

E. Install welded-wire reinforcement in longest practicable lengths on bar supports spaced to minimize sagging. Lap edges and ends of adjoining sheets at least one mesh spacing. Offset laps of adjoining sheet widths to prevent continuous laps in either direction. Lace overlaps with wire.

F. Epoxy-Coated Reinforcement: Repair cut and damaged epoxy coatings with epoxy repair coating according to ASTM D 3963/D 3963M. Use epoxy-coated steel wire ties to fasten epoxy-coated steel reinforcement.

3.5 JOINTS

A. General: Construct joints true to line with faces perpendicular to surface plane of concrete.

B. 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. Continue reinforcement across construction joints unless otherwise indicated. Do not continue reinforcement through sides of strip placements of floors and slabs.
2. Form keyed joints as indicated. Embed keys at least 1-1/2 inches into concrete.
3. Locate horizontal joints in walls and columns at underside of floors, slabs, beams, and girders and at the top of footings or floor slabs.
4. Space vertical joints in walls as indicated. Locate joints beside piers integral with walls, near corners, and in concealed locations where possible.
5. Use a bonding agent at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.

C. Contraction Joints in Slabs-on-Grade: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of concrete thickness as follows:

1. Sawed Joints: Form contraction 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 contraction cracks.

D. Isolation Joints in Slabs-on-Grade: 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. 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 07 92 00 "Joint Sealants," are indicated.
2. Install joint-filler strips in lengths as long as practicable. Where more than one length is required, lace or clip sections together.

3.6 CONCRETE PLACEMENT

A. Before placing concrete, verify that installation of formwork, reinforcement, and embedded items is complete and that required inspections are completed.

B. Before test sampling and placing concrete, water may be added at Project site, subject to limitations of ACI 301.

1. Do not add water to concrete after adding high-range water-reducing admixtures to mixture.

C. 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. Deposit concrete to avoid segregation.

1. Deposit concrete in horizontal layers of depth not to exceed formwork design pressures and in a manner to avoid inclined construction joints.
2. Consolidate placed concrete with mechanical vibrating equipment according to ACI 301.
3. Do not use vibrators to transport concrete inside forms. Insert and withdraw vibrators vertically at uniformly spaced locations to rapidly penetrate placed layer and at least 6

inches into preceding layer. Do not insert vibrators into lower layers of concrete that have begun to lose plasticity. 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.

D. 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. Consolidate concrete during placement operations, so concrete is thoroughly worked around reinforcement and other embedded items and into corners.
2. Maintain reinforcement in position on chairs during concrete placement.
3. Screed slab surfaces with a straightedge and strike off to correct elevations.
4. Slope surfaces uniformly to drains where required.
5. Begin initial floating using bull floats or darbies to form a uniform and open-textured surface plane, before excess bleedwater appears on the surface. Do not further disturb slab surfaces before starting finishing operations.

3.7 FINISHING FORMED SURFACES

A. Rough-Formed Finish: As-cast concrete texture imparted by form-facing material with tie holes and defects repaired and patched. Remove fins and other projections that exceed specified limits on formed-surface irregularities.

1. Apply to concrete surfaces not exposed to public view.

B. Smooth-Formed Finish: As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams. Repair and patch tie holes and defects. Remove fins and other projections that exceed specified limits on formed-surface irregularities.

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.

C. Rubbed Finish: Apply the following to smooth-formed-finished as-cast concrete where indicated:

1. Grout-Cleaned Finish: Wet concrete surfaces and apply grout of a consistency of thick paint to coat surfaces and fill small holes. Mix 1 part portland cement to 1-1/2 parts fine sand with a 1:1 mixture of bonding admixture and water. Add white portland cement in amounts determined by trial patches, so color of dry grout matches adjacent surfaces. Scrub grout into voids and remove excess grout. When grout whitens, rub surface with clean burlap and keep surface damp by fog spray for at least 36 hours.

D. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces unless otherwise indicated.

3.8 FINISHING FLOORS AND SLABS

A. General: Comply with ACI 302.1R recommendations for screeding, restraightening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.

B. Scratch Finish: While still plastic, texture concrete surface that has been screeded and bull-floated or darbied. Use stiff brushes, brooms, or rakes to produce a profile amplitude of 1/4 inch in one direction.

1. Apply scratch finish to surfaces to receive concrete floor toppings or to receive mortar setting beds for bonded cementitious floor finishes.

C. Float Finish: Consolidate surface with power-driven floats or by hand floating if area is small or inaccessible to power-driven floats. Restraighten, cut down high spots, and fill low spots. Repeat float passes and restraightening until surface is left with a uniform, smooth, granular texture.

1. Apply float finish to surfaces to receive trowel finish or to be covered with fluid-applied or sheet waterproofing, built-up or membrane roofing, or sand-bed terrazzo.

D. Trowel Finish: After applying float finish, apply first troweling and consolidate concrete by hand or power-driven trowel. Continue troweling passes and restraighten until surface is free of trowel marks and uniform in texture and appearance. Grind smooth any surface defects that would telegraph through applied coatings or floor coverings.

1. 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.
2. Finish surfaces to the following tolerances, according to ASTM E 1155, for a randomly trafficked floor surface:

a. Specified overall values of flatness, F(F) 35; and of levelness, F(L) 25; with minimum local values of flatness, F(F) 24; and of levelness, F(L) 17; for slabs-on-grade.

E. Trowel and Fine-Broom Finish: Apply a first trowel finish to surfaces 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.

1. 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 elsewhere as indicated.

1. Immediately after float finishing, slightly roughen trafficked surface by brooming with fiber-bristle broom perpendicular to main traffic route. Coordinate required final finish with Architect before application.

3.9 MISCELLANEOUS CONCRETE ITEM INSTALLATION

A. Filling In: Fill in holes and openings left in concrete structures after work of other trades is in place unless otherwise indicated. Mix, place, and cure concrete, as specified, to blend with in-place construction. 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.

3.10 CONCRETE PROTECTING AND CURING

A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and ACI 301 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 according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.

C. Formed Surfaces: Cure formed concrete surfaces, including underside of beams, supported slabs, and other similar surfaces. If forms remain during curing period, moist cure after loosening forms. If removing forms before end of curing period, continue curing for remainder of curing period.

D. Unformed Surfaces: Begin curing immediately after finishing concrete. Cure unformed surfaces, including floors and slabs, concrete floor toppings, and other surfaces.

E. Cure concrete according to ACI 308.1, by one or a combination of the following methods:

1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:

    a. Water.
    b. Continuous water-fog spray.
    c. Absorptive cover, water saturated, and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.

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. Cure for not less than seven days. Immediately repair any holes or tears during curing period, using cover material and waterproof tape.

    a. Moisture cure or use moisture-retaining covers to cure concrete surfaces to receive floor coverings.
    b. Moisture cure or use moisture-retaining covers to cure concrete surfaces to receive penetrating liquid floor treatments.
    c. Cure concrete surfaces to receive floor coverings with either a moisture-retaining cover or a curing compound that the manufacturer certifies does not interfere with bonding of floor covering used on Project.

3. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.

    a. Removal: After curing period has elapsed, remove curing compound without damaging concrete surfaces by method recommended by curing compound manufacturer unless manufacturer certifies curing compound does not interfere with bonding of floor covering used on Project.

3.11 JOINT FILLING

A. Prepare, clean, and install joint filler where indicated, according to manufacturer's written instructions.

1. Defer joint filling until concrete has aged at least one month(s). Do not fill joints until construction traffic has permanently ceased.

B. Remove dirt, debris, saw cuttings, curing compounds, and sealers from joints; leave contact faces of joints clean and dry.

C. Install semirigid joint filler full depth in saw-cut joints and at least 2 inches deep in formed joints. Overfill joint and trim joint filler flush with top of joint after hardening.

3.12 CONCRETE SURFACE REPAIRS

A. Defective Concrete: Repair and patch defective areas when approved by Architect. Remove and replace concrete that cannot be repaired and patched to Architect's approval.

B. Patching Mortar: Mix dry-pack patching mortar, consisting of 1 part portland cement to 2-1/2 parts fine aggregate passing a No. 16 sieve, using only enough water for handling and placing.

C. Repairing Formed Surfaces: Surface defects include color and texture irregularities, cracks, spalls, air bubbles, honeycombs, rock pockets, fins and other projections on the surface, and stains and other discolorations that cannot be removed by cleaning.

1. Immediately after form removal, cut out honeycombs, rock pockets, and voids more than 1/2 inch in any dimension to solid concrete. Limit cut depth to 3/4 inch. Make edges of cuts perpendicular to concrete surface. Clean, dampen with water, and brush-coat holes and voids with bonding agent. Fill and compact with patching mortar before bonding agent has dried. Fill form-tie voids with patching mortar or cone plugs secured in place with bonding agent.
2. Repair defects on surfaces exposed to view by blending white portland cement and standard portland cement so that, when dry, patching mortar matches surrounding color. Patch a test area at inconspicuous locations to verify mixture and color match before proceeding with patching. Compact mortar in place and strike off slightly higher than surrounding surface.
3. Repair defects on concealed formed surfaces that affect concrete's durability and structural performance as determined by Architect.

D. Repairing Unformed Surfaces: Test unformed surfaces, such as floors and slabs, for finish and verify surface tolerances specified for each surface. Correct low and high areas. Test surfaces sloped to drain for trueness of slope and smoothness; use a sloped template.

1. Repair finished surfaces containing defects. Surface defects include spalls, popouts, honeycombs, rock pockets, crazing and cracks in excess of 0.01 inch wide or that penetrate to reinforcement or completely through unreinforced sections regardless of width, and other objectionable conditions.
2. After concrete has cured at least 14 days, correct high areas by grinding.
3. Correct localized low areas during or immediately after completing surface finishing operations by cutting out low areas and replacing with patching mortar. Finish repaired areas to blend into adjacent concrete.
4. Correct other low areas scheduled to receive floor coverings with a repair underlayment. Prepare, mix, and apply repair underlayment and primer according to manufacturer's

written instructions to produce a smooth, uniform, plane, and level surface. Feather edges to match adjacent floor elevations.

5. Repair defective areas, except random cracks and single holes 1 inch or less in diameter, by cutting out and replacing with fresh concrete. Remove defective areas with clean, square cuts and expose steel reinforcement with at least a 3/4-inch clearance all around. Dampen concrete surfaces in contact with patching concrete and apply bonding agent. Mix patching concrete of same materials and mixture as original concrete, except without coarse aggregate. Place, compact, and finish to blend with adjacent finished concrete. Cure in same manner as adjacent concrete.
6. Repair random cracks and single holes 1 inch or less in diameter with patching mortar. Groove top of cracks and cut out holes to sound concrete and clean off dust, dirt, and loose particles. Dampen cleaned concrete surfaces and apply bonding agent. Place patching mortar before bonding agent has dried. Compact patching mortar and finish to match adjacent concrete. Keep patched area continuously moist for at least 72 hours.

E. Perform structural repairs of concrete, subject to Architect's approval, using epoxy adhesive and patching mortar.

F. Repair materials and installation not specified above may be used, subject to Architect's approval.

3.13 FIELD QUALITY CONTROL

A. Special Inspections: Engage a qualified testing and inspecting agency to perform field tests and inspections and prepare test reports.

B. Inspections:

1. Steel reinforcement placement.
2. Headed bolts and studs.
3. Verification of use of required design mixture.
4. Concrete placement, including conveying and depositing.
5. Curing procedures and maintenance of curing temperature.

C. Concrete Tests: Testing of composite samples of fresh concrete obtained according to ASTM C 172/C 172M shall be performed according to the following requirements:

1. Testing Frequency: Obtain at least one composite sample for each 100 cu. yd. or fraction thereof of each concrete mixture placed each day.

    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 C 143/C 143M; 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. Perform additional tests when concrete consistency appears to change.
3. Air Content: ASTM C 231/C 231M, pressure method, for normal-weight concrete; ASTM C 173/C 173M, volumetric method, for structural lightweight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
4. Concrete Temperature: ASTM C 1064/C 1064M; 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.

5. Unit Weight: ASTM C 567/C 567M, fresh unit weight of structural lightweight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
6. Compression Test Specimens: ASTM C 31/C 31M.

    a. Cast and laboratory cure two sets of two standard cylinder specimens for each composite sample.

7. Compressive-Strength Tests: ASTM C 39/C 39M; test one set of two laboratory-cured specimens at 7 days and one set of two specimens at 28 days.

    a. 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. 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.
9. Test results shall be reported in writing to Architect, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.
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: 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. Testing and inspecting agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C 42/C 42M or by other methods as directed by Architect.
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.

D. Measure floor and slab flatness and levelness according to ASTM E 1155 within 24 hours of finishing.

END OF SECTION

SECTION 04 20 00

UNIT MASONRY

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Concrete masonry units.
2. Ground-faced concrete masonry units.
3. Pre-faced concrete masonry units. (**Alternate 1**)
4. Lintels.
5. Mortar and grout materials.
6. Reinforcement.
7. Ties and anchors.
8. Embedded flashing.
9. Accessories.
10. Mortar and grout mixes.

B. Products Installed but not Furnished under This Section:

1. Cast-stone trim in unit masonry.
2. Steel lintels in unit masonry.
3. Cavity wall insulation adhered to masonry backup.

C. Related Requirements:

1. Section 04 43 13.13 "Anchored Stone Masonry Veneer" for thin stone trim set as anchored veneer.
2. Section 05 12 00 "Structural Steel Framing" for steel lintels.
3. Section 07 27 26 "Fluid-Applied Membrane Air Barriers " for fluid applied membrane air barriers applied to unit masonry assemblies.
4. Section 07 21 00 "Thermal Insulation" for cavity wall insulation.

1.2 DEFINITIONS

A. CMU(s): Concrete masonry unit(s).

B. Reinforced Masonry: Masonry containing reinforcing steel in grouted cells.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Shop Drawings: For the following:

1. Masonry Units: Indicate sizes, profiles, coursing, and locations of special shapes.

2. Reinforcing Steel: Indicate bending, lap lengths, and placement of unit masonry reinforcing bars. Comply with ACI 315R. Indicate elevations of reinforced walls.

C. Samples for Initial Selection:

1. Ground-faced CMUs, in the form of small-scale units.
2. Pre-faced CMUs.

1.4 INFORMATIONAL SUBMITTALS

A. Material Certificates: For each type of the following:

1. Masonry units.

a. Include data on material properties.
b. For masonry units used in structural masonry, include data and calculations establishing average net-area compressive strength of units.

2. Integral water repellent used in CMUs.
3. Cementitious materials. Include name of manufacturer, brand name, and type.
4. Mortar admixtures.
5. Preblended, dry mortar mixes. Include description of type and proportions of ingredients.
6. Grout mixes. Include description of type and proportions of ingredients.
7. Reinforcing bars.
8. Joint reinforcement.
9. Anchors, ties, and metal accessories.

B. Mix Designs: For each type of mortar and grout. Include description of type and proportions of ingredients.

1. Include test reports for mortar mixes required to comply with property specification. Test in accordance with ASTM C109/C109M for compressive strength, ASTM C1506 for water retention, and ASTM C91/C91M for air content.
2. Include test reports, in accordance with ASTM C1019, for grout mixes required to comply with compressive strength requirement.

C. Statement of Compressive Strength of Masonry: For each combination of masonry unit type and mortar type, provide statement of average net-area compressive strength of masonry units, mortar type, and resulting net-area compressive strength of masonry determined in accordance with TMS 602.

D. Cold-Weather and Hot-Weather Procedures: Detailed description of methods, materials, and equipment to be used to comply with requirements.

1.5 QUALITY ASSURANCE

A. Qualifications:

1. Testing Agency Qualifications: Qualified in accordance with ASTM C1093 for testing indicated.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Store masonry units on elevated platforms in a dry location. If units are not stored in an enclosed location, cover tops and sides of stacks with waterproof sheeting, securely tied. If units become wet, do not install until they are dry.

B. Deliver preblended, dry mortar mix in moisture-resistant containers. Store preblended, dry mortar mix in delivery containers on elevated platforms in a dry location or in covered weatherproof dispensing silos.

C. Store masonry accessories, including metal items, to prevent corrosion and accumulation of dirt and oil.

1.7 FIELD CONDITIONS

A. Protection of Masonry: During construction, cover tops of walls, projections, and sills with waterproof sheeting at end of each day's work. Cover partially completed masonry when construction is not in progress.

1. Extend cover a minimum of 24 inches down both sides of walls, and hold cover securely in place.
2. Where one wythe of multiwythe masonry walls is completed in advance of other wythes, secure cover a minimum of 24 inches down face next to unconstructed wythe, and hold cover in place.

B. Do not apply uniform floor or roof loads for at least 12 hours and concentrated loads for at least three days after building masonry walls or columns.

C. Stain Prevention: Prevent grout, mortar, and soil from staining the face of masonry to be left exposed or painted. Immediately remove grout, mortar, and soil that come in contact with such masonry.

1. Protect base of walls from rain-splashed mud and from mortar splatter by spreading coverings on ground and over wall surface.
2. Protect sills, ledges, and projections from mortar droppings.
3. Protect surfaces of window and door frames, as well as similar products with painted and integral finishes, from mortar droppings.
4. Turn scaffold boards near the wall on edge at the end of each day to prevent rain from splashing mortar and dirt onto completed masonry.

D. Cold-Weather Requirements: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen substrates. Remove and replace unit masonry damaged by frost or by freezing conditions. Comply with cold-weather construction requirements contained in TMS 602.

1. Cold-Weather Cleaning: Use liquid cleaning methods only when air temperature is 40 deg F and higher and will remain so until masonry has dried, but not less than seven days after completing cleaning.

E. Hot-Weather Requirements: Comply with hot-weather construction requirements contained in TMS 602.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Provide structural unit masonry that develops indicated net-area compressive strengths at 28 days.

1. Determine net-area compressive strength of masonry from average net-area compressive strengths of masonry units and mortar types (unit-strength method) in accordance with TMS 602.

2.2 UNIT MASONRY, GENERAL

A. Masonry Standard: Comply with TMS 602, except as modified by requirements in the Contract Documents.

B. Defective Units: Referenced masonry unit standards may allow a certain percentage of units to contain chips, cracks, or other defects exceeding limits stated. Do not use units where such defects are exposed in the completed Work.

2.3 CONCRETE MASONRY UNITS

A. Shapes: Provide shapes indicated and as follows, with exposed surfaces matching exposed faces of adjacent units unless otherwise indicated.

1. Provide special shapes for lintels, corners, jambs, sashes, movement joints, headers, bonding, and other special conditions.
2. Provide square-edged units for outside corners unless otherwise indicated.

B. Integral Water Repellent: Provide units made with integral water repellent for exposed units.

1. Integral Water Repellent: Liquid polymeric, integral water-repellent admixture that does not reduce flexural bond strength. Units made with integral water repellent, when tested in accordance with ASTM E514/E514M as a wall assembly made with mortar containing integral water-repellent manufacturer's mortar additive, with test period extended to 24 hours, will show no visible water or leaks on the back of test specimen.

C. Load Bearing CMUs: ASTM C90, normal weight.

1. Unit Compressive Strength: Provide units with minimum average net-area compressive strength of 2000 psi.
2. Size (Width): Manufactured to dimensions 3/8 inch less than nominal dimensions.

D. Nonload-Bearing CMUs: ASTM C129, normal weight.

1. Unit Compressive Strength: Provide units with minimum average net-area compressive strength of 2000 psi.
2. Size (Width): Manufactured to dimensions 3/8 inch less than nominal dimensions.

E. Ground-faced CMUs: ASTM C90, normal weight.

1. Unit Compressive Strength: Provide units with minimum average net-area compressive strength of 2150 psi.
2. Size (Width): Manufactured to dimensions specified in "CMUs" Paragraph above.
3. Pattern and Texture: Standard pattern, ground-face finish.
4. Colors: As selected by Architect from manufacturer's full range.

F. Pre-faced CMUs (**Alternate 1**): ASTM C90, lightweight hollow units, with manufacturer's standard smooth resinous facing complying with ASTM C744.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

   a. Trenwyth Industries, Inc., Astra Glaze.
   b. The Burns & Russell Co., Spectra Glaze
   c. Premier Block Corp

2. Unit Compressive Strength: Provide units with minimum average net-area compressive strength of 2150 psi.
3. Size: Manufactured to dimensions specified in "CMUs" Paragraph above but with pre-faced surfaces having 1/16-inch-wide returns of facing to create 1/4-inch-wide mortar joints with modular coursing.
4. Colors and Patterns: As selected by Architect from manufacturer's full range.

2.4 MORTAR AND GROUT MATERIALS

A. Portland Cement: ASTM C150/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.

1. Alkali content will not be more than 0.1 percent when tested in accordance with ASTM C114.

B. Hydrated Lime: ASTM C207, Type S.

C. Portland Cement-Lime Mix: Packaged blend of portland cement and hydrated lime containing no other ingredients.

D. Preblended Dry Mortar Mix: Packaged blend made from portland cement and hydrated lime masonry cement or mortar cement, sand, and admixtures and complying with ASTM C1714/C1714M.

1. Preblended Dry Portland Cement Mortar Mix:

   a. Manufacturers:

      1) Amerimix is a trademark of Bonsal American, an Oldcastle company.
      2) Quikrete; The QUIKRETE Companies, LLC.
      3) SPEC MIX, LLC.
      4) Sakrete; CRH Americas, Oldcastle APG.

E. Aggregate for Mortar: ASTM C144.

1. For mortar that is exposed to view, use washed aggregate consisting of natural sand or crushed stone.

2. For joints less than 1/4 inch thick, use aggregate graded with 100 percent passing the No. 16 sieve.

F. Aggregate for Grout: ASTM C404.

G. Cold-Weather Admixture: Nonchloride, noncorrosive, accelerating admixture complying with ASTM C494/C494M, Type C, and recommended by manufacturer for use in masonry mortar of composition indicated.

H. Water-Repellent Admixture: Liquid water-repellent mortar admixture intended for use with CMUs containing integral water repellent from same manufacturer.

I. Water: Potable.

2.5 REINFORCEMENT

A. Uncoated-Steel Reinforcing Bars: ASTM A615/A615M or ASTM A996/A996M, Grade 60.

B. Reinforcing Bar Positioners: Wire units designed to fit into mortar bed joints spanning masonry unit cells and to hold reinforcing bars in center of cells. Units are formed from 0.148-inch steel wire, hot-dip galvanized after fabrication. Provide units designed for number of bars indicated.

C. Masonry-Joint Reinforcement, General: ASTM A951/A951M.

1. Interior Walls: Hot-dip galvanized carbon steel.
2. Exterior Walls: Hot-dip galvanized carbon steel.
3. Wire Size for Side Rods: 0.148-inch diameter.
4. Wire Size for Cross Rods: 0.148-inch diameter.
5. Wire Size for Veneer Ties: 0.148-inch diameter.
6. Spacing of Cross Rods, Tabs, and Cross Ties: Not more than 16 inches o.c.
7. Provide in lengths of not less than 10 ft.,with prefabricated corner and tee units.

D. Masonry-Joint Reinforcement for Multiwythe Masonry:

1. Manufacturers:

a. 3GEN Masonry Products, Inc.
b. Heckmann Building Products, Inc.
c. Hohmann & Barnard, Inc.
d. Wire-Bond.

2. Adjustable (two-piece) type, either ladder or truss design, with one side rod at each face shell of backing wythe and with separate adjustable ties with pintle-and-eye connections having a maximum horizontal play of 1/16 inch and maximum vertical adjustment of 1-1/4 inches. Size ties to extend at least halfway through facing wythe but with at least 5/8-inch cover on outside face. Ties have hooks or clips to engage a continuous horizontal wire in the facing wythe.

2.6 TIES AND ANCHORS

A. General: Ties and anchors extend at least 1-1/2 inches into veneer but with at least a 5/8-inch cover on outside face.

B. Materials: Provide ties and anchors specified in this article that are made from materials that comply with the following unless otherwise indicated:

1. Hot-Dip Galvanized, Carbon-Steel Wire: ASTM A1064/A1064M, with ASTM A153/A153M, Class B-2 coating.
2. Steel Sheet, Galvanized after Fabrication: ASTM A1008/A1008M, Commercial Steel, with ASTM A153/A153M, Class B coating.
3. Steel Plates, Shapes, and Bars: ASTM A36/A36M.

C. Individual Wire Ties: Rectangular units with closed ends and not less than 4 inches wide.

1. Z-shaped ties with ends bent 90 degrees to provide hooks not less than 2 inches long for masonry constructed from solid units.
2. Where wythes are of different materials, use adjustable ties with pintle-and-eye connections having a maximum adjustment of 1-1/4 inches.
3. Wire: Fabricate from 1/4-inch-diameter, hot-dip galvanized steel wire.

2.7 EMBEDDED FLASHING

A. Drainage Plane Flashing: Fabricate from stainless steel and drainage membrane to shapes indicated. Provide flashing materials as follows:

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

a. Mortar Net Solutions.
b. STS Coatings, Inc.
c. York Manufacturing, Inc.

2. Stainless Steel: ASTM A240/A240M or ASTM A666, Type 304, 0.016 inch thick.
3. Accessories: Provide preformed corners, end dams, other special shapes, and seaming materials produced by flashing manufacturer.

B. Adhesives, Primers, and Seam Tapes for Flashings: Flashing manufacturer's standard products or products recommended by flashing manufacturer for bonding flashing sheets to each other and to substrates.

C. Termination Bars for Flexible Flashing, Flanged: Stainless steel sheet 0.019 inch by 1 inches with a 1/4-inch lip at top.

2.8 ACCESSORIES

A. Compressible Filler: Premolded filler strips complying with ASTM D1056, Grade 2A1; compressible up to 35 percent; of width and thickness indicated; formulated from neoprene, urethane or PVC.

B. Preformed Control-Joint Gaskets: Made from styrene-butadiene-rubber compound, complying with ASTM D2000, Designation M2AA-805 or PVC, complying with ASTM D2287, Type PVC-65406 and designed to fit standard sash block and to maintain lateral stability in masonry wall; size and configuration as indicated.

C. Weep/Cavity Vents: Use the following unless otherwise indicated:

1. Mesh Weep/Vent: Free-draining mesh; made from polyethylene strands, full height and width of head joint and depth 1/8 inch less than depth of outer wythe; in color selected from manufacturer's standard.

D. Cavity Drainage Material: Free-draining mesh, made from polymer strands that will not degrade within the wall cavity.

1. Mortar Deflector: Strips, full depth of cavity and 16 inches high, with dovetail-shaped notches that prevent clogging with mortar droppings.

2.9 MORTAR AND GROUT MIXES

A. General: Do not use admixtures, including pigments, air-entraining agents, accelerators, retarders, water-repellent agents, antifreeze compounds, or other admixtures unless otherwise indicated.

1. Do not use calcium chloride in mortar or grout.
2. Use portland cement-lime mortar unless otherwise indicated.

B. Preblended, Dry Mortar Mix: Furnish dry mortar ingredients in form of a preblended mix. Measure quantities by weight to ensure accurate proportions, and thoroughly blend ingredients before delivering to Project site.

C. Mortar for Unit Masonry: Comply with ASTM C270, Property Specification. Provide the following types of mortar for applications stated unless another type is indicated or needed to provide required compressive strength of masonry.

1. For reinforced masonry, use Type S.
2. For exterior, above-grade, load-bearing, nonload-bearing walls, and parapet walls; for interior load-bearing walls; for interior nonload-bearing partitions; and for other applications where another type is not indicated, use Type N.
3. For interior nonload-bearing partitions, use Type N.

D. Grout for Unit Masonry: Comply with ASTM C476.

1. Use grout of type indicated or, if not otherwise indicated, of type (fine or coarse) that will comply with TMS 602 for dimensions of grout spaces and pour height.
2. Proportion grout in accordance with ASTM C476, Table 1 or paragraph 4.2.1.2 for specified 28-day compressive strength indicated, but not less than 2000 psi.
3. Provide grout with a slump of 8 to 11 inches as measured in accordance with ASTM C143/C143M.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

1. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
2. Verify that foundations are within tolerances specified.

3. Verify that reinforcing dowels are properly placed.
4. Verify that substrates are free of substances that impair mortar bond.

B. Before installation, examine rough-in and built-in construction for piping systems to verify actual locations of piping connections.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION, GENERAL

A. Thickness: Build cavity and composite walls and other masonry construction to full thickness shown. Build single-wythe walls to actual widths of masonry units, using units of widths indicated.

B. Build chases and recesses to accommodate items specified in this and other Sections.

C. Leave openings for equipment to be installed before completing masonry. After installing equipment, complete masonry to match construction immediately adjacent to opening.

D. Use full-size units without cutting if possible. If cutting is required to provide a continuous pattern or to fit adjoining construction, cut units with motor-driven saws; provide clean, sharp, unchipped edges. Allow units to dry before laying unless wetting of units is specified. Install cut units with cut surfaces and, where possible, cut edges concealed.

3.3 TOLERANCES

A. Dimensions and Locations of Elements:

1. For dimensions in cross section or elevation, do not vary by more than plus 1/2 inch or minus 1/4 inch.
2. For location of elements in plan, do not vary from that indicated by more than plus or minus 1/2 inch.
3. For location of elements in elevation, do not vary from that indicated by more than plus or minus 1/4 inch in a story height or 1/2 inch total.

B. Lines and Levels:

1. For bed joints and top surfaces of bearing walls, do not vary from level by more than 1/4 inch in 10 ft., or 1/2-inch maximum.
2. For conspicuous horizontal lines, such as lintels, sills, parapets, and reveals, do not vary from level by more than 1/8 inch in 10 ft., 1/4 inch in 20 ft., or 1/2-inch maximum.
3. For vertical lines and surfaces, do not vary from plumb by more than 1/4 inch in 10 ft., 3/8 inch in 20 ft., or 1/2-inch maximum.
4. For conspicuous vertical lines, such as external corners, door jambs, reveals, and expansion and control joints, do not vary from plumb by more than 1/8 inch in 10 ft., 1/4 inch in 20 ft., or 1/2-inch maximum.
5. For lines and surfaces, do not vary from straight by more than 1/4 inch in 10 ft., 3/8 inch in 20 ft., or 1/2-inch maximum.
6. For vertical alignment of exposed head joints, do not vary from plumb by more than 1/4 inch in 10 ft., or 1/2-inch maximum.

C. Joints:

1. For bed joints, do not vary from thickness indicated by more than plus or minus 1/8 inch, with a maximum thickness limited to 1/2 inch.
2. For exposed bed joints, do not vary from bed-joint thickness of adjacent courses by more than 1/8 inch.
3. For head and collar joints, do not vary from thickness indicated by more than plus 3/8 inch or minus 1/4 inch.
4. For exposed head joints, do not vary from thickness indicated by more than plus or minus 1/8 inch.

3.4 LAYING MASONRY WALLS

A. Lay out walls in advance for accurate spacing of surface bond patterns with uniform joint thicknesses and for accurate location of openings, movement-type joints, returns, and offsets. Avoid using less-than-half-size units, particularly at corners, jambs, and, where possible, at other locations.

B. Bond Pattern for Exposed Masonry: Unless otherwise indicated, lay exposed masonry in running bond; do not use units with less-than-nominal 4-inch horizontal face dimensions at corners or jambs.

C. Lay concealed masonry with all units in a wythe in running bond or bonded by lapping not less than 4 inches. Bond and interlock each course of each wythe at corners. Do not use units with less-than-nominal 4-inch horizontal face dimensions at corners or jambs.

D. Stopping and Resuming Work: Stop work by stepping back units in each course from those in course below; do not tooth. When resuming work, clean masonry surfaces that are to receive mortar, remove loose masonry units and mortar, and wet brick if required before laying fresh masonry.

E. Built-in Work: As construction progresses, build in items specified in this and other Sections. Fill in solidly with masonry around built-in items.

F. Where built-in items are to be embedded in cores of hollow masonry units, place a layer of metal lath, wire mesh, or plastic mesh in the joint below, and rod mortar or grout into core.

G. Fill cores in hollow CMUs with grout 24 inches under bearing plates, beams, lintels, posts, and similar items unless otherwise indicated.

H. Build nonload-bearing interior partitions full height of story to underside of solid floor or roof structure above unless otherwise indicated.

1. Install compressible filler in joint between top of partition and underside of structure above.

3.5 MORTAR BEDDING AND JOINTING

A. Lay CMUs as follows:

1. Bed face shells in mortar and make head joints of depth equal to bed joints.
2. Bed webs in mortar in all courses of piers, columns, and pilasters.
3. Bed webs in mortar in grouted masonry, including starting course on footings.
4. Fully bed entire units, including areas under cells, at starting course on footings where cells are not grouted.

5. Fully bed units and fill cells with mortar at anchors and ties as needed to fully embed anchors and ties in mortar.

B. Lay solid masonry units with completely filled bed and head joints; butter ends with sufficient mortar to fill head joints and shove into place. Do not deeply furrow bed joints or slush head joints.

C. Set cast-stone trim units in full bed of mortar with full vertical joints. Fill dowel, anchor, and similar holes.

1. Clean soiled surfaces with fiber brush and soap powder and rinse thoroughly with clear water.
2. Allow cleaned surfaces to dry before setting.
3. Wet joint surfaces thoroughly before applying mortar.
4. Rake out mortar joints for pointing with sealant.

D. Tool exposed joints slightly concave when thumbprint hard, using a jointer larger than joint thickness unless otherwise indicated.

3.6 CAVITY WALLS

A. Bond wythes of cavity walls together using one of the following methods:

1. Individual Metal Ties: Provide ties as indicated installed in horizontal joints, but not less than one metal tie for 1.77 sq. ft. of wall area spaced not to exceed 16 inches o.c. horizontally and 16 inches o.c. vertically. Stagger ties in alternate courses. Provide additional ties within 12 inches of openings and space not more than 36 inches apart around perimeter of openings. At intersecting and abutting walls, provide ties at no more than 24 inches o.c. vertically.

a. Where bed joints of wythes do not align, use adjustable-type (two-piece-type) ties.
b. Where one wythe is of stone and the other of concrete masonry, use adjustable-type (two-piece-type) ties to allow for differential movement regardless of whether bed joints align.

2. Masonry-Joint Reinforcement: Installed in horizontal mortar joints.

a. Where bed joints of both wythes align, use ladder-type reinforcement extending across both wythes.
b. Where bed joints of wythes do not align, use adjustable-type (two-piece-type) reinforcement.
c. Where one wythe is of stone and the other of concrete masonry, use adjustable-type (two-piece-type) reinforcement to allow for differential movement regardless of whether bed joints align.

3. Masonry-Veneer Anchors: Comply with requirements for anchoring masonry veneers.

B. Keep cavities clean of mortar droppings and other materials during construction. Bevel beds away from cavity, to minimize mortar protrusions into cavity. Do not attempt to trowel or remove mortar fins protruding into cavity.

C. Installing Cavity Wall Insulation: Place small dabs of adhesive, spaced approximately 12 inches o.c. both ways, on inside face of insulation boards, or attach with plastic fasteners designed for this purpose. Fit courses of insulation between wall ties and other confining obstructions in cavity,

with edges butted tightly both ways. Press units firmly against inside wythe of masonry or other construction as indicated.

1. Fill cracks and open gaps in insulation with crack sealer compatible with insulation and masonry.

3.7 MASONRY-JOINT REINFORCEMENT

A. General: Install entire length of longitudinal side rods in mortar with a minimum cover of 5/8 inch on exterior side of walls, 1/2 inch elsewhere. Lap reinforcement a minimum of 6 inches.

1. Space reinforcement not more than 16 inches o.c.
2. Provide reinforcement not more than 8 inches above and below wall openings and extending 12 inches beyond openings in addition to continuous reinforcement.

B. Interrupt joint reinforcement at control and expansion joints unless otherwise indicated.

C. Provide continuity at wall intersections by using prefabricated T-shaped units.

D. Provide continuity at corners by using prefabricated L-shaped units.

3.8 CONTROL AND EXPANSION JOINTS

A. General: Install control- and expansion-joint materials in unit masonry as masonry progresses. Do not allow materials to span control and expansion joints without provision to allow for in-plane wall or partition movement.

B. Form control joints in concrete masonry using one of the following methods:

1. Install temporary foam-plastic filler in head joints, and remove filler when unit masonry is complete for application of sealant.

3.9 LINTELS

A. Install steel lintels where indicated.

B. Provide minimum bearing of 8 inches at each jamb unless otherwise indicated.

3.10 FLASHING, WEEP HOLES, AND CAVITY VENTS

A. General: Install embedded flashing and weep holes in masonry at shelf angles, lintels, ledges, other obstructions to downward flow of water in wall, and where indicated. Install cavity vents at shelf angles, ledges, and other obstructions to upward flow of air in cavities, and where indicated.

B. Install flashing as follows unless otherwise indicated:

1. Prepare masonry surfaces so they are smooth and free from projections that could puncture flashing. Where flashing is within mortar joint, place through-wall flashing on sloping bed of mortar and cover with mortar. Before covering with mortar, seal penetrations in flashing with adhesive, sealant, or tape as recommended by flashing manufacturer.

2. At masonry-veneer walls, extend flashing through veneer, across airspace behind veneer, and up face of sheathing at least 8 inches. Fasten upper edge of flexible flashing to backup wall through termination bar.
3. At lintels and shelf angles, extend flashing 6 inches minimum, to edge of next full unit at each end. At heads and sills, extend flashing 6 inches minimum, to edge of next full unit and turn ends up not less than 2 inches to form end dams.
4. Cut flexible flashing off flush with face of wall after masonry wall construction is completed.

C. Install weep holes in exterior wythes and veneers in head joints of first course of masonry immediately above embedded flashing.

1. Use specified weep/cavity vent products to form weep holes.
2. Space weep holes 24 inches o.c. unless otherwise indicated.

D. Place cavity drainage material in cavities to comply with configuration requirements for cavity drainage material in "Accessories" Article.

3.11 REINFORCED UNIT MASONRY

A. Placing Reinforcement: Comply with requirements in TMS 602.

B. Grouting: Do not place grout until entire height of masonry to be grouted has attained enough strength to resist grout pressure.

1. Comply with requirements in TMS 602 for cleanouts and for grout placement, including minimum grout space and maximum pour height.
2. Limit height of vertical grout pours to not more than 60 inches.

3.12 FIELD QUALITY CONTROL

A. Inspections: Special inspections in accordance with Level 2 in TMS 402.

1. Place grout only after inspectors have verified compliance of grout spaces and of grades, sizes, and locations of reinforcement.
2. Place grout only after inspectors have verified proportions of site-prepared grout.

B. Concrete Masonry Unit Test: For each type of unit provided, in accordance with ASTM C140/C140M for compressive strength.

C. Mortar Test (Property Specification): For each mix provided, in accordance with ASTM C780. Test mortar for mortar air content and compressive strength.

D. Grout Test (Compressive Strength): For each mix provided, in accordance with ASTM C1019.

3.13 REPAIRING, POINTING, AND CLEANING

A. Remove and replace masonry units that are loose, chipped, broken, stained, or otherwise damaged or that do not match adjoining units. Install new units to match adjoining units; install in fresh mortar, pointed to eliminate evidence of replacement.

B. 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 sealant application, where indicated.

C. In-Progress Cleaning: Clean unit masonry as work progresses by dry brushing to remove mortar fins and smears before tooling joints.

D. Final Cleaning: After mortar is thoroughly set and cured, clean exposed masonry as follows:

1. Remove large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels.
2. 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.
3. Protect adjacent stone and nonmasonry surfaces from contact with cleaner by covering them with liquid strippable masking agent or polyethylene film and waterproof masking tape.
4. Wet wall surfaces with water before applying cleaners; remove cleaners promptly by rinsing surfaces thoroughly with clear water.
5. Clean concrete masonry by applicable cleaning methods indicated in NCMA TEK 8-4A.

3.14 MASONRY WASTE DISPOSAL

A. Salvageable Materials: Unless otherwise indicated, excess masonry materials are Contractor's property. At completion of unit masonry work, remove from Project site.

B. Excess Masonry Waste: Remove excess clean masonry waste that cannot be used as fill, as described above or recycled, and other masonry waste, and legally dispose of off Owner's property.

END OF SECTION

SECTION 04 43 13.13

ANCHORED STONE MASONRY VENEER

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Stone masonry anchored to unit masonry backup.

B. Products Installed but Not Furnished under This Section Include:

1. Steel lintels in unit masonry.

C. Related Requirements:

1. Section 04 20 00 "Unit Masonry" for concealed flashing and horizontal joint reinforcement.

1.2 ACTION SUBMITTALS

A. Product Data: For each variety of stone, stone accessory, and manufactured product.

B. Samples for Initial Selection: For colored mortar and other items involving color selection.

C. Samples for Verification:

1. For each stone type indicated. Include at least five Samples in each set and show the full range of color and other visual characteristics in completed Work.

1.3 DELIVERY, STORAGE, AND HANDLING

A. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.

B. Store aggregates where grading and other required characteristics can be maintained and contamination avoided.

C. Deliver preblended, dry mortar mix in moisture-resistant containers designed for use with dispensing silos. Store preblended, dry mortar mix in delivery containers on elevated platforms, under cover, in a dry location, or in covered weatherproof dispensing silos.

D. Store masonry accessories, including metal items, to prevent corrosion and accumulation of dirt and oil.

1.4 FIELD CONDITIONS

A. Protection of Stone Masonry: During construction, cover tops of walls, projections, and sills with waterproof sheeting at end of each day's work. Cover partially completed stone masonry when construction is not in progress.

1. Extend cover a minimum of 24 inches down both sides and hold cover securely in place.

B. Stain Prevention: Immediately remove mortar and soil to prevent them from staining stone masonry face.

1. Protect base of walls from rain-splashed mud and mortar splatter using coverings spread on the ground and over the wall surface.
2. Protect sills, ledges, and projections from mortar droppings.
3. Protect surfaces of window and door frames, as well as similar products with painted and integral finishes, from mortar droppings.
4. Turn scaffold boards near the wall on edge at end of each day to prevent rain from splashing mortar and dirt on completed stone masonry.

C. Cold-Weather Requirements: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen substrates. Remove and replace stone masonry damaged by frost or freezing conditions. Comply with cold-weather construction requirements contained in TMS 602/ACI 530.1/ASCE 6.

1. Cold-Weather Cleaning: Use liquid cleaning methods only when air temperature is 40 deg F and above and will remain so until masonry has dried, but not less than seven days after completing cleaning.

D. Hot-Weather Requirements: Comply with hot-weather construction requirements contained in TMS 602/ACI 530.1/ASCE 6.

1.5 COORDINATION

A. Advise installers of adjacent Work about specific requirements for placement of reinforcement, veneer anchors, flashing, and similar items to be built into stone masonry.

B. Coordinate locations of dovetail slots installed in concrete that are to receive stone anchors.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Source Limitations for Stone: Obtain each variety of stone, regardless of finish, from single quarry with resources to provide materials of consistent quality in appearance and physical properties.

B. Source Limitations for Mortar Materials: Obtain mortar ingredients of uniform quality for each cementitious component from single manufacturer and each aggregate from single source or producer.

2.2 GRANITE COBBLES

A. Material Standard: Comply with ASTM C615/C615M.

B. Description: Uniform, medium-grained, red, pins, black, and blue stones.

C. Varieties and Sources: Subject to compliance with requirements, available stone varieties that may be incorporated into the Work include, but are not limited to, the following:

1. Buechel Stone Corp.; Mosaic Granite Cobbles.
2. Or owner approved equal.

2.3 FABRICATION

A. General: Fabricate stone units in sizes and shapes required to comply with requirements indicated.

1. For granite, comply with recommendations in NBGQA's "Specifications for Architectural Granite."

B. Carefully inspect stone at quarry or fabrication plant for compliance with requirements for appearance, material, and fabrication. Replace defective units before shipment.

1. Clean sawed backs of stone to remove rust stains and iron particles.

C. Thickness of Stone: Provide thickness indicated, but not less than the following:

1. Thickness: 4 inches plus or minus 1/2 inch.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine surfaces indicated to receive stone masonry, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of stone masonry.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Clean dirty or stained stone surfaces by removing soil, stains, and foreign materials before setting. Clean stone by thoroughly scrubbing with fiber brushes and then drenching with clear water. Use only mild cleaning compounds that contain no caustic or harsh materials or abrasives.

3.3 INSTALLATION OF STONE MASONRY

A. Perform necessary field cutting and trimming as stone is set.

1. Use hammer and chisel to split stone that is fabricated with split surfaces. Make edges straight and true, matching similar surfaces that were shop or quarry fabricated.

B. Sort stone before it is placed in wall to remove stone that does not comply with requirements relating to aesthetic effects, physical properties, or fabrication, or that is otherwise unsuitable for intended use.

C. Arrange stones with color and size variations uniformly dispersed for an evenly blended appearance.

D. Install supports, fasteners, and other attachments indicated or necessary to secure stone masonry in place.

E. Set stone accurately in locations indicated with edges and faces aligned according to established relationships and indicated tolerances.

F. Place weep holes and vents in joints where moisture may accumulate, including at base of cavity walls, above shelf angles, and at flashing.

1. Use mesh weep holes/vents to form weep holes.
2. Space weep holes 24 inches o.c.
3. Place cavity drainage material in cavities to comply with configuration requirements for cavity drainage material in "Miscellaneous Masonry Accessories" Article.

3.4 CONSTRUCTION TOLERANCES

A. Variation from Plumb: For vertical lines and surfaces, do not exceed 1/4 inch in 10 feet, 3/8 inch in 20 feet, or 1/2 inch in 40 feet or more. For external corners, expansion joints, control joints, and other conspicuous lines, do not exceed 1/4 inch in 20 feet or 1/2 inch in 40 feet or more.

B. Variation from Level: For bed joints and lines of exposed lintels, sills, parapets, horizontal grooves, and other conspicuous lines, do not exceed 1/4 inch in 20 feet or 1/2 inch in 40 feet or more.

C. Variation of Linear Building Line: For position shown in plan, do not exceed 1/2 inch in 20 feet or 3/4 inch in 40 feet or more.

D. Measure variation from level, plumb, and position shown in plan as a variation of the average plane of each stone face from level, plumb, or dimensioned plane.

E. Variation in Mortar-Joint Thickness: Do not vary from joint size range indicated.

F. Variation in Plane between Adjacent Stones: Do not exceed one-half of tolerance specified for thickness of stone.

3.5 INSTALLATION OF ANCHORED STONE MASONRY

A. Anchor stone masonry to unit masonry with adjustable, screw-attached veneer anchors unless otherwise indicated. Fasten anchors to unit masonry with two screws.

B. Embed veneer anchors in mortar joints of stone masonry at least halfway, but not less than 1-1/2 inches, through stone masonry and with at least a 5/8-inch cover on exterior face.

C. Space anchors not more than 18 inches o.c. vertically and 32 inches o.c. horizontally, with not less than one anchor per 2.67 sq. ft. of wall area. Install additional anchors within 12 inches of openings, sealant joints, and perimeter at intervals not exceeding 12 inches.

D. Set stone in full bed of mortar with full head joints unless otherwise indicated. Build anchors into mortar joints as stone is set.

E. Provide 2-inch cavity between stone masonry and backup construction unless otherwise indicated. Keep cavity free of mortar droppings and debris.

1. Slope beds toward cavity to minimize mortar protrusions into cavity.
2. Do not attempt to trowel or remove mortar fins protruding into cavity.

F. Rake out joints for pointing with mortar to depth of not less than 1/2 inch before setting mortar has hardened. Rake joints to uniform depths with square bottoms and clean sides.

3.6 POINTING

A. Prepare stone-joint surfaces for pointing with mortar by removing dust and mortar particles. Where setting mortar was removed to depths greater than surrounding areas, apply pointing mortar in layers not more than 3/8 inch deep until a uniform depth is formed.

B. Point stone joints by placing and compacting pointing mortar in layers of not more than 3/8 inch deep. Compact each layer thoroughly and allow to it become thumbprint hard before applying next layer.

C. Tool joints, when pointing mortar is thumbprint hard, with a smooth jointing tool to produce the following joint profile:

1. Joint Profile: Smooth, flat face recessed 1/4 inch below edges of stone (raked joint).

3.7 ADJUSTING AND CLEANING

A. Remove and replace stone masonry of the following description:

1. Broken, chipped, stained, or otherwise damaged stone. Stone may be repaired if methods and results are approved by Architect.
2. Defective joints.
3. Stone masonry not matching approved samples and mockups.
4. Stone masonry not complying with other requirements indicated.

B. Replace in a manner that results in stone masonry matching approved samples and mockups, complying with other requirements, and showing no evidence of replacement.

C. In-Progress Cleaning: Clean stone masonry as work progresses. Remove mortar fins and smears before tooling joints.

D. Final Cleaning: After mortar is thoroughly set and cured, clean stone masonry as follows:

1. Remove large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels.
2. Test cleaning methods on mockup; leave one-half of panel uncleaned for comparison purposes. Obtain Architect's approval of sample cleaning before cleaning stone masonry.

3. Clean stone masonry by bucket and brush hand-cleaning method described in BIA Technical Note No. 20, Revised II, using job-mixed detergent solution.
4. Clean limestone masonry to comply with recommendations in ILI's "Indiana Limestone Handbook."

3.8 EXCESS MATERIALS AND WASTE

A. Excess Masonry Waste: Remove excess clean masonry waste that cannot be used as fill, as described above, and other waste, and legally dispose of off Owner's property.

END OF SECTION

SECTION 04 72 00

CAST STONE MASONRY

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Trim units.
2. Accessories.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. For cast stone units, include construction details, material descriptions, dimensions of individual components and profiles, and finishes.

B. Shop Drawings: Show fabrication and installation details for cast stone units. Include dimensions, details of reinforcement and anchorages if any, and indication of finished faces.

1. Include building elevations showing layout of units and locations of joints and anchors.

C. Samples for Verification:

1. For each color and texture of cast stone required, 4 inches square in size.

1.3 QUALITY ASSURANCE

A. Manufacturer Qualifications: A qualified manufacturer of cast stone units similar to those indicated for this Project, that has sufficient production capacity to manufacture required units, and is a plant certified by CSI or APA.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Coordinate delivery of cast stone with unit masonry work to avoid delaying the Work and to minimize the need for on-site storage.

B. Pack, handle, and ship cast stone units in suitable packs or pallets.

1. Lift with wide-belt slings; do not use wire rope or ropes that might cause staining. Move cast stone units if required, using dollies with wood supports.
2. Store cast stone units on wood skids or pallets with nonstaining, waterproof covers, securely tied. Arrange to distribute weight evenly and to prevent damage to units. Ventilate under covers to prevent condensation.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Source Limitations for Cast Stone: Obtain cast stone units from single source from single manufacturer.

2.2 CAST STONE UNITS

A. Cast Stone Units: Comply with ASTM C1364.

1. Units are manufactured using the manufacturer's selected method.
2. Trim units including belt courses.

B. Fabricate units with sharp arris and accurately reproduced details, with indicated texture on all exposed surfaces unless otherwise indicated.

1. Slope exposed horizontal surfaces 1:12 to drain unless otherwise indicated.
2. Provide drips on projecting elements unless otherwise indicated.

C. Fabrication Tolerances:

1. Variation in Cross Section: Do not vary from indicated dimensions by more than 1/8 inch.
2. Variation in Length: Do not vary from indicated dimensions by more than 1/360 of the length of unit or 1/8 inch, whichever is greater, but in no case by more than 1/4 inch.
3. Warp, Bow, and Twist: Not to exceed 1/360 of the length of unit or 1/8 inch, whichever is greater.
4. Location of Grooves, False Joints, Holes, Anchorages, and Similar Features: Do not vary from indicated position by more than 1/8 inch on formed surfaces of units and 3/8 inch on unformed surfaces.

D. Cure Units as Follows:

1. Cure units in enclosed, moist curing room at 95 percent relative humidity and temperature of 100 deg F for 12 hours or 70 deg F for 16 hours.
2. Keep units damp and continue curing to comply with one of the following:

a. No fewer than five days at mean daily temperature of 70 deg F or above.
b. No fewer than seven days at mean daily temperature of 50 deg F or above.

E. Acid etch units after curing to remove cement film from surfaces to be exposed to view.

F. Colors and Textures: As selected by Architect from manufacturer's full range.

2.3 MORTAR MIXES

A. Comply with requirements in Section 04 20 00 "Unit Masonry" for mortar mixes.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 SETTING CAST STONE IN MORTAR

A. Set cast stone as indicated in TMS 604.

B. Set cast stone as indicated on Drawings. Set units accurately in locations indicated, with edges and faces aligned according to established relationships and indicated tolerances.

C. Wet joint surfaces thoroughly before applying mortar or setting in mortar.

D. Set units in full bed of mortar with full head joints unless otherwise indicated.

1. Set units with joints 1/4 to 3/8 inch wide unless otherwise indicated.
2. Build anchors and ties into mortar joints as units are set.

E. Tool exposed joints slightly concave when thumbprint hard. Use a smooth plastic jointer larger than joint thickness.

3.3 ADJUSTING AND CLEANING

A. Remove and replace stained and otherwise damaged units and units not matching approved Samples. Cast stone may be repaired if methods and results are approved by Architect.

B. Replace units in a manner that results in cast stone matching approved Samples, complying with other requirements, and showing no evidence of replacement.

END OF SECTION

SECTION 05 12 00

STRUCTURAL STEEL FRAMING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Structural steel.

1.2 DEFINITIONS

A. Structural Steel: Elements of the structural frame indicated on Drawings and as described in AISC 303, "Code of Standard Practice for Steel Buildings and Bridges."

1.3 COORDINATION

A. Coordinate installation of 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.

1.4 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.5 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Shop Drawings: Show fabrication of structural-steel components.

1. Include details of cuts, connections, splices, camber, holes, and other pertinent data.
2. Include embedment Drawings.
3. Indicate welds by standard AWS symbols, distinguishing between shop and field welds, and show size, length, and type of each weld. Show backing bars that are to be removed and supplemental fillet welds where backing bars are to remain.
4. Indicate type, size, and length of bolts, distinguishing between shop and field bolts. Identify pretensioned and slip-critical, high-strength bolted connections.

1.6 INFORMATIONAL SUBMITTALS

A. Welding certificates.

1.7 QUALITY ASSURANCE

A. Welding Qualifications: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code - Steel."

B. Comply with applicable provisions of the following specifications and documents:

1. AISC 303.
2. AISC 360.
3. RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."

1.8 DELIVERY, STORAGE, AND HANDLING

A. 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 corrosion and deterioration.

1. 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.

B. Store fasteners in a protected place in sealed containers with manufacturer's labels intact.

1. Fasteners may be repackaged provided Owner's testing and inspecting agency observes repackaging and seals containers.
2. Clean and relubricate bolts and nuts that become dry or rusty before use.
3. Comply with manufacturers' written recommendations for cleaning and lubricating ASTM F 1852 fasteners and for retesting fasteners after lubrication.

PART 2 - PRODUCTS

2.1 STRUCTURAL-STEEL MATERIALS

A. W-Shapes and WT-Shapes: ASTM A 992/A 992M.

B. Channels, Angles-Shapes: ASTM A 36/A 36M.

C. Plate and Bar: ASTM A 36/A 36M or ASTM A 572/A 572M, Grade 50 (as noted).

D. Welding Electrodes: Comply with AWS requirements.

2.2 BOLTS, CONNECTORS, AND ANCHORS

A. High-Strength Bolts, Nuts, and Washers: ASTM A 325, Type 1, heavy-hex steel structural bolts; ASTM A 563, Grade C, heavy-hex carbon-steel nuts; and ASTM F 436, Type 1, hardened carbon-steel washers; all with plain finish.

B. Tension-Control, High-Strength Bolt-Nut-Washer Assemblies: ASTM F 1852 or ASTM F 2280 as applicable, Type 1, round head assemblies consisting of steel structural bolts with splined ends, heavy-hex carbon-steel nuts, and hardened carbon-steel washers.

1. Finish: Plain.

2.3 PRIMER

A. Primer: Comply with Section 09 91 14 "Exterior Painting”.

B. Primer: SSPC-Paint 25, Type II, zinc oxide, alkyd, linseed oil primer.

2.4 FABRICATION

A. Structural Steel: Fabricate and assemble in shop to greatest extent possible. Fabricate according to AISC 303, "Code of Standard Practice for Steel Buildings and Bridges," and to AISC 360.

1. Fabricate beams with rolling camber up.
2. Mark and match-mark materials for field assembly.

B. Thermal Cutting: Perform thermal cutting by machine to the greatest extent possible.

1. Plane thermally cut edges to be welded to comply with requirements in AWS D1.1/D1.1M.

C. Bolt Holes: Cut, drill, mechanically thermal cut, or punch standard bolt holes perpendicular to metal surfaces.

D. Finishing: Accurately finish ends of columns and other members transmitting bearing loads.

E. Cleaning: Clean and prepare steel surfaces that are to remain unpainted according to SSPC-SP 1, "Solvent Cleaning."

F. Holes: Provide holes required for securing other work to structural steel and for other work to pass through steel members.

1. Cut, drill, or punch holes perpendicular to steel surfaces.

2.5 SHOP PRIMING

A. Shop prime steel surfaces except the following:

1. Surfaces embedded in concrete or mortar. Extend priming of partially embedded members to a depth of 2 inches.
2. Surfaces to be field welded.
3. Surfaces of high-strength bolted, slip-critical connections.
4. Galvanized surfaces.

B. 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:

1. SSPC-SP 2, "Hand Tool Cleaning."

C. Priming: Immediately after surface preparation, apply primer according to manufacturer's written instructions and at rate recommended by SSPC to provide a minimum dry film thickness of 1.5 mils. Use priming methods that result in full coverage of joints, corners, edges, and exposed surfaces.

1. Stripe paint corners, crevices, bolts, welds, and sharp edges.
2. Apply two coats of shop paint to surfaces that are inaccessible after assembly or erection. Change color of second coat to distinguish it from first.

2.6 GALVANIZING

A. Hot-Dip Galvanized Finish: Apply zinc coating by the hot-dip process to structural steel according to ASTM A 123/A 123M.

1. Fill vent and drain holes that are exposed in the finished Work unless they function as weep holes, by plugging with zinc solder and filing off smooth.
2. Galvanize lintels shelf angles and all structural steel exposed to weather in the completed building.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify, with steel erector present, elevations of concrete- and masonry-bearing surfaces and locations of anchor rods, bearing plates, and other embedments for compliance with requirements.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. 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.

3.3 ERECTION

A. Set structural steel accurately in locations and to elevations indicated and according to AISC 303 and AISC 360.

B. Baseplates Bearing Plates and Leveling Plates: Clean concrete- and masonry-bearing surfaces of bond-reducing materials, and roughen surfaces prior to setting plates. Clean bottom surface of plates.

1. Set plates for structural members on wedges, shims, or setting nuts as required.
2. Promptly pack grout solidly between bearing surfaces and 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.

C. Maintain erection tolerances of structural steel within AISC 303, "Code of Standard Practice for Steel Buildings and Bridges."

D. Align and adjust various members that form part of complete frame or structure before permanently fastening. Before assembly, clean bearing surfaces and other surfaces that are in

permanent contact with members. Perform necessary adjustments to compensate for discrepancies in elevations and alignment.

1. Level and plumb individual members of structure.
2. Make allowances for difference between temperature at time of erection and mean temperature when structure is completed and in service.

E. Do not use thermal cutting during erection unless approved by Architect. Finish thermally cut sections within smoothness limits in AWS D1.1/D1.1M.

F. Do not enlarge unfair holes in members by burning or using drift pins. Ream holes that must be enlarged to admit bolts.

3.4 FIELD CONNECTIONS

A. High-Strength Bolts: 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 type of joint specified.

1. Joint Type: Snug tightened (unless noted otherwise on drawings).

B. Weld Connections: Comply with AWS D1.1/D1.1M for tolerances, appearances, welding procedure specifications, weld quality, and methods used in correcting welding work.

1. Comply with AISC 303 and AISC 360 for bearing, alignment, adequacy of temporary connections, and removal of paint on surfaces adjacent to field welds.
2. Assemble and weld built-up sections by methods that maintain true alignment of axes without exceeding tolerances in AISC 303, "Code of Standard Practice for Steel Buildings and Bridges," for mill material.

3.5 FIELD QUALITY CONTROL

A. Special Inspections: Engage a qualified special inspector to perform the following special inspections:

1. Verify structural-steel materials and inspect steel frame joint details.
2. Verify weld materials and inspect welds.
3. Verify connection materials and inspect high-strength bolted connections.

B. Testing Agency: Engage a qualified testing agency to perform tests and inspections.

C. Bolted Connections: Inspect bolted connections according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."

D. Welded Connections: Visually inspect field welds according to AWS D1.1/D1.1M.

3.6 REPAIRS AND PROTECTION

A. Galvanized Surfaces: Clean areas where galvanizing is damaged or missing and repair galvanizing to comply with ASTM A 780/A 780M.

B. Touchup Priming: Cleaning and touchup priming are specified in Section 09 91 14 "Exterior Painting."

END OF SECTION

SECTION 05 31 00

STEEL DECKING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Roof deck.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of deck, accessory, and product indicated.

B. Shop Drawings:

1. Include layout and types of deck panels, anchorage details, reinforcing channels, pans, cut deck openings, special jointing, accessories, and attachments to other construction.

1.3 INFORMATIONAL SUBMITTALS

A. Welding certificates.

1.4 QUALITY ASSURANCE

A. Welding Qualifications: Qualify procedures and personnel according to AWS D1.3/D1.3M, "Structural Welding Code - Sheet Steel."

1.5 DELIVERY, STORAGE, AND HANDLING

A. Protect steel deck from corrosion, deformation, and other damage during delivery, storage, and handling.

B. Stack steel deck on platforms or pallets and slope to provide drainage. Protect with a waterproof covering and ventilate to avoid condensation.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. AISI Specifications: Comply with calculated structural characteristics of steel deck according to AISI's "North American Specification for the Design of Cold-Formed Steel Structural Members."

2.2 ROOF DECK

A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

1. ASC Profiles, Inc.
2. Canam Steel Corporation; Canam Group, Inc.
3. Epic Metals Corporation.
4. New Millennium Building Systems, LLC.
5. Nucor Corp.
6. Verco Decking, Inc., a Nucor company.

B. Roof Deck: Fabricate panels, without top-flange stiffening grooves, to comply with "SDI Specifications and Commentary for Steel Roof Deck," in SDI Publication No. 31, and with the following:

1. Galvanized-Steel Sheet: ASTM A 653/A 653M, Structural Steel (SS), Grade 33 (minimum), G60 zinc coating.
2. Deck Profile: As indicated on drawings.
3. Profile Depth: As indicated on drawings.
4. Design Uncoated-Steel Thickness: As indicated on drawings.
5. Span Condition: As indicated on drawings.
6. Side Laps: Overlapped or interlocking seam at Contractor's option.

2.3 ACCESSORIES

A. General: Provide manufacturer's standard accessory materials for deck that comply with requirements indicated.

B. Mechanical Fasteners: Corrosion-resistant, low-velocity, power-actuated or pneumatically driven carbon-steel fasteners; or self-drilling, self-threading screws.

C. Side-Lap Fasteners: Corrosion-resistant, hexagonal washer head; self-drilling, carbon-steel screws, No. 10 minimum diameter.

D. Flexible Closure Strips: Vulcanized, closed-cell, synthetic rubber.

E. 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.

F. Galvanizing Repair Paint: ASTM A 780/A 780M.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine supporting frame and field conditions for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION, GENERAL

A. Install deck panels and accessories according to applicable specifications and commentary in SDI Publication No. 31, manufacturer's written instructions, and requirements in this Section.

B. Locate deck bundles to prevent overloading of supporting members.

C. 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.

D. Place deck panels flat and square and fasten to supporting frame without warp or deflection.

E. Cut and neatly fit deck panels and accessories around openings and other work projecting through or adjacent to deck.

F. Provide additional reinforcement and closure pieces at openings as required for strength, continuity of deck, and support of other work.

G. Comply with AWS requirements and procedures for manual shielded metal arc welding, appearance and quality of welds, and methods used for correcting welding work.

3.3 ROOF-DECK INSTALLATION

A. 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 that is not less than 1-1/2 inches long, and as follows:

1. Weld Diameter: 5/8 inch, nominal, unless noted otherwise.
2. Weld Spacing: Weld edge and interior ribs of deck units with a minimum of two welds per deck unit at each support. Space welds 12 inches apart, maximum.

B. Side-Lap and Perimeter Edge Fastening: Fasten side laps and perimeter edges of panels between supports, at intervals not exceeding the lesser of one-half of the span or 36 inches, and using one of the following methods:

1. Mechanically fasten with self-drilling, No. 10 diameter or larger, carbon-steel screws.
2. Mechanically clinch or button punch.
3. Fasten with a minimum of 1-1/2-inch-long welds.

C. End Bearing: Install deck ends over supporting frame with a minimum end bearing of 2 inches, with end joints as follows:

1. End Joints: Lapped 2 inches minimum or butted at Contractor's option.

D. Miscellaneous Roof-Deck Accessories: Install ridge and valley plates, finish strips, end closures, and reinforcing channels according to deck manufacturer's written instructions. Weld to substrate to provide a complete deck installation.

1. Weld cover plates at changes in direction of roof-deck panels unless otherwise indicated.

E. Flexible Closure Strips: Install flexible closure strips over partitions, walls, and where indicated. Install with adhesive according to manufacturer's written instructions to ensure complete closure.

3.4 FIELD QUALITY CONTROL

A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.

B. Field welds will be subject to inspection.

C. Prepare test and inspection reports.

3.5 PROTECTION

A. Galvanizing Repairs: Prepare and repair damaged galvanized coatings on both surfaces of deck with galvanized repair paint according to ASTM A 780/A 780M and manufacturer's written instructions.

END OF SECTION

SECTION 06 10 53

MISCELLANEOUS ROUGH CARPENTRY

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Wood blocking and nailers.

1.2 DEFINITIONS

A. Boards or Strips: Lumber of less than 2 inches nominal size in least dimension.

B. Dimension Lumber: Lumber of 2 inches nominal or greater size but less than 5 inches nominal size in least dimension.

1.3 DELIVERY, STORAGE, AND HANDLING

A. Stack lumber flat with spacers beneath and between each bundle to provide air circulation. Protect lumber from weather by covering with waterproof sheeting, securely anchored. Provide for air circulation around stacks and under coverings.

PART 2 - PRODUCTS

2.1 WOOD PRODUCTS, GENERAL

A. Lumber: DOC PS 20 and applicable rules of grading agencies indicated. If no grading agency is indicated, provide lumber that complies with the applicable rules of any rules-writing agency certified by the ALSC Board of Review. Provide lumber graded by an agency certified by the ALSC Board of Review to inspect and grade lumber under the rules indicated.

1. Dress lumber, S4S, unless otherwise indicated.

B. Maximum Moisture Content of Lumber: 15 percent for 2-inch nominal thickness or less, 19 percent for more than 2-inch nominal thickness unless otherwise indicated.

2.2 MISCELLANEOUS LUMBER

A. General: Provide miscellaneous lumber indicated and lumber for support or attachment of other construction, including the following:

1. Blocking.
2. Nailers.

B. Dimension Lumber Items: Construction or No. 2 grade.

C. Concealed Boards: Construction or No. 2 Common and 15 percent maximum moisture content.

D. For blocking and nailers used for attachment of other construction, select and cut lumber to eliminate knots and other defects that will interfere with attachment of other work.

E. For furring strips for installing plywood or hardboard paneling, select boards with no knots capable of producing bent-over nails and damage to paneling.

2.3 FASTENERS

A. General: Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacture.

B. Nails, Brads, and Staples: ASTM F1667.

C. Power-Driven Fasteners: Fastener systems with an evaluation report acceptable to authorities having jurisdiction, based on ICC-ES AC70.

D. Post-Installed Anchors: Fastener systems with an evaluation report acceptable to authorities having jurisdiction, based on ICC-ES AC01 or ICC-ES AC58 as appropriate for the substrate.

1. Material: Carbon-steel components, zinc plated to comply with ASTM B633, Class Fe/Zn 5.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. Framing Standard: Comply with AF&PA's WCD 1, "Details for Conventional Wood Frame Construction," unless otherwise indicated.

B. Set carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit carpentry accurately to other construction. Locate furring, nailers, blocking, and similar supports to comply with requirements for attaching other construction.

C. Provide blocking and framing as indicated and as required to support facing materials, fixtures, specialty items, and trim.

D. Securely attach carpentry work to substrate by anchoring and fastening as indicated, complying with the following:

1. Table 2304.9.1, "Fastening Schedule," in ICC's International Building Code.

E. Use steel common nails unless otherwise indicated. Select fasteners of size that will not fully penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting wood. Drive nails snug but do not countersink nail heads unless otherwise indicated.

3.2 INSTALLATION OF WOOD BLOCKING AND NAILER

A. Install where indicated and where required for attaching other work. Form to shapes indicated and cut as required for true line and level of attached work. Coordinate locations with other work involved.

B. Attach items to substrates to support applied loading. Recess bolts and nuts flush with surfaces unless otherwise indicated.

END OF SECTION

SECTION 07 21 00

THERMAL INSULATION

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Extruded polystyrene foam-plastic board insulation.
2. Polyisocyanurate foam-plastic board insulation.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product.

1.3 DELIVERY, STORAGE, AND HANDLING

A. Protect insulation materials from physical damage and from deterioration due to 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.

B. Protect foam-plastic board insulation as follows:

1. Do not expose to sunlight except to necessary extent for period of installation and concealment.
2. Protect against ignition at all times. Do not deliver foam-plastic board materials to Project site until just before installation time.
3. Quickly complete installation and concealment of foam-plastic board insulation in each area of construction.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Surface-Burning Characteristics: Maximum flame-spread and smoke-developed indexes less than Class A, 25 and 450 when tested in accordance with ASTM E84.

B. Fire Propagation Characteristics: Passes NFPA 285 testing as part of an approved assembly.

C. Labeling: Provide identification of mark indicating R-value of each piece of insulation 12 inches and wider in width.

D. Thermal-Resistance Value (R-Value): R-value as indicated on Drawings in accordance with ASTM C518.

2.2 EXTRUDED POLYSTYRENE FOAM-PLASTIC BOARD INSULATION (XPS)

A. Extruded Polystyrene Board Insulation, Type IV <**Insert drawing designation**>: ASTM C578, Type IV, 25 psi minimum compressive strength; unfaced.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

a. DiversiFoam Products.
b. DuPont de Nemours, Inc.
c. Kingspan Insulation LLC.
d. Owens Corning.
e. The Dow Chemical Company.

2.3 POLYISOCYANURATE FOAM-PLASTIC BOARD INSULATION

A. Polyisocyanurate Board Insulation, Glass-Fiber-Mat Faced: ASTM C1289, glass-fiber-mat faced, Type II, Class 2.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

a. Atlas Polyiso Roof and Wall Insulation.
b. Carlisle Coatings & Waterproofing Inc.
c. Elevate; Holcim Building Envelope.
d. Johns Manville; a Berkshire Hathaway company.
e. Rmax, A Business Unit of Sika Corporation.

2.4 ACCESSORIES

A. Insulation for Miscellaneous Voids:

1. Spray Polyurethane Foam Insulation: ASTM C1029, Type II, closed cell, with maximum flame-spread and smoke-developed indexes of 75 and 450, respectively, per ASTM E84.

B. Miscellaneous Application Accessories:

1. Adhesive for Bonding Insulation: Product compatible with insulation and air and water barrier materials, and with demonstrated capability to bond insulation securely to substrates without damaging insulation and substrates.
2. Crack Sealer: Closed-cell insulating foam in aerosol dispenser recommended in writing by insulation manufacturer for filling gaps in board insulation.

PART 3 - EXECUTION

3.1 PREPARATION

A. Clean substrates of substances that are harmful to insulation, including removing projections capable of puncturing insulation or vapor retarders, or those that interfere with insulation attachment.

3.2 INSTALLATION, GENERAL

A. Comply with insulation manufacturer's written instructions applicable to products, applications and applicable codes.

B. Install insulation that is undamaged, dry, and unsoiled and that has not been left exposed to ice, rain, or snow at any time.

C. Install insulation with manufacturer's R-value label exposed after insulation is installed.

D. Extend insulation to envelop entire area to be insulated. Fit tightly around obstructions and fill voids with insulation. Remove projections that interfere with placement.

E. Provide sizes to fit applications and selected from manufacturer's standard thicknesses, widths, and lengths. Apply single layer of insulation units unless multiple layers are otherwise shown or required to make up total thickness or to achieve R-value.

3.3 INSTALLATION OF SLAB INSULATION

A. On vertical slab edge and foundation surfaces, set insulation units using manufacturer's recommended adhesive in accordance with manufacturer's written instructions.

1. If not otherwise indicated, extend insulation a minimum of 24 inches below exterior grade line.

B. On horizontal surfaces, loosely lay insulation units in accordance with manufacturer's written instructions. Stagger end joints and tightly abut insulation units.

1. If not otherwise indicated, extend insulation a minimum of 24 inches in from exterior walls.

3.4 INSTALLATION OF FOUNDATION WALL INSULATION

A. Butt panels together for tight fit.

B. Adhesive Installation: Install with adhesive or press into tacky waterproofing or dampproofing in accordance with manufacturer's written instructions.

3.5 INSTALLATION OF CAVITY-WALL INSULATION

A. Foam-Plastic Board Insulation: Install pads of adhesive spaced approximately 24 inches o.c. both ways on inside face and as recommended in writing by manufacturer.

1. Fit courses of insulation between wall ties and other obstructions, with edges butted tightly in both directions, and with faces flush.
2. Press units firmly against inside substrates.
3. Supplement adhesive attachment of insulation by securing boards with two-piece wall ties designed for this purpose and specified in Section 04 20 00 "Unit Masonry."

3.6 INSTALLATION OF BOARD INSULATION

A. Install board insulation in accordance with manufacturer's written instructions per project applications and conditions.

3.7 PROTECTION

A. Protect installed insulation from damage due to harmful weather exposures, physical abuse, and other causes.

B. 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

SECTION 07 27 26

FLUID-APPLIED MEMBRANE AIR BARRIERS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Medium-build air barriers, vapor permeable.

1.2 DEFINITIONS

A. Air-Barrier Accessory: A transitional component of the air barrier that provides continuity.

B. Air-Barrier Assembly: The collection of air-barrier materials and accessories applied to an opaque wall, including joints and junctions to abutting construction, to control air movement through the wall.

C. Air-Barrier Material: A primary element that provides a continuous barrier to the movement of air.

1.3 ACTION SUBMITTALS

A. Product Data: Include manufacturer's written instructions for evaluating, preparing, and treating each substrate; technical data; dry film thickness; and tested physical and performance properties of products.

1. Medium-build air barriers, vapor permeable.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Remove and replace liquid materials that cannot be applied within their stated shelf life.

B. Protect stored materials from direct sunlight.

1.5 FIELD CONDITIONS

A. Environmental Limitations: Apply air barrier within the range of ambient and substrate temperatures recommended in writing by air-barrier manufacturer.

1. Protect substrates from environmental conditions that affect air-barrier performance.
2. Do not apply air barrier to a damp or wet substrate or during snow, rain, fog, or mist.

PART 2 - PRODUCTS

2.1 SOURCE LIMITATIONS

A. Obtain primary air-barrier materials and air-barrier accessories from single manufacturer.

2.2 PERFORMANCE REQUIREMENTS

A. Air-Barrier Performance: Air-barrier assembly and seals with adjacent construction to be capable of performing as a continuous air barrier and as a liquid-water drainage plane flashed to discharge to the exterior incidental condensation or water penetration. Air-barrier assemblies to be capable of accommodating substrate movement and of sealing substrate expansion and control joints, construction material changes, penetrations, and transitions at perimeter conditions without deterioration and air leakage exceeding specified limits.

B. Air-Barrier Assembly Air Leakage: Maximum 0.04 cfm/sq. ft. of surface area at 1.57 lbf/sq. ft., when tested in accordance with ASTM E2357.

C. Air Permeance: Maximum 0.004 cfm/sq. ft. of surface area at 1.57 lbf/sq. ft. pressure difference; ASTM E2178.

D. Adhesion to Substrate: Minimum 16 lbf/sq. in. when tested in accordance with ASTM D4541.

E. UV Resistance: Can be exposed to sunlight for 180 days in accordance with manufacturer's written instructions.

2.3 MEDIUM-BUILD AIR BARRIERS, VAPOR PERMEABLE

A. Medium-Build, Vapor-Permeable Air Barrier: Synthetic polymer material with an installed dry film thickness, according to manufacturer's written instructions, of 16 to 34 mils over smooth, void-free substrates.

1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to the following:

a. Carlisle Coatings & Waterproofing Inc; Barrithane VP.
b. DuPont de Nemours, Inc.; DuPont Tyvek Fluid Applied WB.
c. Prosoco, Inc.; R Guard Cat 5.

d. Sto Corp.; Sto AirSeal.
e. Tremco Commercial Sealants and Waterproofing, part of Tremco CPG; ExoAir 230/230LT.
f. W. R. Meadows, Inc; Air-Shield LMP.

2. Vapor Permeance: Minimum 5 perms; ASTM E96/E96M.

2.4 ACCESSORY MATERIALS

A. Provide primers, transition strips, termination strips, joint reinforcing fabric and strips, joint sealants, counterflashing strips, flashing sheets and metal termination bars, termination mastic, substrate patching materials, adhesives, tapes, foam sealants, lap sealants, and other accessory

materials that are recommended in writing by air-barrier manufacturer to produce a complete air-barrier assembly and that are compatible with primary air-barrier material and adjacent construction to which they may seal.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements and other conditions affecting performance of the Work.

1. Verify that substrates are sound and free of oil, grease, dirt, excess mortar, or other contaminants.
2. Verify that substrates have cured and aged for minimum time recommended in writing by air-barrier manufacturer.
3. Verify that substrates are visibly dry and free of moisture.
4. Verify that masonry joints are flush and completely filled with mortar.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 SURFACE PREPARATION

A. Clean, prepare, treat, fill, and seal substrate and joints and cracks in substrate in accordance with manufacturer's written instructions and details. Provide clean, dust-free, and dry substrate for air-barrier application.

B. Mask off adjoining surfaces not covered by air barrier to prevent spillage and overspray affecting other construction.

C. Remove grease, oil, bitumen, form-release agents, paints, curing compounds, and other penetrating contaminants or film-forming coatings from concrete.

D. Remove fins, ridges, mortar, and other projections and fill honeycomb, aggregate pockets, holes, and other voids in concrete with substrate-patching material.

E. Remove excess mortar from masonry ties, shelf angles, and other obstructions.

F. At changes in substrate plane, apply sealant or termination mastic beads at sharp corners and edges to form a smooth transition from one plane to another.

G. Cover gaps in substrate plane and form a smooth transition from one substrate plane to another with stainless steel sheet mechanically fastened to structural framing to provide continuous support for air barrier.

H. Bridge expansion joints and discontinuous wall-to-wall, deck-to-wall, and deck-to-deck joints with air-barrier accessory material that accommodates joint movement in accordance with manufacturer's written instructions and details.

3.3 INSTALLATION OF ACCESSORIES

A. Install accessory materials in accordance with air-barrier manufacturer's written instructions and details to form a seal with adjacent construction and ensure continuity of air and water barrier.

1. Coordinate the installation of air barrier with installation of roofing membrane and base flashing to ensure continuity of air barrier with roofing membrane.
2. Install transition strip on roofing membrane or base flashing so that a minimum of 3 inches of coverage is achieved over each substrate.
3. Unless manufacturer recommends in writing against priming, apply primer to substrates at required rate and allow it to dry.
4. Apply primer to substrates at required rate and allow it to dry. Limit priming to areas that will be covered by air-barrier material on same day. Reprime areas exposed for more than 24 hours.

B. Connect and seal exterior wall air-barrier material continuously to roofing-membrane air barrier, concrete below-grade structures, floor-to-floor construction, exterior glazing and window systems, glazed curtain-wall systems, storefront systems, exterior louvers, exterior door framing, and other construction used in exterior wall openings, using accessory materials.

C. At end of each working day, seal top edge of strips and transition strips to substrate with termination mastic.

D. Apply joint sealants forming part of air-barrier assembly within manufacturer's recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.

E. Wall Openings: Prime concealed, perimeter frame surfaces of windows, curtain walls, storefronts, and doors. Apply transition strip so that a minimum of 3 inches of coverage is achieved over each substrate. Maintain 3 inches of full contact over firm bearing to perimeter frames, with not less than 1 inch of full contact.

1. Transition Strip: Roll firmly to enhance adhesion.

F. Fill gaps in perimeter frame surfaces of windows, curtain walls, storefronts, and doors, and miscellaneous penetrations of air-barrier material with foam sealant.

G. Seal strips and transition strips around masonry reinforcing or ties and penetrations with termination mastic.

H. Seal top of through-wall flashings to air barrier with an additional 6-inch-wide, transition strip.

I. Seal exposed edges of strips at seams, cuts, penetrations, and terminations not concealed by metal counterflashings or ending in reglets with termination mastic.

J. Repair punctures, voids, and deficient lapped seams in strips and transition strips. Slit and flatten fishmouths and blisters. Patch with transition strips extending 6 inches beyond repaired areas in strip direction.

3.4 INSTALLATION OF PRIMARY AIR-BARRIER MATERIAL

A. Apply air-barrier material to form a seal with strips and transition strips and to achieve a continuous air barrier in accordance with air-barrier manufacturer's written instructions and

details. Apply air-barrier material within manufacturer's recommended application temperature ranges.

1. Unless manufacturer recommends in writing against priming, apply primer to substrates at required rate and allow it to dry.
2. Limit priming to areas that will be covered by air-barrier material on same day. Reprime areas exposed for more than 24 hours.
3. Where multiple prime coats are needed to achieve required bond, allow adequate drying time between coats.

B. Medium-Build Air Barriers: Apply continuous unbroken air-barrier material to substrates according to the following thickness. Apply an increased thickness of air-barrier material in full contact around protrusions such as masonry ties.

1. Vapor-Permeable, Medium-Build Air Barrier: Total dry film thickness as recommended in writing by manufacturer to comply with performance requirements, applied in one or more equal coats. Apply additional material as needed to achieve void- and pinhole-free surface, but do not exceed thickness on which required vapor permeability is based.

C. Do not cover air barrier until it has been tested and inspected by testing agency.

D. Correct deficiencies in or remove air barrier that does not comply with requirements; repair substrates and reapply air-barrier components.

3.5 CLEANING AND PROTECTION

A. Protect air-barrier system from damage during application and remainder of construction period, in accordance with manufacturer's written instructions.

1. Protect air barrier from exposure to UV light and harmful weather exposure as recommended in writing by manufacturer. If exposed to these conditions for longer than recommended, remove and replace air barrier or install additional, full-thickness, air-barrier application after repairing and preparing the overexposed materials in accordance with air-barrier manufacturer's written instructions.
2. Protect air barrier from contact with incompatible materials and sealants not approved by air-barrier manufacturer.

B. Clean spills, stains, and soiling from construction that would be exposed in the completed work using cleaning agents and procedures recommended in writing by manufacturer of affected construction.

C. Remove masking materials after installation.

END OF SECTION

SECTION 07 41 13.16

STANDING-SEAM METAL ROOF PANELS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Vertical-rib, seamed-joint, standing-seam metal roof panels.
2. Roof insulation.
3. Underlayment.

B. Related Requirements:

1. Section 07 42 93 "Soffit Panels" for metal panels used in horizontal soffit applications.

1.2 ACTION SUBMITTALS

A. Product Data:

1. For standing-seam metal roof panels. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of panel and accessory.

B. Shop Drawings:

1. Include fabrication and installation layouts of metal panels; details of edge conditions, joints, panel profiles, corners, anchorages, attachment system, trim, flashings, closures, and accessories; and special details.
2. Accessories: Include details of the flashing, trim, and anchorage systems, at a scale of not less than 1-1/2 inches per 12 inches.

1.3 DELIVERY, STORAGE, AND HANDLING

A. Deliver components, metal panels, and other manufactured items so as not to be damaged or deformed. Package metal panels for protection during transportation and handling.

B. Unload, store, and erect metal panels in a manner to prevent bending, warping, twisting, and surface damage.

C. Stack metal panels horizontally on platforms or pallets, covered with suitable weathertight and ventilated covering. Store metal panels to ensure dryness, with positive slope for drainage of water. Do not store metal panels in contact with other materials that might cause staining, denting, or other surface damage.

D. Retain strippable protective covering on metal panels during installation.

E. Copper Panels: Wear gloves when handling to prevent fingerprints and soiling of surface.

1.4 FIELD CONDITIONS

A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit assembly of metal panels to be performed in accordance with manufacturers' written installation instructions and warranty requirements.

1.5 COORDINATION

A. Coordinate sizes and locations of roof curbs, equipment supports, and roof penetrations with actual equipment provided.

B. 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.

1.6 WARRANTY

A. Special Warranty: Manufacturer agrees to repair or replace components of metal panel systems that fail in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, the following:

a. Structural failures including rupturing, cracking, or puncturing.
b. Deterioration of metal and other materials beyond normal weathering.

2. Warranty Period: Two years from date of Substantial Completion.

B. Special Warranty on Panel Finishes: Manufacturer agrees to repair finish or replace metal panels that show evidence of deterioration of factory-applied finishes within specified warranty period.

1. Exposed Panel Finish: Deterioration includes, but is not limited to, the following:

a. Color fading more than 5 Delta E units when tested in accordance with ASTM D2244.
b. Chalking in excess of a No. 8 rating when tested in accordance with ASTM D4214.
c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.

2. Finish Warranty Period: 20 years from date of Substantial Completion.

C. Special Weathertightness Warranty: Manufacturer agrees to repair or replace standing-seam metal roof panel assemblies that fail to remain weathertight, including leaks, within specified warranty period.

1. Warranty Period: 20 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Structural Performance: Provide metal panel systems capable of withstanding the effects of the following loads, based on testing in accordance with ASTM E1592:

1. Wind Loads: As indicated on Drawings.

B. Wind-Uplift Resistance: Provide metal roof panel assemblies that comply with UL 580 for wind-uplift-resistance class indicated.

1. Uplift Rating: UL 90.

C. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes.

1. Temperature Change: 120 deg F, ambient; 180 deg F, material surfaces.

2.2 STANDING-SEAM METAL ROOF PANELS, GENERAL

A. Provide factory-formed metal roof panels designed to be installed by lapping and interconnecting raised side edges of adjacent panels with joint type indicated and mechanically attaching panels to supports using concealed fasteners in side laps. Include all accessories required for weathertight installation.

1. Aluminum Panel Systems: Unless more stringent requirements are indicated, comply with ASTM E1637.

2.3 VERTICAL-RIB, SEAMED-JOINT, STANDING-SEAM METAL ROOF PANELS

A. Basis-of-Design Product: Subject to compliance with requirements, provide PAC-CLAD; Petersen; a Carlisle company; Tite-Loc Plus or a comparable product by one of the following:

1. AEP Span a brand of ASC Profiles LLC, a part of BlueScope.
2. Berridge Manufacturing Company.
3. CENTRIA, a Nucor Brand.
4. Elevate; Holcim Building Envelope.
5. Englert, Inc.
6. MBCI; Cornerstone Building Brands.
7. Metal Sales Manufacturing Corporation.
8. Morin - A Kingspan Group Company.

B. Panels: Formed with vertical ribs at panel edges; designed for sequential installation by mechanically attaching panels to supports using concealed clips located under one side of panels, engaging opposite edge of adjacent panels, and mechanically seaming panels together.

1. Structural Support: Over solid deck.
2. Material: Aluminum.
3. Seam Type: Double folded.
4. Panel Profile: Flat pan.
5. Panel Coverage: 16 inches.
6. Panel Height: 2.0 inches.

2.4 ROOF INSULATION

1. Polyisocyanurate Board Insulation: ASTM C1289, Type II, Class 1, Grade 2, felt or glass-fiber mat facer on both major surfaces.

2. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

    a. Atlas Polyiso Roof and Wall Insulation.
    b. Carlisle Syntec Systems.
    c. CertainTeed; SAINT-GOBAIN.
    d. Hunter Panels; a Carlisle company.
    e. Insulfoam; a Carlisle Company.

3. Compressive Strength: 20 psi.
4. Size: 48 by 96 inches.
5. Thickness: 2 inches.

B. Composite Polyisocyanurate Board Insulation: ASTM C1289, with factory-applied facing board on one major surface, as indicated below by type, and felt or glass-fiber mat facer on the other surface.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

    a. Atlas Polyiso Roof and Wall Insulation.
    b. Carlisle Syntec Systems.
    c. CertainTeed; SAINT-GOBAIN.
    d. Hunter Panels; a Carlisle company.
    e. Insulfoam; a Carlisle Company.

2. Panels shall consist of a top layer of APA exterior grade 5-ply CDX plywood laminated to fiber-reinforced facers (GRF) polyisocyanurate foam insulation.

    a. Polyisocyanurate foam insulation shall conform to ASTM C 1289, Type V with a compressive strength of:

        1) Grade 2: 20 psi minimum.
        2) Size: 48 by 96 inches.
        3) Thickness: 3 inches.

    b. 5-ply CDX Plywood Top layer substrate shall conform to PS2 and shall be as follows:

        1) Type:

            a) Standard sheathing grade.

        2) Thickness:

            a) 5/8 inch.

        3) Edge detail:

            a) Non-rabbeted.

2.5 UNDERLAYMENT

A. Self-Adhering, High-Temperature Underlayment: Provide self-adhering, cold-applied, sheet underlayment, a minimum of 30 mils thick, consisting of slip-resistant, polyethylene-film top

surface laminated to a layer of butyl or SBS-modified asphalt adhesive, with release-paper backing. Provide primer when recommended by underlayment manufacturer.

1. Thermal Stability: Stable after testing at 240 deg F; ASTM D1970/D1970M.
2. Low-Temperature Flexibility: Passes after testing at minus 20 deg F; ASTM D1970/D1970M.

2.6 PANEL MATERIALS

A. Aluminum Sheet: Coil-coated sheet, ASTM B209/B209M, alloy as standard with manufacturer, with temper as required to suit forming operations and structural performance required.

1. Thickness: 0.032 inch.
2. Surface: Smooth, flat finish.

2.7 MISCELLANEOUS MATERIALS

A. Panel Accessories: Provide components required for a complete, weathertight panel system including trim, copings, fasciae, mullions, sills, corner units, fasteners, flashings, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal panels unless otherwise indicated.

1. Closures: Provide closures at eaves and ridges, fabricated of same metal as metal panels.
2. Backing Plates: Provide metal backing plates at panel end splices, fabricated from material recommended by manufacturer.
3. Closure Strips: Closed-cell, expanded, cellular, rubber or crosslinked, polyolefin-foam or closed-cell laminated polyethylene; minimum 1-inch-thick, flexible closure strips; cut or premolded to match metal panel profile. Provide closure strips where indicated or necessary to ensure weathertight construction.

B. Flashing and Trim: Provide flashing and trim formed from same material as metal panels as required to seal against weather and to provide finished appearance. Locations include, but are not limited to, eaves, rakes, corners, bases, framed openings, ridges, fasciae, and fillers. Finish flashing and trim with same finish system as adjacent metal panels.

C. Gutters: Formed from same material as roof panels, complete with end pieces, outlet tubes, and other special pieces as required. Fabricate in minimum 96-inch-long sections, of size and metal thickness in accordance with manufacturer's recommendations. Furnish gutter supports spaced a maximum of 36 inches o.c., fabricated from same metal as gutters. Provide wire ball strainers of compatible metal at outlets. Finish gutters to match metal roof panels.

D. Downspouts: Formed from same material as roof panels. Fabricate in 10 ft. long sections, complete with formed elbows and offsets, of size and metal thickness in accordance with manufacturer's recommendations. Finish downspouts to match gutters.

E. Roof Curbs: Fabricated from same material as roof panels, 0.048-inch nominal thickness; with bottom of skirt profiled to match roof panel profiles and with welded top box and integral full-length cricket. Fabricate curb subframing of 0.060-inch-nominal thickness, angle-, C-, or Z-shaped steel sheet. Fabricate curb and subframing to withstand indicated loads of size and height indicated. Finish roof curbs to match metal roof panels.

1. Insulate roof curb with 1-inch-thick, rigid insulation.

F. Panel Fasteners: Self-tapping screws designed to withstand design loads.

G. Panel Sealants: Provide sealant type recommended by manufacturer that are compatible with panel materials, are nonstaining, and do not damage panel finish.

1. Joint Sealant: ASTM C920; elastomeric polyurethane or silicone sealant; of type, grade, class, and use classifications required to seal joints in metal panels and remain weathertight; and as recommended in writing by metal panel manufacturer.

2.8 FABRICATION

A. Fabricate and finish metal panels and accessories at the factory, by manufacturer's standard procedures and processes, as necessary to fulfill indicated performance requirements demonstrated by laboratory testing. Comply with indicated profiles and with dimensional and structural requirements.

B. Provide panel profile, including major ribs and intermediate stiffening ribs, if any, for full length of panel.

C. Sheet Metal Flashing and Trim: Fabricate flashing and trim to comply with manufacturer's recommendations that apply to design, dimensions, metal, and other characteristics of item indicated.

1. Form exposed sheet metal accessories that are 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.
2. Seams for Aluminum: Fabricate nonmoving seams with flat-lock seams. Form seams and seal with epoxy seam sealer. Rivet joints for additional strength.
3. Seams for other than Aluminum: Fabricate nonmoving seams in accessories with flat-lock seams. Tin edges to be seamed, form seams, and solder.
4. Sealed Joints: Form nonexpansion, but movable, joints in metal to accommodate sealant and to comply with manufacturer's recommendations.
5. Conceal fasteners and expansion provisions where possible. Exposed fasteners are not permitted on faces of accessories exposed to view.
6. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, noncorrosive metal recommended in writing by metal panel manufacturer.

a. Size: As recommended by metal panel manufacturer for application, but not less than thickness of metal being secured.

2.9 FINISHES

A. Protect mechanical and painted finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

B. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in same piece are unacceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

C. Aluminum Panels and Accessories:

1. Two-Coat Fluoropolymer: AAMA 2605. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, metal panel supports, and other conditions affecting performance of the Work.

B. Examine roughing-in for components and systems penetrating metal panels to verify actual locations of penetrations relative to seam locations of metal panels before installation.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION OF ROOF INSULATION

A. General: Install insulation concurrently with metal panel installation, in thickness indicated to cover entire surface, in accordance with manufacturer's written installation instructions.

3.3 INSTALLATION OF UNDERLAYMENT

A. Self-Adhering Sheet Underlayment: Apply primer if required by manufacturer. Comply with temperature restrictions of underlayment manufacturer for installation. Apply at locations indicated below, wrinkle free, in shingle fashion to shed water, and with end laps of not less than 6 inches staggered 24 inches between courses. Overlap side edges not less than 3-1/2 inches. Roll laps with roller. Cover underlayment within 14 days.

1. Apply over the entire roof surface.

3.4 INSTALLATION OF STANDING-SEAM METAL ROOF PANELS

A. Install metal panels in accordance with manufacturer's written installation instructions and approved Shop Drawings in orientation, sizes, and locations indicated. Anchor metal panels and other components of the Work securely in place, with provisions for thermal and structural movement.

1. Shim or otherwise plumb substrates receiving metal panels.
2. 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.
3. Install screw fasteners in predrilled holes.
4. Locate and space fastenings in uniform vertical and horizontal alignment.
5. Install flashing and trim as metal panel work proceeds.
6. Locate panel splices over, but not attached to, structural supports. Stagger panel splices and end laps to avoid a four-panel lap splice condition.

7. 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.
8. Provide weathertight escutcheons for pipe- and conduit-penetrating panels.

B. Fasteners:

1. 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.

C. Metal Protection: Where dissimilar metals contact each other or corrosive substrates, protect against galvanic action as recommended in writing by metal panel manufacturer.

D. Concealed Clip, Standing-Seam Metal Roof Panel Installation: Fasten metal roof panels to supports with concealed clips at each standing-seam joint at location, spacing, and with fasteners recommended in writing by manufacturer.

1. Install clips to supports with self-tapping fasteners.
2. Install pressure plates at locations indicated in manufacturer's written installation instructions.

E. Clipless, Standing-Seam Metal Roof Panel Installation: Fasten metal panels to supports with screw fasteners at each lapped joint at location and spacing recommended by manufacturer.

F. Panel Joints: Fasten panel joints to substrate in accordance with manufacturer's instructions.

1. Seamed Joint: Crimp standing seams with manufacturer-approved, motorized seamer tool so clip, metal roof panel, and factory-applied sealant are completely engaged.

G. Accessory Installation: Install accessories with positive anchorage to building and weathertight mounting and provide for thermal expansion. Coordinate installation with flashings and other components.

1. Install components required for a complete metal panel system including trim, copings, corners, seam covers, flashings, sealants, gaskets, fillers, closure strips, and similar items. Provide types indicated by metal roof panel manufacturers; or, if not indicated, types recommended by metal roof panel manufacturer.

H. Flashing and Trim: Comply with performance requirements and manufacturer's written installation instructions. Provide concealed 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 weather resistant.

1. 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 and weather-resistant performance.
2. Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joints at a maximum of 10 ft. with no joints allowed within 24 inches of corner or intersection. Where lapped expansion provisions cannot be used or would not be sufficiently weather resistant and waterproof, form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with mastic sealant (concealed within joints).

I. Gutters: Join sections with riveted and soldered or lapped and sealed joints. Attach gutters to eave with gutter hangers spaced not more than 36 inches o.c. using manufacturer's standard fasteners. Provide end closures and seal watertight with sealant. Provide for thermal expansion.

J. Downspouts: Join sections with telescoping joints. Provide fasteners designed to hold downspouts securely 1 inch away from walls; locate fasteners at top and bottom and at approximately 60 inches o.c. in between.

1. Provide elbows at base of downspouts to direct water away from building.

K. Roof Curbs: Install flashing around bases where they meet metal roof panels.

L. Pipe and Conduit Penetrations: Fasten and seal to metal roof panels as recommended by manufacturer.

3.5 CLEANING AND PROTECTION

A. Remove temporary protective coverings 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.

B. Replace metal panels that have been damaged or have deteriorated beyond successful repair by finish touchup or similar minor repair procedures.

END OF SECTION

SECTION 07 42 93

SOFFIT PANELS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Metal soffit panels.

1.2 ACTION SUBMITTALS

A. Product Data:

1. Metal soffit panels.

B. Product Data Submittals:

1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of panel and accessory.

1.3 INFORMATIONAL SUBMITTALS

A. Sample Warranties: For special warranties.

1.4 CLOSEOUT SUBMITTALS

A. Maintenance Data: For metal panels to include in maintenance manuals.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver components, metal panels, and other manufactured items so as not to be damaged or deformed. Package metal panels for protection during transportation and handling.

B. Unload, store, and erect metal panels in a manner to prevent bending, warping, twisting, and surface damage.

C. Stack metal panels horizontally on platforms or pallets, covered with suitable weathertight and ventilated covering. Store metal panels to ensure dryness, with positive slope for drainage of water. Do not store metal panels in contact with other materials that might cause staining, denting, or other surface damage.

D. Retain strippable protective covering on metal panels during installation.

1.6 FIELD CONDITIONS

A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit assembly of metal panels to be performed according to manufacturers' written instructions and warranty requirements.

1.7 COORDINATION

A. Coordinate metal panel installation with rain drainage work, flashing, trim, construction of walls, and other adjoining work to provide a leakproof, secure, and noncorrosive installation.

1.8 WARRANTY

A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of metal panel systems that fail in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, the following:

a. Structural failures including rupturing, cracking, or puncturing.
b. Deterioration of metals and other materials beyond normal weathering.

2. Warranty Period: Two years from date of Substantial Completion.

B. Special Warranty on Panel Finishes: Manufacturer's standard form in which manufacturer agrees to repair finish or replace metal panels that show evidence of deterioration of factory-applied finishes within specified warranty period.

1. Exposed Panel Finish: Deterioration includes, but is not limited to, the following:

a. Color fading more than 5 Delta E units when tested according to ASTM D2244.
b. Chalking in excess of a No. 8 rating when tested according to ASTM D4214.
c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.

2. Finish Warranty Period: 20 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Structural Performance: Provide metal panel systems capable of withstanding the effects of the following loads, based on testing according to ASTM E1592:

1. Wind Loads: As indicated on Drawings.
2. Deflection Limits: For wind loads, no greater than 1/240 of the span.

B. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes by preventing buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Base calculations on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.

1. Temperature Change (Range): 120 deg F, ambient; 180 deg F, material surfaces.

2.2 METAL SOFFIT PANELS

A. Provide metal soffit panels designed to be installed by lapping and interconnecting side edges of adjacent panels and mechanically attaching through panel to supports using concealed fasteners in side laps. Include accessories required for weathertight installation.

B. Metal Soffit Panels: Match profile and material of metal roof panels.

1. Finish: Match finish and color of metal roof panels.

C. Flush-Profile Metal Soffit Panels: Solid panels formed with vertical panel edges and a flat pan between panel edges; with flush joint between panels.

1. Basis-of-Design Product: Subject to compliance with requirements, provide PAC-CLAD; Petersen; a Carlisle company ; Flush soffit panels. or a comparable product by one of the following:

   a. AEP Span a brand of ASC Profiles LLC, a part of BlueScope.
   b. Berridge Manufacturing Company.
   c. CENTRIA, a Nucor Brand.
   d. Elevate; Holcim Building Envelope.
   e. Englert, Inc.
   f. MBCI; Cornerstone Building Brands.
   g. Metal Sales Manufacturing Corporation.

2. Material: Same material, finish, and color as metal roof panels.
3. Panel Coverage: 8 inches.
4. Panel Height: 0.875 inch.

2.3 MISCELLANEOUS MATERIALS

A. Miscellaneous Metal Subframing and Furring: ASTM C645, cold-formed, metallic-coated steel sheet, ASTM A653/A653M, G90 hot-dip galvanized coating designation or ASTM A792/A792M, Class AZ50 aluminum-zinc-alloy coating designation unless otherwise indicated. Provide manufacturer's standard sections as required for support and alignment of metal panel system.

B. Panel Accessories: Provide components required for a complete, weathertight panel system including trim, clips, flashings, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal panels unless otherwise indicated.

1. Closure Strips: Closed-cell, expanded, cellular, rubber or crosslinked, polyolefin-foam or closed-cell laminated polyethylene; minimum 1-inch-thick, flexible closure strips; cut or premolded to match metal panel profile. Provide closure strips where indicated or necessary to ensure weathertight construction.

C. Flashing and Trim: Provide flashing and trim formed from same material as metal panels as required to seal against weather and to provide finished appearance. Finish flashing and trim with same finish system as adjacent metal panels.

D. Panel Fasteners: Self-tapping screws designed to withstand design loads. Provide exposed fasteners with heads matching color of metal panels by means of plastic caps or factory-applied coating. Provide EPDM or PVC sealing washers for exposed fasteners.

E. Panel Sealants: Provide sealant types recommended by manufacturer that are compatible with panel materials, are nonstaining, and do not damage panel finish.

1. Joint Sealant: ASTM C920; elastomeric polyurethane or silicone sealant; of type, grade, class, and use classifications required to seal joints in metal panels and remain weathertight; and as recommended in writing by metal panel manufacturer.

2.4 FABRICATION

A. Fabricate and finish metal panels and accessories at the factory, by manufacturer's standard procedures and processes, as necessary to fulfill indicated performance requirements demonstrated by laboratory testing. Comply with indicated profiles and with dimensional and structural requirements.

B. Provide panel profile, including major ribs and intermediate stiffening ribs, if any, for full length of panel.

C. Sheet Metal Flashing and Trim: Fabricate flashing and trim to comply with manufacturer's recommendations and recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to design, dimensions, metal, and other characteristics of item indicated.

1. Form exposed sheet metal accessories that are 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.
2. Seams for Aluminum: Fabricate nonmoving seams with flat-lock seams. Form seams and seal with epoxy seam sealer. Rivet joints for additional strength.
3. Seams for Other Than Aluminum: Fabricate nonmoving seams in accessories with flat-lock seams. Tin edges to be seamed, form seams, and solder.
4. Sealed Joints: Form nonexpansion, but movable, joints in metal to accommodate sealant and to comply with SMACNA standards.
5. Conceal fasteners and expansion provisions where possible. Exposed fasteners are not allowed on faces of accessories exposed to view.
6. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, noncorrosive metal recommended in writing by metal panel manufacturer.

a. Size: As recommended by SMACNA's "Architectural Sheet Metal Manual" or metal soffit panel manufacturer for application but not less than thickness of metal being secured.

2.5 FINISHES

A. Protect mechanical and painted finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

B. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in same piece are not acceptable. Variations in appearance of other components are acceptable if

they are within the range of approved Samples and are assembled or installed to minimize contrast.

C. Aluminum Panels and Accessories:

1. Two-Coat Fluoropolymer: AAMA 2605. Fluoropolymer finish containing not less than 70 percent polyvinylidene fluoride (PVDF) resin by weight in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, metal panel supports, and other conditions affecting performance of the Work.

1. Examine framing to verify that girts, angles, channels, studs, and other structural panel support members and anchorage have been installed within alignment tolerances required by metal panel manufacturer.

B. Examine roughing-in for components and systems penetrating metal panels to verify actual locations of penetrations relative to seam locations of metal panels before installation.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Miscellaneous Supports: Install subframing, furring, and other miscellaneous panel support members and anchorages according to ASTM C754 and metal panel manufacturer's written recommendations.

3.3 INSTALLATION OF METAL SOFFIT PANELS

A. Install metal panels according to manufacturer's written instructions in orientation, sizes, and locations indicated. Install panels perpendicular to supports unless otherwise indicated. Anchor metal panels and other components of the Work securely in place, with provisions for thermal and structural movement.

1. Shim or otherwise plumb substrates receiving metal panels.
2. 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.
3. Install screw fasteners in predrilled holes.
4. Locate and space fastenings in uniform vertical and horizontal alignment.
5. Install flashing and trim as metal panel work proceeds.
6. Locate panel splices over, but not attached to, structural supports. Stagger panel splices and end laps to avoid a four-panel lap splice condition.
7. Provide weathertight escutcheons for pipe- and conduit-penetrating panels.

B. Fasteners:

1. 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.

C. Metal Protection: Where dissimilar metals contact each other or corrosive substrates, protect against galvanic action as recommended in writing by metal panel manufacturer.

D. Lap-Seam Metal Panels: Fasten metal panels to supports with fasteners at each lapped joint at location and spacing recommended by manufacturer.

1. Apply panels and associated items true to line for neat and weathertight enclosure.
2. Provide metal-backed washers under heads of exposed fasteners bearing on weather side of metal panels.
3. 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.
4. 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.

E. Accessory Installation: Install accessories with positive anchorage to building and weathertight mounting, and provide for thermal expansion. Coordinate installation with flashings and other components.

1. Install components required for a complete metal panel system including trim, corners, seam covers, flashings, sealants, gaskets, fillers, closure strips, and similar items. Provide types indicated by metal panel manufacturer; or, if not indicated, provide types recommended by metal panel manufacturer.

F. 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.

1. 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 to achieve waterproof performance.
2. 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 waterproof, form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with mastic sealant (concealed within joints).

3.4 CLEANING AND PROTECTION

A. Remove temporary protective coverings 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.

B. After metal panel installation, clear weep holes and drainage channels of obstructions, dirt, and sealant.

C. Replace metal panels that have been damaged or have deteriorated beyond successful repair by finish touchup or similar minor repair procedures.

END OF SECTION

SECTION 07 92 00

JOINT SEALANTS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Silicone joint sealants.
2. Nonstaining silicone joint sealants.
3. Urethane joint sealants.
4. Mildew-resistant joint sealants.
5. Latex joint sealants.

1.2 ACTION SUBMITTALS

A. Product Data:

1. Silicone joint sealants.
2. Nonstaining silicone joint sealants.
3. Urethane joint sealants.
4. Mildew-resistant joint sealants.
5. Latex joint sealants.

1.3 FIELD CONDITIONS

A. Do not proceed with installation of joint sealants under the following conditions:

1. When ambient and substrate temperature conditions are outside limits permitted by joint-sealant manufacturer or are below 40 deg F.
2. When joint substrates are wet.
3. Where joint widths are less than those allowed by joint-sealant manufacturer for applications indicated.
4. Where contaminants capable of interfering with adhesion have not yet been removed from joint substrates.

PART 2 - PRODUCTS

2.1 SOURCE LIMITATIONS

A. Obtain joint sealants from single manufacturer for each sealant type.

2.2 JOINT SEALANTS, GENERAL

A. Compatibility: Provide joint sealants, backings, 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.

B. Colors of Exposed Joint Sealants: As selected by Architect from manufacturer's full range.

2.3 SILICONE JOINT SEALANTS

A. Silicone, S, NS, 50, NT: Single-component, nonsag, plus 50 percent and minus 50 percent movement capability, nontraffic-use, neutral-curing silicone joint sealant; ASTM C920, Type S, Grade NS, Class 50, Use NT.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. Adfast.
b. GE Construction Sealants; Momentive Performance Materials Inc.
c. Pecora Corporation.
d. Sika Corporation - Building Components.
e. The Dow Chemical Company.

2.4 NONSTAINING SILICONE JOINT SEALANTS

A. Nonstaining Joint Sealants: No staining of substrates when tested in accordance with ASTM C1248.

B. Silicone, Nonstaining, S, NS, 50, NT: Nonstaining, single-component, nonsag, plus 50 percent and minus 50 percent movement capability, nontraffic-use, neutral-curing silicone joint sealant; ASTM C920, Type S, Grade NS, Class 50, Use NT.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. Adfast.
b. GE Construction Sealants; Momentive Performance Materials Inc.
c. Pecora Corporation.
d. Sika Corporation - Building Components.
e. The Dow Chemical Company.
f. Tremco Incorporated.

2.5 URETHANE JOINT SEALANTS

A. Urethane, S, P, 25, T, NT: Single-component, pourable, plus 25 percent and minus 25 percent movement capability, traffic- and nontraffic-use, urethane joint sealant; ASTM C920, Type S, Grade P, Class 25, Uses T and NT.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. Master Builders Solutions.

b. Pecora Corporation.
c. Polymeric Systems, Inc.
d. Sherwin-Williams Company (The).

2.6 MILDEW-RESISTANT JOINT SEALANTS

A. Mildew-Resistant Joint Sealants: Formulated for prolonged exposure to humidity with fungicide to prevent mold and mildew growth.

B. Silicone, Mildew Resistant, Acid Curing, S, NS, 25, NT: Mildew-resistant, single-component, nonsag, plus 25 percent and minus 25 percent movement capability, nontraffic-use, acid-curing silicone joint sealant; ASTM C920, Type S, Grade NS, Class 25, Use NT.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. Adfast.
b. GE Construction Sealants; Momentive Performance Materials Inc.
c. Pecora Corporation.
d. Sika Corporation - Building Components.
e. The Dow Chemical Company.
f. Tremco Incorporated.

2.7 LATEX JOINT SEALANTS

A. Acrylic Latex: Acrylic latex or siliconized acrylic latex, ASTM C834, Type OP, Grade NF.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. Adfast.
b. Everkem Diversified Products, Inc.
c. Franklin International.
d. Pecora Corporation.
e. Sherwin-Williams Company (The).
f. Tremco Incorporated.

2.8 JOINT-SEALANT BACKING

A. Sealant Backing Material, General: Nonstaining; compatible with joint substrates, sealants, primers, and other joint fillers; and approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. Adfast.
b. Alcot Plastics Ltd.
c. Construction Foam Products; a division of Nomaco, Inc.
d. Master Builders Solutions.

B. Cylindrical Sealant Backings: ASTM C1330, Type C (closed-cell material with a surface skin), Type O (open-cell material), Type B (bicellular material with a surface skin) or any of the preceding types, as approved in writing by joint-sealant manufacturer for joint application indicated, and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance.

C. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint. Provide self-adhesive tape where applicable.

2.9 MISCELLANEOUS MATERIALS

A. 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.

B. 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 joint substrates and adjacent nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants to joint substrates.

C. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting performance of the Work.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions and the following requirements:

1. 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.
2. Clean porous joint substrate surfaces by brushing, grinding, 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 after cleaning operations above by vacuuming or blowing out joints with oil-free compressed air. Porous joint substrates include the following:

    a. Concrete.
    b. Masonry.

3. Remove laitance and form-release agents from concrete.
4. Clean nonporous joint substrate surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants. Nonporous joint substrates include the following:

    a. Metal.

B. Joint Priming: Prime joint substrates where recommended by joint-sealant manufacturer or as indicated by preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.

C. Masking Tape: Use masking tape where required to prevent contact of sealant or primer with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

3.3 INSTALLATION OF JOINT SEALANTS

A. General: Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.

B. Sealant Installation Standard: Comply with recommendations in ASTM C1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.

C. Install sealant backings of type indicated to support 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 sealant backings.
2. Do not stretch, twist, puncture, or tear sealant backings.
3. Remove absorbent sealant backings that have become wet before sealant application, and replace them with dry materials.

D. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.

E. Install sealants using proven techniques that comply with the following and at the same time backings are installed:

1. Place sealants so they directly contact and fully wet 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.

F. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants in accordance with requirements specified in subparagraphs below 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 sealant from surfaces adjacent to joints.
2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.

3. Provide concave joint profile in accordance with Figure 8A in ASTM C1193 unless otherwise indicated.

3.4 CLEANING

A. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

3.5 PROTECTION

A. Protect joint sealants during and after curing period from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out, remove, and repair damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from original work.

END OF SECTION

SECTION 08 11 13

HOLLOW METAL DOORS AND FRAMES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Exterior standard steel doors and frames.

B. Related Requirements:

1. Section 08 71 00 "Door Hardware" for door hardware for hollow-metal doors.

1.2 DEFINITIONS

A. Minimum Thickness: Minimum thickness of base metal without coatings in accordance with NAAMM-HMMA 803 or ANSI/SDI A250.8.

1.3 COORDINATION

A. Coordinate anchorage installation for hollow-metal frames. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors. Deliver such items to Project site in time for installation.

B. Coordinate requirements for installation of door hardware, electrified door hardware, and access control and security systems.

1.4 ACTION SUBMITTALS

A. Product Data:

1. Exterior standard steel doors and frames.

B. Product Data Submittals: For each product.

1. Include construction details, material descriptions, core descriptions, and finishes.

C. Product Schedule: For hollow-metal doors and frames, prepared by or under the supervision of supplier, using same reference numbers for details and openings as those on Drawings. Coordinate with final door hardware schedule.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver hollow-metal doors and frames palletized, packaged, or crated to provide protection during transit and Project-site storage. Do not use nonvented plastic.

1. Provide additional protection to prevent damage to factory-finished units.

B. Deliver welded frames with two removable spreader bars across bottom of frames, tack welded to jambs and mullions.

C. Store hollow-metal doors and frames vertically under cover at Project site with head up. Place on minimum 4-inch-high wood blocking. Provide minimum 1/4-inch space between each stacked door to permit air circulation.

PART 2 - PRODUCTS

2.1 HOLLOW METAL DOORS AND FRAMES

A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

1. Ceco Door; AADG, Inc.; ASSA ABLOY.
2. Curries, AADG, Inc.; ASSA ABLOY Group.
3. Pioneer Industries; AADG, Inc.; ASSA ABLOY.
4. Republic Doors and Frames; a Allegion brand.
5. Steelcraft; Allegion plc.

2.2 EXTERIOR STANDARD STEEL DOORS AND FRAMES

A. Construct hollow-metal doors and frames to comply with standards indicated for materials, fabrication, hardware locations, hardware reinforcement, tolerances, and clearances, and as specified.

B. Maximum-Duty Doors and Frames: ANSI/SDI A250.8, Level 4; ANSI/SDI A250.4, Level A..

1. Doors:

a. Type: As indicated in the Door and Frame Schedule on Drawings.
b. Thickness: 1-3/4 inches.
c. Face: Metallic-coated steel sheet, minimum thickness of 0.067 inch, with minimum A60 coating.
d. Edge Construction: Model 2, Seamless.
e. Edge Bevel: Provide manufacturer's standard beveled or square edges.
f. Top Edge Closures: Close top edges of doors with flush closures of same material as face sheets. Seal joints against water penetration.
g. Bottom Edges: Close bottom edges of doors with end closures or channels of same material as face sheets. Provide weep-hole openings in bottoms of exterior doors to permit moisture to escape.
h. Core: Polyisocyanurate.

2. Frames:

a. Materials: Metallic-coated steel sheet, minimum thickness of 0.067 inch, with minimum A60 coating.
b. Construction: Full profile welded.

3. Exposed Finish: Prime.

2.3 FRAME ANCHORS

A. Jamb Anchors:

1. Type: Anchors of minimum size and type required by applicable door and frame standard, and suitable for performance level indicated.
2. Quantity: Minimum of three anchors per jamb, with one additional anchor for frames with no floor anchor. Provide one additional anchor for each 24 inches of frame height above 7 feet.

B. Floor Anchors: Provide floor anchors for each jamb and mullion that extends to floor.

C. Material: ASTM A879/A879M, Commercial Steel (CS), 04Z coating designation; mill phosphatized.

1. For anchors built into exterior walls, steel sheet complying with ASTM A1008/A1008M or ASTM A1011/A1011M; hot-dip galvanized in accordance with ASTM A153/A153M, Class B.

2.4 MATERIALS

A. Metallic-Coated Steel Sheet: ASTM A653/A653M, Commercial Steel (CS), Type B.

B. Inserts, Bolts, and Fasteners: Hot-dip galvanized in accordance with ASTM A153/A153M.

C. Power-Actuated Fasteners in Concrete: Fastener system of type suitable for application indicated, fabricated from corrosion-resistant materials, with clips or other accessory devices for attaching hollow-metal frames of type indicated.

2.5 FABRICATION

A. Hollow-Metal Frames: Fabricate in one piece except where handling and shipping limitations require multiple sections. Where frames are fabricated in sections, provide alignment plates or angles at each joint, fabricated of metal of same or greater thickness as frames.

1. Provide countersunk, flat- or oval-head exposed screws and bolts for exposed fasteners unless otherwise indicated.
2. Door Silencers: Except on weather-stripped frames, drill stops to receive door silencers as follows. Keep holes clear during construction.

a. Single-Door Frames: Drill stop in strike jamb to receive three door silencers.

B. Hardware Preparation: Factory prepare hollow-metal doors and frames to receive templated mortised hardware, and electrical wiring; include cutouts, reinforcement, mortising, drilling, and tapping in accordance with ANSI/SDI A250.6, the Door Hardware Schedule on Drawings, and templates.

1. Reinforce doors and frames to receive nontemplated, mortised, and surface-mounted door hardware.
2. Comply with BHMA A156.115 for preparing hollow-metal doors and frames for hardware.

2.6 STEEL FINISHES

A. Prime Finish: Clean, pretreat, and apply manufacturer's standard primer.

1. Shop Primer: Manufacturer's standard, fast-curing, lead- and chromate-free primer complying with ANSI/SDI A250.10; recommended by primer manufacturer for substrate; compatible with substrate and field-applied coatings despite prolonged exposure.

PART 3 - EXECUTION

3.1 PREPARATION

A. Remove welded-in shipping spreaders installed at factory. Restore exposed finish by grinding, filling, and dressing, as required to make repaired area smooth, flush, and invisible on exposed faces. Touch up factory-applied finishes where spreaders are removed.

B. Drill and tap doors and frames to receive nontemplated, mortised, and surface-mounted door hardware.

3.2 INSTALLATION

A. Install hollow-metal doors and frames plumb, rigid, properly aligned, and securely fastened in place. Comply with approved Shop Drawings and with manufacturer's written instructions.

B. Hollow-Metal Frames: Comply with ANSI/SDI A250.11.

1. Set frames accurately in position; plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is complete, remove temporary braces without damage to completed Work.

a. Where frames are fabricated in sections, field splice at approved locations by welding face joint continuously; grind, fill, dress, and make splice smooth, flush, and invisible on exposed faces. Touch-up finishes.
b. Install frames with removable stops located on secure side of opening.

2. Floor Anchors: Secure with postinstalled expansion anchors.

a. Floor anchors may be set with power-actuated fasteners instead of postinstalled expansion anchors if so indicated and approved on Shop Drawings.

3. Solidly pack mineral-fiber insulation inside frames.
4. Installation Tolerances: Adjust hollow-metal frames to the following tolerances:

a. Squareness: Plus or minus 1/16 inch, measured at door rabbet on a line 90 degrees from jamb perpendicular to frame head.
b. Alignment: Plus or minus 1/16 inch, measured at jambs on a horizontal line parallel to plane of wall.
c. Twist: Plus or minus 1/16 inch, measured at opposite face corners of jambs on parallel lines, and perpendicular to plane of wall.
d. Plumbness: Plus or minus 1/16 inch, measured at jambs at floor.

C. Hollow-Metal Doors: Fit and adjust hollow-metal doors accurately in frames, within clearances specified below.

1. Non-Fire-Rated Steel Doors: Comply with ANSI/SDI A250.8.

3.3 REPAIR

A. Prime-Coat Touchup: Immediately after erection, sand smooth rusted or damaged areas of prime coat and apply touchup of compatible air-drying, rust-inhibitive primer.

END OF SECTION

SECTION 08 71 00

DOOR HARDWARE

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Hardware for hollow metal doors.

B. Lock cylinders for doors with balance of hardware specified in other sections.

C. Thresholds.

D. Weatherstripping and gasketing.

1.2 RELATED REQUIREMENTS

A. Section 081113 - Hollow Metal Doors and Frames.

1.3 REFERENCE STANDARDS

A. ADA Standards - 2010 ADA Standards for Accessible Design; 2010.

B. BHMA A156.1 - Standard for Butts and Hinges; 2021.

C. BHMA A156.4 - Door Controls - Closers; 2019.

D. BHMA A156.7 - Template Hinge Dimensions; 2016.

E. BHMA A156.13 - Mortise Locks & Latches Series 1000; 2022.

F. BHMA A156.16 - Auxiliary Hardware; 2018.

G. BHMA A156.21 - Thresholds; 2019.

H. BHMA A156.22 - Standard for Gasketing; 2021.

I. BHMA A156.28 - Standard for Recommended Practices for Mechanical Keying Systems; 2018.

J. BHMA A156.30 - High Security Cylinders; 2020.

K. BHMA A156.115 - Hardware Preparation in Steel Doors and Steel Frames; 2016.

L. BHMA A156.115W - Hardware Preparation in Wood Doors with Wood or Steel Frames; 2006.

M. DHI (H&S) - Sequence and Format for the Hardware Schedule; 2019.

N. DHI (KSN) - Keying Systems and Nomenclature; 2019.

O. DHI (LOCS) - Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames; 2004.

P. DHI WDHS.3 - Recommended Locations for Architectural Hardware for Flush Wood Doors; 1993; also in WDHS-1/WDHS-5 Series, 1996.

Q. ICC (IBC) - International Building Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

R. ICC A117.1 - Accessible and Usable Buildings and Facilities; 2017.

S. NFPA 80 - Standard for Fire Doors and Other Opening Protectives; 2022.

T. NFPA 105 - Standard for Smoke Door Assemblies and Other Opening Protectives; 2022.

U. UL (DIR) - Online Certifications Directory; Current Edition.

V. UL 10C - Standard for Positive Pressure Fire Tests of Door Assemblies; Current Edition, Including All Revisions.

W. UL 437 - Standard for Key Locks; Current Edition, Including All Revisions.

1.4 ADMINISTRATIVE REQUIREMENTS

A. Coordinate the manufacture, fabrication, and installation of products that door hardware is installed on.

B. Sequence installation to ensure facility services connections are achieved in an orderly and expeditious manner.

C. Furnish templates for door and frame preparation to manufacturers and fabricators of products requiring internal reinforcement for door hardware.

1.5 SUBMITTALS

A. Product Data: Manufacturer's catalog literature for each type of hardware, marked to clearly show products to be furnished for this project, and includes construction details, material descriptions, finishes, and dimensions and profiles of individual components.

B. Shop Drawings - Door Hardware Schedule: A detailed listing that includes each item of hardware to be installed on each door.

1. Prepared by or under supervision of Architectural Hardware Consultant (AHC).
2. Comply with DHI (H&S) using door numbering scheme and hardware set numbers as indicated in Contract Documents.
3. Submit in vertical format.
4. List groups and suffixes in proper sequence.
5. Include complete description for each door listed.
6. Include manufacturer and product names, and catalog numbers; include functions, types, styles, sizes and finishes of each item.
7. Include account of abbreviations and symbols used in schedule.

C. Manufacturer's Installation Instructions: Indicate special procedures and perimeter conditions requiring special attention.

D. Manufacturer's qualification statement.

E. Installer's qualification statement.

F. Supplier's qualification statement.

G. Maintenance Data: Include data on operating hardware, lubrication requirements, and inspection procedures related to preventative maintenance.

H. Warranty: Submit manufacturer's warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

I. Project Record Documents: Record actual locations of concealed equipment, services, and conduit.

1.6 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum three years of documented experience.

B. Installer Qualifications: Company specializing in performing work of the type specified for commercial door hardware with at least three years of documented experience.

C. Supplier Qualifications: Company with certified Architectural Hardware Consultant (AHC) to assist in work of this section.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Package hardware items individually; label and identify each package with door opening code to match door hardware schedule.

1.8 WARRANTY

A. Manufacturer Warranty: Provide manufacturer warranty against defects in material and workmanship for period indicated, from Date of Substantial Completion. Complete forms in Owner's name and register with manufacturer.

1. Closers: Thirty five years, minimum.
2. Locksets: Lifetime.

PART 2 - PRODUCTS

2.1 GENERAL REQUIREMENTS

A. Provide specified door hardware as required to make doors fully functional, compliant with applicable codes, and secure to extent indicated.

B. Provide individual items of single type, of same model, and by same manufacturer.

C. Closers:

1. Provide door closer on each exterior door, unless otherwise indicated.
2. Provide door closer on each fire-rated and smoke-rated door.
3. Spring hinges are not an acceptable self-closing device, unless otherwise indicated.

D. Weatherstripping and Gasketing:

1. Provide weatherstripping on each exterior door at head, jambs, and meeting stiles of door pairs, unless otherwise indicated.
2. Provide door bottom sweep on each exterior door, unless otherwise indicated.

E. Fasteners:

1. Provide fasteners of proper type, size, quantity, and finish that comply with commercially recognized standards for proposed applications.

    a. Aluminum fasteners are not permitted.
    b. Provide Phillips flat-head screws with heads finished to match door surface hardware unless otherwise indicated.

F. Provide machine screws for attachment to reinforced hollow metal and aluminum frames.

1. Self-drilling (Tek) type screws are not permitted.

G. Provide stainless steel machine screws and lead expansion shields for concrete and masonry substrates.

H. Provide wall grip inserts for hollow wall construction.

I. Fire-Resistance-Rated Applications: Comply with NFPA 80.

1. Provide wood or machine screws for hinges mortised to doors or frames, strike plates to frames, and closers to doors and frames.
2. Provide steel through bolts for attachment of surface mounted closers, hinges, or exit devices to door panels unless proper door blocking is provided.

2.2 PERFORMANCE REQUIREMENTS

A. Provide door hardware products that comply with the following requirements:

1. Applicable provisions of federal, state, and local codes.

    a. ICC (IBC).

2. Accessibility: ADA Standards and ICC A117.1.
3. Hardware Preparation for Steel Doors and Steel Frames: BHMA A156.115.
4. Hardware Preparation for Wood Doors with Wood or Steel Frames: BHMA A156.115W.
5. Products Requiring Electrical Connection: Listed and classified by UL (DIR) as suitable for the purpose specified.

2.3 HINGES

A. Manufacturers:

1. BEST; dormakaba Group: www.bestaccess.com/#sle.

B. Properties:

1. Continuous Hinges: As applicable to each item specified.

a. Geared Continuous Hinges: As applicable to each item specified.

1) Non-handed.
2) Anti-spinning through-fastener.
3) UL 10C listed for fire-resistance-rated doors.

a) Metal Door Installation: Rated up to 90 minutes.
b) Wood Door Installation: Rated up to 60 minutes.

4) Sufficient size to permit door to swing 180 degrees

C. Sizes: See Door Hardware Schedule.

1. Hinge Widths: As required to clear surrounding trim.
2. Sufficient size to allow 180 degree swing of door.

D. Finishes: See Door Hardware Schedule.

1. Fully polish hinges; front, back, and barrel.

E. Grades:

1. Comply with BHMA A156.18 Materials and Finishes.
2. Continuous Hinges: Comply with BHMA A156.26, Grade 1.

F. Material: Base metal as indicated for each item by BHMA material and finish designation.

G. Types:

1. Continuous Hinges: Include geared hinges.

H. Quantities:

1. Continuous Hinges: One per door leaf.

a. Size: Provide continuous hinges 3/4" - 1" less door height.

I. Applications: At swinging doors.

J. Products:

1. Butt Hinges:
2. Continuous Hinges:

a. Aluminum geared hinges.

2.4 LOCK CYLINDERS

A. Manufacturers:

1. Schlage; an Allegion company

B. Properties:

1. Lock Cylinders: Provide key access on outside of each lock, unless otherwise indicated.

a. Provide cams and/or tailpieces as required for locking devices.

C. Grades:

1. High Security Cylinders: Comply with BHMA A156.30 or UL 437.

D. Material:

1. Manufacturer's standard corrosion-resistant brass alloy.

E. Types: As applicable to each item specified.

1. Conventional mortise cylinders.

2.5 MORTISE LOCKS

A. Manufacturers:

1. BEST, dormakaba Group: www.bestaccess.com/#sle.

B. Properties:

1. Mechanical Locks: Manufacturer's standard.

a. Fitting modified ANSI A115.1 door preparation.
b. Door Thickness Coordination Fitting 1-3/4 inch (44 mm) to 2-1/4 inch (57 mm) thick doors.
c. Latch: Solid, one-piece, anti-friction, self-lubricating stainless steel.

1) Latch bolt Throw: 3/4 inch (19 mm), minimum.

d. Auxiliary Deadlatch: One piece stainless steel, permanently lubricated.
e. Backset: 2-3/4 inch (70 mm).
f. Lever Trim:

1) Functionality: Allow the lever handle to move up to 45 degrees from horizontal position prior to engaging the latch bolt assembly.
2) Strength: Locksets outside locked lever designed to withstand minimum 1,400 inch-lbs (158.2 Nm) of torque. In excess of that, a replaceable part will shear. Key from outside and/or inside lever will still operate lockset.
3) Spindle: Designed to prevent forced entry from attacking of lever.
4) Independent spring mechanism for each lever.
5) Trim to be self-aligning and thru-bolted.

6) Handles: Made of forged or cast brass, bronze, or stainless steel construction. Levers that contain a hollow cavity are not acceptable.
7) Levers to operate a roller bearing spindle hub mechanism.

C. Finishes: See Door Hardware Schedule.

D. Grades:

1. Comply with BHMA A156.13, Grade 1, Security; Grade 2.

E. Options:

1. VIB: Visual occupancy indicator that shows visually shows when the door is secure or unsecure mounted to both sides of the door.

F. Products: Mortise locks, including standard types.

1. 40H.

2.6 CLOSERS

A. Manufacturers:

1. BEST, dormakaba Group www.bestaccess.com/#sle.

B. Properties:

1. Surface Mounted Closers: Manufacturer's standard.

a. Construction: Single piece casted cast iron..
b. Hydraulic Fluid: All-weather type.
c. Arm Assembly: Standard for product specified.

1) Material: Steel.
2) Include integral stop or spring-loaded stop feature, as specified in Door Hardware Schedule.
3) Parallel arm to be a heavy-duty rigid arm.

d. Covers:

1) Type: Standard for product selected.
2) Material: Plastic.
3) Finish: Painted.

C. Grades:

1. Closers: Comply with BHMA A156.4, Grade 1.

a. Underwriters Laboratories Compliance:

1) Product Listing: UL (DIR) and ULC for use on fire-resistance-rated doors.

a) UL 228 - Door Closers-Holders, With or Without Integral Smoke Detectors.

D. Types:

1. Rack-and-pinion, surface-mounted. 1-1/2 inches (38 mm) minimum bore.

E. Installation:

1. Mounting: Includes surface mounted installations.
2. Mount closers on non-public side of door and stair side of stair doors unless otherwise noted in hardware sets.
3. At out swinging exterior doors, mount closer on interior side of door.
4. Provide adapter plates, shim spacers, and blade stop spacers as required by frame and door conditions.
5. Where an overlapping astragal is included on pairs of swinging doors, provide coordinator to ensure door leaves close in proper order.

F. Products:

1. Surface Mounted:

a. EHD9000

2.7 STOPS AND HOLDERS

A. Manufacturers:

1. Trimco: www.trimcohardware.com/#sle.

B. General: Provide overhead stop/holder when wall or floor stop is not feasible.

C. Grades:

1. Wall Bumpers and Floor Stops: Comply with BHMA A156.16 and Resilient Material Retention Test as described in this standard.

D. Material: Base metal as indicated for each item by BHMA material and finish designation.

E. Types:

1. Wall Bumpers: Bumper, concave, wall stop.

F. Installation:

1. Non-Masonry Walls: Confirm adequate wall reinforcement has been installed to allow lasting installation of wall bumpers.

G. Products:

1. Wall Bumpers: 1270.

2.8 THRESHOLDS

A. Manufacturers:

1. National Guard Products, Inc: www.ngpinc.com/#sle.

B. Properties:

1. Threshold Surface: Fluted horizontal grooves across full width.

C. Grades: Thresholds: Comply with BHMA A156.21.

D. Types: As applicable to project conditions. Provide barrier-free type at every location where specified.

1. Saddle Thresholds: Without thermal break.

2.9 WEATHERSTRIPPING AND GASKETING

A. Manufacturers:

1. National Guard Products, Inc: www.ngpinc.com/#sle.

B. Properties:

1. Rigid, Housed, Perimeter Gasketing: Sponge silicone gasket material held in place by aluminum housing; fastened to frame stop with screws.
2. Door Sweeps: Silicone gasket material held in place by flat aluminum housing or flange; surface mounted to face of door with screws.
3. Door Shoes: Neoprene gasket material held in place by metal retainer; mounted to bottom edge of door with screws.

a. Mounting: Surface mounted on bottom edge of door.

C. Grades: Comply with BHMA A156.22.

D. Products:

1. Weatherstripping: See Door Hardware Schedule.
2. Door Bottom Seals:

a. Door Sweeps: See Door Hardware Schedule.
b. Door Bottoms: See Door Hardware Schedule.

2.10 KEYS AND CORES

A. Manufacturers:

1. Schlage; an Allegion company
2. Substitutions: Not permitted.

B. Properties: Complying with guidelines of BHMA A156.28.

1. Provide conventional cylinders.
2. Provide keying information in compliance with DHI (KSN) standards.

3. Keying Schedule: Arrange for a keying meeting, with Architect, Owner and hardware supplier, and other involved parties to ensure locksets and locking hardware, are functionally correct and keying complies with project requirements.
4. Keying: Master keyed.
5. Key to existing system
6. Supply keys in following quantities:

    a. Change Keys: 2 each for each keyed cylinder.

7. Provide key collection envelopes, receipt cards, and index cards in quantity suitable to manage number of keys.
8. Deliver keys with identifying tags to Owner by mail and get a signed receipt of delivery.
9. Permanent Keys and Cores: Stamped with applicable key marking for identification. Do not include actual key cuts within visual key control marks or codes. Stamp permanent keys "Do Not Duplicate."
10. Include installation of permanent cores and return construction cores to hardware supplier. Construction cores and keys to remain property of hardware supplier.

2.11 FINISHES

A. Finishes: Identified in Hardware Sets.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify that doors and frames are ready to receive this work; labeled, fire-rated doors and frames are properly installed, and dimensions are as indicated on shop drawings.

B. Correct all defects prior to proceeding with installation.

C. Verify that electric power is available to power operated devices and of correct characteristics.

3.2 INSTALLATION

A. Install hardware in accordance with manufacturer's instructions and applicable codes.

B. Install hardware using the manufacturer’s fasteners provided. Drill and tap all screw holes located in metallic materials. Do not use “Riv-Nuts” or similar products.

C. Install hardware on fire-rated doors and frames in accordance with applicable codes and NFPA 80.

D. Install hardware for smoke and draft control doors in accordance with NFPA 105.

E. Use templates provided by hardware item manufacturer.

F. Do not install surface mounted items until application of finishes to substrate are fully completed.

G. Wash down masonry walls and complete painting or staining of doors and frames.

H. Complete finish flooring prior to installation of thresholds.

I. Door Hardware Mounting Heights: Distance from finished floor to center line of hardware item. As indicated in following list; unless noted otherwise in Door Hardware Schedule or on drawings.

1. For Steel Doors and Frames: Install in compliance with DHI (LOCS) recommendations.
2. For Steel Doors and Frames: See Section 081113.
3. For Wood Doors: Install in compliance with DHI WDHS.3 recommendations.
4. Mounting heights in compliance with ADA Standards:

a. Locksets: 40-5/16 inch (1024 mm).
b. Push Plates/Pull Bars: 42 inch (1067 mm).
c. Deadlocks (Deadbolts): 48 inch (1219 mm).
d. Exit Devices: 40-5/16 inch (1024 mm).
e. Door Viewer: 43 inch (1092 mm); standard height 60 inch (1524 mm).

J. Set exterior door thresholds with full-width bead of elastomeric sealant at each point of contact with floor providing a continuous weather seal; anchor thresholds with stainless steel countersunk screws.

K. Include in installation for existing doors and frames any necessary field modification and field preparation of doors and frames for new hardware. Provide necessary fillers, reinforcements, and fasteners for mounting new hardware and to cover existing door and frame preparations.

3.3 FIELD QUALITY CONTROL

A. Perform field inspection and testing under provisions of Section 014000 - Quality Requirements.

3.4 ADJUSTING

A. Adjust hardware for smooth operation.

B. Adjust gasketing for complete, continuous seal; replace if unable to make complete seal.

3.5 CLEANING

A. Clean finished hardware in accordance with manufacturer's written instructions after final adjustments have been made.

B. Clean adjacent surfaces soiled by hardware installation activities.

C. Replace items that cannot be cleaned to manufacturer's level of finish quality at no additional cost.

3.6 PROTECTION

A. Protect finished Work under provisions of Section 017000 - Execution and Closeout Requirements.

B. Do not permit adjacent work to damage hardware or finish.

3.7 HARDWARE SETS

A. Manufacturer list:

BES	Best
NGP	National Guard Products
SC	Schlage
TRI	Trimco

B. Option list:

Code:	Name:
15	
D	Storeroom Function
LC	Less Cylinder
VIB	Double Visual Indicator
WV	Wrought Wall Bumper Concave
T	Dormitory Function

C. Finish list

Code:	Name:
A	Anodized Aluminum
HD	Heavy Duty
630	Satin Stainless Steel
626	Satin chromium plated

D. Hardware Sets:

Set #01				
Doors: 103-1, 102-1, 101-1				
Qty	**Description**	**Model #**	**Fin.**	**Mfr.**
1	Hinge	662HD	AL	BES
1	Mortise Lock	45H0 | T | 15 | H | LC | VIB	626	BES
1	Mortise Cylinder	26-021	626	SC
1	Door Closer	EHD9016 SDS90	689	BES
1	Gasketing	160S	A	NGP
1	Sweep	200S	A	NGP
1	Threshold	425		NGP

Set #02				
Doors: 100-1				
Qty	**Description**	**Model #**	**Fin.**	**Mfr.**
1	Hinge	662HD	AL	BES
1	Mortise Lock	45H0 | T | 15 | H | LC | VIB	626	BES
1	Mortise Cylinder	26-021	626	SC
1	Door Closer	EHD9016 AF90	689	BES
1	Threshold	896	HD	NGP
1	Door Bottom	15N	A	NGP
1	Gasketing	160S	A	NGP
1	Wall Stop	1270WV	630	TRI

Set #03				
Doors: 104-1				
Qty	**Description**	**Model #**	**Fin.**	**Mfr.**
1	Hinge	662HD	AL	BES
1	Mortise Lock	45H0 | D | 15 | H | LC	626	BES
1	Mortise Cylinder	26-021	626	SC
1	Door Closer	EHD9016 AF90	689	BES
1	Threshold	896	HD	NGP
1	Door Bottom	15N	A	NGP
1	Gasketing	160S	A	NGP
1	Wall Stop	1270	630	TRI

END OF SECTION

SECTION 08 91 19

FIXED LOUVERS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Fixed extruded-aluminum louvers.

B. Related Requirements:

1. Section 08 11 13 "Hollow Metal Doors and Frames" for louvers in hollow-metal doors.

1.2 DEFINITIONS

A. Louver Terminology: Definitions of terms for metal louvers contained in AMCA 501 apply to this Section unless otherwise defined in this Section or in referenced standards.

B. Horizontal Louver: Louver with horizontal blades (i.e., the axis of the blades are horizontal).

C. Wind-Driven-Rain-Resistant Louver: Louver that provides specified wind-driven-rain performance, as determined by testing in accordance with AMCA 500-L.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. For louvers specified to bear AMCA seal, include printed catalog pages showing specified models with appropriate AMCA Certified Ratings Seals.

B. Shop Drawings: For louvers and accessories. Include plans, elevations, sections, details, and attachments to other work. Show frame profiles and blade profiles, angles, and spacing.

1. Show weep paths, gaskets, flashings, sealants, and other means of preventing water intrusion.
2. Show mullion profiles and locations.

1.4 FIELD CONDITIONS

A. Field Measurements: Verify actual dimensions of openings by field measurements before fabrication.

1.5 WARRANTY

A. Special Finish Warranty, Factory-Applied Finishes: Standard form in which manufacturer agrees to repair finishes or replace aluminum that shows evidence of deterioration of baked enamel, powder coat, or organic finishes within specified warranty period.

1. Deterioration includes, but is not limited to, the following:

a. Color fading more than 5 Delta E units when tested in accordance with ASTM D2244.
b. Chalking in excess of a No. 8 rating when tested in accordance with ASTM D4214.
c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.

2. Warranty Period: 20 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Source Limitations: Obtain fixed louvers from single source from a single manufacturer where indicated to be of same type, design, or factory-applied color finish.

2.2 PERFORMANCE REQUIREMENTS

A. Delegated Design: Design louvers, including comprehensive engineering analysis by a qualified professional engineer, using structural performance requirements and design criteria indicated.

B. Structural Performance: Louvers withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated without permanent deformation of louver components, noise or metal fatigue caused by louver-blade rattle or flutter, or permanent damage to fasteners and anchors. Wind pressures are considered to act normal to the face of the building.

1. Wind Loads:

a. Determine loads based on a uniform pressure of 20 lbf/sq. ft., acting inward or outward.

C. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes.

1. Temperature Change (Range): 120 deg F, ambient; 180 deg F, material surfaces.

D. SMACNA Standard: Comply with recommendations in SMACNA's "Architectural Sheet Metal Manual" for fabrication, construction details, and installation procedures.

2.3 FIXED EXTRUDED-ALUMINUM LOUVERS

A. Horizontal, Wind-Driven-Rain-Resistant Louver, Extruded Aluminum:

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

a. Air Balance; MESTEK, Inc.
b. Air Flow Company, Inc.
c. Airline Louvers; Mestek, Inc.
d. Airolite Company, LLC (The).
e. All-Lite Architectural Products.
f. American Warming and Ventilating (AWV); Mestek, Inc.
g. Architectural Louvers Co.; Harray, LLC.
h. Arrow United Industries; Mestek, Inc.
i. Construction Specialties, Inc.
j. Greenheck Fan Corporation.
k. Industrial Louvers Inc.
l. NCA Manufacturing, Inc.; Metal Industries, Inc.
m. Pottorff.
n. Reliable Products, Inc.
o. Ruskin; Air Distribution Technologies, Inc.; Johnson Controls, Inc.
p. Safe Air - Dowco.
q. United Enertech Corp.

2. Louver Depth: 4 inches.
3. Frame and Blade Nominal Thickness: Not less than 0.060 inch for blades and 0.080 inch for frames.
4. Louver Performance Ratings:

a. Free Area: Not less than 5.0 sq. ft. for 48-inch-wide by 48-inch-high louver.
b. Wind-Driven Rain Performance: Not less than 80 percent effectiveness when subjected to a rainfall rate of 3 inches per hour and a wind speed of 29 mph at a core-area intake velocity of 300 fpm.

5. AMCA Seal: Mark units with AMCA Certified Ratings Seal.

2.4 MATERIALS

A. Aluminum Extrusions: ASTM B221, Alloy 6063-T5, T-52, or T6.

B. Aluminum Sheet: ASTM B209, Alloy 3003 or 5005, with temper as required for forming, or as otherwise recommended by metal producer for required finish.

C. Fasteners: Use types and sizes to suit unit installation conditions.

1. Use hex-head or Phillips pan-head screws for exposed fasteners unless otherwise indicated.
2. For fastening aluminum, use aluminum or 300 series stainless steel fasteners.
3. For color-finished louvers, use fasteners with heads that match color of louvers.

D. Postinstalled Fasteners for Concrete and Masonry: Torque-controlled expansion anchors, fabricated from stainless steel components, with allowable load or strength design capacities calculated in accordance with ICC-ES AC193 and ACI 318 greater than or equal to the design load, as determined by testing in accordance with ASTM E488/E488M conducted by a qualified testing agency.

E. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D1187/D1187M.

2.5 FABRICATION

A. Factory assemble louvers to minimize field splicing and assembly. Disassemble units as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation.

B. Maintain equal louver blade spacing to produce uniform appearance.

C. Fabricate frames, including integral sills, to fit in openings of sizes indicated, with allowances made for fabrication and installation tolerances, adjoining material tolerances, and perimeter sealant joints.

1. Frame Type: Channel unless otherwise indicated.

D. Include supports, anchorages, and accessories required for complete assembly.

E. Provide subsills made of same material as louvers or extended sills for recessed louvers.

F. Join frame members to each other and to fixed louver blades with fillet welds, threaded fasteners, or both, as standard with louver manufacturer unless otherwise indicated or size of louver assembly makes bolted connections between frame members necessary.

2.6 ALUMINUM FINISHES

A. Finish louvers after assembly.

B. High-Performance Organic Finish, Two-Coat PVDF: Fluoropolymer finish complying with AAMA 2605 and containing not less than 70 percent PVDF resin by weight in color coat.

1. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions [**for seacoast and severe environments**].
2. Color and Gloss: As selected by Architect from manufacturer's full range.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates and openings, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Coordinate setting drawings, diagrams, templates, instructions, and directions for installation of anchorages that are to be embedded in concrete or masonry construction. Coordinate delivery of such items to Project site.

3.3 INSTALLATION

A. Locate and place louvers level, plumb, and at indicated alignment with adjacent work.

B. Use concealed anchorages where possible. Provide brass or lead washers fitted to screws where required to protect metal surfaces and to make a weathertight connection.

C. Form closely fitted joints with exposed connections accurately located and secured.

D. Provide perimeter reveals and openings of uniform width for sealants and joint fillers, as indicated.

E. Protect unpainted galvanized- and nonferrous-metal surfaces that are in contact with concrete, masonry, or dissimilar metals from corrosion and galvanic action by applying a heavy coating of bituminous paint or by separating surfaces with waterproof gaskets or nonmetallic flashing.

F. Install concealed gaskets, flashings, joint fillers, and insulation as louver installation progresses, where weathertight louver joints are required. Comply with Section 07 92 00 "Joint Sealants" for sealants applied during louver installation.

3.4 ADJUSTING AND CLEANING

A. Clean exposed louver surfaces that are not protected by temporary covering, to remove fingerprints and soil during construction period. Do not let soil accumulate during construction period.

B. Before final inspection, clean exposed surfaces with water and a mild soap or detergent not harmful to finishes. Thoroughly rinse surfaces and dry.

C. Restore louvers damaged during installation and construction, so no evidence remains of corrective work. If results of restoration are unsuccessful, as determined by Architect, remove damaged units and replace with new units.

1. Touch up minor abrasions in finishes with air-dried coating that matches color and gloss of, and is compatible with, factory-applied finish coating.

END OF SECTION

SECTION 09 22 16

NON-STRUCTURAL METAL FRAMING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Framing systems.

1.2 ACTION SUBMITTALS

A. Product Data:

1. Framing systems.

1.3 DELIVERY, STORAGE, AND HANDLING

A. Notify manufacturer of damaged materials received prior to installation.

B. Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.

C. Protect cold-formed metal framing from corrosion, deformation, and other damage during delivery, storage, and handling as required by AISI S202, "Code of Standard Practice for Cold-Formed Steel Structural Framing."

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Horizontal Deflection: For wall assemblies, limited to 1/360 of the wall height based on horizontal loading of 10 lbf/sq. ft..

B. Design framing systems in accordance with AISI S220, "North American Specification for the Design of Cold-Formed Steel Framing - Nonstructural Members," unless otherwise indicated.

C. Design Loads: As indicated on architectural Drawings or 5 lbf/sq. ft. minimum as required by the IBC.

D. Design framing systems to accommodate deflection of primary building structure and construction tolerances and to withstand design loads with a maximum deflection of <**Insert inches**>.

2.2 FRAMING SYSTEMS

A. Framing Members, General: Comply with AISI S220 for conditions indicated.

1. Steel Sheet Components: Comply with AISI S220 requirements for metal unless otherwise indicated
2. Protective Coating: Comply with AISI S220; ASTM A653/A653M, G40; or coating with equivalent corrosion resistance. Galvannealed products are unacceptable.

a. Coating demonstrates equivalent corrosion resistance with an evaluation report acceptable to authorities having jurisdiction.

B. Studs and Track: AISI S220.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

a. ClarkDietrich.
b. Jaimes Industries, Inc.
c. MRI Steel Framing, LLC.
d. Marino\WARE.
e. SCAFCO Steel Stud Company; Stone Group of Companies.
f. Steel Construction Systems; Stone Group of Companies.

2. Minimum Base-Steel Thickness: 0.0329 inch.
3. Depth: 6 inches.

C. Flat Strap and Backing Plate: Steel sheet for blocking and bracing in length and width indicated.

1. Minimum Base-Steel Thickness: 0.0329 inch.

2.3 AUXILIARY MATERIALS

A. General: Provide auxiliary materials that comply with referenced installation standards.

1. Fasteners for Steel Framing: Of type, material, size, corrosion resistance, holding power, and other properties required to fasten steel members to substrates.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas and substrates, with Installer present, and including welded hollow-metal frames, cast-in anchors, and structural framing, for compliance with requirements and other conditions affecting performance of the Work.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION, GENERAL

A. Installation Standard: ASTM C754.

1. Gypsum Board Assemblies: Also comply with requirements in ASTM C840 that apply to framing installation.

B. Install framing and accessories plumb, square, and true to line, with connections securely fastened.

C. Install supplementary framing, and blocking to support fixtures, equipment services, heavy trim, grab bars, toilet accessories, furnishings, or similar construction.

D. Install bracing at terminations in assemblies.

3.3 INSTALLATION OF FRAMING SYSTEMS

A. Install framing system components according to spacings indicated, but not greater than spacings required by referenced installation standards for assembly types.

1. Single-Layer Application: 16 inches o.c. unless otherwise indicated.

B. Install studs so flanges within framing system point in same direction.

C. Installation Tolerance: Install each framing member so fastening surfaces vary not more than 1/8 inch from the plane formed by faces of adjacent framing.

3.4 FIELD QUALITY CONTROL

A. Installation Tolerances: Install suspension systems that are level to within 1/8 inch in 12 feet measured lengthwise on each member that will receive finishes and transversely between parallel members that will receive finishes.

END OF SECTION

SECTION 09 29 00

GYPSUM BOARD

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Interior gypsum board.

B. Related Requirements:

1. Section 09 22 16 "Non-Structural Metal Framing" for non-structural steel framing and suspension systems that support gypsum board panels.

1.2 ACTION SUBMITTALS

A. Product Data: For the following:

1. Foil-backed gypsum board.
2. Interior trim.
3. Joint treatment materials.

1.3 DELIVERY, STORAGE AND HANDLING

A. Store materials inside under cover and keep them dry and protected against weather, condensation, direct sunlight, construction traffic, and other potential causes of damage. Stack panels flat and supported on risers on a flat platform to prevent sagging.

1.4 FIELD CONDITIONS

A. Environmental Limitations: Comply with ASTM C840 requirements or gypsum board manufacturer's written instructions, whichever are more stringent.

B. Do not install paper-faced gypsum panels until installation areas are enclosed and conditioned.

C. Do not install panels that are wet, moisture damaged, and mold damaged.

1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

PART 2 - PRODUCTS

2.1 INTERIOR GYPSUM BOARD

A. Foil-Backed Gypsum Board: ASTM C1396/C1396M.

1. Core: 5/8 inch, Type X.
2. Long Edges: Tapered.

2.2 TRIM ACCESSORIES

A. Interior Trim: ASTM C1047.

1. Material: Plastic.
2. Shapes:

a. L-Bead: L-shaped; exposed long flange receives joint compound.

2.3 JOINT TREATMENT MATERIALS

A. General: Comply with ASTM C475/C475M.

B. Joint Tape:

1. Interior Gypsum Board: Paper.

C. Joint Compound for Interior Gypsum Board: For each coat, use formulation that is compatible with other compounds applied on previous or for successive coats.

1. Prefilling: At open joints, rounded or beveled panel edges, and damaged surface areas, use setting-type taping compound.
2. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use setting-type taping compound.
3. Fill Coat: For second coat, use setting-type, sandable topping compound.
4. Finish Coat: For third coat, use setting-type, sandable topping compound.

2.4 AUXILIARY MATERIALS

A. Provide auxiliary materials that comply with referenced installation standards and manufacturer's written instructions.

B. Steel Drill Screws: ASTM C1002 unless otherwise indicated.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas and substrates including welded hollow-metal frames and support framing, with Installer present, for compliance with requirements and other conditions affecting performance of the Work.

B. Examine panels before installation. Reject panels that are wet, moisture damaged, and mold damaged.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION AND FINISHING OF PANELS, GENERAL

A. Comply with ASTM C840.

B. Install ceiling panels across framing to minimize the number of abutting end joints and to avoid abutting end joints in central area of each ceiling. Stagger abutting end joints of adjacent panels not less than one framing member.

C. Install panels with face side out. Butt panels together for a light contact at edges and ends with not more than 1/16 inch of open space between panels. Do not force into place.

D. Locate edge and 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. Do not make joints other than control joints at corners of framed openings.

E. Form control and expansion joints with space between edges of adjoining gypsum panels.

F. Attachment to Steel Framing: Attach panels so leading edge or end of each panel is attached to open (unsupported) edges of stud flanges first.

3.3 INSTALLATION OF INTERIOR GYPSUM BOARD

A. Install interior gypsum board in the following locations:

1. Foil-Backed Type: As indicated on Drawings.

B. Single-Layer Application:

1. On ceilings, apply gypsum panels before wall/partition board application to greatest extent possible and at right angles to framing unless otherwise indicated.

3.4 INSTALLATION OF TRIM ACCESSORIES

A. General: For trim with back flanges intended for fasteners, attach to framing with same fasteners used for panels. Otherwise, attach trim according to manufacturer's written instructions.

B. Interior Trim: Install in the following locations:

1. L-Bead: Use at exposed panel edges.

3.5 FINISHING OF GYPSUM BOARD

A. General: Treat gypsum board joints, interior angles, edge trim, control joints, penetrations, fastener heads, surface defects, and elsewhere as required to prepare gypsum board surfaces for decoration. Promptly remove residual joint compound from adjacent surfaces.

B. Prefill open joints, rounded or beveled edges, and damaged surface areas.

C. Apply joint tape over gypsum board joints, except for trim products specifically indicated as not intended to receive tape.

D. Gypsum Board Finish Levels: Finish panels to levels indicated below and in accordance with ASTM C840:

1. Level 4: At panel surfaces that will be exposed to view unless otherwise indicated.

3.6 PROTECTION

A. Protect adjacent surfaces from drywall compound and promptly remove from floors and other non-drywall surfaces. Repair surfaces stained, marred, or otherwise damaged during drywall application.

B. Protect installed products from damage from weather, condensation, direct sunlight, construction, and other causes during remainder of the construction period.

C. Remove and replace panels that are wet, moisture damaged, and mold damaged.

1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

END OF SECTION

SECTION 09 91 14

EXTERIOR PAINTING (MPI STANDARDS)

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Surface preparation and application of paint systems on exterior substrates.

1.2 DEFINITIONS

A. MPI Gloss Level 6: 70 to 85 units at 60 degrees, according to ASTM D523.

B. MPI Gloss Level 7: More than 85 units at 60 degrees, according to ASTM D523.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include preparation requirements and application instructions.
2. Include printout of current "MPI Approved Products List" for each product category specified, with the proposed product highlighted.
3. Indicate VOC content.

B. Samples: For each type of topcoat product.

1. Submit Samples on rigid backing, 8 inches square.
2. Apply coats on Samples in steps to show each coat required for system.
3. Label each coat of each Sample.
4. Label each Sample for location and application area.

C. Product List: Cross-reference to paint system and locations of application areas. Use same designations indicated on Drawings and in the Exterior Painting Schedule to cross-reference paint systems specified in this Section. Include color designations.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F.

1. Maintain containers in clean condition, free of foreign materials and residue.
2. Remove rags and waste from storage areas daily.

1.5 FIELD CONDITIONS

A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F.

B. Do not apply paints in snow, rain, fog, or mist; when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Behr Paint Company; Behr Process Corporation.
2. Benjamin Moore & Co.
3. PPG Paints; PPG Industries, Inc.
4. Pratt & Lambert; a subsidiary of The Sherwin-Williams Company.
5. Valspar; a brand of The Sherwin-Williams Company.
6. Sherwin-Williams Company (The).

B. Source Limitations: Obtain paint from single source from single manufacturer.

2.2 PAINT PRODUCTS

A. MPI Standards: Provide products complying with MPI standards indicated and listed in its "MPI Approved Products List."

B. Material Compatibility:

1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
2. For each coat in a paint system, provide products recommended in writing by topcoat manufacturers for use in paint system and on substrate indicated.

C. Colors: As selected by Architect from manufacturer's full range.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.

B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:

1. Masonry (Clay and CMUs): 12 percent.

C. Verify suitability of substrates, including surface conditions and compatibility, with existing finishes and primers.

D. Proceed with coating application only after unsatisfactory conditions have been corrected.

1. Application of coating indicates acceptance of surfaces and conditions.

3.2 PREPARATION

A. Comply with manufacturer's written instructions and recommendations in "MPI Manual" applicable to substrates and paint systems indicated.

B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.

1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection.

C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.

1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.

D. Masonry Substrates: Remove efflorescence and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces or mortar joints exceeds that permitted in manufacturer's written instructions.

E. Shop-Primed Steel Substrates: Clean field welds, bolted connections, and areas where shop paint is abraded. Paint exposed areas with the same material as used for shop priming to comply with SSPC-PA 1 for touching up shop-primed surfaces.

F. Galvanized-Metal Substrates: Remove grease and oil residue from galvanized sheet metal by mechanical methods to produce clean, lightly etched surfaces that promote adhesion of subsequently applied paints.

3.3 INSTALLATION

A. Apply paints in accordance with manufacturer's written instructions and recommendations in "MPI Manual."

1. Use applicators and techniques suited for paint and substrate indicated.
2. Paint surfaces behind movable items same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed items with prime coat only.
3. Paint both sides and edges of exterior doors and entire exposed surface of exterior door frames.
4. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
5. Primers specified in the Exterior Painting Schedule may be omitted on items that are factory primed or factory finished if compatible with intermediate and topcoat coatings and acceptable to intermediate and topcoat paint manufacturers.

B. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.

C. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

3.4 CLEANING AND PROTECTION

A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.

1. Do not clean equipment with free-draining water and prevent solvents, thinners, cleaners, and other contaminants from entering into waterways, sanitary and storm drain systems, and ground.
2. Dispose of contaminants in accordance with requirements of authorities having jurisdiction.
3. Allow empty paint cans to dry before disposal.

B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.

C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.

D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.5 EXTERIOR PAINTING SCHEDULE

A. Steel and Iron Substrates:

1. Quick-Dry Enamel System MPI EXT 5.1A:

a. Prime Coat: Primer, alkyd, quick dry, for metal, MPI #76.
b. Intermediate Coat: Alkyd, quick dry, matching topcoat.
c. Gloss Topcoat: Alkyd, quick dry, gloss (MPI Gloss Level 7), MPI #96.

B. Galvanized-Metal Substrates:

1. Alkyd System MPI EXT 5.3B:

a. Prime Coat: Primer, galvanized, cementitious, MPI #26.
b. Intermediate Coat: Exterior, alkyd enamel, matching topcoat.
c. Gloss Topcoat: Alkyd, exterior, gloss (MPI Gloss Level 6), MPI #9.

END OF SECTION

SECTION 09 91 24

INTERIOR PAINTING (MPI STANDARDS)

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes surface preparation and the application of paint systems on interior substrates.

B. Related Requirements:

1. Section 09 91 13 "Exterior Painting" for general field painting.
2. Section 09 96 11 “High-Performance Coatings (Proprietary Specification)” for painting of interior restroom CMU walls.

1.2 DEFINITIONS

A. MPI Gloss Level 2: Not more than 10 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D523.

B. MPI Gloss Level 5: 35 to 70 units at 60 degrees, according to ASTM D523.

C. MPI Gloss Level 6: 70 to 85 units at 60 degrees, according to ASTM D523.

D. MPI Gloss Level 7: More than 85 units at 60 degrees, according to ASTM D523.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product. Include preparation requirements and application instructions.

1. Include printout of current "MPI Approved Products List" for each product category specified, with the proposed product highlighted.
2. Indicate VOC content.

B. Samples for Verification: For each type of paint system and in each color and gloss of topcoat.

1. Submit Samples on rigid backing, 8 inches square.
2. Apply coats on Samples in steps to show each coat required for system.
3. Label each coat of each Sample.
4. Label each Sample for location and application area.

C. Product List: Use same designations indicated on Drawings and in the Interior Painting Schedule to cross-reference paint systems specified in this Section. Include color designations.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F.

1. Maintain containers in clean condition, free of foreign materials and residue.
2. Remove rags and waste from storage areas daily.

1.5 FIELD CONDITIONS

A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F.

B. Do not apply paints when relative humidity exceeds 85 percent; at temperatures of less than 5 deg F above the dew point; or to damp or wet surfaces.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Behr Paint Company; Behr Process Corporation.
2. Benjamin Moore & Co.
3. Pratt & Lambert; a subsidiary of The Sherwin-Williams Company.
4. Valspar; a brand of The Sherwin-Williams Company.
5. PPG Paints; PPG Industries, Inc.
6. Sherwin-Williams Company (The).

2.2 PAINT, GENERAL

A. MPI Standards: Products shall comply with MPI standards indicated and shall be listed in its "MPI Approved Products List."

B. Material Compatibility:

1. Materials for use within each paint system shall be compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
2. For each coat in a paint system, products shall be recommended in writing by topcoat manufacturers for use in paint system and on substrate indicated.

C. Colors: As selected by Architect from manufacturer's full range.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.

B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:

1. Masonry (Clay and CMUs): 12 percent.
2. Gypsum Board: 12 percent.

C. Gypsum Board Substrates: Verify that finishing compound is sanded smooth.

D. Verify suitability of substrates, including surface conditions and compatibility, with existing finishes and primers.

E. Proceed with coating application only after unsatisfactory conditions have been corrected.

1. Application of coating indicates acceptance of surfaces and conditions.

3.2 PREPARATION

A. Comply with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual" applicable to substrates and paint systems indicated.

B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.

1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.

C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.

1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.

D. Masonry Substrates: Remove efflorescence and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces or mortar joints exceeds that permitted in manufacturer's written instructions.

E. Shop-Primed Steel Substrates: Clean field welds, bolted connections, and areas where shop paint is abraded. Paint exposed areas with the same material as used for shop priming to comply with SSPC-PA 1 for touching up shop-primed surfaces.

F. Galvanized-Metal Substrates: Remove grease and oil residue from galvanized sheet metal by mechanical methods to produce clean, lightly etched surfaces that promote adhesion of subsequently applied paints.

3.3 INSTALLATION

A. Apply paints according to manufacturer's written instructions and to recommendations in "MPI Manual."

1. Use applicators and techniques suited for paint and substrate indicated.
2. Paint surfaces behind movable equipment and furniture same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed equipment or furniture with prime coat only.
3. Paint front and backsides of access panels, removable or hinged covers, and similar hinged items to match exposed surfaces.
4. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
5. Primers specified in painting schedules may be omitted on items that are factory primed or factory finished if acceptable to topcoat manufacturers.

B. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.

C. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

D. Painting Fire-Suppression, Plumbing, HVAC, Electrical, Communication, and Electronic Safety and Security Work:

1. Paint the following work where exposed in equipment rooms:

a. Uninsulated metal piping.
b. Pipe hangers and supports.
c. Metal conduit.

2. Paint the following work where exposed in occupied spaces:

a. Equipment, including panelboards.
b. Pipe hangers and supports.
c. Metal conduit.
d. Other items as directed by Architect.

3.4 CLEANING AND PROTECTION

A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.

B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.

C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.

D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.5 INTERIOR PAINTING SCHEDULE

A. Concrete Substrates, Traffic Surfaces:

1. Clear Sealer System MPI EXT 3.2G:

a. Prime Coat: Sealer, solvent based, matching topcoat.
b. Intermediate Coat: Sealer, solvent based, matching topcoat.
c. Topcoat: Sealer, solvent based, for concrete floors, MPI #104.

B. Steel Substrates:

1. Quick-Dry Enamel System, MPI INT 5.1A:

a. Prime Coat: Primer, alkyd, quick dry, for metal, MPI #76.
b. Intermediate Coat: Alkyd, quick dry, matching topcoat.
c. Topcoat: Alkyd, quick dry, gloss (MPI Gloss Level 7), MPI #96.

C. Galvanized-Metal Substrates:

1. Water-Based Light-Industrial Coating System, MPI INT 5.3K:

a. Prime Coat: Primer, galvanized, water based, MPI #134.
b. Intermediate Coat: Light-industrial coating, interior, water based, matching topcoat.
c. Topcoat: Light-industrial coating, interior, water based, gloss (MPI Gloss Level 6), MPI #154.

D. Gypsum Board Substrates:

1. High-Performance Architectural Latex System, MPI INT 9.2B:

a. Prime Coat: Primer sealer, latex, interior, MPI #50.
b. Intermediate Coat: Latex, interior, high performance architectural, matching topcoat.
c. Topcoat: Latex, interior, high performance architectural (MPI Gloss Level 2), MPI #138.

END OF SECTION

SECTION 09 96 11

HIGH-PERFORMANCE COATINGS (PROPRIETARY SPECIFICATION)

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes surface preparation and application of high-performance coating systems on the following substrates:

1. Interior Substrates:

a. CMUs.

B. Related Requirements:

1. Section 09 91 13 "Exterior Painting" for general field painting.
2. Section 09 91 23 "Interior Painting" for general field painting.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product. Include preparation requirements and application instructions.

1. Indicate VOC content.

1.3 DELIVERY, STORAGE, AND HANDLING

A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F.

1. Maintain containers in clean condition, free of foreign materials and residue.
2. Remove rags and waste from storage areas daily.

1.4 FIELD CONDITIONS

A. Apply coatings only when temperature of surfaces to be coated and ambient air temperatures are between 50 and 95 deg F.

B. Do not apply coatings when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.

C. Do not apply exterior coatings in snow, rain, fog, or mist.

PART 2 - PRODUCTS

2.1 HIGH-PERFORMANCE COATINGS

A. Material Compatibility:

1. Materials for use within each paint system shall be compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
2. For each coat in a paint system, products shall be recommended in writing by topcoat manufacturers for use in paint system and on substrate indicated.
3. Products shall be of same manufacturer for each coat in a coating system.

B. Colors: As selected by Architect from manufacturer's full range.

2.2 BLOCK FILLERS

A. Epoxy Block Filler: Solvent-based, two-component, epoxy, high-solids coating; formulated to bridge and fill porous surfaces of CMUs in preparation for specified intermediate and topcoat coatings:

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

a. PPG Paints; PPG Industries, Inc.
b. Tnemec Company, Inc.

2.3 EPOXY COATINGS

A. High-Build Epoxy, Low Gloss: Two-component epoxy, high-solids, low-gloss coating for use on interior or exterior concrete, masonry, and primed metal surfaces.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

a. PPG Paints; PPG Industries, Inc.
b. Tnemec Company, Inc.

2. Gloss Level: Manufacturer's standard low gloss finish.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.

B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:

1. CMUs: 12 percent.

C. Verify suitability of substrates, including surface conditions and compatibility, with existing finishes and primers.

D. Proceed with coating application only after unsatisfactory conditions have been corrected.

1. Application of coating indicates acceptance of surfaces and conditions.

3.2 PREPARATION

A. Comply with manufacturer's written instructions applicable to substrates and coating systems indicated.

B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted.

1. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
2. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed.
3. Remove surface-applied protection if any.

C. Clean substrates of substances that could impair bond of coatings, including dust, dirt, oil, grease, and incompatible paints and encapsulants.

D. Masonry Substrates: Remove efflorescence and chalk.

1. Do not coat surfaces if moisture content, alkalinity of surfaces, or alkalinity of mortar joints exceeds that permitted in manufacturer's written instructions.

3.3 APPLICATION

A. Apply high-performance coatings in accordance with manufacturer's written instructions.

1. Use applicators and techniques suited for coating and substrate indicated.

B. If undercoats or other conditions show through final coat, apply additional coats until cured film has a uniform coating finish, color, and appearance.

C. Apply coatings to produce surface films without cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections. Produce sharp glass lines and color breaks.

3.4 CLEANING AND PROTECTION

A. After completing coating application, clean spattered surfaces. Remove spattered coatings by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.

B. Protect work of other trades against damage from coating operation. Correct damage to work of other trades by cleaning, repairing, replacing, and recoating, as approved by Architect, and leave in an undamaged condition.

C. At completion of construction activities of other trades, touch up and restore damaged or defaced coated surfaces.

3.5 INTERIOR HIGH-PERFORMANCE COATING SCHEDULE

A. CMU Substrates:

1. Epoxy, High-Build System:

a. Prime Coat: Epoxy block filler.
b. Intermediate Coat: High-build epoxy, matching topcoat.
c. Topcoat: High-build epoxy, low gloss.

END OF SECTION

SECTION 09 96 23

GRAFFITI RESISTANT COATINGS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes surface preparation and application of high-performance coating systems and supplementary items to complete the work.

1. Applications include:

a. Surface preparation.
b. Permanent anti-graffiti coating system.

B. Related Section: Division 09 Section Painting for exterior and interior painting not specified in this Section.

1.2 ACTION SUBMITTALS

A. Product Data: Manufacturers technical literature for each product and system indicated.

1. Include manufacturers specifications for materials, preparation requirements, finishes, construction details, installation instructions, and recommendations for maintenance

B. Samples for Verification: For each type of coating system and in each color and gloss of topcoat indicated.

1. Submit Samples on rigid backing, 8 insquare.
2. Step coats on Samples to show each coat required for system.
3. Label each coat of each Sample.
4. Label each Sample for location and application area.

C. Product List: For each product indicated, include the following:

1. Cross-reference to paint system and locations of application areas. Use same designations indicated on Drawings and in schedules.

1.3 INFORMATIONAL SUBMITTALS

A. Manufacturers Project Acceptance Document: Certification by the manufacturer that its products are approved, acceptable, suitable for use in specific locations, for specific details, and for applications indicated, specified, or required, and that a warranty will be issued.

1. Manufacturer shall certify all products comply with Federal, State and Local regulatory requirements including but not limited to OTC and VOC regulations. Notify Construction Manager of materials not in compliance.

B. Warranty:

1. Provide manufacturers written warranty covering materials and installation (labor) stating obligations, remedies, limitations and exclusions.

1.4 QUALITY ASSURANCE

A. Manufacturer Qualifications: Manufacturer with not less than 10 years of experience in the successful production and in-service performance of products and systems similar to scope of this Project.

B. Installer Qualifications:

1. Experience: Installers personnel with not less than 5 years of experience in the successful performance of Work similar to scope of this Project.
2. Supervision: Installer shall maintain a competent supervisor at Project while the Work is in progress, and who has not less than 5 years of experience installing products and systems similar to scope of this Project.

C. Field Mockups: Apply benchmark samples of each coating system indicated to verify preliminary selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.

1. Construction Manager will select one surface to represent surfaces and conditions for application of each coating. Demonstrate field applied coating procedures.
2. Final acceptance of field applied coatings will be from field mock-up.
3. Clean exposed faces of mock-up.
4. Notify Construction Manager seven days in advance of the dates and times when mock-up will be installed.
5. Demonstrate the proposed range of aesthetic effects and workmanship.
6. Protect accepted mock-up from the elements with weather-resistant membrane.
7. Obtain Construction Managers acceptance of mockups before starting installation.
8. Maintain mockups during construction in an undisturbed condition as a standard for review of the completed Work.

1.5 PRE-INSTALLATION CONFERENCE

A. Pre-Installation Conference: Before Work begins, conduct conference at Project site.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F. and a

1. Maintain containers in clean condition, free of foreign materials and residue.

1.7 PROJECT CONDITIONS

A. Apply coatings only when the temperature of surfaces to be coated and surrounding air temperatures are above 45 deg. F (7 deg. C), unless otherwise permitted by manufacturer's printed instructions or written authorization from the coatings manufacturer.

B. Do not apply coatings in snow, rain, fog or mist, or when the relative humidity exceeds 80 percent, or at temperatures less than 5 deg. F (-15 deg. C) above the dew point, or to damp or wet surfaces unless otherwise permitted by manufacturer's printed instructions or written authorization from the coatings manufacturer. Allow wet surfaces to dry thoroughly and attain the temperature and conditions specified before proceeding with or continuing the coating operation.

1.8 COORDINATION

A. Coordinate installation of products and systems with interfacing and adjoining construction to provide a successful installation without failure.

1.9 WARRANTY

A. Coating Manufacturer’s Warranty: Submit coating manufacturer’s written warranty signed by manufacturer, agreeing to repair or replace work which exhibits material defects caused by error in formulation, manufacture or design of product or workmanship defects.

1. Warranty Period: Manufacturer shall warrant the products to be free from material and workmanship defects for a period of 5 years from date of Substantial Completion.

a. Includes treated surfaces effectively and repeatedly cleaned of graffiti without damage or loss of effectiveness of the graffiti resistant coating.

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

A. Single Source Responsibility: Furnish each type of product from single manufacturer. Provide primer material produced by the same manufacturer as the finish coats. Provide secondary materials only as recommended by manufacturer of primary materials.

B. Material Compatibility:

1. Provide materials for use within each coating system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
2. For each coat in a coating system, provide products recommended in writing by manufacturers of topcoat for use in coating system and on substrate indicated.
3. Provide products of same manufacturer for each coat in a coating system.

C. Regulatory Requirements: Comply with federal, state, and local codes and regulations applicable to surface preparation, coating application, storage, handling, and environmental requirements, including Federal, State and Local EPA requirements for maximum VOC.

2.2 GRAFFITI RESISTANT COATING

A. General: Clear, non-sacrificial graffiti resistant coating providing protection for exterior surfaces from permanent graffiti staining and damage caused by spray paint and marking pens.

1. Coating shall be suitable for application to painted and unpainted surfaces including masonry, concrete, metals and EIFS.
2. Coating shall allow recoating with the underlying paint without removal of the graffiti resistant coating.
3. Coating shall dry clear, non-yellowing with a low luster.

B. Available Manufacturers and Products: Subject to compliance with requirements of Contract Documents as judged by the Construction Manager, manufacturers offering products that may be incorporated into the Work include, but are not limited to, those listed.

1. Anti-Graffiti Coating Manufacturer and Products

a. Prosoco Blok-Guard & Graffiti Control Ultra
b. Prosoco Blok-Guard & Graffiti Control Ultra 15
c. Rainguard International; VandlGuard Non-Sacrificial Anti - Graffiti Coating.
d. Sherwin Williams Anti-Graffiti Coating.
e. Or approved equal.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Acceptance of Surfaces and Conditions: Examine substrates to receive products and systems and associated work for compliance with requirements and other conditions affecting performance. Proceed only when unsatisfactory conditions have been corrected in a manner complying with Contract Documents. Starting work within a particular area will be construed as acceptance of surface conditions.

1. Maximum Moisture Content of Concrete Substrates: When measured with an electronic moisture meter as follows:

a. Concrete: 12 percent unless recommended otherwise by manufacturer.

B. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.

1. Unpainted Concrete and Masonry: Verify water repellant has been applied to new or non-painted concrete and masonry surfaces prior to the application of the anti-graffiti coating.

3.2 INSTALLATION, GENERAL

A. Installation Quality Standards: In addition to standards listed elsewhere, perform Work according to following, unless otherwise specified:

1. Respective manufacturers written installation instructions.
2. Accepted submittals.
3. Contract Documents.

3.3 PREPARATION

A. General: Comply with manufacturer's instructions, recommendations, and specifications for cleaning and surface preparation. Surfaces shall have no defects, contaminants, or errors which would result in poor or potentially defective installation or would cause latent defects in Work.

B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.

1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection.

C. Clean substrates of substances that could impair bond of coatings, including dust, dirt, oil, grease, and incompatible paints and encapsulants.

3.4 MATERIAL PREPARATION

A. Material Preparation: Carefully mix and prepare materials in compliance with the coating manufacturers Application Instructions.

3.5 APPLICATION

A. Apply high-performance coatings according to manufacturer's written instructions.

1. Use applicators and techniques suited for coating and substrate indicated.
2. The number of coats and film thickness required is the same regardless of the application method. Do not apply succeeding coats until the previous coat has cured as recommended by the manufacturer.
3. Minimum Coating Thickness: Apply each material to provide not less than the minimum DFT recommended by the coating manufacturer. Provide total DFT for the entire system as recommended by the coating manufacturer.

3.6 CLEANING AND PROTECTION

A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.

B. After completing coating application, clean spattered surfaces. Remove spattered coatings by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.

C. Protect work of other trades against damage from coating operation. Correct damage by cleaning, repairing, replacing, and recoating, as accepted by Construction Manager, and leave in an undamaged condition.

D. At completion of construction activities of other trades, touch up and restore damaged or defaced coated surfaces.

END OF SECTION

SECTION 10 14 23

PANEL SIGNAGE

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Panel signs.
2. Field-applied, vinyl-character signs.

1.2 DEFINITIONS

A. Accessible: In accordance with the accessibility standard.

1.3 ACTION SUBMITTALS

A. Product Data:

1. Panel signs.
2. Field-applied, vinyl-character signs.

B. Shop Drawings: For panel signs.

1. Include fabrication and installation details and attachments to other work.
2. Show sign mounting heights, locations of supplementary supports to be provided by other installers, and accessories.
3. Show message list, typestyles, graphic elements, including raised characters and Braille, and layout for each sign at least half size.

1.4 CLOSEOUT SUBMITTALS

A. Maintenance Data: For signs to include in maintenance manuals.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Accessibility Standard: Comply with applicable provisions in the USDOJ's "2010 ADA Standards for Accessible Design" and ICC A117.1.

2.2 PANEL SIGNS

A. Panel Sign: Sign with smooth, uniform surfaces; with message and characters having uniform faces, sharp corners, and precisely formed lines and profiles; and as follows:

1. Solid-Sheet Sign: Aluminum sheet with finish specified in "Surface Finish and Applied Graphics" Subparagraph and as follows:

a. Thickness: 0.125 inch.
b. Surface-Applied, Raised Graphics: Applied polymer characters and Braille.

2. Sign-Panel Perimeter: Finish edges smooth.

a. Corner Condition in Elevation: As indicated on Drawings.

3. Mounting: Manufacturer's standard method for substrates indicated with.
4. Surface Finish and Applied Graphics:

a. Baked-Enamel or Powder-Coat Finish and Graphics: Manufacturer's standard, in color as selected by Architect from manufacturer's full range.
b. Overcoat: Manufacturer's standard baked-on clear coating.

5. Text and Typeface: Accessible raised characters and Braille typeface as selected by Architect from manufacturer's full range. Finish raised characters to contrast with background color, and finish Braille to match background color.

2.3 PANEL-SIGN MATERIALS

A. Aluminum Sheet and Plate: ASTM B209, alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated.

B. Paints and Coatings for Sheet Materials: Inks, dyes, and paints that are recommended by manufacturer for optimum adherence to surface and are UV and water resistant for colors and exposure indicated.

2.4 ACCESSORIES

A. Fasteners and Anchors: Manufacturer's standard as required for secure anchorage of signs, noncorrosive and compatible with each material joined, and complying with the following unless otherwise indicated:

1. For exterior exposure, furnish stainless steel devices unless otherwise indicated.

2.5 FABRICATION

A. General: Provide manufacturer's standard sign assemblies according to requirements indicated.

1. Preassemble signs in the shop to greatest extent possible. Disassemble signs and assemblies only as necessary for shipping and handling limitations. Clearly mark units for reassembly and installation; apply markings in locations concealed from view after final assembly.

2.6 GENERAL FINISH REQUIREMENTS

A. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

2.7 ALUMINUM FINISHES

A. Baked-Enamel or Powder-Coat Finish: AAMA 2603 except with a minimum dry film thickness of 1.5 mils. Comply with coating manufacturer's written instructions for cleaning, conversion coating, and applying and baking finish.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

B. Verify that sign-support surfaces are within tolerances to accommodate signs without gaps or irregularities between backs of signs and support surfaces unless otherwise indicated.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. General: Install signs using mounting methods indicated and according to manufacturer's written instructions.

1. Install signs level, plumb, true to line, and at locations and heights indicated, with sign surfaces free of distortion and other defects in appearance.
2. Install signs so they do not protrude or obstruct according to the accessibility standard.
3. Before installation, verify that sign surfaces are clean and free of materials or debris that would impair installation.

B. Accessible Signage: Install in locations on walls as indicated on Drawings and according to the accessibility standard.

C. Mounting Methods:

1. Through Fasteners: Drill holes in substrate using predrilled holes in sign as template. Countersink holes in sign if required. Place sign in position and flush to surface. Install through fasteners and tighten.

3.3 ADJUSTING AND CLEANING

A. Remove and replace damaged or deformed signs and signs that do not comply with specified requirements. Replace signs with damaged or deteriorated finishes or components that cannot be successfully repaired by finish touchup or similar minor repair procedures.

B. Remove temporary protective coverings and strippable films as signs are installed.

C. On completion of installation, clean exposed surfaces of signs according to manufacturer's written instructions and touch up minor nicks and abrasions in finish. Maintain signs in a clean condition during construction and protect from damage until acceptance by Owner.

END OF SECTION

SECTION 10 28 00

TOILET, BATH, AND LAUNDRY ACCESSORIES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Public-use washroom accessories.
2. Childcare accessories.
3. Underlavatory guards.
4. Custodial accessories.

1.2 COORDINATION

A. Coordinate accessory locations with other work to prevent interference with clearances required for access by people with disabilities, and for proper installation, adjustment, operation, cleaning, and servicing of accessories.

B. Deliver inserts and anchoring devices set into concrete or masonry as required to prevent delaying the Work.

1.3 ACTION SUBMITTALS

A. Product Data Submittals: For each product.

1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
2. Include anchoring and mounting requirements, including requirements for cutouts in other work and substrate preparation.
3. Include electrical characteristics.

1.4 INFORMATIONAL SUBMITTALS

A. Sample Warranty: For manufacturer's special warranties.

1.5 CLOSEOUT SUBMITTALS

A. Maintenance Data: For accessories to include in maintenance manuals.

1.6 WARRANTY

A. Manufacturer's Special Warranty for Hand Dryers: Manufacturer agrees to repair or replace hand dryers that fail in materials or workmanship within specified warranty period.

1. Warranty Period: Two years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

2.2 PUBLIC-USE WASHROOM ACCESSORIES

A. Source Limitations: Obtain public-use washroom accessories from single source from single manufacturer.

B. Toilet Tissue (Roll) Dispenser: Supplied by Owner, Installed by Contractor.

C. Warm-Air Hand Dryer:

1. Basis-of-Design Product: Subject to compliance with requirements, provide Dayton; 5W630A or a comparable product by one of the following:

    a. ASI-American Specialties, Inc.
    b. Bobrick Washroom Equipment, Inc.
    c. Bradley Corporation.
    d. Sloan Valve Company.
    e. World Dryer Corporation (Zurn Industries, LLC).

2. Description: Standard-speed, warm-air hand dryer.
3. Mounting: Surface mounted.

    a. Protrusion Limit: Installed unit protrudes maximum 4 inches from wall surface.

4. Operation: Touch-button activated with timed power cutoff switch.

    a. Automatic Shutoff: At 30 seconds.
5. Cover Material and Finish: Chrome-plated steel Stainless steel, ASTM A480/A480M No. 4 finish (satin).
6. Electrical Requirements: 115 V, 20 A, 2300 W.

D. Soap Dispenser: Supplied by Owner, Installed by Contractor.

E. Grab Bar:

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

    a. ASI-American Specialties, Inc.
    b. Bobrick Washroom Equipment, Inc.
    c. Bradley Corporation.

2. Mounting: Flanges with concealed fasteners.
3. Material: Stainless steel, 0.05 inch thick.

a. Finish: Smooth, ASTM A480/A480M No. 4 finish (satin) on ends and slip-resistant texture in grip area.

4. OD: 1-1/2 inches.
5. Configuration and Length: As indicated on Drawings.

F. Sanitary-Napkin and Tampon Vendor:

1. Basis-of-Design Product: Subject to compliance with requirements, provide Bobrick Washroom Equipment, Inc; B-47069 or a comparable product by one of the following:

a. ASI-American Specialties, Inc.
b. Bradley Corporation.

2. Mounting: Surface mounted.
3. Capacity: 20 sanitary napkins and 30 tampons.
4. Operation: No coin (free).
5. Exposed Material and Finish: Stainless steel, ASTM A480/A480M No. 4 finish (satin).
6. Lockset: Tumbler type with separate lock and key for coin box.

G. Sanitary-Napkin Disposal Unit:

1. Basis-of-Design Product: Subject to compliance with requirements, provide Bobrick Washroom Equipment, Inc; B-254 or a comparable product by one of the following:

a. ASI-American Specialties, Inc.
b. Bradley Corporation.

2. Mounting: Surface mounted.
3. Door or Cover: Self-closing, disposal-opening cover and hinged face panel with tumbler lockset.
4. Receptacle: Removable.
5. Material and Finish: Stainless steel, ASTM A480/A480M No. 4 finish (satin).

H. Mirror Unit:

1. Basis-of-Design Product: Subject to compliance with requirements, provide Bobrick Washroom Equipment, Inc; B-1556 or a comparable product by one of the following:

a. ASI-American Specialties, Inc.
b. Bradley Corporation.

2. Size: As indicated on Drawings.
3. Finish: #8 polished stainless steel.

I. Hook:

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

a. ASI-American Specialties, Inc.
b. Bobrick Washroom Equipment, Inc.
c. Bradley Corporation.

2. Description: Single-prong unit.

3. Mounting: Concealed.
4. Material and Finish: Stainless steel, ASTM A480/A480M No. 4 finish (satin).

J. Adjustable-Height Adult Changing Station:

1. Basis-of-Design Product: Subject to compliance with requirements, provide Koala Kare; KB3000-AHL or a comparable product by one of the following:

   a. Foundations Worldwide, Inc.
   b. Pressalit Inc.
   c. Smirthwaite USA LLC; Prism Medical Group.

2. Description: Height-adjustable horizontal unit that is electrically operated and with safety rail and receiver tray.

   a. Engineered to support minimum of 500 lb (181 kg) static load when opened.
3. Electrical Characteristics: Manufacturer's standard actuator and control system.
4. Material and Finish: Stainless steel, ASTM A480/A480M No. 4 finish (satin).

2.3 HEALTHCARE ACCESSORIES

A. Source Limitations: Obtain each type of healthcare accessory from single source from single manufacturer.

B. Surface Mounted Sharps Disposal:

1. Basis-of-Design Product: Subject to compliance with requirements, provide Bobrick Washroom Equipment, Inc; B-350169 or a comparable product by one of the following:

   a. ASI-American Specialties, Inc.
   b. Bradley Corporation.

2. Mounting: Surface mounted.
3. Door or Cover: Hhinged face panel with tumbler lockset.
4. Receptacle: Removable.

5. Material and Finish: Stainless steel, ASTM A480/A480M No. 4 finish (satin).
6. Lockset: Tumbler type.

2.4 UNDERLAVATORY GUARDS

A. Underlavatory Guard:

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

   a. Buckaroos, Inc.
   b. Plumberex Specialty Products, Inc.
   c. Truebro; IPS Corporation.

2. Description: Insulating pipe covering for supply and drain piping assemblies that prevents direct contact with and burns from piping; allow service access without removing coverings.
3. Material and Finish: Antimicrobial, molded plastic, white.

2.5 CUSTODIAL ACCESSORIES

A. Source Limitations: Obtain custodial accessories from single source from single manufacturer.

B. Custodial Mop and Broom Holder:

1. Basis-of-Design Product: Subject to compliance with requirements, provide Bobrick Washroom Equipment, Inc; B-239 or a comparable product by one of the following:

    a. ASI-American Specialties, Inc.
    b. Bradley Corporation.

2. Description: Unit with shelf, hooks, holders, and rod suspended beneath shelf.
3. Length: 36 inches.
4. Hooks: Four.
5. Mop/Broom Holders: Three, spring-loaded, rubber hat, cam type.
6. Material and Finish: Stainless steel, ASTM A480/A480M No. 4 finish (satin).

    a. Shelf: Not less than nominal 0.05-inch-thick stainless steel.
    b. Rod: Approximately 1/4-inch-diameter stainless steel.

2.6 MATERIALS

A. Stainless Steel: ASTM A240/A240M or ASTM A666, Type 304, 0.031-inch-minimum nominal thickness unless otherwise indicated.

B. Steel Sheet: ASTM A1008/A1008M, Designation CS (cold rolled, commercial steel), 0.036-inch-minimum nominal thickness.

C. Galvanized-Steel Sheet: ASTM A653/A653M, with G60 hot-dip zinc coating.

D. Galvanized-Steel Mounting Devices: ASTM A153/A153M, hot-dip galvanized after fabrication.

E. Fasteners: Screws, bolts, and other devices of same material as accessory unit, unless otherwise recommended by manufacturer or specified in this Section, and tamper and theft resistant where exposed, and of stainless or galvanized steel where concealed.

F. Chrome Plating: ASTM B456, Service Condition Number SC 2 (moderate service).

2.7 FABRICATION

A. General: Fabricate units with tight seams and joints, and exposed edges rolled. Hang doors and access panels with full-length, continuous hinges. Equip units for concealed anchorage and with corrosion-resistant backing plates.

B. Keys: Provide universal keys for internal access to accessories for servicing and resupplying. Provide minimum of six keys to Owner's representative.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install accessories in accordance with manufacturers' written instructions, using fasteners appropriate to substrate indicated and recommended by unit manufacturer. Install units level, plumb, and firmly anchored in locations and at heights indicated.

1. Remove temporary labels and protective coatings.

B. Grab Bars: Install to comply with specified structural-performance requirements.

3.2 ADJUSTING AND CLEANING

A. Adjust accessories for unencumbered, smooth operation. Replace damaged or defective items.

B. Clean and polish exposed surfaces in accordance with manufacturer's written instructions.

END OF SECTION

SECTION 31 10 00

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, removing site utilities and abandoning site utilities in place.
7. Temporary erosion- and sedimentation-control measures.

B. Related Sections:

1. Section 31 20 00 “Earth Moving” for soil materials, excavating, backfilling, and site grading.

1.2 DEFINITIONS

A. A/E: Architect/Engineer

B. Clean Construction or Demolition Debris (CCDD): Per the Illinois administrative code, Title 35 Environmental Protection Subtitle J: “Clean Construction or Demolition Debris Chapter I: Pollution Control Board Part 1100 Clean Construction or Demolition Debris Fill Operations And Uncontaminated Soil Fill Operations Section 11 00 .103 Definitions” "*Clean construction or demolition debris" means uncontaminated broken concrete without protruding metal bars, bricks, rock, stone, reclaimed or other asphalt pavement, or soil generated from construction or demolition activities*. For purposes of this Part, CCDD may include uncontaminated broken concrete without protruding metal bars, bricks, rock, stone, or reclaimed or other asphalt pavement that has been painted (painted CCDD) if the painted CCDD is used as fill material at a CCDD fill operation in accordance with Section 11 00 .212. *Clean construction or demolition debris does not include uncontaminated soil generated during construction, remodeling, repair, and demolition of utilities, structures, and roads provided the uncontaminated soil is not commingled with any clean construction or demolition debris or other waste*. For purposes of this Part, uncontaminated soil may include incidental amounts of stone, rock, gravel, roots, and other vegetation. [415 ILCS 5/3.160(b)]”

C. Subsoil: All soil beneath the topsoil layer of the soil profile, and typified by the lack of organic matter and soil organisms.

D. Surface Soil: Soil that is present at the top layer of the existing soil profile at the Project site. In undisturbed areas, the surface soil is typically topsoil; but in disturbed areas such as urban environments, the surface soil can be subsoil.

E. Topsoil: Top layer of the soil profile consisting of existing native surface topsoil or existing in-place surface soil and is the zone where plant roots grow.

F. Topsoil: Top layer of the soil profile consisting of existing native surface topsoil or existing in-place surface soil and is the zone where plant roots grow. Its appearance is generally friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 2 inches in diameter; and free of subsoil and weeds, roots, toxic materials, or other non-soil materials.

G. Plant-Protection Zone: Area surrounding individual trees, groups of trees, shrubs, or other vegetation to be protected during construction, and indicated on the Drawings.

H. Tree-Protection Zone: Area surrounding individual trees or groups of trees to be protected during construction, and as indicated on the Drawings.

I. Vegetation: Trees, shrubs, groundcovers, grass, and other plants.

1.3 MATERIAL OWNERSHIP

A. Except for stripped topsoil and other 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.

B. Contractor shall coordinate with Owner regarding materials indicated to be salvaged on the Drawings or as directed by the Owner.

1.4 SUBMITTALS

A. Existing Conditions: Documentation of existing trees and plantings, adjoining construction, and site improvements that establishes preconstruction conditions that might be misconstrued as damage caused by site clearing.

1. Use sufficiently detailed photographs or videotape.
2. Include plans and notations to indicate specific wounds and damage conditions of each tree or other plants designated to remain.

B. Record Drawings: Identifying and accurately showing locations of capped utilities and other subsurface structural, electrical, and mechanical conditions.

1.5 QUALITY ASSURANCE

A. Preinstallation Conference: Conduct conference at the Project site.

1.6 PROJECT 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 traffic ways if required by Owner or authorities having jurisdiction.

B. Improvements on Adjoining Property: Authority for performing site clearing indicated on property adjoining Owner's property will be obtained by Owner before award of Contract.

1. Do not proceed with work on adjoining property until directed by Owner.

C. Salvable Improvements: Carefully remove items indicated to be salvaged and store on Owner's premises.

D. Utility Locator Service: Notify JULIE at 811 or 1-800-892-0123 minimum of 48-Hrs in advance of demolition or construction site activities at for area where Project is located before site clearing.

E. Do not commence site clearing operations until temporary erosion- and sedimentation-control and plant-protection measures are in place.

F. The following practices are prohibited within protection zones:

1. Storage of construction materials, debris, or excavated material.
2. Parking vehicles or equipment.
3. Foot traffic.
4. Erection of sheds or structures.
5. Impoundment of water.
6. Excavation or other digging unless otherwise indicated.
7. Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.

G. Do not direct vehicle or equipment exhaust towards protection zones.

H. Prohibit heat sources, flames, ignition sources, and smoking within or near protection zones.

I. Soil Stripping, Handling, and Stockpiling: Perform only when the topsoil is dry or slightly moist.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Satisfactory Soil Material: Requirements for satisfactory soil material are specified in Division 31 Section "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. Locate and clearly identify trees, shrubs, and other vegetation to remain. Flag each tree trunk at 54 inches above the ground.

C. 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 TREE AND PLANT PROTECTION

A. General: Protect trees and plants remaining on-site according to the Drawings.

B. Repair or replace trees, shrubs, and other vegetation indicated to remain or be relocated that are damaged by construction operations, in a manner approved by Owner.

3.4 EXISTING UTILITIES

A. Contractor arrange for disconnecting and sealing indicated utilities that serve existing structures before site clearing, when requested by Contractor.

1. Verify that utilities have been disconnected and capped before proceeding with site clearing.

B. 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.
2. Contractor arrange to shut off indicated utilities when requested by Contractor.

C. Locate, identify, and disconnect utilities indicated to be abandoned in place.

D. 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 Owner not less than two days in advance of proposed utility interruptions.
2. Do not proceed with utility interruptions without Owner's written permission.

E. Excavate for and remove underground utilities indicated to be removed.

F. Removal of underground utilities is included in Division 33 sections.

3.5 CLEARING AND GRUBBING

A. Remove obstructions, trees, shrubs, and other vegetation to permit installation of new construction.

1. Do not remove trees, shrubs, and other vegetation indicated to remain or to be relocated.
2. Grind down stumps and remove roots, obstructions, and debris to a depth of 18 inches below exposed subgrade.
3. Use only hand methods for grubbing within protection zones.
4. Chip removed tree branches and dispose of off-site.

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 8 inches and compact each layer to a density equal to adjacent original ground.

3.6 TOPSOIL STRIPPING

A. Remove sod and grass before stripping topsoil.

B. Strip topsoil in a manner to prevent intermingling with underlying subsoil or other waste materials.

1. Remove subsoil and non-soil materials from topsoil, including clay lumps, gravel, and other objects more than 2 inches in diameter; trash, debris, weeds, roots, and other waste materials.

C. Stockpile topsoil away from edge of excavations without intermixing with subsoil. Grade and shape stockpiles to drain surface water. Cover to prevent windblown dust and erosion by water.

1. Limit height of topsoil stockpiles to 72 inches.
2. Do not stockpile topsoil within protection zones.
3. Dispose of surplus topsoil. Surplus topsoil is that which exceeds quantity indicated to be stockpiled or reused.
4. Stockpile surplus topsoil to allow for respreading deeper topsoil.

3.7 SITE IMPROVEMENTS

A. Remove existing above- and below-grade improvements as indicated and necessary to facilitate new construction.

B. Remove slabs, paving, curbs, gutters, and aggregate base as indicated.

1. Unless existing full-depth joints coincide with line of demolition, neatly saw-cut along line of existing pavement to remain before removing adjacent existing pavement. Saw-cut faces vertically.

2. Paint cut ends of steel reinforcement in concrete to remain with two coats of antirust coating, following coating manufacturer’s written instructions. Keep paint off surfaces that will remain exposed.

3.8 FIELD QUALITY CONTROL

A. Testing Agency: Contractor shall engage a qualified geotechnical engineering testing agency to perform tests and inspections.

B. Allow testing agency to observe and report on site stripping, fill removal, and clearing and grubbing.

3.9 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.

C. All surplus excavation, waste materials, and demolition debris shall be removed and disposed of off-site at a licensed landfill, recycling center, reused on site, or otherwise disposed of in accordance with local, state, and federal disposal laws and regulations, including the Illinois Environmental Protection Agency’s (IEPA) Clean Construction and Demolition Debris” (CCDD) regulation.

END OF SECTION

SECTION 31 20 00

EARTH MOVING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Preparing subgrades for walks, turf, grasses and plants.
2. Excavating and backfilling for buildings and structures.
3. Subbase course for concrete walks.
4. Subsurface drainage backfill for walls and trenches.
5. Excavating and backfilling trenches for utilities and pits for buried utility structures.

B. Related Sections:

1. Section 31 10 00 "Site Clearing" for site stripping, grubbing, stripping topsoil, and removal of above-and below-grade improvements and utilities.

1.2 DEFINITIONS

A. A/E: Architect/Engineer

B. Backfill: Soil material or controlled low-strength material used to fill an excavation.

1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
2. Final Backfill: Backfill placed over initial backfill to fill a trench.

C. Base Course: Aggregate layer placed between the subbase course and pavement section.

D. Bedding Course: Aggregate layer placed over the excavated subgrade in a trench before laying pipe.

E. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.

F. Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated.

1. Authorized Additional Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions as directed on the Drawings. Authorized additional excavation and replacement material will be paid for according to Contract provisions for unit prices.
2. Bulk Excavation: Excavation more than 10 feet in width and more than 30 feet in length.
3. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions without direction by Architect. Unauthorized excavation, as well as remedial work directed by Owner, shall be without additional compensation.

G. Fill: Soil materials used to raise existing grades.

H. Rock: Rock material in beds, ledges, unstratified masses, conglomerate deposits, and boulders of rock material that exceed 1 cu. yd. for bulk excavation or 3/4 cu. yd. for footing, trench, and pit excavation that cannot be removed by rock excavating equipment equivalent to the following in size and performance ratings, without systematic drilling, ram hammering, ripping, or blasting, when permitted:

1. Excavation of Footings, Trenches, and Pits: Late-model, track-mounted hydraulic excavator; equipped with a 42-inch-wide, maximum, short-tip-radius rock bucket; rated at not less than 138-hp flywheel power with bucket-curling force of not less than 28,700 lbf and stick-crowd force of not less than 18,400 lbf with extra-long reach boom; measured according to SAE J-1179.
2. Bulk Excavation: Late-model, track-mounted loader; rated at not less than 230¬hp flywheel power and developing a minimum of 47,992-lbf breakout force with a general-purpose bare bucket; measured according to SAE J-732..

I. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.

J. Subbase Course: Aggregate layer placed between the subgrade and base course for hot-mix asphalt pavement, or aggregate layer placed between the subgrade and a cement concrete pavement or a cement concrete or hot-mix asphalt walk.

K. Subgrade: Uppermost surface of an excavation or the top surface of a fill or backfill immediately below subbase, drainage fill, drainage course, or topsoil materials.

L. Utilities: On-site underground pipes, conduits, ducts, and cables, as well as underground services within buildings.

1.3 SUBMITTALS

A. Product Data: For each type of the following manufactured products required:

1. Warning tapes.
2. Detectable warning tapes.

B. Samples

1. Submit material source information, type (use) of each material gradation to engineer for review and approval prior to installation.

C. Qualification Data: For qualified testing agency.

D. Minimum 4-lb samples of subbase, base, and bedding course aggregate materials.

E. Material Test Reports: For each on-site and borrow soil material proposed for fill and backfill as follows:

1. Classification according to ASTM D 2487.
2. Laboratory compaction curve according to ASTM D 698.

F. Pre-excavation Photographs or Videotape: Show existing conditions of adjoining construction and site improvements, including finish surfaces, that might be misconstrued as damage caused by earth moving operations. Submit before earth moving begins.

1.4 QUALITY ASSURANCE

A. Geotechnical Testing Agency Qualifications: Qualified according to ASTM E 329 and ASTM D 3740 for testing indicated.

B. Pre-excavation Conference: Conduct conference at Project site.

1.5 PROJECT CONDITIONS

A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during earth moving 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 traffic ways if required by Owner or authorities having jurisdiction.

B. Improvements on Adjoining Property: Authority for performing earth moving indicated on property adjoining Owner's property will be obtained by Owner before award of Contract.

1. Do not proceed with work on adjoining property until directed by Owner.

C. Utility Locator Service: Notify JULIE. a minimum of 48-Hrs in advance of demolition or construction site activities at 811 or 1-800-892-0123 for area where Project is located before site clearing.

D. Do not commence earth moving operations until temporary erosion- and sedimentation-control measures, specified in Division 01 Section "Temporary Facilities and Controls," and Division 31 Section "Site Clearing," is in place.

E. Do not commence earth moving operations until plant-protection measures as indicated on the Drawings are in place.

F. The following practices are prohibited within protection zones:

1. Storage of construction materials, debris, or excavated material.
2. Parking vehicles or equipment.
3. Foot traffic.
4. Erection of sheds or structures.
5. Impoundment of water.
6. Excavation or other digging unless otherwise indicated.
7. Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.

G. Do not direct vehicle or equipment exhaust towards protection zones.

H. Prohibit heat sources, flames, ignition sources, and smoking within or near protection zones.

I. Store aggregates where grading and other required characteristics can be maintained and contamination can be avoided.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.

B. Satisfactory Soils: Soil Classification Groups GW, GP, GM, SW, SP, and SM according to ASTM D 2487 or a combination of these groups; free of rock or gravel larger than 2 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.

C. Unsatisfactory Soils: Soil Classification Groups GC, SC, CL, ML, OL, CH, MH, OH, and PT according to ASTM D 2487 or a combination of these groups.

1. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.

D. Subbase Material: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve. Conform to IDOT-SSRBC 2022 Sections 1003 and 1004 for Fine and Coarse Aggregate material. Material gradations as specified on plans.

E. Base Course: 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-inc sieve and not more than 8 percent passing a No. 200 sieve. Conform to IDOT-SSRBC 2020, CA-6 gradation or as otherwise noted in plans.

F. Engineered Fill: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve. Conform to IDOT-SSRBC 2022

G. Sections 1003 and 1004 for Fine and Coarse Aggregate material. Material gradations as specified on plans.

1. The project geotechnical engineer should be consulted to determine suitability of engineered fill material prior to placement.

H. Backfill against waterproofed basement walls:

1. Course Aggregate Quality: Class B or better.
2. Project geotechnical engineer should be consulted to determine suitability of engineered fill material prior to placement.

I. Bedding Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; except with 100 percent passing a 1-inch sieve and not more than 8 percent passing a No. 200 sieve.

J. Sand: ASTM C 33; fine aggregate. Conform to IDOT-SSRBC 2022 Sections 1003 and 1004 for Fine and Coarse Aggregate material. Material gradations as specified on plans.

K. Impervious Fill: Clayey gravel and sand mixture capable of compacting to a dense state.

2.2 ACCESSORIES

A. Warning Tape: Acid- and alkali-resistant, polyethylene film warning tape manufactured for marking and identifying underground utilities, 6 inches wide and 4 mils thick, continuously inscribed with a description of the utility; colored as follows:

1. Red: Electric.
2. Yellow: Gas, oil, steam, and dangerous materials.
3. Orange: Telephone and other communications.
4. Blue: Water systems.
5. Green: Sewer systems.

B. Detectable Warning Tape: Two tone wire detectable warning tape. Acid- and alkali-resistant, polyethylene film warning tape manufactured for marking and identifying underground utilities, a minimum of 6 inches wide and 4 mils thick, continuously inscribed with a description of the utility, with metallic core encased in a protective jacket for corrosion protection, detectable by metal detector when tape is buried up to 30 inches deep; colored as follows:

1. Red: Electric.
2. Yellow: Gas, oil, steam, and dangerous materials.
3. Orange: Telephone and other communications.
4. Blue: Water systems.
5. Green: Sewer systems.

PART 3 - EXECUTION

3.1 PREPARATION

A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth moving operations.

B. Preparation of subgrade for earthwork operations including removal of vegetation, topsoil, debris, obstructions, and deleterious materials from ground surface as specified in Section 31 11 00 “Site Clearing”.

C. Protect and maintain erosion and sedimentation controls during earth moving operations.

D. Protect subgrades and foundation soils from freezing temperatures and frost. Remove temporary protection before placing subsequent materials.

3.2 DEWATERING

A. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.

B. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.

1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.

3.3 EXPLOSIVES

A. Explosives: Do not use explosives.

3.4 EXCAVATION, GENERAL

A. Unclassified Excavation: Excavate to subgrade elevations regardless of the character of surface and subsurface conditions encountered. Unclassified excavated materials may include rock, soil materials, and obstructions. No changes in the Contract Sum or the Contract Time will be authorized for rock excavation or removal of obstructions.

1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.
2. Remove rock to lines and grades indicated to permit installation of permanent construction without exceeding the following dimensions:

    a. 24 inches outside of concrete forms other than at footings.
    b. 12 inches outside of concrete forms at footings.
    c. 6 inches outside of minimum required dimensions of concrete cast against grade.
    d. Outside dimensions of concrete walls indicated to be cast against rock without forms or exterior waterproofing treatments.
    e. 12 inches beneath bottom of concrete slabs-on-grade.
    f. 12 inches beneath pipe in trenches, and the greater of 24 inches wider than pipe or 42 inches wide.

B. Classified Excavation: Excavate to subgrade elevations. Material to be excavated will be classified as earth and rock. Do not excavate rock until it has been classified and cross sectioned by Architect. The Contract Sum will be adjusted for rock excavation according to unit prices included in the Contract Documents. Changes in the Contract Time may be authorized for rock excavation.

1. Earth excavation includes excavating pavements and obstructions visible on surface; underground structures, utilities, and other items indicated to be removed; together with soil, boulders, and other materials not classified as rock or unauthorized excavation.
2. Rock excavation includes removal and disposal of rock. Remove rock to lines and subgrade elevations indicated to permit installation of permanent construction without exceeding the following dimensions:

    a. 24 inches outside of concrete forms other than at footings.
    b. 12 inches outside of concrete forms at footings.
    c. 12 inches outside of minimum required dimensions of concrete cast against grade.
    d. Outside dimensions of concrete walls indicated to be cast against rock without forms or exterior waterproofing treatments.
    e. 12 inches beneath bottom of concrete slabs-on-grade.
    f. 12 inches beneath pipe in trenches, and the greater of 24 inches wider than pipe or 42 inches wide.

3.5 EXCAVATION FOR WALKS AND PAVEMENTS

A. Excavate surfaces under walks and pavements to indicated lines, cross sections, elevations, and subgrades.

3.6 EXCAVATION FOR UTILITY TRENCHES

A. Excavate trenches to indicated gradients, lines, depths, and elevations.

1. Beyond building perimeter, excavate trenches to allow installation of top of pipe below frost line.

B. Excavate trenches to uniform widths to provide the following clearance on each side of pipe or conduit. Excavate trench walls vertically from trench bottom to 12 inches higher than top of pipe or conduit unless otherwise indicated.

1. Clearance: 18 inches each side of pipe or conduit.

C. Trench Bottoms: Excavate and shape trench bottoms to provide uniform bearing and support of pipes and conduit. Shape subgrade to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits. Remove projecting stones and sharp objects along trench subgrade.

1. For pipes and conduit less than 6 inches in nominal diameter, hand-excavate trench bottoms and support pipe and conduit on an undisturbed subgrade.
2. For pipes and conduit 6 inches or larger in nominal diameter, shape bottom of trench to support bottom 90 degrees of pipe or conduit circumference. Fill depressions with tamped sand backfill.
3. For flat-bottomed, multiple-duct conduit units, hand-excavate trench bottoms and support conduit on an undisturbed subgrade.
4. Excavate trenches 6 inches deeper than elevation required in rock or other unyielding bearing material to allow for bedding course.

D. Trench Bottoms: Excavate trenches 4 inches deeper than bottom of pipe and conduit elevations to allow for bedding course. Hand-excavate deeper for bells of pipe.

1. Excavate trenches 6 inches deeper than elevation required in rock or other unyielding bearing material to allow for bedding course.

E. Trenches in Tree- and Plant-Protection Zones:

1. Hand-excavate to indicated lines, cross sections, elevations, and subgrades. Use narrow-tine spading forks to comb soil and expose roots. Do not break, tear, or chop exposed roots. Do not use mechanical equipment that rips, tears, or pulls roots.
2. Do not cut main lateral roots or taproots; cut only smaller roots that interfere with installation of utilities.
3. Cut and protect roots according to requirements of the Architect.

3.7 SUBGRADE INSPECTION

A. Notify A/E when excavations have reached required subgrade.

B. If A/E determines that unsatisfactory soil is present, continue excavation and replace with compacted backfill or fill material as directed.

C. Authorized additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.

D. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by Architect, without additional compensation.

3.8 UNAUTHORIZED EXCAVATION

A. Fill unauthorized excavation under foundations or wall footings by extending bottom elevation of concrete foundation or footing to excavation bottom, without altering top elevation. Lean concrete fill, with 28-day compressive strength of 2500 psi, may be used when approved by Architect.

1. Fill unauthorized excavations under other construction, pipe, or conduit as directed by Architect.

3.9 STORAGE OF SOIL MATERIALS

A. Stockpile borrow soil materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.

1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

3.10 BACKFILL

A. Place and compact backfill in excavations promptly, but not before completing the following:

1. Construction below finish grade including, where applicable, subdrainage, dampproofing, waterproofing, and perimeter insulation.
2. Surveying locations of underground utilities for Record Documents.
3. Testing and inspecting underground utilities.
4. Removing concrete formwork.
5. Removing trash and debris.
6. Removing temporary shoring and bracing, and sheeting.
7. Installing permanent or temporary horizontal bracing on horizontally supported walls.

B. Place backfill on subgrades free of mud, frost, snow, or ice.

3.11 UTILITY TRENCH BACKFILL

A. Place backfill on subgrades free of mud, frost, snow, or ice.

B. Place and compact bedding course on trench bottoms and where indicated. Shape bedding course to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits.

C. Trenches under Footings: Backfill trenches excavated under footings and within minimum 18 inches of bottom of footings with satisfactory soil; fill with concrete to elevation of bottom of footings.

D. Trenches under Roadways: Provide minimum 4-inch thick, concrete-base slab support for piping or conduit less than 30 inches below surface of roadways. After installing and testing, completely encase piping or conduit in a minimum of 4 inches of concrete before backfilling or placing roadway subbase course.

E. Backfill voids with satisfactory soil while removing shoring and bracing.

F. Place and compact initial backfill of subbase material or satisfactory soil, free of particles larger than 1 inch in any dimension, to a height of 12 inches over the pipe or conduit.

1. Carefully compact initial backfill under pipe haunches and compact evenly up on both sides and along the full length of piping or conduit to avoid damage or displacement of piping or conduit. Coordinate backfilling with utilities testing.

G. Controlled Low-Strength Material: Place initial backfill of controlled low-strength material to a height of 12 inches over the pipe or conduit. Coordinate backfilling with utilities testing.

H. Place and compact final backfill of satisfactory soil to final subgrade elevation.

I. Controlled Low-Strength Material: Place final backfill of controlled low-strength material to final subgrade elevation.

J. Install warning tape directly above utilities, 18 inches below finished grade, except 6 inches below subgrade under pavements and slabs.

3.12 SOIL FILL

A. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing material.

B. Place and compact fill material in layers to required elevations as follows:

1. Under grass and planted areas, use satisfactory soil material.
2. Under walks and pavements, use engineered fill material as specified in plans.

C. Place soil fill on subgrades free of mud, frost, snow, or ice.

3.13 SOIL MOISTURE CONTROL

A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within 2 percent of optimum moisture content.

1. Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.
2. Remove and replace, or scarify and air dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.

3.14 COMPACTION OF SOIL BACKFILLS AND FILLS

A. Place backfill and fill soil materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers.

B. Place backfill and fill soil materials evenly on all sides of structures to required elevations, and uniformly along the full length of each structure.

C. Compact soil materials to not less than the following percentages of maximum dry unit weight according to Modified Proctor Density compaction:

1. Under structures, building slabs, steps, and pavements, scarify and recompact top 12 inches of existing subgrade and each layer of backfill or fill soil material in 8” lifts, compacting each layer at 95 percent modified proctor density.
2. Under walkways, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material in 8” lifts, compacting each layer at 95 percent modified proctor density.
3. Under turf or unpaved areas, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 85 percent.
4. For utility trenches, compact each layer of initial and final backfill soil material at 95 percent modified proctor density.

3.15 GRADING

A. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.

1. Provide a smooth transition between adjacent existing grades and new grades.
2. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.

B. Site Rough Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to required elevations within the following tolerances:

1. Turf or Unpaved Areas: Plus or minus 1 inch.
2. Walks: Plus or minus 1/2 inch.
3. Pavements: Plus or minus 1/2 inch.

3.16 SUBBASE AND BASE COURSES UNDER PAVEMENTS AND WALKS

A. General: Install in accordance with the City of Peoria Municipal Code and the IDOT-SSRBC 2022.

B. Place subbase course and base course on subgrades free of mud, frost, snow, or ice.

C. On prepared subgrade, place subbase course and base course under pavements and walks as follows:

1. Install separation geotextile on prepared subgrade according to manufacturer's written instructions, overlapping sides and ends.
2. Place base course material over subbase course under hot-mix asphalt pavement.
3. Shape subbase course and base course to required crown elevations and cross-slope grades.
4. Place subbase course and base course 6 inches or less in compacted thickness in a single layer.
5. Place subbase course and base course that exceeds 6 inches in compacted thickness in layers of equal thickness, with no compacted layer more than 6 inches thick or less than 3 inches thick.
6. Compact subbase course and base course at optimum moisture content to required grades, lines, cross sections, and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D 698.

3.17 FIELD QUALITY CONTROL

A. Special Inspections: A/E will engage a qualified special inspector to perform the following special inspections:

1. Determine prior to placement of fill that site has been prepared in compliance with requirements.
2. Determine that fill material and maximum lift thickness comply with requirements.
3. Determine, at the required frequency, that in-place density of compacted fill complies with requirements.

B. Testing Agency: Contractor will engage a qualified geotechnical engineering testing agency to perform tests and inspections in accordance with Exhibit A “General Conditions Of The Agreement”, Section 18 “Testing And Inspection Of Work”.

C. Testing Agency shall inspect and verify all proof rolling operations.

D. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earth moving only after test results for previously completed work comply with requirements.

E. Testing agency will test compaction of soils in place according to ASTM D 1556, ASTM D 2167, ASTM D 2922, and ASTM D 2937, as applicable. Tests will be performed at the following locations and frequencies:

1. Trench Backfill: At each compacted initial and final backfill layer, at least one test for every 100 feet or less of trench length, but no fewer than two tests.
2. Paved and Building Slab Areas: At subgrade and at each compacted fill and backfill layer, at least one test for every 2000 sq. ft. or less of paved area or building slab, but in no case fewer than three tests.
3. Foundation Wall Backfill: At each compacted backfill layer, at least one test for every 100 feet or less of wall length, but no fewer than two tests.

F. If testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil materials to depth required; recompact and retest until specified compaction is obtained.

3.18 PROTECTION

A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.

B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.

1. Scarify or remove and replace soil material to depth as directed by Architect; reshape and recompact.

C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.

1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to greatest extent possible.

3.19 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A. Remove surplus satisfactory soil and waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off Owner's property.

B. Transport surplus satisfactory soil to designated storage areas on Owner's property. Stockpile or spread soil as directed by A/E.

C. Remove waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off Owner's property. All surplus excavation, waste materials, and unsatisfactory soil shall be removed and disposed of off-site at a licensed landfill, recycling center, reused on site, or otherwise disposed of in accordance with local, state, and federal disposal laws and regulations, including the Illinois Environmental Protection Agency's (IEPA) Clean Construction and Demolition Debris" (CCDD) regulation.

END OF SECTION

SECTION 32 13 13

CONCRETE PAVING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Concrete paving as specified on the drawing and as specified herein:

a. Curbs and gutters.
b. Ramps.
c. Walks.
d. Exterior stairs.

1.2 SYSTEM DESCRIPTION

A. Definitions:

1. A/E: Architect/Engineer.
2. Cementitious Materials: Portland cement alone or in combination with one or more of blended hydraulic cement, fly ash and other pozzolans, and ground granulated blast-furnace slag.

1.3 QUALITY ASSURANCE

A. Regulatory Requirements: Comply with materials, workmanship, and other applicable requirements of Illinois Department of Transportation (IDOT) construction guides and manuals as described, specified, and illustrated in the current edition of the "Standard Specifications for Road and Bridge Construction," (2022) including Supplemental Specifications and Recurring Special Provisions (2022), latest editions and updates for asphalt paving work. Hereafter these documents are referenced as the "IDOT Standard Specifications, (IDOT SSRBC)" (2012).

1. Measurement and payment provisions and safety program submittals included in IDOT Standard Specifications do not apply to this Section.

B. Detectable Warning Installer Qualifications: An employer of workers trained and approved by manufacturer of detectable warning systems.

C. Ready-Mix-Concrete Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M (2020) requirements for production facilities and equipment.

1. Manufacturer certified according to National Ready Mixed Concrete Association's (NRMCA) "Certification of Ready Mixed Concrete Production Facilities" (Quality Control Manual - Section 3, "Plant Certification Checklist").

D. Testing Agency Qualifications: Qualified according to ASTM C 1077 (2017) and ASTM E 329 (2020) for testing indicated.

1. Personnel conducting field tests shall be qualified as American Concrete Institute (ACI) Concrete Field Testing Technician, Grade 1, according to ACI CP-1 (2000) or an equivalent certification program.

E. Concrete Testing Service: A/E shall engage a qualified testing agency to perform material evaluation tests and to design concrete mixtures.

F. ACI Publications: Comply with ACI 301 (2020) unless otherwise indicated.

G. Preinstallation Conference: Conduct conference at Project site.

1. Review methods and procedures related to concrete paving for the following:

a. Concrete mixture design.
b. Quality control of concrete materials and concrete paving construction practices.

2. Require representatives of each entity directly concerned with concrete paving to attend, including the following:

a. General Contractor's superintendent.
b. Independent testing agency responsible for concrete design mixtures.
c. Concrete paving subcontractor.

1.4 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Other Action Submittals:

1. 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.

C. Material Certificates: For the following, from manufacturer:

1. Cementitious materials.
2. Admixtures.
3. Curing compounds.
4. Applied finish materials.
5. Joint fillers.

D. Material Test Reports: For each of the following:

1. Aggregates. Include service-record data indicating absence of deleterious expansion of concrete due to alkali-aggregate reactivity.

E. Field quality-control reports.

1.5 PROJECT CONDITIONS

A. Traffic Control: Maintain access for vehicular and pedestrian traffic as required for other construction activities.

B. Pavement-Marking Paint: Proceed with pavement marking only on clean, dry surfaces and at a minimum ambient or surface temperature of 40 deg. for oil-based materials or 55 deg F for water-based materials, and not exceeding 95 deg F for either.

PART 2 - PRODUCTS

2.1 FORMS

A. Form Materials: Plywood, metal, metal-framed plywood, or other approved panel-type materials to provide full-depth, continuous, straight, and smooth exposed surfaces.

1. Use flexible or uniformly curved forms for curves with a radius of 100 feet or less. Do not use notched and bent forms.

B. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and that will not impair subsequent treatments of concrete surfaces.

2.2 STEEL REINFORCEMENT

A. Epoxy-Coated Reinforcing Bars: ASTM A 775/A 775M (2019) or ASTM A 934/A 934M (2019); with ASTM A 615/A 615M (2020), Grade 60 deformed bars.

B. Epoxy-Coated, Joint Dowel Bars: ASTM A 775/A 775M (2019); with ASTM A 615/A 615M (2020), Grade 60, plain-steel bars.

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 Concrete Reinforcing Steel Institute’s (CRSI) "Manual of Standard Practice" from steel wire, plastic, or precast concrete of greater compressive strength than concrete specified, and as follows:

1. For epoxy-coated reinforcement, use epoxy-coated or other dielectric-polymer-coated wire bar supports.

D. Epoxy Repair Coating: Liquid, two-part, epoxy repair coating, compatible with epoxy coating on reinforcement.

E. Zinc Repair Material: ASTM A 780 (2020).

2.3 CONCRETE MATERIALS

A. Cementitious Material: Use the following cementitious materials, of same type, brand, and source throughout Project:

1. Portland Cement: ASTM C 150 (2020), gray Portland cement Type I in accordance with IDOT SSRBC, adopted April 2016. Type II, TYPE IIA, Type III, Type IIA, Type IV, or Type V may be used when specified or when approved in writing by the A/E.

a. Fly Ash: AASHTO M 295 (2011), Class C or Class F in accordance with IDOT SSRBC, adopted April 2016.
b. Ground Granulated Blast-Furnace Slag: AASHTO M 302 (2019), Grade 100 or 120, in accordance with IDOT SSRBC, adopted April 2016.

B. Normal-Weight Aggregates: Shall be Class A uniformly graded. Provide aggregates from a single source in accordance with the following:

1. Coarse-Aggregate: Shall be in accordance with IDOT SSRBC, adopted April 2016.
2. Fine Aggregate: Shall be in accordance with IDOT SSRBC, adopted April 2016.

C. Water: Potable and in accordance with IDOT SSRBC, adopted April 2016.

D. Air-Entraining Admixture: AASHTO M 154 (2011), and in accordance with IDOT SSRBC, adopted April 2016.

E. Chemical Admixtures: In accordance with IDOT SSRBC, adopted April 2016.

2.4 CURING MATERIALS

A. Shall be in accordance with IDOT SSRBC, adopted April 2016.

2.5 RELATED MATERIALS

A. Joint Fillers: ASTM D 1751 (2018), asphalt-saturated cellulosic fiber in preformed strips.

B. Protective Coat: AASHTO M 233 (1986) in accordance with IDOT SSRBC, adopted April 2016.

C. Epoxy Bonding Adhesive: ASTM C 881 (2020), Type IV, Grade 1, Class A, B, or C, in accordance with IDOT SSRBC, adopted April 2016.

2.6 DETECTABLE WARNING MATERIALS

A. Detectable Warning Tile: Detectable warning tile consisting of raised truncated domes with a diameter of nominal 0.9 inch. a height of nominal 0.2 inch. and a center to center spacing of nominal 2.35 inch. and shall contrast visually with adjoining surfaces. The detectable warning shall comply with the Americans with Disabilities Accessibility Guidelines (ADAAG) (2010), the Illinois Accessibility Code (IAC) (2018).

1. Manufacturers:

a. East Jordan Iron Works
301 Spring Street
East Jordan, MI 49727
(800) 874-4100
b. Neenah Foundry
2121 Brooks Avenue
Neenah, WI 54956
(800) 558-5075
c. Pioneer Detectable, LLC
N8060 Maple Street
Ixonia, WI 53036

(262) 370-5355

d. Advantage Cast Iron
241 Main Street, Suite 100
Buffalo, NY 14203
(800) 679-4022

e. Detectible Cast Iron ADA Plates
603 Mallard Lane
Oak Brook, IL 60623
(630) 734-0277

f. Or approved equal.

2. It is not acceptable to install two different detectable warning products adjacent to one another at any location.
3. Size of Tile: Straight tiles shall have a minimum dimension of 2-Ft.x2-Ft. with 2-Ft.x3-Ft. and 2-Ft.x4-Ft. tiles permissible. Radial tiles shall be 2-Ft. minimum in depth and the Contractor shall verify with the tile Manufacturer that the tile radii match the back of curb radii. The Contractor shall verify the tile dimensions with the tiled Manufacturer.
4. Products: Subject to compliance with requirements, the available products that may be incorporated into the Work shall come from the approved detectable warning products list.

2.7 CONCRETE MIXTURES

A. Prepare design mixtures proportioned according to the following IDOT Portland Cement Concrete Mix Designs:

1. IDOT Class PV mix design, in accordance with IDOT SSRBC, adopted April 2016, shall be used for the following:

a. Portland Cement Concrete sidewalk pavement and curbs.

2. IDOT Class SI mix design, in accordance with IDOT SSRBC, adopted April 2016, shall be used for the following:

a. Portland Cement Concrete stairs, ramps and cheek wall and foundations.

B. Chemical Admixtures: Use admixtures in accordance with IDOT SSRBC, adopted April 2016.

2.8 CONCRETE MIXING

A. Portland Cement Concrete shall be mixed in accordance with IDOT SSRBC, adopted April 2016.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine exposed subgrades and subbase surfaces for compliance with requirements for dimensional, grading, and elevation tolerances.

B. Proof-roll prepared subbase surface below concrete paving to identify soft pockets and areas of excess yielding.

1. Completely proof-roll subbase in one direction and repeat in perpendicular direction. Limit vehicle speed to 3 mph.
2. Correct subbase with soft spots and areas of pumping or rutting exceeding depth of 1/2 inch according to requirements in Division 31 Section "Earth Moving."

C. Proceed with installation only after unsatisfactory conditions have been corrected.

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

A. General: Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.

B. Clean reinforcement of loose rust and mill scale, earth, ice, or other bond-reducing materials.

C. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during concrete placement. Maintain minimum cover to reinforcement.

D. Epoxy-Coated Reinforcement: Use epoxy-coated steel wire ties to fasten epoxy-coated reinforcement. Repair cut and damaged epoxy coatings with epoxy repair coating according to ASTM D 3963/D 3963M (2015).

E. Install fabricated bar mats in lengths as long as practicable. Handle units to keep them flat and free of distortions. Straighten bends, kinks, and other irregularities, or replace units as required before placement. Set mats for a minimum 2-inch overlap of adjacent mats.

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.

1. When joining existing paving, place transverse joints to align with previously placed joints 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.

1. Continue steel reinforcement across construction joints unless otherwise indicated. Do not continue reinforcement through sides of paving strips unless otherwise indicated.
2. Provide tie bars at sides of paving strips where indicated.
3. Doweled Joints: Install dowel bars and support assemblies at joints where indicated. Lubricate or coat with asphalt one-half of dowel length to prevent concrete bonding to one side of joint.

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.

1. Locate expansion joints at intervals of 30 feet unless otherwise indicated.
2. Extend joint fillers full width and depth of joint.
3. Terminate joint filler not less than 1/2 inch or more than 1 inch below finished surface if joint sealant is indicated.
4. Place top of joint filler flush with finished concrete surface if joint sealant is not indicated.
5. Furnish joint fillers in one-piece lengths. Where more than one length is required, lace or clip joint-filler sections together.
6. During concrete placement, protect top edge of joint filler with metal, plastic, or other temporary preformed cap. Remove protective cap after concrete has been placed on both sides of joint.

D. Control 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, as follows:

1. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint with grooving tool to a 1/4-inch or 3/8-inch radius. Repeat grooving of contraction joints after applying surface finishes.

    a. Tolerance: Ensure that grooved joints are within 3 inches either way from centers of dowels.

2. Sawed Joints: Form contraction joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/8-inch-wide joints into concrete when cutting action will not tear, abrade, or otherwise damage surface and before developing random contraction cracks.

    a. Tolerance: Ensure that sawed joints are within 3 inches either way from centers of dowels.
    b. Sawed Joints shall be placed as soon as the concrete will hold the weight of the saw but no later than 12 hours after placement. Joints will be cut the same day.

E. Doweled Contraction Joints: Install dowel bars and support assemblies at joints where indicated. Lubricate or coat with asphalt one-half of dowel length to prevent concrete bonding to one side of joint.

F. Edging: After initial floating, tool edges of paving, gutters, curbs, and joints in concrete with an edging tool to a 1/4-inch or 3/8-inch radius. Repeat tooling of edges after applying surface finishes.

3.6 CONCRETE PLACEMENT

A. Before placing concrete, inspect and complete formwork installation, steel reinforcement, and items to be embedded or cast-in.

B. Remove snow, ice, or frost from subbase surface and steel reinforcement before placing concrete. Do not place concrete on frozen surfaces.

C. 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.

D. Comply with ACI 301 (2016) requirements for measuring, mixing, transporting, and placing concrete.

E. Do not add water to concrete during delivery or at Project site. Do not add water to fresh concrete after testing.

F. 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.

G. Consolidate concrete according to ACI 309 (2005) by mechanical vibrating equipment supplemented by hand spading, rodding, or tamping.

1. Consolidate concrete along face of forms and adjacent to transverse joints with an internal vibrator. Keep vibrator away from joint assemblies, reinforcement, or side forms. Use only square-faced shovels for hand spreading and consolidation. Consolidate with care to prevent dislocating reinforcement, dowels, and joint devices.

H. Screed paving surface with a straightedge and strike off.

I. Commence initial floating using bull floats or darbies to impart an open-textured and uniform surface plane before excess moisture or bleed water appears on the surface. Do not further disturb concrete surfaces before beginning finishing operations or spreading surface treatments.

J. Curbs and Gutters: Use design mixture for automatic machine placement. Produce curbs and gutters to required cross section, lines, grades, finish, and jointing.

K. Slip-Form Paving: Use design mixture for automatic machine placement. Produce paving to required thickness, lines, grades, finish, and jointing.

1. Compact subbase and prepare subgrade of sufficient width to prevent displacement of slip-form paving machine during operations.

L. Cold-Weather Placement: Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing, or low temperatures. Comply with ACI 306.1 (2002) and the following:

1. When air temperature has fallen to or is expected to fall below 40 deg F, uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 deg F and not more than 80 deg F at point of placement.
2. Do not use frozen materials or materials containing ice or snow.
3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in design mixtures.

M. Hot-Weather Placement: Comply with ACI 301 (2020) and as follows when hot-weather conditions exist:

1. Cool ingredients before mixing to maintain concrete temperature below 90 deg F at time of placement. Chilled mixing water or chopped ice may be used to control temperature,

provided water equivalent of ice is calculated in total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.

2. Cover steel reinforcement with water-soaked burlap so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.
3. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

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 bleed-water 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.
2. See drawings for finish of vertical surfaces of stair cheek wall.

3.8 DETECTABLE WARNINGS

A. Install per Manufacturer’s written instructions.

3.9 CONCRETE PROTECTION AND CURING

A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures in accordance with IDOT SSRBC, adopted April 2016.

B. Concrete Curing Materials: Concrete curing materials shall be in accordance with IDOT SSRBC, adopted April 2016.

C. Protective Coat: Protective coat shall be in accordance with IDOT SSRBC, adopted April 2016.

D. Concrete Sealer: Concrete sealer shall be in accordance with IDOT SSRBC, adopted April 2016.

E. Comply with ACI 306.1 (2002) for cold-weather protection.

F. 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.

3.10 PAVING TOLERANCES

A. Comply with tolerances in ACI 117 (2015) and as follows:

1. Elevation: 3/4 inch.
2. Thickness: Plus 3/8-inch, minus 1/4 inch.
3. Surface: Gap below 10-foot- long, unleveled straightedge not to exceed 1/2 inch.

4. Lateral Alignment and Spacing of Dowels: 1 inch.
5. Vertical Alignment of Dowels: 1/4 inch.
6. Alignment of Dowel-Bar End Relative to Line Perpendicular to Paving Edge: 1/4 inch per 12 inches of dowel.
7. Joint Spacing: 3 inches.
8. Contraction Joint Depth: Plus 1/4 inch, no minus.
9. Joint Width: Plus 1/8 inch, no minus.

3.11 FIELD QUALITY CONTROL

A. Testing Agency: Contractor engage a qualified testing agency to perform tests and inspections.

B. Testing Services: Testing of composite samples of fresh concrete obtained according to ASTM C 172 (2017) shall be performed according to the following requirements:

1. Testing Frequency: Obtain at least one composite sample for each 100-cu. yd. or fraction thereof of each concrete mixture placed each day.

    a. When frequency of testing will provide 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 C 143/C 143M (2020); 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. Perform additional tests when concrete consistency appears to change.
3. Air Content: ASTM C 231 (2017), pressure method; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
4. Concrete Temperature: ASTM C 1064/C 1064M (2017); one test hourly when air temperature is 40 deg F and below and when it is 80 deg F and above, and one test for each composite sample.
5. Compression Test Specimens: ASTM C 31/C 31M (2019); cast and laboratory cure one set of three standard cylinder specimens for each composite sample.
6. Compressive-Strength Tests: ASTM C 39/C 39M (2020); test one specimen at seven days and two specimens at 28 days.

    a. A compressive-strength test shall be the average compressive strength from two specimens obtained from same composite sample and tested at 28 days.

C. Strength of each concrete mixture will be satisfactory if 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.

D. Test results shall be reported in writing to A/E, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.

E. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by A/E but will not be used as sole basis for approval or rejection of concrete.

F. Additional Tests: 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 A/E.

G. Concrete paving will be considered defective if it does not pass tests and inspections.

H. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

I. Prepare test and inspection reports.

3.12 REPAIRS 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 the A/E.

B. Drill test cores, where directed by the A/E, when necessary to determine magnitude of cracks or defective areas. Fill drilled core holes in satisfactory paving areas with Portland cement concrete bonded to paving with epoxy adhesive.

C. 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.

D. 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

SECTION 32 92 00

LAWNS AND SEEDING

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Seedbed preparation.
2. Turfgrass Seeding and Fertilization.
3. Maintenance.

B. Related Sections include the following:

1. Division 31: Earthwork.

1.2 SUBMITTALS

A. Installer Qualifications: Submit installer qualifications as noted under quality assurance.

B. Certification of Grass Seed: From seed vendor for each grass-seed monostand or mixture stating the botanical and common name and 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.

C. Qualification Data: For landscape installer.

D. Planting Schedule: Indicating anticipated planting dates for each type of planting.

E. Maintenance Instructions: Recommended procedures to be established by Owner for maintenance of lawns during a calendar year. Submit before expiration of required maintenance periods.

1.3 QUALITY ASSURANCE

A. Installer Qualifications, Turfgrass:

1. Installer must have a work record of at least ten (10) successful turf seeding projects similar to this project. Provide list and contact numbers for at least five (5) projects.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Seed: Deliver seed in original sealed, labeled, and undamaged containers. Store in a manner to prevent wetting and deterioration.

1.5 PROJECT CONDITIONS

A. Notification: Notify Owner's Representative at least 7 working days prior to the start of seeding operations.

B. Perform seeding work only after planting and other work affecting ground surface has been completed.

C. Restrict traffic from lawn areas until grass is established.

D. Provide hose and lawn watering equipment as required.

1.6 TURFGRASS WARRANTY

A. Provide a uniform stand of grass by watering, mowing, and maintaining seeded areas until final acceptance. Reseed areas, with specified materials, which fail to provide a uniform stand of grass until all affected areas are accepted by Owner's Representative.

1.7 SCHEDULING

A. Turf Grass seeding shall be performed in the fall of 2024.

PART 2 - PRODUCTS

2.1 SEED

A. Turfgrass Seed: Fresh, clean, and new-crop seed mixture.

1. Composed of the following varieties, mixed to the specified proportions by weight and tested to minimum percentages of purity and germination. Poa annua, bent grass, and noxious weed seed free.
2. Proportions by weight:

a.	Rugby Kentucky Bluegrass:	25%
b.	Ram I Kentucky Bluegrass:	25%
c.	Palmer Perennial Ryegrass:	10%
d.	Reliant II Creeping Red Fescue:	20%
e.	Scaldis Hard Fescue:	20%
f.	Ratio:	5 lbs/1000 sq. ft.

2.2 FERTILIZER

A. Slow-Release Fertilizer: Provide slow release commercial 11-9-4 fertilizer delivered to the site in bags. Labeled with the manufacturer's guaranteed analysis.

2.3 HERBICIDES

A. Selective Herbicides: EPA registered and approved, of type recommended by manufacturer for application.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas to receive lawn seeding. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.

3.2 TURFGRASS PREPARATION

A. Spread topsoil as required to provide a smooth seed bed.

B. Grade seed beds to remove all ridges and depressions, and to provide smooth, continuous, firm planes that ensure proper drainage.

C. Remove all rocks (>1”), soil lumps, sticks, and other deleterious material.

3.3 TURFGRASS PLANTING

A. Sow turfgrass seed at 5 lbs./1000 sq. ft. Seed may be broadcast and lightly raked, or slit-seeded at Contractor’s option. Either method shall require two passes at right angles to evenly distribute seed.

B. Promptly after seeding, wet seed bed thoroughly, and keep moist throughout germination period.

C. Fertilizer: Apply specified fertilizer at 20 lbs./1000 sq. ft. and rake lightly into soil.

D. Straw mulch seeded areas uniformly at a rate of 2 tons straw/acre. Mulch shall be mechanically crimped into soil with suitable equipment.

E. Protect turf areas from trampling until final completion.

3.4 SATISFACTORY TURFGRASS LAWN

A. Satisfactory Seeded Lawn: 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% over any 10 sq. ft. area, and bare spots not exceeding 5” x 5”.

B. Reestablish lawns that do not comply with requirements and continue maintenance until lawns are satisfactory.

3.5 LAWN MAINTENANCE

A. Begin maintenance immediately after each area is planted and continue until acceptable lawn is established.

B. Maintain and establish lawn by watering, fertilizing, weeding, mowing, trimming, replanting, and other operations. Roll, regrade, and replant bare or eroded areas and remulch to produce a uniformly smooth lawn.

C. Watering: Provide and maintain temporary piping, hoses, and lawn-watering equipment to convey water from sources and to keep lawn uniformly moist to a depth of 4 inches (100 mm).

D. Mow lawn as soon as top growth is tall enough to cut. Repeat mowing to maintain specified height without cutting more than 40 percent of grass height. Remove no more than 40 percent 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 grass to 2” high.

3.6 CLEANUP AND PROTECTION

A. Promptly remove soil and debris created by lawn work from paved areas. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.

B. Erect barricades and warning signs as required to protect newly planted areas from traffic. Maintain barricades throughout maintenance period and remove after lawn is established.

C. Remove erosion-control measures after grass establishment period.

END OF SECTION

ATTACHMENT A –
INSURANCE REQUIREMENTS

ATTACHMENT A.6
INSURANCE REQUIREMENTS
ROUTINE CONSTRUCTION, MAINTENANCE AND REPAIR PROJECTS

Contractor shall obtain insurance of the types and in the amounts listed below.

A. COMMERCIAL GENERAL AND UMBRELLA LIABILITY INSURANCE

Contractor shall maintain commercial general liability (CGL) and, if necessary, commercial umbrella insurance with a limit of not less than $1,000,000 each occurrence. If such CGL insurance contains a general aggregate limit, it shall apply separately to this project/location.

CGL insurance shall be written on Insurance Services Office (ISO) occurrence form CG 00 01 10 93, or a substitute form providing equivalent coverage, and shall cover liability arising from premises, operations, independent contractors, products-completed operations, personal injury and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract).

Owner shall be included as an insured under the CGL, using ISO additional insured endorsement CG 20 10 or a substitute providing equivalent coverage, and under the commercial umbrella, if any. This insurance shall apply as primary insurance with respect to any other insurance or self-insurance afforded to Owner.

There shall be no endorsement or modification of the CGL limiting the scope of coverage for liability arising from pollution, explosion, collapse, or underground property damage.

B. CONTINUING COMPLETED OPERATIONS LIABILITY INSURANCE

Contractor shall maintain commercial general liability (CGL) and, if necessary, commercial umbrella liability insurance with a limit of not less than $1,000,000 each occurrence for at least one (1) year following substantial completion of the work.

Continuing CGL insurance shall be written on ISO occurrence form CG 00 01 10 93, or substitute form providing equivalent coverage, and shall, at minimum, cover liability arising from products-completed operations and liability assumed under an insured contract.

Continuing CGL insurance shall have a products-completed operations aggregate of at least two times its each occurrence limit.

Continuing commercial umbrella coverage, if any, shall include liability coverage for damage to the insured's completed work equivalent to that provided under ISO form CG 00 01.

C. BUSINESS AUTO AND UMBRELLA LIABILITY INSURANCE

Contractor shall maintain business auto liability and, if necessary, commercial umbrella liability insurance with a limit of not less than $1,000,000 each accident. Such insurance shall cover liability arising out of any auto including owned, hired and non-owned autos.

Business auto insurance shall be written on Insurance Services Office (ISO) form CA 00 01, CA 00 05, CA 00 12, CA 00 20, or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage equivalent to that provided in the 1990 and later editions of CA 00 01.

D. WORKERS COMPENSATION INSURANCE

Contractor shall maintain workers compensation as required by statute and employers liability insurance. The commercial umbrella and/or employers liability limits shall not be less than $1,000,000 each accident for bodily injury by accident or $1,000,000 each employee for bodily injury by disease.

If Owner has not been included as an insured under the CGL using ISO additional insured endorsement CG 20 10 under the Commercial General and Umbrella Liability Insurance required in this Contract, the Contractor waives all rights against Owner and its officers, officials, employees, volunteers and agents for recovery of damages arising out of or incident to the Contractor's work.

E. GENERAL INSURANCE PROVISIONS

1. Evidence of Insurance. Prior to beginning work, Contractor shall furnish Owner with a certificate(s) of insurance and applicable policy endorsement(s), executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements set forth above.

All certificates shall provide for 30 days written notice to Owner prior to the cancellation or material change of any insurance referred to therein. Written notice to Owner shall be by certified mail, return receipt requested.

Failure of Owner to demand such certificate, endorsement or other evidence of full compliance with these insurance requirements or failure of Owner to identify a deficiency from evidence that is provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

Owner shall have the right, but not the obligation, of prohibiting Contractor or any subcontractor from entering the project site until such certificates or other evidence that insurance has been placed in complete compliance with these requirements is received and approved by Owner.

Failure to maintain the required insurance may result in termination of this Contract at Owner's option.

With respect to insurance maintained after final payment in compliance with a requirement above, an additional certificate(s) evidencing such coverage shall be promptly provided to Owner whenever requested.

Contractor shall provide certified copies of all insurance policies required above within 10 days of Owner's written request for said copies.

2. Acceptability of Insurers. For insurance companies which obtain a rating from A.M. Best, that rating should be no less than A VII using the most recent edition of the A.M. Best's Key Rating Guide. If the Best's rating is less than A VII or a Best's rating is not obtained, the Owner has the right to reject insurance written by an insurer it deems unacceptable.

3. Cross-Liability Coverage. If Contractor's liability policies do not contain the standard ISO separation of insureds provision, or a substantially similar clause, they shall be endorsed to provide cross-liability coverage.

4. Deductibles and Self-Insured Retentions. Any deductibles or self-insured retentions must be declared to the Owner. At the option of the Owner, the Contractor may be asked to eliminate such deductibles or self insured retentions as respects the Owner, its officers, officials, employees, volunteers and agents or required to procure a bond guaranteeing payment of losses and other related costs including but not limited to investigations, claim administration and defense expenses.

5. Subcontractors. Contractor shall cause each subcontractor employed by Contractor to purchase and maintain insurance of the type specified above. When requested by the Owner, Contractor shall furnish copies of certificates of insurance evidencing coverage for each subcontractor.

F. INDEMNIFICATION

To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner and the Architect and their officers, officials, employees, volunteers and agents from and against all claims, damages, losses and expenses including but not limited legal fees (attorney's and paralegal's fees and court costs), arising

out of or resulting from the performance of the Contractor's work, provided that any such claim, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or injury to or destruction of tangible property, other than the work itself, including the loss of use resulting therefrom and (2) is caused in whole or I part by any wrongful or negligent act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, except to the extent it is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this Paragraph. Contractor shall similarly protect, indemnify and hold and save harmless the Owner, its officers, officials, employees, volunteers and agents against and from any and all claims, costs, causes, actions and expenses including but not limited to legal fees, incurred by reason of Contractor's breach of any of its obligations under, or Contractor's default of, any provision of the Contract.

SAMPLE LIABILITY INSURANCE ENDORSEMENT

The following spaces preceded by an asterisk (*) need not be completed if this endorsement and policy have the same inception date.

ATTACHED TO AND FORMING PART OF POLICY NUMBER	*EFFECTIVE DATE OF ENDORSEMENT	*ISSUED TO

This endorsement changes the policy. Please read it carefully.

AUTOMATIC ADDITIONAL INSUREDS

The following provision is added to (SECTION II), Who Is An Insured.

5. Any entity you are required in a written contract (hereinafter called Additional Insured) to name as an insured is an insured but only with respect to liability arising out of your premises, "your work" for the Additional Insured, or acts or omissions of the Additional Insured in connection with the general supervision of "your work" to the extent set forth below.

a. The Limits of Insurance provided on behalf of the Additional Insured are not greater than those required by such contract.

b. The coverage provided to the Additional Insured(s) is not greater than that customarily provided by the policy forms specified in and required by the contract.

c. All insuring agreements, exclusions and conditions of this policy apply.

d. In no event shall the coverages or Limits of Insurance in this Coverage Form be increased by such contract.

Except when required otherwise by contract, this insurance does not apply to:

1) "Bodily injury" or "property damage" occurring after

a) All work on the project (other than service, maintenance or repairs) to be performed by or on behalf of the Additional Insured(s) at the site of the covered operations has been completed; or

b) That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

2) "Bodily injury" or "property damage" arising out of any act or omission of the Additional Insured(s) or any of their employees, other than the general supervision of work performed for the Additional Insured(s) by you.

3) "Property damage" to

a) Property owned, used or occupied by or rented to the Additional Insured(s);

b) Property in the care, custody or control of the Additional Insured(s) or over which the Additional Insured(s) is for any purpose exercising physical control; or

c) “Your work” for the Additional Insured(s).

With respect to Additional Insureds who are architects, engineers or surveyors, this insurance does not apply “bodily injury”, “property damage”, “personal injury” or “advertising injury” arising out of the rendering of or the failure to render any professional services by or for you, including:

a) The preparing, approving, or failing to prepare or approve maps, drawings, opinions, reports, surveys, change orders, designs or specifications; and

b) Supervisory, inspection or engineering services.

Any coverages provided hereunder shall be excess over any other valid and collectible insurance available to the Additional Insured(s) whether primary, excess, contingent or on any other basis unless a contract specifically requires that this insurance be primary or you request that it apply on a primary basis.

No person or organization is an Additional Insured with respect to the conduct of any current or past partnership or joint venture that is not shown as a Named Insured in the Declarations.

END OF ATTACHMENT A.6

ATTACHMENT B –
SOLICITATION AND HIRING FOR QUALIFYING CONSTRUCTION CONTRACTS & FORMS

- QUALIFYING CONSTRUCTION CONTRACTS POLICY
- SUMMARY SHEET
- CERTIFICATE OF EQUAL EMPLOYMENT OPPORTUNITY COMPLIANCE FOR CONTRACTORS & VENDORS
- WORKFORCE PROFILE AND INSTRUCTIONS
- COMPANY OWNERSHIP CERTIFICATION
- MINORITY/WOMEN OWNED CONTACT SHEET
- CONTRACTOR/SUBCONTRACTOR WORKFORCE PLAN
- APPENDIX A OF 44 ILL ADMIN CODE 750

SECTION III BUSINESS

5.00 SOLICITATION AND HIRING FOR QUALIFYING CONSTRUCTION CONTRACTS

.01 OBJECTIVE

The Peoria Park District Staff and Board believe that diversity and equity are central to our mission. Diversity of race, color, gender, disability, age, and culture in our employees and those we work with is important to fairly represent the same diversity in our community. The differing perspectives available from a diverse workforce are important to solving the complex problems of our community.

As one of the four pillars of the **Peoria Park District's 4-Pronged Approach to Equity** document, **Pillar #3** is to **Actively Promote and Encourage the Diversity, Equity and Inclusiveness of Peoria Park District funded Contractors and Suppliers**.

The Peoria Park District actively promotes and encourages maximum participation of minorities and women on Peoria Park District construction, procurement, and maintenance contracts to ensure that those we serve and those we work with look like the residents of our community.

This goal is established with the following objectives in mind:

(A) To ensure that construction contracts are awarded and administered in a nondiscriminatory manner;

(B) To meet the goals and requirements of the Illinois Human Rights Act ("Act") which requires that every party to a public contract and every eligible bidder shall refrain from unlawful discrimination and undertake affirmative action to assure equality of employment opportunity and eliminate the effects of past discrimination (775 ILCS 5/2-105(A)(1) and of the Illinois Administrative Code ("Code") which requires public contractors and subcontractors to determine if minority persons or women are underutilized in any job classification and, if such underutilization exists, to take appropriate affirmative action to rectify underutilization (44 Ill Admin Code 750.110 and 750.120);

(C) To promote the District's use of Minority-Owned and Women-Owned Businesses by removing barriers and encouraging a level playing field on which such businesses can compete fairly for construction contracts;

(D) To strive to increase capacity and participation of minority and women labor as well as Minority- Owned and Women-Owned Businesses for Peoria Park District construction projects; and

(E) To ensure that goals for Minority-Owned and Women-Owned Businesses are narrowly tailored in accordance with applicable law.

The Park Board recognizes that it is required to comply with applicable bidding laws, federal and state constitutions, statutes, and rules and regulations, as well as any applicable local ordinances.

.02 DEFINITIONS

For the purpose of this Policy, the terms set forth below shall have the following definitions:

"Minority Person" shall mean a person who is a citizen or lawful permanent resident of the United States and who is any of the following: (a) American Indian or Alaska Native (a person having origins in any of the original peoples of North and South America, including Central America, and who maintains tribal affiliation or community attachment); (b) Asian (a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, but not limited to, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam); (c) Black or African American (a person having origins in any of the black racial groups of Africa); (d) Hispanic or Latino (a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race); and (e) Native Hawaiian or Other Pacific Islander (a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands).

"Woman" shall mean a person who is a citizen or lawful permanent resident of the United States and who is of the female gender.

"Minority-Owned Business" means a business which is at least 51% owned by one or more minority persons, or in the case of a corporation, at least 51% of the stock in which is owned by one or more minority persons; and the management and daily operations of which are controlled by one or more of the minority individuals who own it.

"Women-Owned Business" means a business which is at least 51% owned by one or more women, or in the case of a corporation, at least 51% of the stock in which is owned by one or more women; and the management and daily operations of which are controlled by one or more of the women who own it.

"Qualifying Construction Contract"or "Qualifying Construction Contracts" means any any or all construction projects with an estimated total base cost of $50,000 or more.

"Responsible Bidder" means a person who has the capability in all respects to perform fully the contract requirements and who has the integrity and reliability that will assure good faith performance. Past performance may be considered as a part of this analysis. This further requires that the bidder is in compliance with the Act and Code.

"Responsive Bidder" means a person who has submitted a bid that conforms in all material respects to the invitation for bids.

"Subcontractor" includes any sub-subcontractors or any more remote contractors on the job.

Any definition above or herein that is not consistent with existing or subsequently added or amended provisions of the Act or Code shall be deemed modified to be consistent with the Act or Code. Any term used herein but not explicitly defined shall have the same meaning as in the Act or Code.

.03 PARTICIPATION GOALS AND AFFIRMATIVE STEPS

(A) Goals:

It is a goal of the Peoria Park District to ensure that the goals and provisions of the Act and Code are met and to encourage participation of minorities and women on Park District Qualifying Construction Projects.

Peoria Park District shall as permitted by law:

(1) endeavor to award not less than 20% of the total dollar amount of the Park District's Qualifying Construction Contracts to Minority-owned Businesses and not less than 5% of the total dollar amount of the Park District's Qualifying Construction Contracts to Women-owned Businesses ("Participation Goals"); and

(2) endeavor to ensure that a minimum of 20% of the total hours worked on any Qualifying Construction Contract are performed by Minority Persons and a minimum of 5% of the total hours worked are performed by Women ("Workforce Goals").

(B) Affirmative Steps:

Peoria Park District shall take the following affirmative steps to ensure that the aforesaid goals are met in respect to Qualifying Construction Projects:

1) Require that all contractors and subcontractors, as a part of their bid submission documents, provide information demonstrating that the contractor or subcontractor has examined all of its job classifications to determine if minority persons or women are underutilized in any classification, and if so, what affirmative action was taken to rectify that underutilization. (44 Ill Admin Code 750.110 (b) and 750.120);

2) Require that if a contractor or subcontractor hires additional employees in order to perform the contract or portion of the contract, it will determine the availability of minorities and women in the areas from which it might reasonably recruit and will hire for each job classification in a way that minorities and women are not underutilized (44 Ill Admin Code 750.110(c) and 120);

3) Include as a part of all contracts, and require as a part of all subcontracts, the Equal Opportunity Clause set forth in Appendix A of 44 Ill Admin Code 750;

4) Place qualified Minority-Owned and Women-Owned Businesses on solicitation lists;

5) Require that Minority-Owned and Women-Owned Businesses are solicited whenever they are potential sources, at varying sizes of projects;

6) Include in all advertisements for bid (legal notice in the Peoria Journal Star), "Bidders are also advised that contract documents for this project include the non-discrimination, equal opportunity and affirmative action provisions in the Human Rights Act and rules and regulations of

the Department of Human Rights. The Peoria Park District is an EEO organization and encourages participation by minority and female-owned firms."

7) Notify applicable plan rooms and diverse agencies which have specific outreach and contacts with local Minority-Owned Businesses or Women-Owned Businesses of current projects out for bid to encourage the broadest notification to Minority-Owned Businesses and Women-Owned Businesses;

8) Include in all bid documents, a current list of Minority-Owned and Women-Owned Businesses for general contractors to be able to contact;

9) Provide access to a website for free download ability of bid documents for all contractors, including Minority-Owned Businesses and Women-Owned Business;

10) When economically feasible and legally permissible, divide construction projects into smaller tasks or quantities to permit maximum participation by Minority-Owned and Women-Owned Businesses;

11) Establish project and delivery schedules, when feasible, that encourage participation by Minority-Owned and Women-Owned Businesses;

12) Provide the following documentation in staff recommendations to the Park Board: all contractors and agencies notified of the work, all contractors known to download the bid documents, all contractors that bid on the work, which contractors and subcontractors are minority or women owned; the racial, ethnic, and gender breakdown of the contractor and subcontractor workforce on the form provided by PPD; and whether the contractor or subcontractor has violated any law or ordinance, failed to follow any PPD policies, or breached any contract with the PPD in the past;

13) Track final statistics of Peoria Park District construction projects for Minority-Owned Businesses and Women-Owned Businesses and workforce participation numbers quarterly and annually;

14) Require the general contractor on Qualifying Construction Contracts, if subcontracts are to be let, to follow the Good Faith Effort requirements defined below.

Good Faith Effort is defined as follows:

A good faith effort means the contractor actively and aggressively sought participation by Minority-Owned and Women-Owned Businesses and/or employment of Minority Persons and Women and to meet all requirements of the Act and Code.

Evidence of good faith effort includes, as appropriate:

- Meeting the requirements of the Act and Code as set forth above on an ongoing basis .
- Based on the trades and availability of contractors required to complete the project, a

minimum of three minority/women owned firms must be contacted. The Park District's list of minority/women owned firms will be included in all bid documents.

- The bidder shall negotiate in good faith with the potential minority/women owned firms by not imposing any conditions which are not similarly imposed on all other subcontractors and suppliers, or by denying benefits ordinarily conferred on subcontractors or suppliers for the type of work for which bids were solicited. Minority and women owned businesses must be notified at least 3 business days prior to bid opening to allow adequate time to review and provide bid.

- On all Qualifying Construction Contracts, the bidder must complete and include in the bid, the **Minority/Women Owned Contact Sheet** form. This form will include name of companies contacted, the time and date companies were contacted, the method by which the companies were contacted, the response by the companies contacted, the area of work the companies were contacted about, and bid amounts received from the companies along with other comments.

- The low bidder shall provide to the Park District upon request, copies of all correspondence including without limitation, faxes, letters, text messages, and emails sent to minority/women owned firms.

- Assisting interested Minority-owned and Women-owned Businesses in obtaining bonding, lines of credit and insurance;

- Seeking services from available minority and women community organizations, contractors' groups, business assistance offices and other organizations, as appropriate, to provide assistance in recruiting Minority owned and Women-owned Businesses;

- Providing payroll records or other evidence showing the percentage of Minority Persons and Women employees;

- If a Minority-owned or Women-owned Business is rejected, providing sound reasons for rejection;

- Assisting interested Minority-owned and Women-owned Businesses in obtaining necessary equipment, supplies or materials;

- Placing qualified Minority-Owned and Women-Owned Businesses on solicitation lists;

- Ensuring that Minority-Owned and Women-Owned Businesses are solicited whenever they are potential sources, at varying sizes of projects; and

- When economically feasible and legally permissible, dividing construction projects into smaller tasks or quantities to permit maximum participation by Minority-Owned and Women-Owned Businesses

- All other good faith efforts or evidence of due diligence to meet the Park District's Workforce Goals;

.04 CONTRACT BID DOCUMENTS AND AWARD

The Park District shall include within the bid documents for each Qualifying Construction Contract:

(A) A copy of this policy (Section 5.00);

(B) An identification of what documents are required to be submitted as a part of the bid under this policy;

(C) Such documents as will assist in determining compliance with this policy (including without limitation, Company Ownership Form, EEO Form, Workforce Profile, Minority/Women Owned Contact Sheet, Contractor/Subcontractor Workforce Plan);

(D) A requirement that the contractor meet the Park District's Workforce Goals or provide evidence of a good faith effort toward meeting the goals;

(E) Appendix A of 44 Ill Admin Code 750;

(F) Notice that all subcontracts must make reference to and incorporate the provisions of this policy. To the extent a subcontract does not reference and incorporate the provisions of this policy, the contractor will be deemed in breach of contract and in violation of this policy, and shall be subject to the provisions of Section .05. below; and

(G) Such other documents as deemed appropriate.

Contracts will be awarded to the lowest Responsible and Responsive Bidder. Bids or proposals submitted without the required documentation identified in this policy are considered unresponsive and will be rejected.

.05 PROGRAM ADMINISTRATION

(A) The Executive Director or designee shall administer and enforce the provisions of this policy;

(B) The Park District Board, prior to voting on an applicable contract award, shall be provided information showing the bidder's compliance with this policy;

(C) The Executive Director or designee shall monitor, track, and report contractors' compliance with this policy over the contract duration to ensure compliance with this policy, including prompt reporting of potential violations to the DEIA Committee and Park District Board. The Park District Board, after five (5) days' notice to the contractor and allowing the

contractor to make a presentation to the Park District Board, shall make a final determination of whether a violation has occurred and what penalty or remedy should be imposed for such violation. Potential penalties or remedies include, but are not limited to, termination of any contract or subcontract, corrective action steps, PPD's contractual remedies, or that the PPD will not consider that contractor to be a responsible bidder, in accordance with Section 8-1(c) of the Park District Code, 70 ILCS 1205/8-1(c), until that contractor provides evidence of making a good faith effort toward meeting these goals, or any combination of penalties and remedies that the Board deems appropriate. The decision of the Park Board is final. The Park Board shall promptly report its decision to the DEIA Committee.

(D) The Executive Director or designee shall submit a quarterly report with statistics of Peoria Park District construction projects for Minority- Owned Businesses and Women-Owned Businesses and workforce participation numbers to DEIA Committee and to the Park Board for review; and

(E) The Executive Director or designee shall submit an annual report to the DEIA Committee and Park Board of final statistics of Peoria Park District construction projects for Minority-Owned Businesses and Women-Owned Businesses and workforce participation numbers.

SUMMARY SHEET
SOLICITATION AND HIRING FOR QUALIFYING CONSTRUCTION CONTRACTS
(Construction Projects of $50,000.00 or more)

1. **Goals**
   Bidder must meet Park District's goals stated below or provide evidence of good faith effort toward meeting the goals to be considered a Responsible and Responsive Bidder.

   - Not less than 20% of the total dollar amount of the Contract awarded to go to Minority-owned Businesses
   - Not less than 5% of the total dollar amount of the Contract awarded to go to Women-owned Businesses

   - Not less than 20% of total hours worked on the job to be by Minority Persons
   - Not less than 5% of total hours worked on the job to be by Women

   Prior to award, Bidder may be asked to attend a Park Board meeting to review goals and good faith efforts.

2. **Required bid documents**
   The following forms are required with each bid submission. Failing to submit the forms may result in the bid being non-responsive.

   - Bid Form
   - Subcontractors List
   - Certification of Compliance of Listed Provisions and Laws
   - W-9
   - Bid Bond
   - Company Ownership Certification
   - Certificate of Equal Employment Opportunity Compliance for Contractors and Vendors
   - Workforce Profile
   - Minority/Women Owned Contact Sheet
   - Contractor/Subcontractor Workforce Plan

3. **Required project administrative documents**
   - Signed Agreement Between Owner & Contractor
   - Labor & Material Bond and Performance Bond
   - Insurance
   - Proof of Certified Payroll submitted to IDOL
   - Lien Waivers
   - Contractor Affidavit
   - Contractor/Subcontractor Workforce Plan

4. **Notice to Subcontractors**
   All subcontracts must make reference to and incorporate the provisions of this Qualifying Construction Contracts Policy. To the extent a subcontract does not reference and incorporate the provisions of the policy, the contractor will be deemed in breach of contract and in violation of this policy, and shall be subject to penalties or remedies stated below.

5. **Violation & Penalties**
   During construction, not meeting self-stated goals listed on "Contractor/Subcontractor Workforce Plan" or "Minority/Women Owned Contact Sheet" shall appear to be a violation. This will result in the following:
   - Staff will notify contractor and request additional information and corrective action steps

- Staff will give notice to the Diversity, Equity, Inclusion, & Accessibility (DEIA) Committee and the Park District Board
- The Park District Board, after 5 days' notice to the contractor and allowing the contractor to make a presentation to the Park District Board, shall make a final determination of whether a violation has occurred and what penalty or remedy should be imposed for such violations
- Potential penalties or remedies include:
    - Corrective action steps
    - Termination of any contract or subcontract
    - PPD's contractual remedies
    - PPD will not consider that contractor to be a responsible bidder on future projects until contractor provides evidence of making a good faith effort toward meeting these goals, or any combination of penalties and remedies that the Board deems appropriate.

The decision of the Park Board is final.

Peoria Park District

Certificate of Equal Employment Opportunity Compliance for Contractors & Vendors

The Peoria Park District is an Equal Opportunity Employer and it agrees with each of the provisions below and requires that all suppliers, contractors, subcontractors, and vendors doing business with the Park District be Certified Equal Employment Opportunity Employers in compliance with the Illinois Human Rights Act and such regulations promulgated thereunder, and, that any and all suppliers, contractors, subcontractors or vendors who are found to be in non-compliance with the Illinois Human Rights Act or said regulations may be declared ineligible for future contracts with this Park District; and, that each and every supplier, contractor, subcontractor or vendor does at all times in connection with any dealings with this Park District agree as follows:

1) That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status or an unfavorable discharge from military service; and,

_____ ***Initial*** **further, that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any underutilization [44 Ill Admin Code 750.110(b)].**

2) That, if it hires additional employees in order to perform this contract or any portion of this contract, it will determine the availability (in accordance with the Illinois Department of Human Rights Rules and Regulations) of minorities and women in the areas from which it may reasonably recruit and it will hire for each job classification for which employees are hired in a way that minorities and women are not underutilized.

3) That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status or an unfavorable discharge from military service.

4) That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising the labor organization or representative of the contractor's obligations under the Illinois Human Rights Act and the Department's Rules and Regulations. If any labor organization or representative fails or refuses to cooperate with the contractor in its efforts to comply with such Act and Rules and Regulations, the contractor will promptly notify the Peoria Park District and will recruit employees from other sources when necessary to fulfill its obligations under the contract.

5) That it will submit reports as required by the Department's Rules and Regulations, furnish all relevant information as may from time to time be requested by the Department or the Peoria Park District, and in all respects comply with the Illinois Human Rights Act and the Department's Rules and Regulations.

6) That it will permit access to all relevant books, records, accounts and work sites by personnel of the Peoria Park District and the Department for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Department's Rules and Regulations.

7) That it will include verbatim or by reference the provisions of this clause in every subcontract awarded under which any portion of the contract obligations are undertaken or assumed, so that the provisions will be binding upon the subcontractor. In the same manner as with other provisions of this contract, the contractor will be liable for compliance with applicable provisions of this clause by subcontractors; and further it will promptly notify the Peoria Park District and the Department in the event any subcontractor fails or refuses to comply with the provisions. In addition, the contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

Failure to properly complete and sign this form, certifying that the Company will agree to the above provisions of the Illinois Human Rights Act as well as the items below will result in it being returned unprocessed thereby resulting in a delay or denial of eligibility to be awarded work with the Peoria Park District.

The Company certifies that it has a written sexual harassment policy meeting the Illinois Human Rights Act and Illinois Department of Human Rights requirements.

Company Name	Company Address
Signature of Company Official	Name / Title
Telephone Number & Fax Number	Email Address

WORKFORCE PROFILE

Job Classifications	Black Employees		White Employees		Hispanic Employees		Native American Employees		Asian Employees		Other Employees		TOTAL EMPLOYEES	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
1. Officials, Managers, Supervisors														
2. Professionals														
3. Technicians														
4. Sales														
5. Office/Clerical														
6. White Collar Trainees:														
7. Skilled Crafts:														
8. Apprentices:														
9. On-the-job Trainees:														
10. Semi-skilled														
11. Service Workers														
12. Unskilled														
TOTALS														

Company Name: _____

WORKFORCE PROFILE INSTRUCTIONS

RACE/ETHNIC IDENTIFICATION

WHITE (not of Hispanic origin): All persons having origins in any of the original peoples of Europe, North Africa, or the Middle East.

BLACK (not of Hispanic origin): All persons having origins in any of the Black racial groups of Africa.

HISPANIC: All persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.

ASIAN or PACIFIC ISLANDER: All persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands. This area includes, for example, China, India, Japan, Korea, the Philippine Islands, and Samoa.

NATIVE AMERICAN or ALASKAN NATIVE: All persons having origins in any of the original peoples of North America, and who maintain cultural identification through tribal affiliation or community recognition.

DESCRIPTION OF JOB CLASSIFICATIONS

OFFICIALS, MANAGERS, AND SUPERVISORS - Occupations requiring administrative personnel who set broad policies, and exercise over-all responsibility for the execution of these policies, and direct individual departments or special phases of a firm's operations. Includes: officials, executives, middle management, plant managers, department managers/superintendents, salaried foremen who are members of management, purchasing agents and buyers, and kindred workers.

PROFESSIONALS - Occupations requiring either college graduation or experience of such kind and amount as to provide a comparable background. Includes: accountants/auditors, airplane pilots and navigators, architects, artists, chemists, designers, dietitians, editors, engineers, lawyers, librarians, mathematicians, natural scientists, personnel and labor relations workers, physical scientists, physicians, social scientists, teachers, and kindred workers.

TECHNICIANS - Occupations requiring combination of basic scientific knowledge and manual skill which can be obtained through about 2 years of post high school education, such as is offered in many technical institutes and junior colleges, or through equivalent on-the-job training. Includes: drafters, engineering aids, junior engineers, scientific assistants, surveyors, technical illustrators, technicians (medical, dental, electronic physical sciences), and kindred workers.

SALES WORKERS - Occupations engaging wholly or primarily in direct selling. Includes: advertising agents/salespersons, insurance agents/brokers, real estate agents/brokers, stock and bond salespersons, demonstrators, salespersons and sales clerks, and kindred workers.

OFFICE AND CLERICAL WORKERS - Includes all clerical type work regardless of level of difficulty, where the activities are predominantly non-manual though some manual work not directly involved with altering or transporting the products is included. Includes: bookkeepers, cashiers, collectors (bills and accounts), messengers and office couriers, office machine operators, shipping and receiving clerks, stenographers, typist and secretaries, telegraph and telephone operators, and kindred workers.

WHITE COLLAR TRAINEES - Persons engaged in formal training for official, managerial, professional, technical, sales, office and clerical occupations.

SKILLED CRAFTS - Manual worker of relatively high skill level having a thorough and comprehensive knowledge of the processes involved in their work. Exercise considerable independent judgment and usually receive an extensive period of training. Includes: the building trades hourly paid foremen and leadmen who are not members of management, mechanics and repairmen, skilled machining occupations, compositors and typesetters, electricians, engravers, job setters (metal), motion picture projectionists, pattern and model makers, stationary engineers, tailors and tailoresses, and kindred workers.

APPRENTICES - Persons employed in a program including work training and related instruction to learn a trade or craft which is traditionally considered an apprenticeship, regardless of whether the program is registered with a Federal or State agency.

ON-THE-JOB TRAINEES - Persons engaged in formal training for craftsmen when not trained under apprentice programs; semi-skilled, unskilled and service occupations.

SEMI-SKILLED WORKERS - Workers who operate machine or processing equipment or perform other factory-type duties of intermediate skill level which can be mastered in a few weeks and require only limited training.

SERVICE WORKERS - Workers in both protective and non-protective service occupations. Includes: attendants (hospital and other institution, professional and personal service), barbers, charwomen and cleaners, cooks (except household), counter and fountain workers, elevator operators, fire fighters, guards, watchmen and doorkeepers, stewards, janitors, police officers and detectives, porters, waiters and waitresses, and kindred workers.

UNSKILLED WORKERS - Workers in manual occupations which generally require no special training. Perform elementary duties that may be learned in a few days and require the application of little or no independent judgement. Includes: garage laborers, car washers and greasers, gardeners (except farm) and groundskeepers, longshoremen and stevedores, lumbermen, craftsmen and wood choppers, laborers performing lifting, digging, mixing loading and pulling operations, and kindred workers.

PEORIA PARK DISTRICT

Company Ownership Certification

In compliance with Illinois Public Act 102-265, and Peoria Park District policy, disclosure of the information requested in this form is required by the Peoria Park District. Failure to properly complete and sign this form will result in it being returned unprocessed thereby resulting in a delay or denial of Company's eligibility to transact business with Peoria Park District.

Please answer all questions. Note, Company may answer "Yes" to more than one category.

- **Is the Company a Minority Owned Business?** ____ YES ____ NO
  Check One:
  ____ Company holds Certification for this classification, or
  ____ Company is self-certifying
- **Is the Company a Woman Owned Business?** ____ YES ____ NO
  Check One:
  ____ Company holds Certification for this classification, or
  ____ Company is self-certifying
- **Is the Company a Disability-Owned Business?** ____ YES ____ NO
  Check One:
  ____ Company holds Certification for this classification, or
  ____ Company is self-certifying
- **Is the Company a Veteran Owned Business?** ____ YES ____ NO
  Check One:
  ____ Company holds Certification for this classification, or
  ____ Company is self-certifying
- **Is the Company a Service Disabled Veteran Owned Business?** ____ YES ____ NO
  Check One:
  ____ Company holds Certification for this classification, or
  ____ Company is self-certifying

Does Company qualify as a small business under federal Small Business Administration? ____ YES ____ NO
https://www.sba.gov/document/support-table-size-standards

Please list the name(s) of the Company majority owner(s):_____

Does Company have any parent and/or subsidiary companies? ____ YES ____ NO

If yes, please list all companies: _____

_____

By signing this form, the Company and the individual signing below attest that the above questions have been answered truthfully, to the best of their knowledge.

_____ Company Name

_____ Company Address

_____ Signature of Company Official

_____ Name / Title

_____ Telephone Number & Fax Number

_____ Email Address

Rev. 5/2022

PEORIA PARK DISTRICT

Definitions for Company Ownership Certification

- Selected Classification of Owned Business means a business which is at least 51% owned by one or more persons of the selected ownership classification (i.e. minority, women, veteran, etc.), or in the case of a corporation, at least 51% of the stock in which is owned by one or more persons of the selected ownership classification; and the management and daily operations of which are controlled by one or more of the selected ownership classification individuals who own it.
- Control means the exclusive or ultimate and sole control of the business including, but not limited to, capital investment and all other financial matters, property, acquisitions, contract negotiations, legal matters, officer-director-employee selection and comprehensive hiring, operating responsibilities, cost-control matters, income and dividend matters, financial transactions and rights of other shareholders or joint partners. Control shall be real, substantial and continuing, no pro forma. Control shall include the power to direct or cause the direction of the management and policies of the business and to make the day-to-day as well as major decisions in matters of policy, management and operations. Control shall be exemplified by possessing the requisite knowledge and expertise to run the particular business and control shall not include simple majority or absentee ownership.
- Minority person shall mean a person who is a citizen or lawful permanent resident of the United States and who is any of the following:
  a) American Indian or Alaska Native (a person having origins in any of the original peoples of North and South America, including Central America, and who maintains tribal affiliation or community attachment).
  b) Asian (a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, but not limited to, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam).
  c) Black or African American (a person having origins in any of the black racial groups of Africa).
  d) Hispanic or Latino (a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race).
  e) Native Hawaiian or Other Pacific Islander (a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands).
- Woman shall mean a person who is a citizen or lawful permanent resident of the United States and who is of the female gender.
- Veteran means a person who (i) has been a member of the armed forces of the United States or, while a citizen of the United States, was a member of the armed forces of allies of the United States in time of hostilities with a foreign country and (ii) has served under one or more of the following conditions: (a) the veteran served a total of at least 6 months; (b) the veteran served for the duration of hostilities regardless of the length of the engagement; (c) the veteran was discharged on the basis of hardship; or (d) the veteran was released from active duty because of a service connected disability and was discharged under honorable conditions.
- Service-Disabled Veteran means a veteran who has been found to have 10% or more service-connected disability by the United States Department of Veterans Affairs or the United States Department of Defense.
- A Person with a Disability means a person who is a citizen or lawful resident of the United States and is a person qualifying as being disabled, meaning a person with a severe physical or mental disability that:
  a) results from: amputation, arthritis, autism, blindness, burn injury, cancer, cerebral palsy, Crohn's disease, cystic fibrosis, deafness, head injury, heart disease, hemiplegia, hemophilia, respiratory or pulmonary dysfunction, an intellectual disability, mental illness, multiple sclerosis, muscular dystrophy, musculoskeletal disorders, neurological disorders, including stroke and epilepsy, paraplegia, quadriplegia and other spinal cord conditions, sickle cell anemia, ulcerative colitis, specific learning disabilities, or end stage renal failure disease; and
  b) substantially limits one or more of the person's major life activities.

  Another disability or combination of disabilities may also be considered as a severe disability for the purposes of item (a) of this subdivision if it is determined by an evaluation of the rehabilitation potential to cause a comparable degree of substantial functional limitation similar to the specific list of disabilities listed in item (a) of this subdivision.
- Certification means a determination made by the Business Enterprise Council for Minorities, Women, and Persons with Disabilities, or by one delegated authority from the Council to make certifications, or by a State agency with statutory authority to make such a certification, that a business entity is a business owned by a minority, woman, or person with a disability for whatever purpose.

Minority/Women Owned Contact Sheet

Proof of Contact Efforts by General Contractor of MBE/WBE firms for the project

MBE/WBE Company Name	Minority Owned or Woman Owned?	Individual Contacted at MBE/WBE also date/time	Method of Contact & Information: Phone #, Fax #, Email	Response: (Provided Bid or No Bid?)	Area of Work	Comments: If Bid accepted, give $ amount. If Bid not accepted, give justification.

Company Name _____

Contractor/Subcontractor Workforce Plan

Initial Bid/Estimating Date: _____ Progress Reporting Date: _____

Check appropriate status:

_____ Contractor

_____ Subcontractor

Company Name: _____

Address: _____

Contact Person: _____ Phone: _____

Project: _____

Date Work Started: _____ Percent Complete: _____ %

Job Categories (by Trade)	Total Est. Hrs. (Bid)	# Crew (Head Ct.)	# Minority (Head Ct.)	# Female (Head Ct.)	Planned Minority Hrs.	Planned Female Hrs.	Actual Minority Hrs. to date	Actual Female Hrs. to date
Example: Carpenter	1,000	4	1	0	250	0		
Example: Painter	300	3	1	1	100	100		
Total								

Document Purpose:

This document is a tool to estimate the number and areas of work concerning minority and female labor hours anticipated on this job.

The apparent low bidder and their subcontractors listed on the bid documents shall submit this form within one week after bid opening to the Peoria Park District.

This tool is also a means of tracking the minority and female hours on this job. This document shall be attached to each invoice to show actual minority and female hours on this job.

Job Categories (by Trade)	*List of Workers Trade Name*
Total Est. Hrs. (Bid)	*Total hours of each of the trade listed*
# Crew (Head Ct.)	*Total crew head count of each of the trade listed*
# Minority (Head Ct.)	*Total Minority head count (it is subset of Total Crew #)*
# Females (Head Ct.)	*Total Female head count (it is subset of Total Crew #)*
Planned Minority Hrs.	*Planned Minority hours of each of the trade listed*
Planned Female Hrs.	*Planned Female hours of each of the trade listed*

Contractor/Subcontractor Workforce Plan (pg 2)
Anticipated Minority & Female Hours on the Job
Implementation Outline

Initial Bid/Estimating Date: _____

Job Categories (by Trade)	Month #1 or Payment #1	Month #2 or Payment #2	Month #3 or Payment #3	Month #4 or Payment #4	Month #5 or Payment #5	Month #6 or Payment #6	Month #7 or Payment #7
Example: Carpenter			XXXXXXXXX	XXXXXXXXX	XXXXXXXXX		
Example: Painter						XXXXXXXXX	XXXXXXXXX

Document Purpose:
This document is a tool to help the Park District anticipate when minority and women hours can be expected on the project to help ensure compliance of good faith efforts.

APPENDIX A OF 44 IL ADMIN CODE 750
EQUAL EMPLOYMENT OPPORTUNITY

In the event of the contractor's non-compliance with the provisions of this Equal Employment Opportunity Clause or the Act, the contractor may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and the contract may be cancelled or voided in whole or in part, and other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation. During the performance of this contract, the contractor agrees as follows:

1) That he or she will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status or an unfavorable discharge from military service; and, further, that he or she will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any underutilization.

2) That, if he or she hires additional employees in order to perform this contract or any portion of this contract, he or she will determine the availability (in accordance with this Part) of minorities and women in the areas from which he or she may reasonably recruit and he or she will hire for each job classification for which employees are hired in a way that minorities and women are not underutilized.

3) That, in all solicitations or advertisements for employees placed by him or her or on his or her behalf, he or she will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status or an unfavorable discharge from military service.

4) That he or she will send to each labor organization or representative of workers with which he or she has or is bound by a collective bargaining or other agreement or understanding, a notice advising the labor organization or representative of the contractor's obligations under the Act and this Part. If any labor organization or representative fails or refuses to cooperate with the contractor in his or her efforts to comply

with the Act and this Part, the contractor will promptly notify the Department and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations under the contract.

5) That he or she will submit reports as required by this Part, furnish all relevant information as may from time to time be requested by the Department or the contracting agency, and in all respects comply with the Act and this Part.

6) That he or she will permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency and the Department for purposes of investigation to ascertain compliance with the Act and the Department's Rules and Regulations.

7) That he or she will include verbatim or by reference the provisions of this clause in every subcontract awarded under which any portion of the contract obligations are undertaken or assumed, so that the provisions will be binding upon the subcontractor. In the same manner as with other provisions of this contract, the contractor will be liable for compliance with applicable provisions of this clause by subcontractors; and further it will promptly notify the contracting agency and the Department in the event any subcontractor fails or refuses to comply with the provisions. In addition, the contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

ATTACHMENT C –
DIRECTORY OF MINORITY & WOMEN OWNED BUSINESS ENTERPRISES

ATTACHMENT C
Directory of Minority & Women Owned Business Enterprises
Peoria Park District

Revised 3/2023

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3 Keys Construction Tray Keys	MBE Concrete, Roadway Patching, Retaining Walls, Landscaping, Storm Sewer 2314 Lehman Rd., Peoria, IL 61604 threekeysconstruction@yahoo.com	309-472-2721
Absolute Risk Management Strategies Kelly Peterson	MBE Construction Safety, Job Site Safety Plan Development, Job Site Risk Assessment, Construction OSHA Training 416 Main St., Suite 533, Peoria, IL 61602	309-256-8471 309-222-4050 Cell
Adams Septic & Sewer Services, Inc. Michelle Adams	WBE Septic and Sewer Contractor 1641 N. Tiber Ridge Ct., East Peoria, IL 61611	309-691-6113
Aerial Work Services Company	MBE Landscaping and Seeding 13805 Wadsworth Road, Wadsworth, IL	847-662-5321 847-662-5321 Fax
AFE Construction, Inc. Tommy and Monica Arbuckle	WBE/MBE General Contractor P.O. Box 10331, Peoria, IL 61612	309-473-8688 866- 491-2209 Fax admin@afeconstruction.net
A & L Salvage, Inc. Archie Brown	MBE Clean Up, Tree Cutting & Removal, Truck Salvaging 824 W. Brons Peoria, IL 61604	309-682-4412
Alexander Brothers Construction Co. Allester Alexander	MBE Concrete, Demolition, Excavation, Landscaping P.O. Box 1508, Peoria, IL 61605	309-673-6768 abrosconst@aol.com
Alexander & Sons Construction Leonard Alexander	MBE Driveways, Curbs, Foundations, Layouts, Sidewalks, etc. 2415 N. Linn Street, Peoria, IL 61604 Leonardalexander1467@yahoo.com	309-678-3004 773-628-9064 (cell)
Allworld Project Management LLC Ronnie Foster Jr.	MBE Highway, Street & Bridge Construction, Water & Sewer Line and Related Construction, Landscaping, Civil Engineering 415 South Front Street, Suite 121, Memphis, TN 38103 procurement@allworldmail.com	901-881-2985
A. Lucas & Sons Steel Margaret Hanley	WBE Structural Steel Fabrication 1328 SW Washington, Peoria, IL 61602	309-673-8547 309-673-7213 Fax Margaret@alucasiron.com
Ambri Inc. Robert J. Hunt. Jr.	MBE Drywall, Flooring, Painting, Cabinetry 9101 S. Nashville Ave., Oak Lawn, IL 60453	708-233-0217 Ph/ Fax
A Unique Maintenance Service Andrea McKnight	MBE Commercial and Industrial Construction Cleanup 1215 N. Sheridan Road, Suite A, Peoria, IL 61606	309-637-4400 309-637-1300 Fax 309-453-3393 Cell
Black Squirrel Services Inc. Aaron Watkins and Joshua Wessels	MBE Skid Steer, Landscaping, Blacktop, Striping, Sealcoating Crack Filling, Crack Routing & Concrete 2037 N. Aspen Road, Peoria, IL 61604	309-369-7817 blacksquirrel@yahoo.com
BMI Contractors & Assoc. Sammy Hobson	MBE Excavation, Concrete 1123 MacQueen., Peoria, IL 61604 bmicontractorsandassociates@comcast.net	309-657-4469 Ph 309-713-1569 Fax
BOWA Group, The Lee Fantroy	MBE General 7050 S. Stony Island Ave, Chicago, IL 60649	312-238-9899 603-388-1071 Fax lfantroy@thebowagroup.com
Braun Excavating, Inc. Teresa Braun	WBE Demolition, Digging of Footings, Excavation, Pipe Laying 24 Gulf Stream, Bartonville, IL 61607	309-697-5454 309-697-6567 Fax
Brown, Leo Trucking, Inc. Leo Brown	MBE Trucking/Hauling P. O. Box 9057, Peoria, IL 61612	309-685-6710 309-685-0759 Fax
Buddy's Landscaping Dexter Davis	MBE Landscaping P. O. Box 1836, Bloomington, IL 61702	309-824-9211 309-454-3342 Fax Dexterdavis2@aol.com

Built United John Sutherland	MBE General Contractor	309-699-9191
Burnside Brothers Construction Terry Burnside	MBE Landscaping, General Construction 3563 SW Adams, Peoria, IL 61605	309-922-9390
C and G Concrete Construction Co. Inc. Patricia Slusher	WBE Concrete Rodney@cngconcrete.com	309-699-0384 309-699-6922 Fax 309-208-2646 Cell
CAD Construction	WBE General Contractor	309-925-2092
Capitol Trucking Eddie Washington	MBE Trucking, Snow Removal 2803 Creston Lane, Peoria, IL 61604	309-339-5313
Central IL Construction Inc. Jessica Youngman	WBE Land Surveying 416 Germantown Rd., Germantown, IL 61548	309-383-3156
Central IL Consulting Jessica Youngman	WBE Land Surveying 416 Germantown Rd., Germantown, IL 61548	309-383-3156 youngman@mtco.com
Central IL Rebar Insulators Roger Fleming	MBE Structural Steel and Rebar Replacement 4719 Ridgelawn Place, Peoria, IL 61615	309-258-1379 888-387-5716 Fax 309-258-1379 Cell
Central Landscaping Donna Brandenburg	WBE Seeding, Landscaping 12512 Mendell Rd., Princeville, IL 61559	309-385-4832 309-385-2644 Fax
CJL Landscaping, Inc. Rebecca J. Kelch	WBE Landscaping 10902 W. U. S. Highway 150, Brimfield, IL 61517	309-691-9200 309-691-5131 Fax Meinders_81@yahoo.com jrdoering@att.net
Clevenger Contractors Inc. Verlee Clevenger Misty L. Daham	WBE Guardrail, Bridge Rail, Seeding, Fencing 355 Naples Rd., P.O. Box 19, Bluffs, IL 62621	217-754-3411 217-754-3537 Fax clever@irtc.net
CNS Forestry & Landscaping LLC Christine Schilling	WBE Landscaping, Seeding, Sodding, Tree Removal 1813 1000th St., Lincoln, IL 62656	217-792-3808 217-792-3808 Fax
Concrete to Perfection Elonda Whitfield	WBE/MBE Designs on Concrete concretetoperfection@gmail.com	309-681-9508
Cordova Construction Tina Christopher	WBE Concrete Removal, Curb & Gutter Removal, Sidewalk Removal 2424 N. Ellory Road, Peoria, IL 61615	309-674-8810 309-208-3448 Cell
Cornerstone Builders & Developers Ron Touilly	WBE 6129 W. Southport Rd., Peoria, IL 61615	309-674-9000 309-673-7783 Fax
Creative Touch Painting Chris Ridge	MBE Painting Exterior/Interior 3318 N. Isabell Ave., Peoria, IL 61604	309-229-1253 309-643-7400 Cell info@creativetouchpnt.com
CSS (Construction Specialties & Services) Dave Suzuki	MBE Building Specialties, Design, Engineering, Estimating P. O. Box 120703 Peoria, IL 61614	309-685-8453
CWG Inc. Teresa Gustafson	WBE Demolition, Excavation, Trucking 24635 Cooper Rd., Morton, IL 61550	309-208-5461 Cell 309-208-8899 Cell tgusdesigns@yahoo.com
Davis Brothers Construction Company Russell Davis	MBE Trucking/Hauling 1522 W. Kettelle St. Peoria, IL 61605	309-683-6931
DECA Realty Eddie J. Washington	MBE Real Estate Broker, Appraiser 417 W. Main, Peoria, IL 61606	309-637-3322 309-682-3922 Fax
Design Air Inc. Courtney Eston	MBE Commercial Air Duct Cleaning 3806 W. Hearthwood Dr., Dunlap, IL 61525	309-693-8632 309-243-2102 Fax
Dunbar Transfer	WBE Trucking P.O. Box 315, Chillicothe, IL 61523-0315	309-303-5122
E & D Trucking and Hauling, Inc. Eddie Proctor	MBE Trucking/Hauling 1913 N. Idaho, Peoria, IL 61604	309-682-4336 309-251-6736 Cell

E. Davis Trucking Company Eric Davis	MBE Trucking edavistrucking@gmail.com	309-648-1450
Earth Care Unlimited, Inc. Monica Thornley	WBE Landscaping, Seeding, Sodding 3108 Panther Grove Rd, Ashland, IL 62612	217-452-7370 217-414-4321
Fire & Ice Heating and Air J.T. Toombs	MBE HVAC Maintenance, Installment 922 W. Smith St., Peoria, IL 61605	309-219-3708
Flessner Electric	WBE Electrical 3600 S. Cameron Ln., Mapleton, IL 61547	309-697-2484
Foster-Jacob Electric Emily Rudesill	WBE Electrical 826 W. Main St., Peoria, IL 61606	309-674-8129 309-674-6890 Fax emilyj@fosterjacob.com
Fuhrmann Engineering Inc. Kathy Shelter	WBE Civil Engineers / Land Surveyors 456 Fulton St., Suite 146	309-713-3498 Ext. 5
Garza Heating & Cooling	MBE HVAC 1304 S. Western Ave., Peoria, IL 61605	309-645-6294
Get Current Electrical Serv. Richard Rhodes	MBE Electrical 4210 N. Northbrook Ct. Richard_rhodes2001@yahoo.com	309-989-7931
Ronald A. Givens & Associates Ronald A. Givens	MBE Insurance & Investments 2616 N. Lehman, Peoria, IL 61602	309-685-4588 309-676-3152 Fax
GIVSCO Construction Ronald Givens	MBE General Contractor 2321 Lakeshore Dr., Pekin, IL 61554	309-620-9127 info@givsco.com
Gutters & More	WBE 157 Thunderbird Ln., East Peoria, IL 61611	309-694-4000 309-694-3356 Fax
Hancock Trucking, Inc. Nancy Hancock	WBE Trucking/Hauling 30570 Hancock Road Mackinaw, IL 61755	309-447-6733
Hanley Steel, Inc. Jill Hanley	WBE Fabricated Structural and Miscellaneous Steel 8811 N. Industrial Rd., Peoria, IL 61615	309-692-5250 309-692-5251 Fax
Heart Technologies Jim Bainter, Brad Armstrong	WBE Data and Telephone, Communication and Construction 3105 N. Main Street, Peoria, IL 61611	309-427-7000 309-427-7007 Fax
Hermann & Associates Alisha Hermann	WBE Consultant Engineering 5835 N. Galena Rd., Peoria, IL 61614	309-687-5566 309-687-0571 Fax
Horan Construction, Inc. Susan Arnholt	WBE Carpentry, Concrete, Demolition, General, Wrecking 1720 W. Chanute Road Peoria, IL 61615	309-691-3133 309-691-1841 Fax
Illinois Mechanical Service & Design Beth Ward	WBE HVAC P.O. Box 10494, Peoria, IL 61612	309-713-3640 309-274-6941
Infrastructure Engineering	MBE Civil Engineering 456 Fulton St., Suite 104, Peoria, IL 61602	309-637-9200 309-637-9210
Intech Innovations John McCrary	WBE Audio/Video Design and Integration Washington, IL 61571	309-370-6676 309-745-9691 Fax
Interlock Brick Paving Chris Joos	WBE Hardscaping, Landscaping, Excavating P.O. Box 6, Morton, IL 61550 chris@interlockbrickpaving.com	309-696-9264
JC Construction Frank Coates	MBE General 1810 Stever, Peoria, IL 61605	309-303-3919 Cell
JAKS Construction Inc John Spencer	Disabled Vet Full Service Concrete Cutting, Drilling & Sealing 19319 Great Crane Road, Bloomington, IL 61705	800-455-9662 309-455-9662 Fax 309-846-6382 Cell jaksinc@live.com
J & K Construction James Tillman	MBE General 4003 N. Rochelle, Peoria, IL 61615	309-685-8554 309-685-8554 Fax 309-264-3903 Cell j&kconst@comcast.net

J & J Construction Herman Johnson	MBE Concrete Removal, Curb & Gutter Removal, Demolition 1300 W. Aiken Avenue, Peoria, IL 61605	309-657-9228 309-676-8292 Fax 309-657-9228 Cell
JM Industrial Supply Ron Given	MBE Maintenance Items, Tools, Soaps 2323 Lakeshore, Pekin, IL 61554	309-346-5796 309-347-5100 Fax
Jones Electrical Contractors, Inc. Ronald Jones	MBE Electrical	309-339-7690 rj@joneselectricalco.com
Kahbeah Contracting & Trucking Larry Kahbeah	MBE Trucking/Hauling 510 N. Yates, P. O. Box 56, Tallula, IL 62688	217-634-4157 217-634-4157 Fax
Kelley Ironworks Tania Hoerr	WBE Fencing and Ironwork 4303 N Main Street, East Peoria, IL 61611 tania@kelleyiron.com	309-697-9870 309-697-9871 Fax 309-208-5207 Cell
Kerry Brown Trucking Leo K. Brown	MBE Tandem, Semi Dump, General Hauling Peoria, IL	309-251-6089 Cell leok.brown1957@gmail.com
Kreiling Roofing Co.	WBE Slate, Wood Shakes, Tile, Thatch, Custom Fabricated Copper and Steel, Residential and Commercial 2335 W. Altorfer Dr., Peoria, IL 61615	309-673-3649 309-692-2504 Fax 309-397-7747 Cell lmoore@kreiling.com
Leo Brown Trucking Inc Leo Brown	MBE Trucking PO Box 9057, Peoria, IL 61612	309-685-6710 309-685-0759 Fax 309-303-7111 Cell
LIZZ Trucking & Hauling Brandon Hines	MBE Trucking/Hauling lizztrucking@yahoo.com	309-208-5942
LNR Construction & Trucking Demonte Davis Lavael Randle Sr.	MBE Concrete, Trucking 2200 N. Linsley St., Peoria, IL 61605	309-682-6331 309-682-6331 Fax 309-678-3314 Cell
LV Enterprise John L. Palmer	MBE Trucking/Hauling 303 E. Archer Avenue, Peoria, IL 61603	309-657-2420 309-682-8872 Fax
M & A Plumbing Michael Abner	MBE Plumbing 6216 N. Devonshire Avenue, Peoria, IL 61615	309-689-0133 309-689-0133 Fax
M&K Heating & Cooling Reggie Williams	MBE HVAC 2406 W. Newman Parkway, Peoria, IL 61604	309-256-6129
M & L Plumbing Manzell Lawson	MBE Plumbing 1309 W. Lincoln, Peoria, IL 61605	309-674-8466
McGinnis Transportation Beth McGinnis	WBE Trucking, Tandem, 24" Box Truck 336 Riverview Drive, Creve Coeur, IL 61610	309-369-4465 309-694-1604 Fax
Michlyn Corporation Fred Danage	MBE Concrete, Landscaping, Lead Based Paint Abatement P.O. Box 5895, Peoria, IL 61601	309-829-2115 309-303-1561 Cell macdanage@yahoo.com
Mid-Illinois Companies, Corp. Debra Young	WBE Metal Framing, Insulation, Drywall, Plaster and Exterior Insulation, Acoustical Ceilings and Wall Panels, Painting and Wall Covering, Access Flooring 905 NE Adams St., Peoria, IL 61603	309-674-0717 309-674-5802 Fax dyoung@mic123.com
Midwest Construction Services Sheila Shover	M/WBE Traffic Control Products, Trucking/Hauling P. O. Box 4185, Bartonville, IL 61607	309-697-1000 309-697-1004 Fax
Millennia Professional Services of IL Paul Moreno	MBE Civil Engineering, Erosion Control, Landscaping, Sewer Construction, Surveying, Retaining Walls 850 N. Main St., Morton, IL 61550	309-321-8141 309-321-8142 Fax 309-303-8428 Cell pmoreno@mps-il.com
Molleck Electric	WBE Electrical 14926 W. Winchester Dr., Brimfield, IL 61517	309-446-3483
Montefusco Heating Sheet Metal Lisa Rhoades	WBE HVAC 2200 W. Altorfer Dr. D, Peoria, IL 61615	309-306-7040 lisa@montefuscohvac.com

N.E. Rudd Trucking Nanette E Jenkins-Rudd	WBE Excavating, Hauling, Asphalt, Dirt, Gravel, Sand Milling ; Dumps and Tandems PO Box 14, Kingston Mines, IL 61539	309-389-4150 309-389-2849 Fax 309-360-7986 Cell
Peoria Metro Construction	WBE General Contractor	309-671-1466
Porter, V. L. Vincent Porter	MBE Concrete, General 500 W. North, Suite 10, Springfield, IL 62704	217-744-8050
Prairie Engineers of Illinois PC Colleen Ayars	WBE Civil Engineering, Surveying ,Environmental Consulting 926 SW Adams Street, Suite 120, Peoria, IL 61602 www.prairieengineers.com	309-839-2642 217-718-4764 Fax
Reign Construction Bridget Booker	WBE/MBE Iron Worker 801 W. Main St., Suite A118, Peoria, IL 61606 bridget@reignconstructioninc.com	309-495-7982 309-495-7996 Fax 309-750-4846 Cell
RNS Electric Inc. Regina Slonneger	WBE Electrical 28558 Irish Lane, Washington, IL 61571	309-444-5200 309-444-5201 Fax
Rudd Trucking Nanette Jenkins-Rudd	WBE Trucking/Hauling P.O. Box 14, 107 Washington St., Kingston Mines, IL 61539	309-389-4150 309-389-2849 Fax
Rufus Construction Company Rufus Nelson	MBE Painting, Roofing, Remodeling 1819 S. Idaho Street, Peoria, IL 61605	309-673-6776 309-497-9453 Cell
Searle Trucking, Inc. Debbie Searle	WBE Trucking/Hauling P. O. Box 1084, Peoria, IL 61653	309-686-0708 309-688-5365 Fax
Serenity Electric	MBE Electrical PO Box 6521, Peoria, IL 61601 jamesltaylor1955@yahoo.com	309-363-5067 309-363-5067 Cell
Sherwin Baker & Associates Inc. Sherwin Baker	MBE Engineering Technical Service, Construction Management 103 E. Archer, Peoria, IL 61603	309-688-4203 309-682-4203 Fax 309-678-2897 Cell sherwin_baker@yahoo.com
Standard Heating & Cooling	WBE HVAC	309-671-5417
Tabitha Ventures, Inc. Edward O. Taiwo	MBE Asphalt, Concrete, Demolition, Earthwork, Electrical, Excavation, General, HVAC, Landscaping, Painting, Plumbing, Resurfacing, Roofing, Trucking/Hauling 100 N. Main Street, Suite 203, East Peoria, IL 61611	309-692-1473 309-692-1564 Fax information@tabithainc.com
TEMCO Heating & AC Ellen Robinson	WBE Heating & AC 913 Laramie St. Peoria, IL 61605	309-637-7746
The Communication Connection Jennifer Stone	WBE Communication, Wire and Cable, Electrical and Telephone Prod. 604 Filmore Street Harrisburg, PA 17104	717-561-7267
Third Hand Landscaping Tommy Harris	MBE Landscaping 2313 W. Lincoln, Peoria, IL 61605	309-673-6702
Three Cross Development J. T. Donelson	MBE Concrete, General, Sidewalk 1519 W. Millman Peoria, IL 61605	309-637-1238
Thompson Brothers Inc. Todd Thompson	MBE General Carpentry and Construction, Interior Finish Work, Millwork 221 Court St., Pekin, IL 61554	309-613-0254
Thornton Rave dba Illini Concrete Co. of Illinois	MBE Precast and Prestressed Concrete, Demolition, Excavating and Grading, Drainage, Aggregate Bases and Surfaces, Pavement Patching 929 E. Grove St., Suite A, Bloomington, IL 61701	309-585-2376 309-585-2472 Fax 309-706-9213 Cell thorntonrave01@gmail.com
Tillman Electric James Tillman	MBE Electrical 4003 N. Rochelle, Peoria, IL 61615	309-685-8554 309-264-3903 Cell
Willie Veneble Construction Willie Venable	MBE Construction, Concrete Removal, Demolition 1000 E. Wilcox, Peoria, IL 61605	309-686-1429 309-360-0757 Cell
Willis Electric Phyllis Willis	WBE Electrical P.O. Box 545, Chillicothe, IL 61523	309-579-2926

ATTACHMENT D –
PREVAILING WAGES FOR PEORIA COUNTY – ILLINOIS DEPARTMENT OF LABOR

Peoria County Prevailing Wage Rates posted on 8/15/2024

						Overtime										
Trade Title	**Rg**	**Type**	**C**	**Base**	**Foreman**	**M-F**	**Sa**	**Su**	**Hol**	**H/W**	**Pension**	**Vac**	**Trng**	**Other Ins**	**Add OT 1.5x owed**	**Add OT 2.0x owed**
ASBESTOS ABT-GEN	All	BLD		34.50	36.00	1.5	1.5	2.0	2.0	8.70	22.90	0.00	0.80	0.00	2.17	4.34
ASBESTOS ABT-GEN	All	HWY		36.45	37.95	1.5	1.5	2.0	2.0	8.70	26.92	0.00	0.80	0.00	3.81	7.62
ASBESTOS ABT-MEC	All	BLD		33.43	37.19	1.5	1.5	2.0	2.0	15.84	14.47	0.00	0.90		2.33	4.66
BOILERMAKER	All	BLD		43.54	46.54	1.5	1.5	2.0	2.0	7.07	24.29	0.00	2.18	0.00	16.38	32.76
BRICK MASON	All	BLD		39.30	41.66	1.5	1.5	2.0	2.0	12.20	14.75	0.00	1.05		0.00	0.00
CARPENTER	All	BLD		38.07	40.82	1.5	1.5	2.0	2.0	9.70	21.79	0.00	0.80	0.00	15.75	31.49
CARPENTER	All	HWY		39.97	42.22	1.5	1.5	2.0	2.0	9.70	24.00	0.00	0.77	0.00	0.00	0.00
CEMENT MASON	All	BLD		34.31	36.06	1.5	1.5	2.0	2.0	9.00	23.22	0.00	0.83		0.00	0.00
CEMENT MASON	All	HWY		37.31	39.31	1.5	1.5	2.0	2.0	9.00	23.02	0.00	0.77	0.00	0.00	0.00
CERAMIC TILE FINISHER	All	BLD		36.13		1.5	1.5	2.0	2.0	12.20	14.75	0.00	1.04		0.00	0.00
ELECTRIC PWR EQMT OP	All	ALL		55.13	65.42	1.5	1.5	2.0	2.0	8.90	15.43	0.00	0.55	0.00	0.00	0.00
ELECTRIC PWR GRNDMAN	All	ALL		37.46	65.42	1.5	1.5	2.0	2.0	8.37	10.49	0.00	0.37	0.00	0.00	0.00
ELECTRIC PWR LINEMAN	All	ALL		61.36	65.42	1.5	1.5	2.0	2.0	9.09	17.18	0.00	0.61	0.00	0.00	0.00
ELECTRIC PWR TRK DRV	All	ALL		39.31	65.42	1.5	1.5	2.0	2.0	8.43	11.01	0.00	0.39	0.00	0.00	0.00
ELECTRICIAN	All	BLD		41.80	45.30	1.5	1.5	2.0	2.0	9.00	15.50	0.00	0.90		0.00	0.00
ELECTRONIC SYSTEM TECH	All	BLD		33.47	36.47	1.5	1.5	2.0	2.0	8.56	13.82	0.00	0.40		0.00	0.00
ELEVATOR CONSTRUCTOR	All	BLD		55.57	62.52	2.0	2.0	2.0	2.0	16.17	20.96	4.45	0.75		0.00	0.00
GLAZIER	All	BLD		39.74	41.74	1.5	1.5	1.5	2.0	15.27	11.21	0.00	1.30	0.00	0.00	0.00
HEAT/FROST INSULATOR	All	BLD		45.91	48.66	1.5	1.5	2.0	2.0	15.84	16.71	0.00	0.90		3.45	6.90
IRON WORKER	All	BLD		37.35	39.25	1.5	1.5	2.0	2.0	12.31	19.76	0.00	0.86	0.00	0.00	0.00
IRON WORKER	All	HWY		44.14	46.14	1.5	1.5	2.0	2.0	12.31	19.76	0.00	1.11	0.00	0.00	0.00
LABORER	All	BLD		32.50	34.00	1.5	1.5	2.0	2.0	8.70	22.90	0.00	0.80	0.00	2.17	4.34
LABORER	All	HWY		35.70	37.20	1.5	1.5	2.0	2.0	8.70	26.92	0.00	0.80	0.00	3.81	7.62
LABORER, SKILLED	All	BLD		32.90	34.40	1.5	1.5	2.0	2.0	8.70	22.90	0.00	0.80	0.00	2.17	4.34
LABORER, SKILLED	All	HWY		36.00	37.50	1.5	1.5	2.0	2.0	8.70	26.92	0.00	0.80	0.00	3.81	7.62
LATHER	All	BLD		38.07	40.82	1.5	1.5	2.0	2.0	9.70	21.79	0.00	0.80	0.00	15.75	31.49
MACHINERY MOVER	All	HWY		44.14	46.14	1.5	1.5	2.0	2.0	12.31	19.76	0.00	1.11	0.00	0.00	0.00

Peoria County Prevailing Wage Rates posted on 8/15/2024

MACHINIST	All	BLD		58.39	62.39	1.5	1.5	2.0	2.0	9.93	8.95	1.85	1.47		0.00	0.00
MARBLE FINISHER	All	BLD		36.13		1.5	1.5	2.0	2.0	12.20	14.75	0.00	1.04		0.00	0.00
MARBLE MASON	All	BLD		39.71	42.09	1.5	1.5	2.0	2.0	12.20	14.75	0.00	1.06		0.00	0.00
MILLWRIGHT	All	BLD		37.25	40.00	1.5	1.5	2.0	2.0	9.70	22.98	0.00	0.80	0.00	16.34	32.68
MILLWRIGHT	All	HWY		41.00	43.25	1.5	1.5	2.0	2.0	9.70	23.62	0.00	0.77	0.00	0.00	0.00
OPERATING ENGINEER	All	BLD	1	46.67	49.67	1.5	1.5	2.0	2.0	12.60	24.15	0.00	3.60	0.00	0.00	0.00
OPERATING ENGINEER	All	BLD	2	43.14	49.67	1.5	1.5	2.0	2.0	12.60	24.15	0.00	3.60	0.00	0.00	0.00
OPERATING ENGINEER	All	BLD	3	37.36	49.67	1.5	1.5	2.0	2.0	12.60	24.15	0.00	3.60	0.00	0.00	0.00
OPERATING ENGINEER	All	HWY	1	46.67	49.67	1.5	1.5	2.0	2.0	12.60	24.15	0.00	3.60	0.00	0.00	0.00
OPERATING ENGINEER	All	HWY	2	43.14	49.67	1.5	1.5	2.0	2.0	12.60	24.15	0.00	3.60	0.00	0.00	0.00
OPERATING ENGINEER	All	HWY	3	37.36	49.67	1.5	1.5	2.0	2.0	12.60	24.15	0.00	3.60	0.00	0.00	0.00
PAINTER	All	ALL		41.00	43.00	1.5	1.5	1.5	2.0	14.53	11.87	0.00	1.40	0.00	0.00	0.00
PAINTER - SIGNS	All	BLD		45.49	51.09	1.5	1.5	2.0	2.0	8.20	16.81	0.00	0.00	0.00	0.00	0.00
PILEDRIVER	All	BLD		40.07	42.82	1.5	1.5	2.0	2.0	9.70	21.79	0.00	0.80	0.00	15.75	31.49
PILEDRIVER	All	HWY		40.97	43.22	1.5	1.5	2.0	2.0	9.70	24.00	0.00	0.77	0.00	0.00	0.00
PIPEFITTER	All	BLD		41.10	45.62	1.5	1.5	2.0	2.0	9.45	16.74	0.00	1.40		0.00	0.00
PLASTERER	All	BLD		33.00	35.00	1.5	1.5	2.0	2.0	9.00	23.85	0.00	0.98		0.00	0.00
PLUMBER	All	BLD		38.80	42.29	1.5	1.5	2.0	2.0	9.45	17.98	0.00	1.45	0.00	0.00	0.00
ROOFER	All	BLD		36.00	40.50	1.5	1.5	2.0	2.0	10.75	13.04	0.00	0.30	0.00	0.00	0.00
SHEETMETAL WORKER	All	BLD		39.50	41.48	1.5	1.5	2.0	2.0	11.82	19.98	0.00	1.26	0.00	0.00	0.00
SIGN HANGER	All	HWY		44.14	46.14	1.5	1.5	2.0	2.0	12.31	19.76	0.00	1.11	0.00	0.00	0.00
SPRINKLER FITTER	All	BLD		47.09	50.09	1.5	1.5	2.0	2.0	11.45	14.92	0.00	0.52		0.00	0.00
STEEL ERECTOR	All	HWY		44.14	46.14	1.5	1.5	2.0	2.0	12.31	19.76	0.00	1.11	0.00	0.00	0.00
STONE MASON	All	BLD		39.30	41.66	1.5	1.5	2.0	2.0	12.20	14.75	0.00	1.05		0.00	0.00
TERRAZZO FINISHER	All	BLD		36.13		1.5	1.5	2.0	2.0	12.20	14.75	0.00	1.04		0.00	0.00
TERRAZZO MASON	All	BLD		39.71	42.09	1.5	1.5	2.0	2.0	12.20	14.75	0.00	1.06		0.00	0.00
TILE MASON	All	BLD		39.71	42.09	1.5	1.5	2.0	2.0	12.20	14.75	0.00	1.06		0.00	0.00
TRUCK DRIVER	All	ALL	1	43.24	47.60	1.5	1.5	2.0	2.0	16.27	7.75	0.00	0.25	0.00	0.00	0.00
TRUCK DRIVER	All	ALL	2	43.38	47.60	1.5	1.5	2.0	2.0	16.27	7.75	0.00	0.25	0.00	0.00	0.00
TRUCK DRIVER	All	ALL	3	44.10	47.60	1.5	1.5	2.0	2.0	16.27	7.75	0.00	0.25	0.00	0.00	0.00

Peoria County Prevailing Wage Rates posted on 8/15/2024

TRUCK DRIVER	All	ALL	4	44.49	47.60	1.5	1.5	2.0	2.0	16.27	7.75	0.00	0.25	0.00	0.00	0.00
TRUCK DRIVER	All	ALL	5	45.59	47.60	1.5	1.5	2.0	2.0	16.27	7.75	0.00	0.25	0.00	0.00	0.00
TRUCK DRIVER	All	O&C	1	34.59	38.08	1.5	1.5	2.0	2.0	16.27	7.75	0.00	0.25	0.00	0.00	0.00
TRUCK DRIVER	All	O&C	2	35.06	38.08	1.5	1.5	2.0	2.0	16.27	7.75	0.00	0.25	0.00	0.00	0.00
TRUCK DRIVER	All	O&C	3	35.28	38.08	1.5	1.5	2.0	2.0	16.27	7.75	0.00	0.25	0.00	0.00	0.00
TRUCK DRIVER	All	O&C	4	35.59	38.08	1.5	1.5	2.0	2.0	16.27	7.75	0.00	0.25	0.00	0.00	0.00
TRUCK DRIVER	All	O&C	5	36.47	38.08	1.5	1.5	2.0	2.0	16.27	7.75	0.00	0.25	0.00	0.00	0.00
TUCKPOINTER	All	BLD		39.30	41.66	1.5	1.5	2.0	2.0	12.20	14.75	0.00	1.05		0.00	0.00

Legend

Rg Region
Type Trade Type - All,Highway,Building,Floating,Oil & Chip,Rivers
C Class
Base Base Wage Rate
OT M-F Unless otherwise noted, OT pay is required for any hour greater than 8 worked each day, Mon through Fri. The number listed is the multiple of the base wage.
OT Sa Overtime pay required for every hour worked on Saturdays
OT Su Overtime pay required for every hour worked on Sundays
OT Hol Overtime pay required for every hour worked on Holidays
H/W Health/Welfare benefit
Vac Vacation
Trng Training
Other Ins Employer hourly cost for any other type(s) of insurance provided for benefit of worker.

Explanations PEORIA COUNTY

The following list is considered as those days for which holiday rates of wages for work performed apply: New Years Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, Christmas Day and Veterans Day in some classifications/counties. Generally, any of these holidays which fall on a Sunday is celebrated on the following Monday. This then makes work performed on that Monday payable at the appropriate overtime rate for holiday pay. Common practice in a given local may alter certain days of celebration. If in doubt, please check with IDOL.

Oil and chip resealing (O&C) means the application of road oils and liquid asphalt to coat an existing road surface, followed by application of aggregate chips or gravel to coated surface, and subsequent rolling of material to seal the surface.

EXPLANATION OF CLASSES

Peoria County Prevailing Wage Rates posted on 8/15/2024

ASBESTOS - GENERAL - removal of asbestos material/mold and hazardous materials from any place in a building, including mechanical systems where those mechanical systems are to be removed. This includes the removal of asbestos materials/mold and hazardous materials from ductwork or pipes in a building when the building is to be demolished at the time or at some close future date.

ASBESTOS - MECHANICAL - removal of asbestos material from mechanical systems, such as pipes, ducts, and boilers, where the mechanical systems are to remain.

CERAMIC TILE FINISHER, MARBLE FINISHER, TERRAZZO FINISHER

Assisting, helping or supporting the tile, marble and terrazzo mechanic by performing their historic and traditional work assignments required to complete the proper installation of the work covered by said crafts. The term "Ceramic" is used for naming the classification only and is in no way a limitation of the product handled. Ceramic takes into consideration most hard tiles.

ELECTRONIC SYSTEMS TECHNICIAN

Installation, service and maintenance of low-voltage systems which utilizes the transmission and/or transference of voice, sound, vision, or digital for commercial, education, security and entertainment purposes for the following: TV monitoring and surveillance, background/foreground music, intercom and telephone interconnect, field programming, inventory control systems, microwave transmission, multi-media, multiplex, radio page, school, intercom and sound burglar alarms and low voltage master clock systems.

Excluded from this classification are energy management systems, life safety systems, supervisory controls and data acquisition systems not intrinsic with the above listed systems, fire alarm systems, nurse call systems and raceways exceeding fifteen feet in length.

LABORER, SKILLED - BUILDING

The skilled laborer building (BLD) classification shall encompass the following types of work, irrespective of the site of the work: cutting & acetylene torch, gunnite nozzlemen, gunnite pump men & pots, kettlemen & carriers of men handling hot stuff, sandblaster nozzle men, sandblasting pump men & pots, setting up and using concrete burning bars, wood block setters, underpinning & shoring of existing buildings, and the unload-ing and handling of all material coated with creosote.

LABORER, SKILLED - HIGHWAY

The skilled laborer heavy & highway (HWY) classification shall encompass the following types of work,irrespective of the site of the work: jackhammer & drill operator, gunite pump & pot man, puddlers, vibrator men, wire fabric placer, sandblast pump & pot man, strike off concrete, unloading, handling & carrying of all creosoted piles, ties or timber, concrete burning bars, power wheelbarrows or buggies, asphalt raker, brickset-ters, cutting torchman (electric & acetylene), men setting lines to level forms, form setters, gunite nozzle man & sandblasting nozzle man, power man, and rip-rapping by hand.

TRUCK DRIVER - BUILDING, HEAVY AND HIGHWAY CONSTRUCTION Class 1. Drivers on 2 axle trucks hauling less than 9 ton. Air

compressor and welding machines and brooms, including those pulled by separate units, truck driver helpers, warehouse employees, mechanic helpers, greasers and tiremen, pickup trucks when hauling materials, tools, or workers to and from and on-the-job site, and fork lifts up to 6,000 lb. capacity.

Class 2. Two or three axle trucks hauling more than 9 ton but hauling less than 16 ton. A-frame winch trucks, hydrolift trucks, vactor trucks or similar equipment when used for transportation purposes. Fork lifts over 6,000 lb. capacity, winch trucks, four axle combination units, and ticket writers.

Class 3. Two, three or four axle trucks hauling 16 ton or more. Drivers on water pulls, articulated dump trucks, mechanics and working forepersons, and dispatchers. Five axle or more combination units.

Class 4. Low Boy and Oil Distributors.

Class 5. Drivers who require special protective clothing while employed on hazardous waste work.

TRUCK DRIVER - OIL AND CHIP RESEALING ONLY.

This shall encompass laborers, workers and mechanics who drive contractor or subcontractor owned, leased, or hired pickup, dump, service, or oil distributor trucks. The work includes transporting materials and equipment (including but not limited to, oils, aggregate supplies, parts, machinery and tools) to or from the job site; distributing oil or liquid asphalt and aggregate; stock piling material when in connection with the actual oil and chip contract. The Truck Driver (Oil & Chip Resealing) wage classification does not include supplier delivered materials.

OPERATING ENGINEERS - BUILDING

Class 1. Cranes; Overhead Cranes; Gradall; All Cherry Pickers; Mechanics; Central Concrete Mixing Plant Operator; Road Pavers (27E - Dual Drum - Tri Batchers); Blacktop Plant Operators and Plant Engineers; 3 Drum Hoist; Derricks; Hydro Cranes; Shovels; Skimmer Scoops; Koehring Scooper; Drag Lines; Backhoe; Derrick Boats; Pile Drivers and Skid Rigs; Clamshells; Locomotive Cranes; Dredge (all types) Motor Patrol; Power Blades - Dumore - Elevating and similar types; Tower Cranes (Crawler-Mobile) and Stationary; Crane-type Backfiller; Drott Yumbo and similar types considered as Cranes; Caisson Rigs; Dozer; Tournadozer; Work Boats; Ross Carrier; Helicopter; Tournapulls - all and similar types; Scoops (all sizes); Pushcats; Endloaders (all types); Asphalt Surfacing Machine; Slip Form Paver; Rock Crusher; Heavy Equipment Greaser; CMI, CMI Belt Placer, Auto Grade & 3 Track and similar types; Side Booms; Multiple Unit Earth Movers; Creter Crane; Trench Machine; Pump-crete-Belt Crete-Squeeze Cretes-Screw-type Pumps and Gypsum; Bulker & Pump - Operator will clean; Formless Finishing Machine; Flaherty Spreader or similar types; Screed Man on Laydown Machine; Wheel Tractors (industrial or Farm-type w/Dozer-Hoe-Endloader or other attachments); F.W.D. & Similar Types; Vermeer Concrete Saw.

Class 2. Dinkeys; Power Launches; PH One-pass Soil Cement Machine (and similar types); Pugmill with Pump; Backfillers; Euclid Loader; Forklifts; Jeeps w/Ditching Machine or other attachments; Tuneluger; Automatic Cement and Gravel Batching Plants; Mobile Drills (Soil Testing) and similar types; Gurries and Similar Types; (1) and (2) Drum Hoists (Buck Hoist and Similar Types); Chicago Boom; Boring Machine & Pipe Jacking Machine; Hydro Boom; Dewatering System; Straw Blower; Hydro Seeder; Assistant Heavy Equipment Greaser on Spread; Tractors (Track type) without Power Unit pulling Rollers; Rollers on Asphalt -- Brick

Macadem; Concrete Breakers; Concrete Spreaders; Mule Pulling Rollers; Center Stripper; Cement Finishing Machines & CMI Texture & Reel Curing Machines; Cement Finishing Machine; Barber Green or similar loaders; Vibro Tamper (All similar types) Self-propelled; Winch or Boom Truck; Mechanical Bull Floats; Mixers over 3 Bag to 27E; Tractor pulling Power Blade or Elevating Grader; Porter Rex Rail; Clary Screed; Truck Type Hoptoe Oilers; Fireman; Spray Machine on Paving; Curb Machines; Truck Crane Oilers; Oil Distributor; Truck-Mounted Saws.

Class 3. Air Compressor; Power Subgrader; Straight Tractor; Trac Air without attachments; Herman Nelson Heater, Dravo, Warner, Silent Glo, and similar types; Roller: Five (5) Ton and under on Earth or Gravel; Form Grader; Crawler Crane & Skid Rig Oilers; Freight Elevators - permanently installed; Pump; Light Plant; Generator; Conveyor (1) or (2) - Operator will clean; Welding Machine; Mixer (3) Bag and Under (Standard Capacity with skip); Bulk Cement Plant; Oiler on Central Concrete Mixing Plant.

OPERATING ENGINEERS - HEAVY AND HIGHWAY CONSTRUCTION

CLASS 1. Cranes; Hydro Cranes; Shovels; Crane Type Backfiller; Tower, Mobile, Crawler, & Stationary Cranes; Derricks; Hoists (3 Drum); Draglines; Drott Yumbo & Similar Types considered as Cranes; 360 Degree Swing Excavator (Shears, Grapples, Movacs, etc.); Back Hoe; Derrick Boats; Pile Driver and Skid Rigs; Clam Shell; Locomotive - Cranes; Road Pavers - Single Drum - Dual Drum - Tri Batcher; Motor Patrols & Power Blades - Dumore - Elevating & Similar Types; Mechanics; Central Concrete Mixing Plant Operator; Asphalt Batch Plant Operators and Plant Engineers; Gradall; Caisson Rigs; Skimmer Scoop - Koering Scooper; Dredges (all types); Hoptoe; All Cherry Pickers; Work Boat; Ross Carrier; Helicopter; Dozer; Tournadozer; Tournapulls - all and similar types; Operation of Concrete and all Recycle Machines; Multiple Unit Earth Movers; Scoops (all sizes); Pushcats; Endloaders (all types); Asphalt Surfacing Machine; Slip Form Paver; Rock Crusher; Operation of Material Crusher, Screening Plants, and Tunnel Boring Machine; Heavy Equipment Greaser (top greaser on spread); CMI, Auto Grade, CMI Belt Placer & 3 Track and Similar Types; Side Booms; Asphalt Heater & Planer Combination (used to plane streets); Wheel Tractors (with Dozer, Hoe or Endloader Attachments); CAT Earthwork Compactors and Similar Types; Blaw Knox Spreader and Similar Types; Trench Machines; Pump Crete - Belt Crete - Squeeze Crete - Screw Type Pumps and Gypsum (operator will clean); Creter Crane; Operation of Concrete Pump Truck; Formless Finishing Machines; Flaherty Spreader or Similar Types; Screed Man on Laydown Machine; Vermeer Concrete Saw; Operation of Laser Screed; Span Saw; Dredge Leverman; Dredge Engineer; Lull or Similar Type; Hydro-Boom Truck; Operation of Guard Rail Machine; and Starting Engineer on Pipeline or Construction (11 or more pieces) including: Air Compressor (Trailer Mounted), All Forced Air Heaters (regardless of Size), Water Pumps (Greater than 4-1/2" or Total Discharge Over 4-1/2"), Light Plants, Generators (Trailer Mounted - Excluding Decontamination Trailer), Welding Machines (Any Size or Mode of Power), Conveyor, Mixer (any size), Stud Welder, Power Pac, etc, and Ground Heater (Trailer Mounted).

CLASS 2. Bulker & Pump; Power Launches; Boring Machine & Pipe Jacking Machine; Dinkeys; Operation of Carts, Powered Haul Unit for a Boring Machine; P & H One Pass Soil Cement Machines and Similar Types; Wheel Tractors (Industry or Farm Type - Other); Back Fillers; Euclid Loader; Fork Lifts; Jeep w/Ditching Machine or Other Attachments; Tunneluger; Automatic Cement & Gravel Batching Plants; Mobile Drills - Soil Testing and Similar Types; Pugmill with Pump; All (1) and (2) Drum Hoists; Dewatering System; Straw Blower; Hydro-Seeder; Bump Grinders (self-propelled); Assistant Heavy Equipment Greaser; Apsco Spreader; Tractors (Track-Type) without Power Units Pulling Rollers; Rollers on Asphalt - Brick or Macadam; Concrete Breakers; Concrete Spreaders; Cement Strippers; Cement Finishing Machines & CMI Texture & Reel Curing Machines; Vibro-Tampers (All Similar Types Self-Propelled); Mechanical Bull Floats; Self-Propelled Concrete Saws; Truck Mounted Power Saws; Operation of Curb Cutters; Mixers - Over Three (3) Bags; Winch and Boom Trucks; Tractor Pulling Power Blade or Elevating Grader; Porter Rex Rail;

Clary Screed; Mule Pulling Rollers; Pugmill without Pump; Barber Greene or Similar Loaders; Track Type Tractor w/Power Unit attached (minimum); Fireman; Spray Machine on Paving; Curb Machines; Paved Ditch Machine; Power Broom; Self-Propelled Sweepers; Self-Propelled Conveyors; Power Subgrader; Oil Distributor; Straight Tractor; Truck Crane Oiler; Truck Type Oilers; Directional Boring Machine; Horizontal Directional Drill; Articulating End Dump Vehicles; Starting Engineer on Pipeline or Construction (6 -10 pieces) including: Air Compressor (Trailer Mounted), All Forced Air Heaters (regardless of Size), Water Pumps (Greater than 4-1/2" or Total Discharge Over 4-1/2"), Light Plants, Generators (Trailer Mounted - Excluding Decontamination Trailer), Welding Machines (Any Size or Mode of Power), Conveyor, Mixer (any size), Stud Welder, Power Pac, etc., and Ground Heater (Trailer Mounted).

CLASS 3. Straight Framed Truck Mounted Vac Unit (separately powered); Trac Air Machine (without attachments); Rollers - Five Ton and Under on Earth and Gravel; Form Graders; Bulk Cement Plant; Oilers; and Starting Engineer on Pipeline or Construction (3 - 5 pieces) including: Air Compressor (Trailer Mounted), All Forced Air Heaters (regardless of Size), Water Pumps (Greater than 4-1/2" or Total Discharge Over 4-1/2"), Light Plants, Generators (Trailer Mounted - Excluding Decontamination Trailer), Welding Machines (Any Size or Mode of Power), Conveyor, Mixer (any size), Stud Welder, Power Pac, etc., and Ground Heater (Trailer Mounted).

Other Classifications of Work:

For definitions of classifications not otherwise set out, the Department generally has on file such definitions which are available. If a task to be performed is not subject to one of the classifications of pay set out, the Department will upon being contacted state which neighboring county has such a classification and provide such rate, such rate being deemed to exist by reference in this document. If no neighboring county rate applies to the task, the Department shall undertake a special determination, such special determination being then deemed to have existed under this determination. If a project requires these, or any classification not listed, please contact IDOL at 217-782-1710 for wage rates or clarifications.

LANDSCAPING

Landscaping work falls under the existing classifications for laborer, operating engineer and truck driver. The work performed by landscape plantsman and landscape laborer is covered by the existing classification of laborer. The work performed by landscape operators (regardless of equipment used or its size) is covered by the classifications of operating engineer. The work performed by landscape truck drivers (regardless of size of truck driven) is covered by the classifications of truck driver.

INCLUSIVE BATHROOM & SITE IMPROVEMENTS
GLEN OAK PARK
PEORIA PARK DISTRICT
2218 N PROSPECT RD
PEORIA, IL 61603

INDEX OF DRAWINGS

SHEET NUMBER	SHEET NAME
G-000	COVER SHEET
G-001	ARCHITECTURAL NOTES, SYMBOLS, & ABBREVIATIONS
G-002	CODE & LIFE SAFETY ANALYSIS
C-001	GENERAL NOTES
C-100	SITE DEMOLITION PLAN
C-200	SITE DIMENSION PLAN
C-300	SITE GRADING & UTILITY PLAN
C-500	SITE DETAILS
C-501	SITE DETAILS
A-100	SITE PLAN
A-101	FLOOR PLAN
A-102	ROOF PLAN
A-103	REFLECTED CEILING PLAN
A-201	BUILDING ELEVATIONS
A-202	WALL SECTIONS
A-203	SECTIONS & DETAILS
A-204	DOOR SCHEDULE AND DETAILS
A-205	INTERIOR ELEVATIONS
S-001	STRUCTURAL GENERAL NOTES AND ABBREVIATIONS
S-101	STRUCTURAL FOUNDATION PLAN
S-102	STRUCTURAL ROOF PLAN
S-501	STRUCTURAL FOUNDATION DETAILS
S-502	STRUCTURAL FRAMING DETAILS
M-101	MECHANICAL FIRST FLOOR PLAN
P-001	PLUMBING TITLE SHEET
P-100	PLUMBING UNDERFLOOR PLAN
P-101	PLUMBING FIRST FLOOR PLAN
E-001	ELECTRICAL TITLE SHEET
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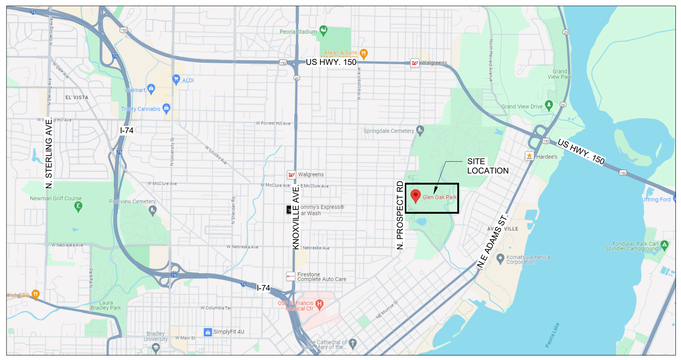
AX-101	SHELTER DRAWINGS (1 OF 4)
AX-102	SHELTER DRAWINGS (2 OF 4)
AX-103	SHELTER DRAWINGS (3 OF 4)
AX-104	SHELTER DRAWINGS (4 OF 4)



VICINITY SKETCH

N

AREA LOCATION PLAN

N

700 N Sangamon
Chicago, IL 60642
t 312.432.4180
f 312.432.4184

INCLUSIVE BATHROOM & SITE IMPROVEMENTS
GLEN OAK PARK
PEORIA PARK DISTRICT
ISSUED FOR BID

STATE OF ILLINOIS
MARK M. STROMBERG
001-017758
LICENSED ARCHITECT
EXPIRES: 11/30/2024

No.	Description	Date
1	ISSUED FOR 60% DESIGN	2024-05-23
2	ISSUED FOR 90% DESIGN	2024-07-11
3	ISSUED FOR BID	2024-08-22

GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
2218 N Prospect Rd
Peoria, IL 61603

COVER SHEET

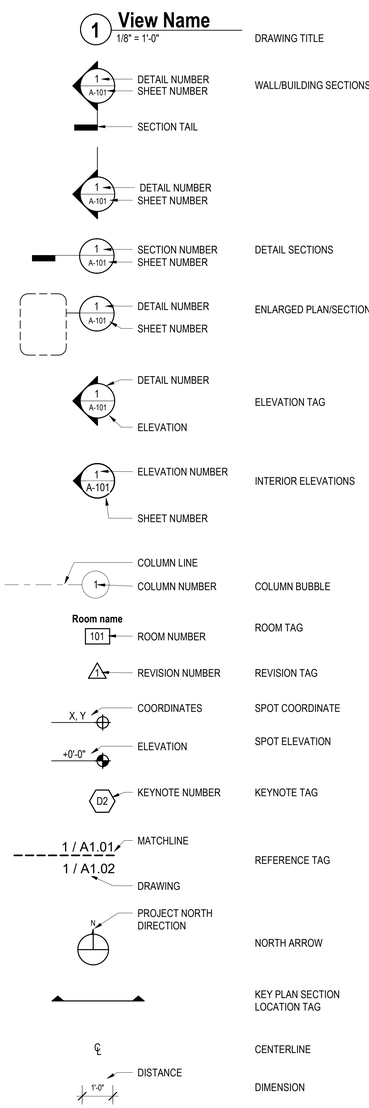
DRAWN:	AH
CHECKED:	BS
APPROVED:	SC
JOB NO:	24-1006

SHEET NO.
G-000

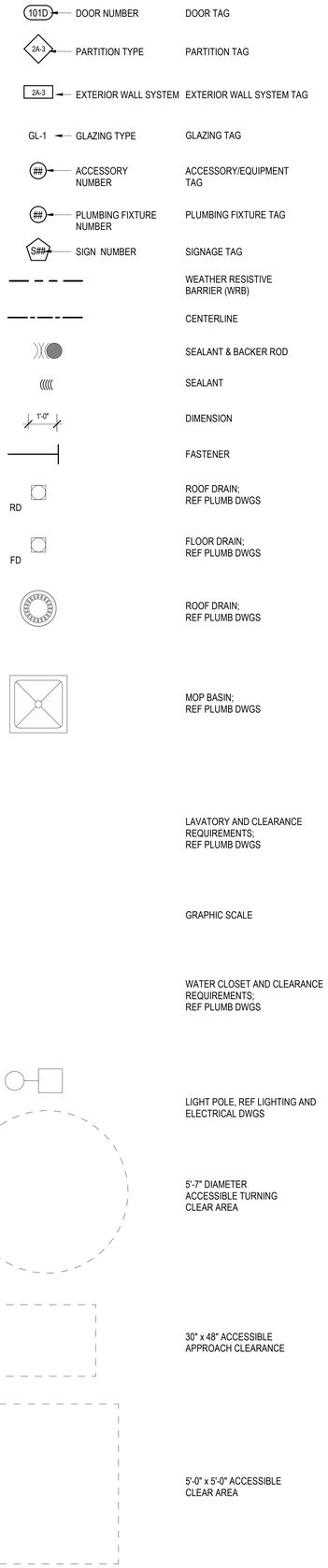
GENERAL CONSTRUCTION NOTES

1. ALL DIMENSIONS ARE TO FACE OF PARTITIONS, COLUMN CENTERLINE, OR FINISHED FACE OF EXTERIOR WALL UNLESS NOTED OTHERWISE.
2. ALL DIMENSIONS SHALL BE VERIFIED IN THE FIELD BEFORE PROCEEDING WITH ANY WORK. PEORIA PARK DISTRICT AND ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES OR CORRECTIONS IN WRITING.
3. PROVIDE ACCESS PANELS AS REQUIRED BY APPLICABLE CODES AND AS REQUIRED FOR VENTILATION AND ELECTRICAL EQUIPMENT. REVIEW LOCATIONS WITH PEORIA PARK DISTRICT AND ARCHITECT.
4. ALL DISSIMILAR METALS SHALL BE EFFECTIVELY ISOLATED.
5. THE CONTRACTOR SHALL COORDINATE ALL VENTILATION AND ELECTRICAL FLOOR SLEEVES AND WALL SLEEVES, EMBEDDED CONDUIT, AND VENTILATION DUCTWORK WITH VENTILATION, PLUMBING, ELECTRICAL, AND ARCHITECTURAL DRAWINGS WITH CORRESPONDING DISCIPLINES.
6. ALL PIPES, CONDUITS, AND DUCTWORK THAT PENETRATE WALL, FLOOR, OR ROOF SLABS SHALL BE INSTALLED IN A MANNER THAT WILL PRESERVE THE WATER TIGHTNESS OF SUCH WALL OR SLABS IN THE BUILDING.
7. ALL EXTERIOR JOINTS AROUND WINDOWS, DOORS, FRAMES, METAL PANELS, BETWEEN WALLS AND ROOF, BETWEEN WALL PANELS, AND AT PENETRATIONS OF UTILITIES THROUGH THE BUILDING ENVELOPE SHALL BE SEALED, CAULKED, OR WEATHER-STRIPPED TO PREVENT WATER OR AIR LEAKAGE/PENETRATION.
8. THE FINISH FLOOR ELEVATION FOR THE BUILDING IS SET SO THAT 0'-0" BUILDING DATUM = 632' CIVIL SITE DATUM; SEE SHEET C300. GENERAL CONTRACTOR TO COORDINATE WITH STRUCTURAL AND CIVIL SHEETS. REFERENCE CIVIL DRAWINGS FOR BENCHMARKS.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF NEW WORK. ANY WORK DAMAGED FOR ANY REASON SHALL BE REPLACED AT NO COST TO PEORIA PARK DISTRICT.
10. PRIOR TO STARTING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NEITHER CONSTRUCTION NOR FABRICATION OF ANY ITEM SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED ALL PERMITS AND ANY OTHER APPROVALS FROM GOVERNMENTAL AGENCIES OR OTHER REGULATORY AUTHORITIES HAVING JURISDICTION OVER THE PROJECT. FAILURE OF THE CONTRACTOR TO FOLLOW THIS PROCEDURE SHALL CAUSE THE CONTRACTOR TO ASSUME FULL RESPONSIBILITY FOR ANY SUBSEQUENT MODIFICATION OF THE WORK MANDATED BY REGULATORY AUTHORITY.
11. ALL GYPSUM BOARD TO BE 5/8" TYPE "X" UNLESS NOTED OTHERWISE.
12. CONTRACTOR SHALL INSTALL ROUGH BLOCKING OR WOOD NAILERS DURING THE ROUGH FRAMING STAGE OF CONSTRUCTION AS REQUIRED FOR PROPERLY SECURING SIGNAGE SHELVING, LIGHTING AND ELECTRICAL FIXTURES, WALL MOUNTED EQUIPMENT, MILLWORK, APPLIED DECORATIVE TREATMENTS, AND HANDRAIL BRACKETS.
13. EXPOSED ELECTRICAL ITEMS INCLUDING, BUT NOT LIMITED TO, CONDUIT HANGERS AND FITTINGS SHALL BE PAINTED TO MATCH EXISTING ADJACENT SURFACES WHERE NOT CONCEALED.
14. CONTRACTOR TO REMOVE ANY GRAFFITI WITHIN 24 HOURS DURING CONSTRUCTION.
15. CONTRACTOR SHALL SAWCUT SIDEWALKS IN A CLEAN AND STRAIGHT MANNER AT THE LIMITS OF THE DESIGNATED REMOVAL.
16. DETAILS SHOWN ARE INTENDED TO BE INDICATIVE OF THE PROFILES AND TYPE OF DETAILING REQUIRED FOR THE WORK. CONDITIONS NOT COVERED BY SPECIFIC DETAILS ARE SIMILAR IN CHARACTER AND QUALITY TO THOSE DETAILS AND MUST MEET SPECIFIED DESIGN CRITERIA.
17. DETAILS SHOWN MAY NOT GRAPHICALLY REPRESENT ALL COMPONENTS NECESSARY TO COMPLETE THE TOTAL SYSTEM. THE CONTRACTOR MUST BE RESPONSIBLE TO COORDINATE ALL OF THE REQUIREMENTS SHOWN ON THE DRAWINGS WITH THOSE STATED IN THE APPLICABLE SPECIFICATIONS AND PROJECT NOTES TO PROVIDE THE COMPLETE SYSTEM.
18. CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR QUALITY CONTROL, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PHASING OR PROCEDURES, SAFETY PRECAUTIONS, AND PROGRAMS IN CONNECTION WITH THE WORK.
19. PEORIA PARK DISTRICT WILL NOT BE RESPONSIBLE FOR, NOR WILL HAVE ANY CONTROL OVER OR CHARGE OF, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PHASING, OR PROCEDURES OF SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, NOR WILL BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. PEORIA PARK DISTRICT WILL NOT BE RESPONSIBLE FOR, NOR HAVE CONTROL OR CHARGE OVER, THE ERRORS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, THEIR AGENTS, EMPLOYEES, OR ANY OTHER PERSON PERFORMING ANY OF THE WORK.
20. INSTALL GYPSUM BOARD EXPANSION JOINTS AT MAXIMUM INTERVALS OF 30'-0".
21. PEORIA PARK DISTRICT EXPRESSLY DISCLAIMS ANY RESPONSIBILITY ARISING FROM ANY UNAUTHORIZED USE OF THESE CONTRACT DOCUMENTS. ANY AUTHORIZATION MUST BE IN WRITING. THE CONTRACT DRAWINGS MAY HAVE BEEN REPRODUCED AT A SIZE DIFFERENT THAN ORIGINALLY DRAWN. DO NOT SCALE DRAWINGS.
23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH ARCHITECT AND PEORIA PARK DISTRICT REGARDING ALL NEW AND/OR REMEDIAL CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, SITEWORK, OTHER SITE BUILDINGS, ETC. THAT PEORIA PARK DISTRICT MAY HAVE IN PROGRESS WITHIN THE SAME PERIOD.
24. THE CONTRACTOR SHALL REVIEW AND HAVE COMPLETE COMMAND OF THE VARIOUS PHASES OF THE CONSTRUCTION WORK PLUS A TOTAL UNDERSTANDING OF THE UNIQUE MANPOWER AND SUPPLY SCHEDULE REQUIREMENTS SPECIFIC TO THE SITE. CONTRACTOR MUST COORDINATE ALL CONSTRUCTION-RELATED ACTIVITIES WITH MAINTENANCE SCHEDULES, OPERATING REQUIREMENTS, AND ANY RESULTING HAZARDOUS CONDITIONS.
25. THE CONTRACTOR SHALL COORDINATE AND CONFIRM WITH ARCHITECT AND PEORIA PARK DISTRICT THE HOURS OF CONSTRUCTION AND MAINTENANCE YARD OPERATIONS FOR THE ENTIRE SCHEDULE OF THE WORK.
26. CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING THE JOB SITE AND THE PROTECTION OF THE GENERAL PUBLIC FROM ALL POSSIBLE HAZARDS OF THE ENTIRE CONSTRUCTION SITE.
27. ANY DETAILS, SYSTEMS, OR MATERIALS (I.E. ARCHITECTURAL, STRUCTURAL, HEATING AND VENTILLATION, ETC.) WHICH ARE IDENTIFIED TO BE CHANGED OR SUBSTITUTED MUST BE FIRST REVIEWED AND APPROVED PRIOR TO THE PREPARATION AND SUBMITTAL OF SHOP DRAWINGS. PEORIA PARK DISTRICT RESERVES THE RIGHT TO REJECT SUBSTITUTIONS. THE CONTRACTOR IS RESPONSIBLE FOR ADDED JOB COSTS DUE TO HIS SUBSTITUTIONS IMPACTED ON OTHER TRADES.
28. REFER TO THE TECHNICAL SPECIFICATIONS FOR ADDITIONAL INFORMATION AND COORDINATION OF THE WORK. IN THE EVENT OF DISCREPANCIES BETWEEN DRAWINGS AND SPECIFICATIONS, THE MOST STRINGENT OR COSTLY SHALL BE PROVIDED PER THE CONTRACT.
29. THE CONTRACTOR SHALL ASSURE ITSELF THAT NO HAZARDOUS MATERIALS ARE HANDLED OR DISTRIBUTED. IF HAZARDOUS MATERIALS ARE ENCOUNTERED, IT MUST BE BROUGHT TO THE IMMEDIATE ATTENTION OF ARCHITECT/ENGINEER AND PEORIA PARK DISTRICT.
30. ALL NEW GUARDRAILS AND HANDRAILS MUST MEET ILLINOIS ACCESSIBILITY CODE, OSHA, NIOSH, AND ADA GUIDELINES, 200 PSF LIVE LOAD SAFETY CODE REQUIREMENTS, AND CODE-PRESCRIBED SIMULTANEOUS HORIZONTAL AND VERTICAL HANDRAIL REQUIREMENTS.
31. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH WORK NOTED "(NIC)", IF ANY, WHICH IS BEING PERFORMED UNDER SEPARATE CONTRACT WHERE IT INTERFACES WITH OR AFFECTS WORK UNDER THIS CONTRACT.
32. DRAWINGS ARE TO BE ISSUED TO THE SUBCONTRACTORS BY THE CONTRACTOR IN COMPLETE SETS SO THAT THE EXTENT AND COORDINATION OF WORK IS MADE POSSIBLE.
33. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE ACCURATE PLACEMENT AND CONDITIONS OF THE WORK.
34. CONTRACTOR'S DUMPSTER PLACEMENT LOCATIONS MUST BE APPROVED BY THE PEORIA PARK DISTRICT.
35. GENERAL CONTRACTOR'S PRIMARY RESPONSIBILITY IN ALL PHASES OF THE PROJECT IS SAFETY. THE RESPONSIBILITY FOR SAFETY INCLUDES THE PATRONS, CONTRACTOR'S EMPLOYEES, AND ANY PERSON(S) WHO MAY ENTER UPON OR BE PROXIMATE TO THE WORK AREA, WHETHER OR NOT WORK IS IN PROGRESS.
36. CONTRACTOR'S WORK SHALL NOT INTERFERE WITH PEORIA PARK DISTRICT OPERATIONS.
37. CONSTRUCTION SITE TO BE FULLY BARRICADED AND LOCKED. MAINTAIN BARRICADE AND SIGNAGE DURING CONSTRUCTION.
38. CONTRACTOR SHALL PROVIDE TOILET FACILITIES FOR HIS OWN WORKERS.
39. NO WORK WILL BE ALLOWED AT THE SITE BEFORE A CONSTRUCTION PHASING PLAN WITH MATERIAL/EQUIPMENT STAGING PLAN IS APPROVED BY PEORIA PARK DISTRICT & ARCHITECT.
40. OVERHEAD MOUNTED FEATURES WEIGHING 31 POUNDS (14 KILOGRAMS) OR MORE (EXCLUDING DISTRIBUTED SYSTEMS SUCH AS SUSPENDED CEILINGS THAT COLLECTIVELY EXCEED THAT WEIGHT) ARE TO BE MOUNTED USING EITHER RIGID OR FLEXIBLE SYSTEMS TO MINIMIZE THE LIKELIHOOD THAT THEY WILL FALL AND INJURE BUILDING OCCUPANTS. ALL SUCH SYSTEMS TO BE MOUNTED SO THAT THEY RESIST FORCES OF 0.5 TIMES THE COMPONENT WEIGHT IN ANY HORIZONTAL DIRECTION AND 1.5 TIMES THE COMPONENT WEIGHT IN THE DOWNWARD DIRECTION.
41. GC TO COORDINATE WITH USING AGENCY AT LEAST 7 DAYS PRIOR FOR ANY REQUIRED UTILITY TIE INS/SHUTDOWNS.

PROJECT TARGET LEGEND



ARCHITECTURE SYMBOL LEGEND



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INCLUSIVE BATHROOM & SITE IMPROVEMENTS
GLEN OAK PARK
PEORIA PARK DISTRICT

ISSUED FOR BID

STATE OF ILLINOIS
MARK M. STROMBERG
001-017758
LICENSED ARCHITECT

EXPIRES: 11/30/2024

No.	Description	Date
1	ISSUED FOR 60% DESIGN	2024-05-23
2	ISSUED FOR 90% DESIGN	2024-07-11
3	ISSUED FOR BID	2024-08-22

GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
2218 N Prospect Rd
Peoria, IL 61603

ARCHITECTURAL NOTES, SYMBOLS, & ABBREVIATIONS

DRAWN:	AH
CHECKED:	BS
APPROVED:	SC
JOB NO:	24-1006

SHEET NO.
G-001

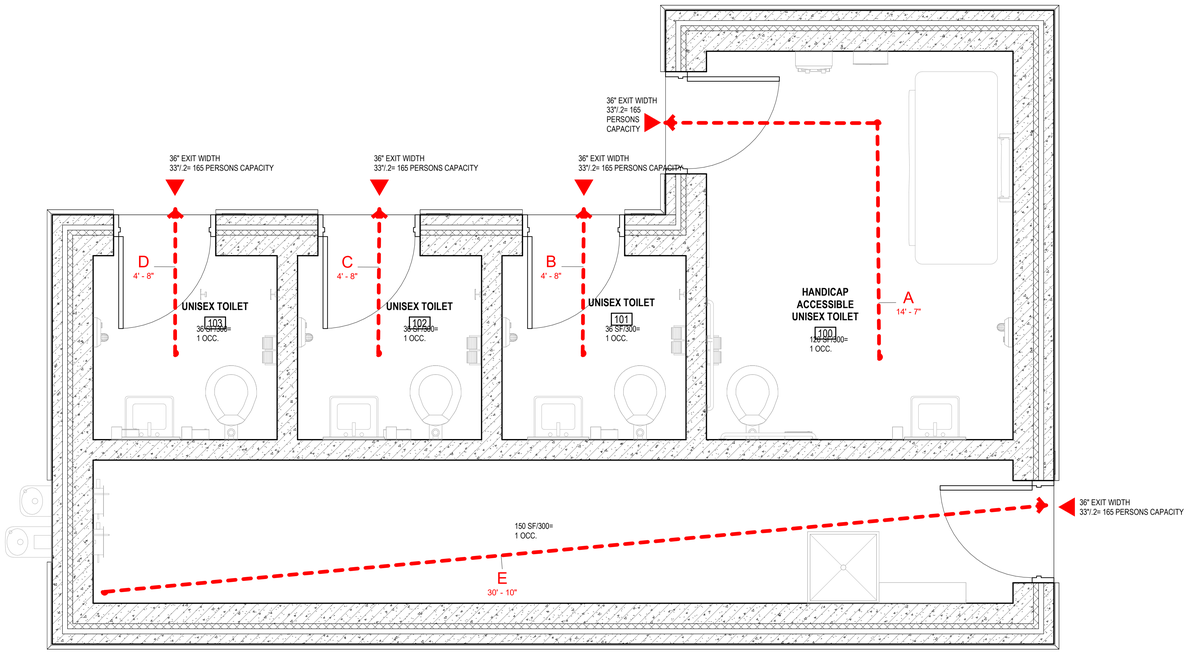
LIFE SAFETY SYMBOLS LEGEND

- EGRESS EXIT
- TRAVEL DISTANCE TO EXIT
- (FE) FIRE EXTINGUISHERS - PROVIDED BY USING AGENCY
- (FEC) FIRE EXTINGUISHER CABINET - PROVIDED BY USING AGENCY
- EXIT SIGN (WALL MTD); REF ELEC DWGS
- 1 HOUR RATED
- 2 HOUR RATED

DOOR WIDTH FACTOR CALCULATIONS:
IBC CHAPTER 10, SECTION 1005.3.2

3' DOOR: 36" EXIT WIDTH WITH PANIC HARDWARE
32" / 0.2" = 160 PERSON CAPACITY (FOR SPINKLERED BUILDING)

EGRESS PATH		
PATH	ACTUAL LENGTH	ALLOWABLE DISTANCE
A	14'-7"	200'-0"
B	4'-8"	200'-0"
C	4'-8"	200'-0"
D	4'-8"	200'-0"
E	30'-10"	200'-0"



1 **LIFE SAFETY PLAN**
1/2" = 1'-0"

N

GENERAL LIFE SAFETY NOTES

1. INTERIOR WALL AND CEILING FINISHES SHALL BE CLASS 1 WITH A FLAME SPREAD RATING 0-25, AND SMOKE DEVELOPED RATING OF 0-450.
2. ALL EXIT DOORS TO SWING IN THE DIRECTION OF TRAVEL EXCEPT FROM ROOMS HAVING A CAPACITY NOT EXCEEDING 50 PERSONS.
3. ALL EXIT DOORS MUST BE READILY OPENED WITHOUT A KEY FROM THE SIDE EGRESS IS MADE.
4. ALL ROOF COVERINGS TO BE MINIMUM OF CLASS 'C' FIRE RESISTANT ROOF COVERINGS.
5. ALL DOORS OPENING INTO VENTILATION OR ELECTRICAL EQUIPMENT ROOMS SHALL HAVE KNURLED HANDLES.

BUILDING CODE ANALYSIS

APPLICABLE CODES
2021 INTERNATIONAL BUILDING CODE (IBC)
2015 NFPA - 101 LIFE SAFETY CODE
2018 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)
2018 IL ACCESSIBILITY CODE (IAC)
2014 IL PLUMBING CODE
2017 NATIONAL ELECTRIC CODE (NEC)
2018 INTERNATIONAL MECHANICAL CODE (IMC)

COMPLIANCE WITH NFPA 101 LIFE SAFETY CODE, 2015 EDITION IS REQUIRED BY THE OFFICE OF THE STATE FIRE MARSHAL.

PLUMBING REQUIREMENTS

OCCUPANCY CALCULATIONS FOR PLUMBING FIXTURES

TOTAL NUMBER OF ALLOWABLE OCCUPANTS = 5 OCCUPANTS

IL PLUMBING CODE REQUIREMENTS
ALL FACILITIES FOR EMPLOYEE USE
(890.TABLE B. MINIMUM NUMBER OF PLUMBING FIXTURES)

WC	1: 1-15	LAV 1: 1-15
	2: 16-35	2: 16-35
	3: 36-55	3: 36-60

CODE REQUIRED NUMBER OF FIXTURES:
TOTAL FIXTURES = 1 WC & 1 LAV

ACTUAL NUMBER OF FIXTURES PROVIDED:
TOTAL FIXTURES = 4 WC & 4 LAV

ENERGY CODE ANALYSIS

MINIMUM THERMAL ENVELOPE REQUIREMENTS
CLIMATE ZONE 5A

TABLE C402.1.3
- ROOFS R-30 ci
- EXTERIOR MASS WALLS R-11.4 ci
- BELOW GRADE WALLS R-7.5ci
- FLOORS MASS R-10 ci
- UNHEATED SLABS R-10 FOR 24 INCHES BELOW

TABLE C402.1.4
- SWINGING DOOR U-0.37

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ISSUED FOR BID

STATE OF ILLINOIS
MARK M. STROMBERG
001-017758
LICENSED ARCHITECT
EXPIRES: 11/30/2024

No.	Description	Date
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2	ISSUED FOR BID	2024-08-22

GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
2218 N Prospect Rd
Peoria, IL 61603

CODE & LIFE SAFETY ANALYSIS

DRAWN:	AH
CHECKED:	BS
APPROVED:	SC
JOB NO:	24-1006

SHEET NO.
G-002

GENERAL NOTES:

1. THE SURVEY BASE PROVIDED HEREIN IS FOR INFORMATIONAL PURPOSES ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL SITE CONDITIONS.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AFFECTING THEIR WORK WITH ACTUAL CONDITIONS AT THE JOB SITE. IF THERE ARE ANY DISCREPANCIES FROM WHAT IS SHOWN ON THE CONSTRUCTION PLAN, THEY MUST IMMEDIATELY REPORT SAME TO THE ENGINEER BEFORE DOING ANY WORK, OTHERWISE THE CONTRACTOR ASSUMES FULL RESPONSIBILITIES. IN THE EVENT OF DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, STANDARD SPECIFICATIONS AND/OR SPECIAL DETAIL, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSIONS OR DISCREPANCIES, FAILING TO SECURE SUCH INSTRUCTION, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT THEIR OWN RISK AND EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTION ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE.
3. EXCEPT WHERE MODIFIED BY THE CONTRACT DOCUMENTS, ALL WORK PROPOSED HEREIN SHALL BE IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:
   A. ILLINOIS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION AND ALL SUPPLEMENTAL PROVISIONS AND ADDENDA, LATEST EDITION.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS AND PAYING THE REQUISITE FEES FOR CONSTRUCTION. THEY SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE STREETS OR ROADWAYS AND ASSOCIATED STRUCTURES AND SHALL MAKE REPAIRS AS NECESSARY TO THE SATISFACTION OF THE ENGINEER.
5. THE CONTRACTOR MUST COMPLY WITH ALL FEDERAL, STATE AND LOCAL CODES.
6. ALL WORK AND MATERIALS WHICH DO NOT CONFORM TO THE SPECIFICATIONS ARE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
7. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
8. ALL DISTURBED AREAS SHALL BE RESTORED BY THE CONTRACTOR TO THE ORIGINAL CONDITION.

DEMOLITION NOTES:

1. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND SPECIFIED HEREIN AND INCLUDES, BUT IS NOT LIMITED TO THE REMOVAL OF ALL UTILITIES, OVERHEAD LINES AND POLES, PAVING, VEGETATION AND OTHER SITE FEATURES WHICH CONFLICT WITH THE CONSTRUCTION OF THE NEW FACILITIES, OR ARE DESIGNATED TO BE REMOVED.
2. CONDUCT DEMOLITION OPERATIONS AND REMOVAL OF DEBRIS AND SPOILS TO ENSURE MINIMAL INTERFERENCE WITH FACILITY OPERATIONS.
3. ENSURE SAFE PASSAGE OF PERSONS AROUND AREAS OF DEMOLITION. REMOVE FROM SITE ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM DEMOLITION AND LAWFULLY DISPOSE OF SAME.
4. NOTIFY OWNER 48 HOURS IN ADVANCE OF ANY UTILITY SHUTDOWN.
5. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER/ARCHITECT ALL ITEMS DESIGNATED TO BE REMOVED OR RELOCATED.
6. IF ANY ITEMS ARE ENCOUNTERED IN THE FIELD THAT ARE NOT SHOWN ON THE PLAN WHICH REQUIRE DEMOLITION OR RELOCATION, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY.
7. THE CONTRACTOR WILL PROTECT ALL UTILITIES DESIGNATED TO REMAIN. ANY DAMAGE BY THE CONTRACTOR TO UTILITIES, ALLEYWAYS, STREETS OR ADJACENT PROPERTIES WILL BE REPLACED/REPAIRED AT THE CONTRACTOR'S EXPENSE.
8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE ALL EXISTING SERVICES AND APPURTENANCES TO DEMOLISHED SITE FEATURES AND CAP/TERMINATE AS REQUIRED BY THE UTILITY COMPANY. CONTRACTOR SHOULD CONTACT ARCHITECT/ENGINEER IF ANY QUESTION ARISES REGARDING THE VIABILITY OF A UTILITY STRUCTURE.

DIMENSION NOTES:

1. ALL DIMENSIONS ARE FROM FACE OF CURB, FACE OF BUILDING, EDGE OF PAVEMENT, PROPERTY LINE OR POINT OF TANGENCY UNLESS OTHERWISE NOTED.

GRADING NOTES:

1. CONTRACTOR TO ADJUST RIMS OF ALL EXISTING STRUCTURES TO MEET NEW GRADES.
2. FOR PUBLIC SIDEWALKS THE MAXIMUM CROSS-SLOPE SHALL NOT EXCEED 2.0%, THE MAXIMUM RUNNING SLOPE SHALL NOT EXCEED 5.0% OR THE GENERAL GRADE ESTABLISHED FOR THE ADJACENT STREET, WHICH EVER IS HIGHER.
3. ELEVATIONS SHOWN ARE PER NAVD 88 DATUM.

EROSION CONTROL NOTES:

1. THE SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS FOR SOIL AND SEDIMENTATION CONTROL OF LOCAL GOVERNMENT AGENCIES, PROCEDURES AND STANDARDS FOR URBAN SOIL AND SEDIMENTATION CONTROL IN ILLINOIS, AND IEPA STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, LATEST EDITION.
2. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
3. PRIOR TO COMMENCING LAND-DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING BUT NOT LIMITED TO, ADDITIONAL PHASES OF DEVELOPMENT AND OFF-SITE BORROW OR WASTE AREAS) A SUPPLEMENTARY EROSION CONTROL PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW.
4. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE ENGINEER.
5. PERMANENT OR TEMPORARY SOIL STABILIZATION MUST BE APPLIED WITHIN 15 CALENDAR DAYS OF THE END OF ACTIVE SOIL DISTURBANCE.
6. FILTER BASKETS SHALL BE INSTALLED AND MAINTAINED AROUND THE INLET AND OUTLET STRUCTURES AS SPECIFIED.
7. SEDIMENTATION BASINS, BARRIERS, AND ALL APPROPRIATE EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SORT OF SITE DISTURBING.
8. THE CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES WEEKLY AND AFTER ANY STORM EVENT IN EXCESS OF 1/2".
9. SHOULD THE VOLUME, VELOCITY, SEDIMENT LOAD, OR PEAK FLOW RATES OF STORMWATER RUNOFF TEMPORARILY INCREASE DURING CONSTRUCTION, THEN ADDITIONAL MEASURES TO PROTECT ADJACENT PROPERTIES SHALL BE UNDERTAKEN.
10. THE TEMPORARY EROSION MEASURES SHALL REMAIN IN PLACE UNTIL ALL THE PERMANENT EROSION CONTROL ITEMS ARE FULLY FUNCTIONAL.
11. GRAVELED ROADS, ACCESS DRIVES, PARKING AREAS OF SUFFICIENT WIDITH AND LENGTH, AND VEHICLES WASHDOWN FACILITIES, SHALL BE PROVIDED TO PREVENT THE DEPOSIT OF SOIL FROM BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS. ANY SOIL REACHING A PUBLIC OR PRIVATE ROADWAY SHALL BE REMOVED CONTINUOUSLY.
12. DUST SCREENING SHALL BE PROVIDED ON ALL CONSTRUCTION FENCING.

UTILITY NOTES:

1. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES SHALL BE OBTAINED FROM ALL UTILITY COMPANIES, INVESTIGATED AND VERIFIED IN THE FIELD BY THE CONTRACTOR BEFORE STARTING WORK IN THE CONSTRUCTION AREA. EXCAVATION IN THE VICINITY OF EXISTING STRUCTURES SHALL BE PERFORMED BY HAND. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING FACILITIES, MAINTENANCE AND PROTECTION OF EXISTING UTILITIES AND STRUCTURES.
2. THE CONTRACTOR IS TO UNCOVER ALL LINES BEING TIED INTO AND VERIFY GRADES BEFORE ANY CONSTRUCTION.
3. EXCEPT WHERE MODIFIED BY THE CONTRACT DOCUMENTS, ALL UTILITY WORK PROPOSED HEREIN SHALL BE IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:
   A. ILLINOIS SOCIETY OF PROFESSIONAL ENGINEERS "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", LATEST EDITION.
4. CALL JULIE (800) 892-0123 PRIOR TO DIGGING FOR ANY UTILITY CONSTRUCTION.
5. A WATER MAIN SHALL BE SEPARATED FROM A SEWER SO THAT ITS INVERT IS A MINIMUM OF 18 INCHES ABOVE THE CROWN OF THE SEWER. WHENEVER WATER MAINS CROSS STORM SEWERS, SANITARY SEWERS OR SEWER SERVICE CONNECTIONS, THIS VERTICAL SEPARATION SHALL BE MAINTAINED. A LENGTH OF WATER MAIN PIPE SHALL BE CENTERED OVER THE SEWER TO BE CROSSED WITH JOINTS EQUIDISTANT FROM THE SEWER OR DRAIN. A TEN FOOT HORIZONTAL SEPARATION BETWEEN ALL WATER AND SEWER PIPES SHALL BE MAINTAINED.
6. WHEN IT IS IMPOSSIBLE TO OBTAIN THE PROPER SEPARATION AS DESCRIBED ABOVE, OR THE WATER MAIN PASSES UNDER A SEWER OR DRAIN, BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT CAST OR DUCTILE IRON PIPE EQUIVALENT TO WATER MAIN STANDARDS OF CONSTRUCTION.

GENERAL NOTES FOR WORK IN THE PUBLIC WAY:

1. THE ILLINOIS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION." LATEST EDITION, AND ALL ADDENDA THERETO SHALL GOVERN THE EARTHWORK AND PAVING WORK UNDER THIS CONTRACT.
2. THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS," LATEST EDITION, SHALL GOVERN THE UNDERGROUND WORK UNDER THIS CONTRACT EXCEPT AS MODIFIED BY THESE SPECIFICATIONS, OR WHERE IN CONFLICT WITH CITY OF PEORIA STANDARDS.
3. ALL WORK SHALL BE CONDUCTED IN ACCORDANCE WITH OSHA REQUIREMENTS AND CITY OF PEORIA REGULATIONS AND STANDARDS AND SHALL CONFORM IN ALL RESPECTS TO ALL STATE AND FEDERAL LAWS AND REGULATIONS.
4. THE CONTRACTORS SHALL NOTIFY ALL UTILITY COMPANIES FOR FIELD LOCATIONS OF THEIR FACILITIES PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF THESE FACILITIES. ANY UTILITY LOCATIONS SHOWN ON PLANS ARE BASED ON AVAILABLE RECORDS AND ARE FOR GENERAL DIRECTION ONLY. ALL UTILITY LOCATIONS SHOWN MUST BE VERIFIED BY THE CONTRACTOR IN THE FIELD.
5. ALL UTILITY TRENCHES UNDER AND WITHIN TWO FEET OF PAVEMENT, SIDEWALK, CURB AND GUTTER, ETC. SHALL BE BACKFILLED WITH CA-6 CRUSHED STONE (GRADE 8 OR 9), COMPACTED IN 9" LIFTS TO 95% OF MODIFIED PROCTOR.
6. UTILITY CONNECTIONS WITHIN THE STREET RIGHT-OF-WAY SHALL BE ACCOMPLISHED BY SAW CUTTING AND REMOVING THE EXISTING PAVEMENT. BACKFILL AND RESTORATION SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE DEPT. OF TRANSPORTATION.
7. THE CONTRACTOR SHALL INFORM THE COMMISSIONER 72 HOURS PRIOR TO REMOVING ANY STREET CAR TRACKS IF DISCOVERED AND NECESSARY TO REMOVE. THE COMMISSIONER WILL VERIFY THAT THE TRACKS AND/OR THE BURIED NEGATIVE GROUND CABLE IS NOT BEING USED FOR ELECTROLYSIS.

DUTY TO INDEMNIFY

THE CONTRACTOR SHALL DEFEND, INDEMNIFY, KEEP SAFE HARMLESS THE MUNICIPALITY, OWNER AND ENGINEER, AND THEIR RESPECTIVE BOARD MEMBERS, REPRESENTATIVES, AGENTS AND EMPLOYEES, IN BOTH INDIVIDUAL AND OFFICIAL CAPACITIES, AGAINST ALL SUITS, CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES, CAUSED BY, GROWING OUT OF, OR INCIDENTAL TO THE PERFORMANCE OF WORK UNDER THE CONTRACT BY THE CONTRACTOR OR ITS SUBCONTRACTORS TO THE FULL EXTENT AS ALLOWED BY THE LAWS OF THE STATE OF ILLINOIS AND NOT BEYOND ANY EXTENT WHICH WOULD RENDER THESE PROVISIONS VOID OR UNENFORCEABLE. THIS OBLIGATION INCLUDES BUT IS NOT LIMITED TO: THE ILLINOIS LAWS REGARDING STRUCTURAL WORK [IL REV. STAT. CH 48, PAR. 60 AT SEQ.] AND REGARDING THE PROTECTION OF ADJACENT LANDOWNERS [IL. REV. STAT. CH. 17-1/2 PAR. 51 ET. SEQ.]. IN THE EVENT OF ANY SUCH INJURY [INCLUDING DEATH] OR LOSS OR DAMAGE, OF CLAIMS THEREFORE, OR CLAIMS THEREFORE, THE CONTRACTOR SHALL GIVE PROMPT NOTICE TO THE OWNER.

AS-BUILT DRAWINGS

A. CONTRACTOR TO SUBMIT AS-BUILT DRAWINGS TO ENGINEER OF RECORD FOR REVIEW AND APPROVAL AS FOLLOWS:
   i. WITHIN 48 HOURS OF COMPLETING EARTHWORK ACTIVITIES TO ACHIEVE BOTTOM OF EXCAVATION AT STORMWATER BMP's AS NOTED ON THE DRAWINGS AND PRIOR TO BACKFILLING OPERATIONS.
   ii. WITHIN ONE WEEK OF INSTALLATION OF STORM, SANITARY AND WATER INFRASTRUCTURE AND PRIOR TO ROUGH GRADING ACTIVITIES.
   iii. WITHIN TWO WEEKS OF INSTALLATION OF FINAL GRADING/PAVING.

B. AS-BUILT DRAWINGS MUST INCLUDE THE FOLLOWING INFORMATION:
   i. LOCATION OF STORM, SANITARY, AND WATER STRUCTURES, VAULTS, MANHOLES, ETC.
   ii. STRUCTURE RIM AND PIPE INVERT ELEVATIONS, INCLUDING INVERTS AT CAPPED (BURIED) ENDS.
   iii. TOP/BOTTOM OF WATER PIPE ELEVATIONS AT SEWER/STORM CROSSINGS AND AT STRUCTURES.
   iv. LOCATION, SIZE, LENGTH AND MATERIAL OF SANITARY, STORM AND WATER PIPING, INCLUDING LOCATION OF BENDS.
   v. GRADING DETAIL AT THE LEVEL OF DETAIL AND AT THE SCALE(S) SHOWN IN THE CIVIL PLANS, INCLUDING DETAIL ENLARGEMENTS AT 1:5 SCALE.
   vi. SPOT ELEVATIONS AND CONTOURS.
   vii. BOTTOM OF EXCAVATION AT STORMWATER BMPS.

C. AS-BUILT DRAWINGS MUST BE:
   iv. GENERATED BY A SURVEYOR LICENSED IN THE STATE THE PROJECT IS LOCATED.
   ii. MANUFACTURED AS A MARK-UP OF CIVIL ENGINEERING PLANS. IF SURVEY DEVIATES FROM DESIGN, A LINE SHALL BE STRUCK THROUGH THE DESIGN TEXT AND AS-BUILT INFORMATION WRITTEN NEXT TO IT. IF SURVEY MATCHES DESIGN, THE DESIGN TEXT SHALL BE CIRCLED INDICATING FULL COMPLIANCE.

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INCLUSIVE BATHROOM & SITE IMPROVEMENTS
GLEN OAK PARK
PEORIA PARK DISTRICT

LICENSED PROFESSIONAL ENGINEER
KEVIN HEJTMANEK
062-067844
OF ILLINOIS
EXP 11/30/25

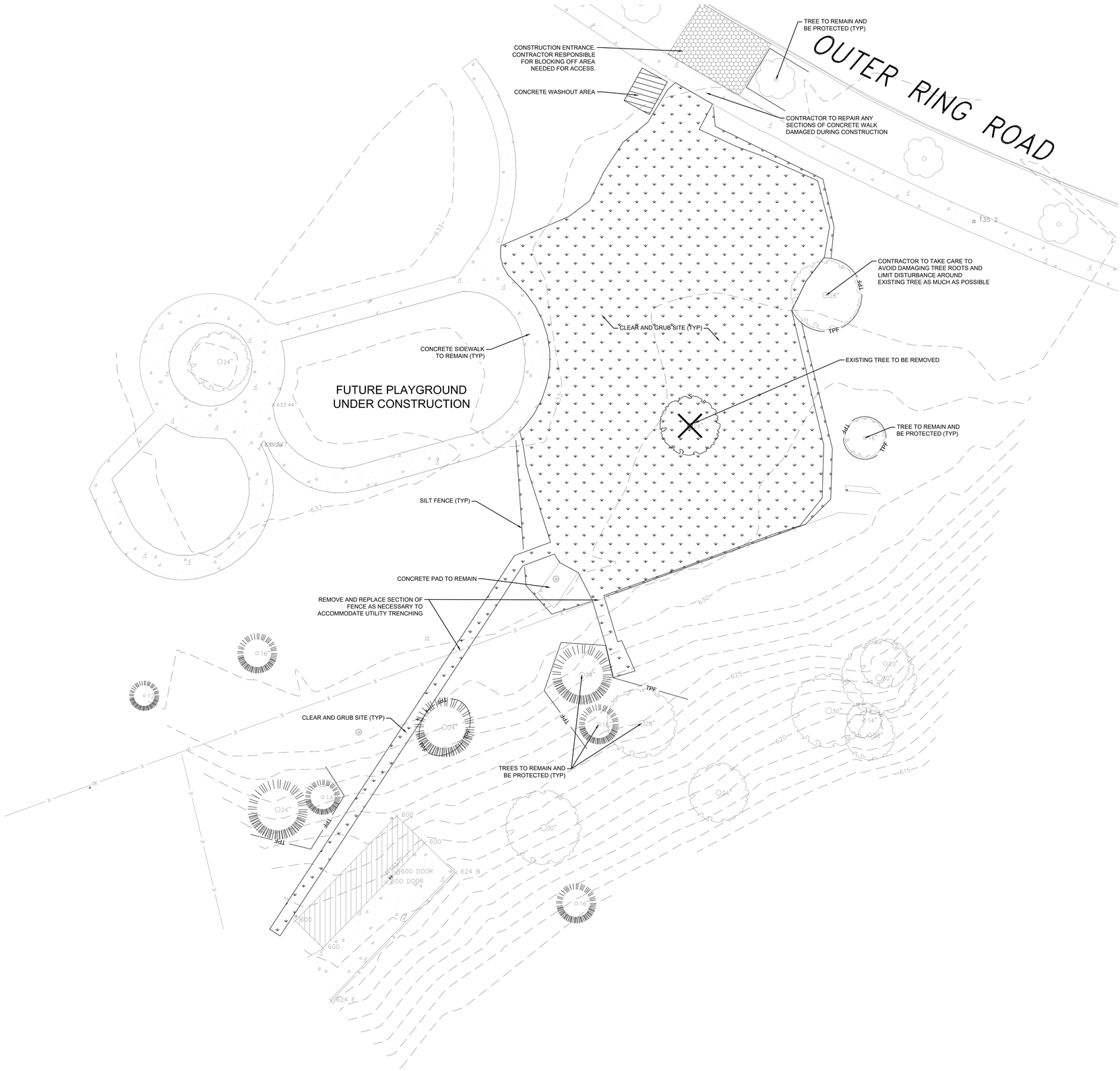
No.	Description	Date
1	ISSUED FOR 60% DESIGN	2024-05-23
2	ISSUED FOR 90% DESIGN	2024-07-11
3	ISSUED FOR BID	2024-08-22

GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
2218 N Prospect Rd
Peoria, IL 61603

GENERAL NOTES

DRAWN:	MS
CHECKED:	KH
APPROVED:	KH
JOB NO:	24-172

SHEET NO.
C-001



N

Scale: 1 inch = 10 feet

LEGEND:

- CLEAR AND GRUB SITE
- EXISTING TREE TO BE REMOVED
- TPF — TREE PROTECTION FENCE
- SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- CONCRETE WASHOUT AREA

700 N Sangamon
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GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
GLEN OAK PARK
PEORIA PARK DISTRICT

LICENSED PROFESSIONAL ENGINEER
KEVIN HEJTMANEK
062-067844
OF ILLINOIS
EXP 11/30/25

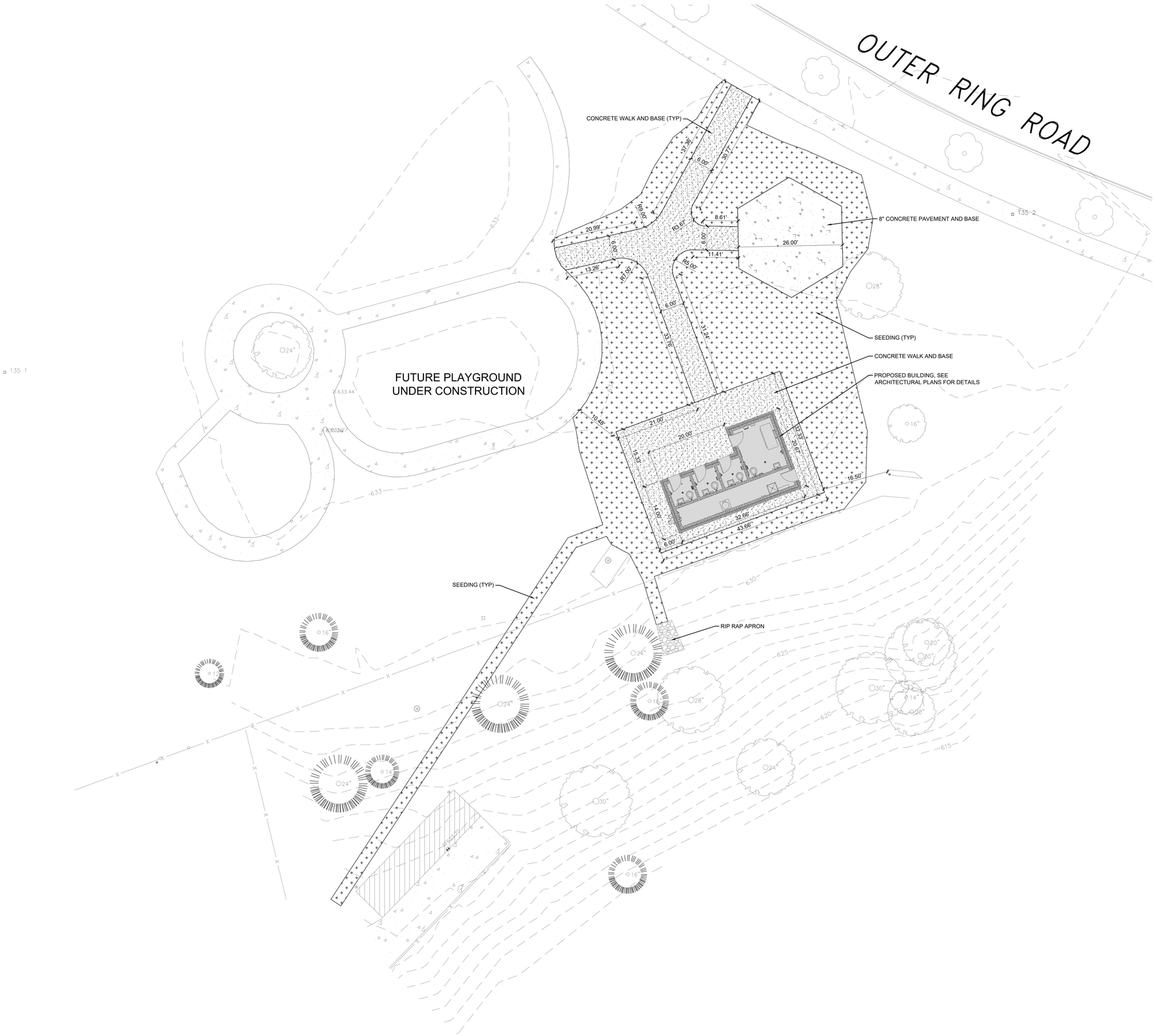
No.	Description	Date
1	ISSUED FOR 60% DESIGN	2024-05-23
2	ISSUED FOR 90% DESIGN	2024-07-11
3	ISSUED FOR BID	2024-08-22

GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
2218 N Prospect Rd
Peoria, IL 61603

SITE DEMOLITION AND EROSION CONTROL PLAN

DRAWN:	MS
CHECKED:	KH
APPROVED:	KH
JOB NO:	24-172

SHEET NO.
C-100



N

Scale: 1 inch = 10 feet

LEGEND:

- PROPOSED BUILDING
- CONCRETE PAVEMENT AND BASE
- CONCRETE WALK AND BASE
- SEEDING
- RIP RAP APRON, SEE DETAIL

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INCLUSIVE BATHROOM & SITE IMPROVEMENTS
GLEN OAK PARK
PEORIA PARK DISTRICT

LICENSED PROFESSIONAL ENGINEER
KEVIN HEJTMANEK
062-067844
OF ILLINOIS
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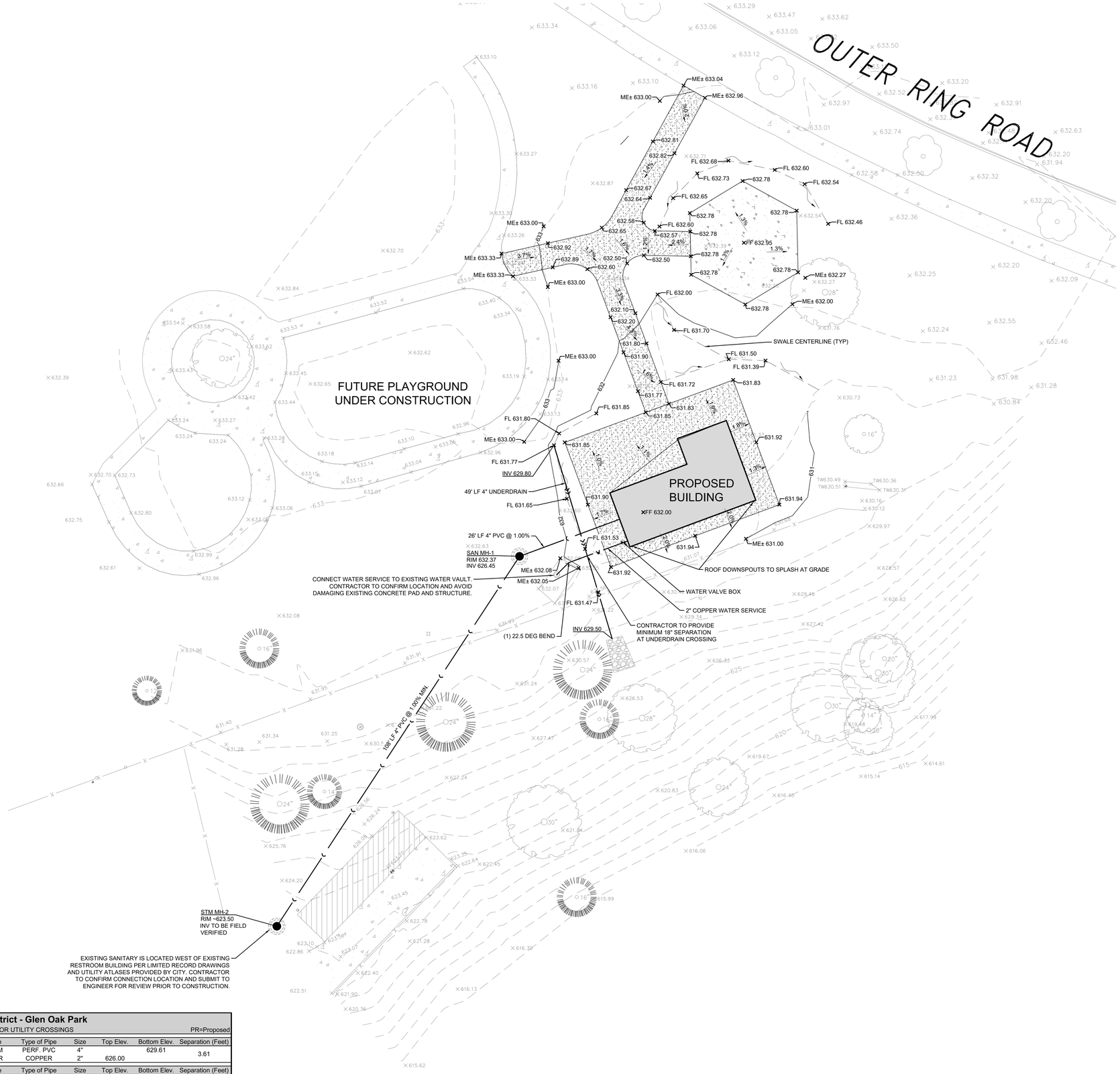
GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
2218 N Prospect Rd
Peoria, IL 61603

SITE DIMENSION PLAN

DRAWN:	IDM
CHECKED:	KH
APPROVED:	KH
JOB NO:	24-172

SHEET NO.
C-200



N

Scale: 1 inch = 10 feet

LEGEND:

- SANITARY SEWER
- WATER SERVICE
- 1.0% — SLOPE ARROW
- ME± — MATCH EXISTING
- FF — FINISHED FLOOR
- FL — FLOW LINE
- 9 — PROPOSED CONTOUR
- SWALE CENTERLINE
- EXISTING CONTOUR

Peoria Park District - Glen Oak Park

ELEVATION TABLES FOR UTILITY CROSSINGS — PR=Proposed

Tag #	Use of Pipe	Type of Pipe	Size	Top Elev.	Bottom Elev.	Separation (Feet)
1	PR. STORM	PERF. PVC	4"		629.61	3.61
	PR. WATER	COPPER	2"	626.00		

Tag #	Use of Pipe	Type of Pipe	Size	Top Elev.	Bottom Elev.	Separation (Feet)
2	PR. STORM	PERF. PVC	4"		629.66	3.05
	PR. SANITARY	PVC	4"	626.61		

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GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS

GLEN OAK PARK
PEORIA PARK DISTRICT

LICENSED PROFESSIONAL ENGINEER
KEVIN HEJTMANEK
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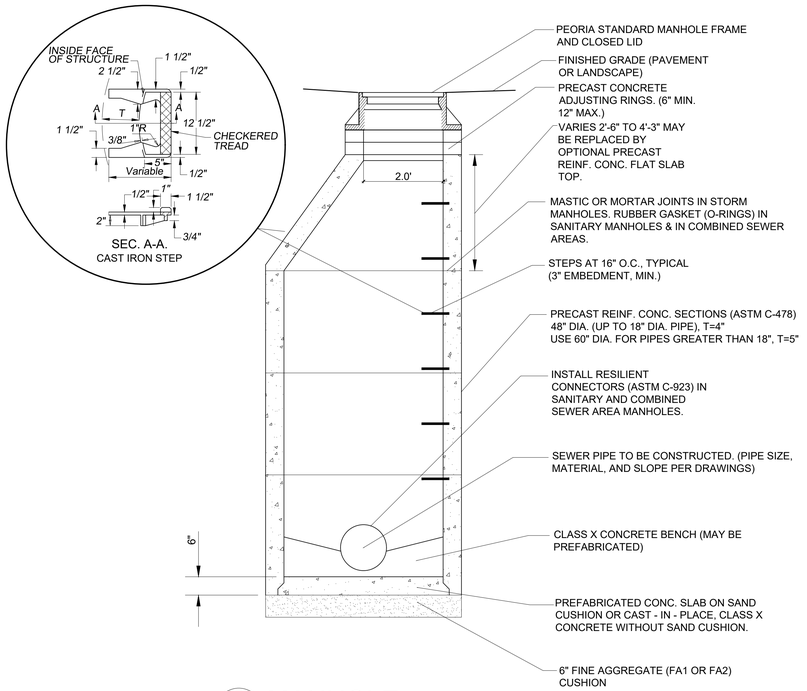
GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
2218 N Prospect Rd
Peoria, IL 61603

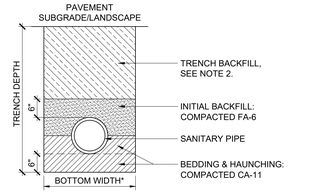
SITE GRADING AND UTILITY PLAN

DRAWN:	IDM
CHECKED:	KH
APPROVED:	KH
JOB NO:	24-172

SHEET NO.
C-300



1 MANHOLE
SCALE: 1" = 1'-0"

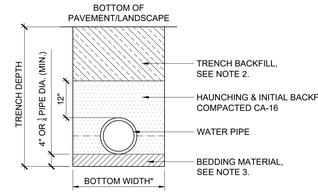


* BOTTOM WIDTH: 9" + O.D. + 9", WHEN TRENCH DEPTH ≤ 5 FT.
* BOTTOM WIDTH: 18" + O.D. + 18", WHEN TRENCH DEPTH > 5 FT.

SEWER TRENCH BEDDING AND BACKFILL

GENERAL NOTES:
1. SEE UTILITY PLAN FOR PIPE SIZE, INVERT, AND MATERIAL INFORMATION.
2. TRENCH BACKFILL BENEATH PAVEMENT IS TO MATCH PAVEMENT SUBBASE, CA-6 OR CA-7. TRENCH BACKFILL BENEATH LANDSCAPE IS TO BE EARTH BACKFILL AND TOPSOIL.

2 SEWER TRENCH BEDDING AND BACKFILL
SCALE: 1" = 1'-0"

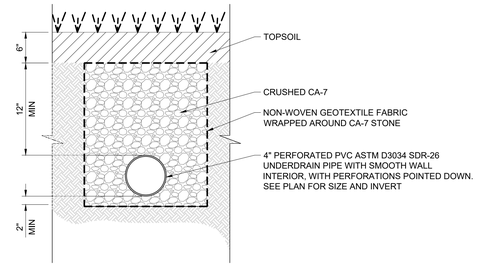


* BOTTOM WIDTH: 12" + O.D. + 12"

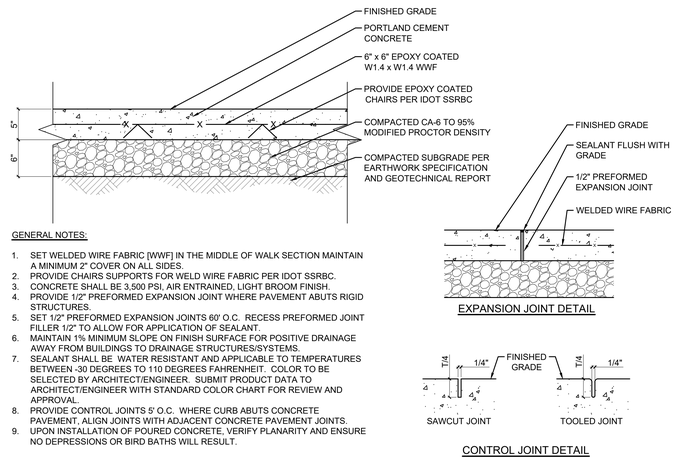
WATER PIPE TRENCH BEDDING AND BACKFILL

GENERAL NOTES:
1. SEE UTILITY PLAN FOR PIPE SIZE, INVERT, AND MATERIAL INFORMATION.
2. TRENCH BACKFILL BENEATH PAVEMENT IS TO MATCH PAVEMENT SUBBASE, CA-6 OR CA-7. TRENCH BACKFILL BENEATH LANDSCAPE IS TO BE EARTH BACKFILL AND TOPSOIL.
3. FOR PIPE SIZES UP TO 16"Ø, BEDDING MATERIAL TO BE COMPACTED CA-16. FOR PIPE SIZES GREATER THAN 16"Ø, BEDDING MATERIAL TO BE COMPACTED CA-11.

3 WATER TRENCH BEDDING AND BACKFILL
SCALE: 1" = 1'-0"

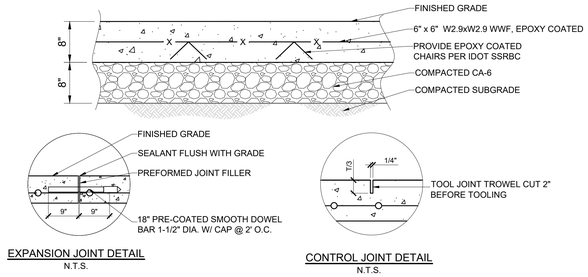


4 TYPICAL UNDERDRAIN SECTION
SCALE: NTS



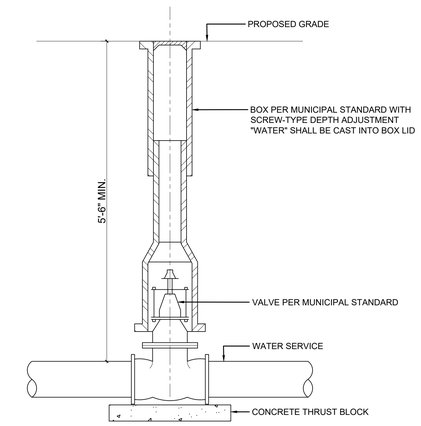
GENERAL NOTES:
1. SET WELDED WIRE FABRIC [WWF] IN THE MIDDLE OF WALK SECTION MAINTAIN A MINIMUM 2" COVER ON ALL SIDES.
2. PROVIDE CHAIRS SUPPORTS FOR WELD WIRE FABRIC PER IDOT SSRBC.
3. CONCRETE SHALL BE 3,500 PSI, AIR ENTRAINED, LIGHT BROOM FINISH.
4. PROVIDE 1/2" PREFORMED EXPANSION JOINT WHERE PAVEMENT ABUTS RIGID STRUCTURES.
5. SET 1/2" PREFORMED EXPANSION JOINTS 60' O.C. RECESS PREFORMED JOINT FILLER 1/2" TO ALLOW FOR APPLICATION OF SEALANT.
6. MAINTAIN 1% MINIMUM SLOPE ON FINISH SURFACE FOR POSITIVE DRAINAGE AWAY FROM BUILDINGS TO DRAINAGE STRUCTURES/SYSTEMS.
7. SEALANT SHALL BE WATER RESISTANT AND APPLICABLE TO TEMPERATURES BETWEEN -30 DEGREES TO 110 DEGREES FAHRENHEIT. COLOR TO BE SELECTED BY ARCHITECT/ENGINEER. SUBMIT PRODUCT DATA TO ARCHITECT/ENGINEER WITH STANDARD COLOR CHART FOR REVIEW AND APPROVAL.
8. PROVIDE CONTROL JOINTS 5' O.C. WHERE CURB ABUTS CONCRETE PAVEMENT. ALIGN JOINTS WITH ADJACENT CONCRETE PAVEMENT JOINTS.
9. UPON INSTALLATION OF POURED CONCRETE, VERIFY PLANARITY AND ENSURE NO DEPRESSIONS OR BIRD BATHS WILL RESULT.

5 CONCRETE WALK AND BASE
SCALE: 1" = 1'-0"



GENERAL NOTES:
1. SET WELDED WIRE FABRIC [WWF] 4" FROM BOTTOM OF SLAB.
2. REFER TO DRAWINGS FOR PAVEMENT LOCATIONS AND ELEVATIONS.
3. CONCRETE SHALL BE 3,500 PSI, A/E. LIGHT BROOM FINISH.
4. PROVIDE ½" PREFORMED EXPANSION JOINT WHERE PAVEMENT ABUTS RIGID STRUCTURES.
5. MAINTAIN 1% MINIMUM SLOPE ON FINISH SURFACE FOR POSITIVE DRAINAGE AWAY FROM BUILDINGS TO DRAINAGE STRUCTURES/SYSTEMS.
6. SET ½" PREFORMED EXPANSION JOINTS 50' O.C. RECESS PREFORMED JOINT FILLER ½" TO ALLOW FOR APPLICATION OF SEALANT.
7. SEALANT SHALL BE WATER RESISTANT AND APPLICABLE TO TEMPERATURES BETWEEN -30 DEGREES TO 110 DEGREES FAHRENHEIT. COLOR TO BE SELECTED BY ARCHITECT/ENGINEER. SUBMIT PRODUCT DATA TO ARCHITECT/ENGINEER WITH STANDARD COLOR CHART FOR REVIEW AND APPROVAL.
8. PROVIDE CONTROL JOINTS 15' O.C.
9. UPON INSTALLATION OF POURED CONCRETE, VERIFY PLANARITY AND ENSURE NO DEPRESSIONS OR BIRD BATHS WILL RESULT.

6 8" CONCRETE PAVEMENT AND BASE
SCALE: NTS



7 WATER VALVE BOX
SCALE: NTS

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INCLUSIVE BATHROOM & SITE IMPROVEMENTS
GLEN OAK PARK
PEORIA PARK DISTRICT

LICENSED PROFESSIONAL ENGINEER
KEVIN HEJTMANEK
062-067844
OF ILLINOIS
EXP 11/30/25

No.	Description	Date
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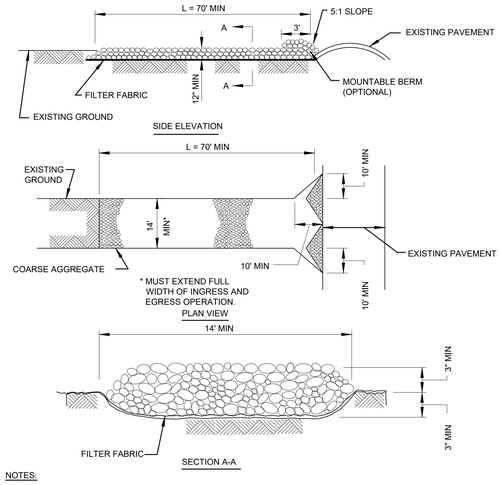
2	ISSUED FOR 90% DESIGN	2024-07-11
3	ISSUED FOR BID	2024-08-22

GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
2218 N Prospect Rd
Peoria, IL 61603

SITE DETAILS

DRAWN:	MS
CHECKED:	KH
APPROVED:	KH
JOB NO:	24-172

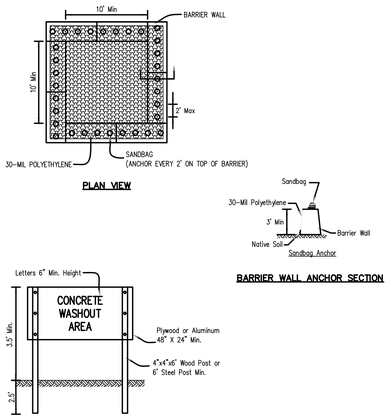
SHEET NO.
C-500



NOTES:

1. FILTER FABRIC SHALL MEET THE REQUIREMENTS OF MATERIAL SPECIFICATION 592 GEOTEXTILE, TABLE I OR 2, CLASS I, II OR IV AND SHALL BE PLACED OVER THE CLEARED AREA PRIOR TO THE PLACING OF ROCK.
2. ROCK OR RECLAIMED CONCRETE SHALL MEET ONE OF THE FOLLOWING IDOT COARSE AGGREGATE GRADATION, CA-1 OR CA-4 AND BE PLACED ACCORDING TO CONSTRUCTION SPECIFICATION 25 ROCKFILL USING PLACEMENT METHOD 1 AND CLASS III COMPACTION.
3. ANY DRAINAGE FACILITIES REQUIRED BECAUSE OF WASHING SHALL BE CONSTRUCTED ACCORDING TO MANUFACTURERS SPECIFICATIONS.
4. ANY WASH RACKS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.
5. ANY WASH RACKS SHALL BE CONSTRUCTED OF REINFORCED P.C.C. IN ACCORDANCE WITH PROJECTED DAILY TRUCK LOAD.
6. WATER SOURCE MUST BE PROVIDED NEAR WASH RACK FOR CLEANING, AND POSITIVE DRAINAIGE AWAY FROM ENTRANCE TO SEDIMENT TRAPPING DEVICE MUST BE PROVIDED.
7. CONTRACTOR TO REMOVE ALL STONE AND DEBRIS FROM SITE

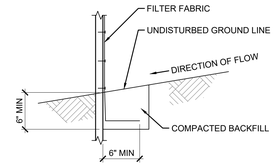
1 STABILIZED CONSTRUCTION ENTRANCE
SCALE: NTS



NOTES:

1. Maintaining temporary concrete washout facilities shall include removing and disposing of hardend concrete and/or slurry and returning the facilities to a functional condition.
2. Facility shall be cleaned or reconstructed in a new area once washout becomes two-thirds full.

2 CONCRETE WASHOUT FACILITY
SCALE: NTS

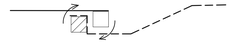


FABRIC ANCHOR DETAIL
SCALE: 1" = 1'-0"

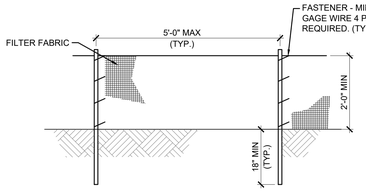
INSTALLATION

STEP 1: PLACE THE END POST OF THE SECOND FENCE INSIDE THE END POST OF THE FIRST FENCE.

STEP 2: ROTATE BOTH POSTS AT LEAST 180 DEGREES IN A CLOCKWISE DIRECTION TO CREATE A TIGHT SEAL WITH THE FABRIC MATERIAL.



STEP 3: DRIVE BOTH POSTS A MINIMUM OF 18 INCHES INTO THE GROUND AND BURY THE FLAP.

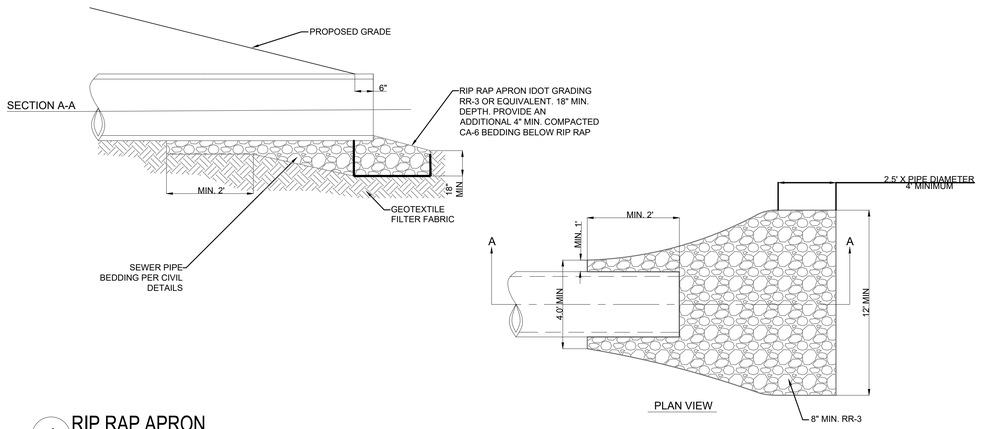


ELEVATION

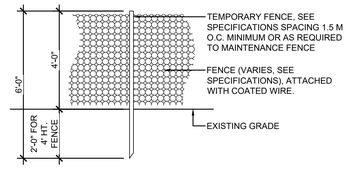
NOTES:

1. TEMPORARY SEDIMENT FENCE SHALL BE INSTALLED PRIOR TO ANY GRADING WORK IN THE AREA TO BE PROTECTED. THEY SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD AND REMOVED IN CONJUNCTION WITH THE FINAL GRADING AND SITE STABILIZATION.
2. FILTER FABRIC SHALL MEET THE REQUIREMENTS OF MATERIAL SPECIFICATION 592 GEOTEXTILE TABLE 1 OR 2, CLASS WITH EQUIVALENT OPENING SIZE OF AT LEAST 30 FOR NONWOVEN AND 50 FOR WOVEN.
3. FENCE POSTS SHALL BE EITHER STANDARD STEEL POST OR WOOD POST WITH A MINIMUM CROSS-SECTIONAL AREA OF 3.0 SQ. IN.

3 SILT FENCE
SCALE: 1" = 1'-0"



4 RIP RAP APRON
SCALE: NTS



5 TREE PROTECTION FENCE
SCALE: NTS

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INCLUSIVE BATHROOM & SITE IMPROVEMENTS
GLEN OAK PARK
PEORIA PARK DISTRICT

LICENSED PROFESSIONAL ENGINEER
KEVIN
HEJTMANEK
062-067844
OF ILLINOIS
EXP 11/30/25

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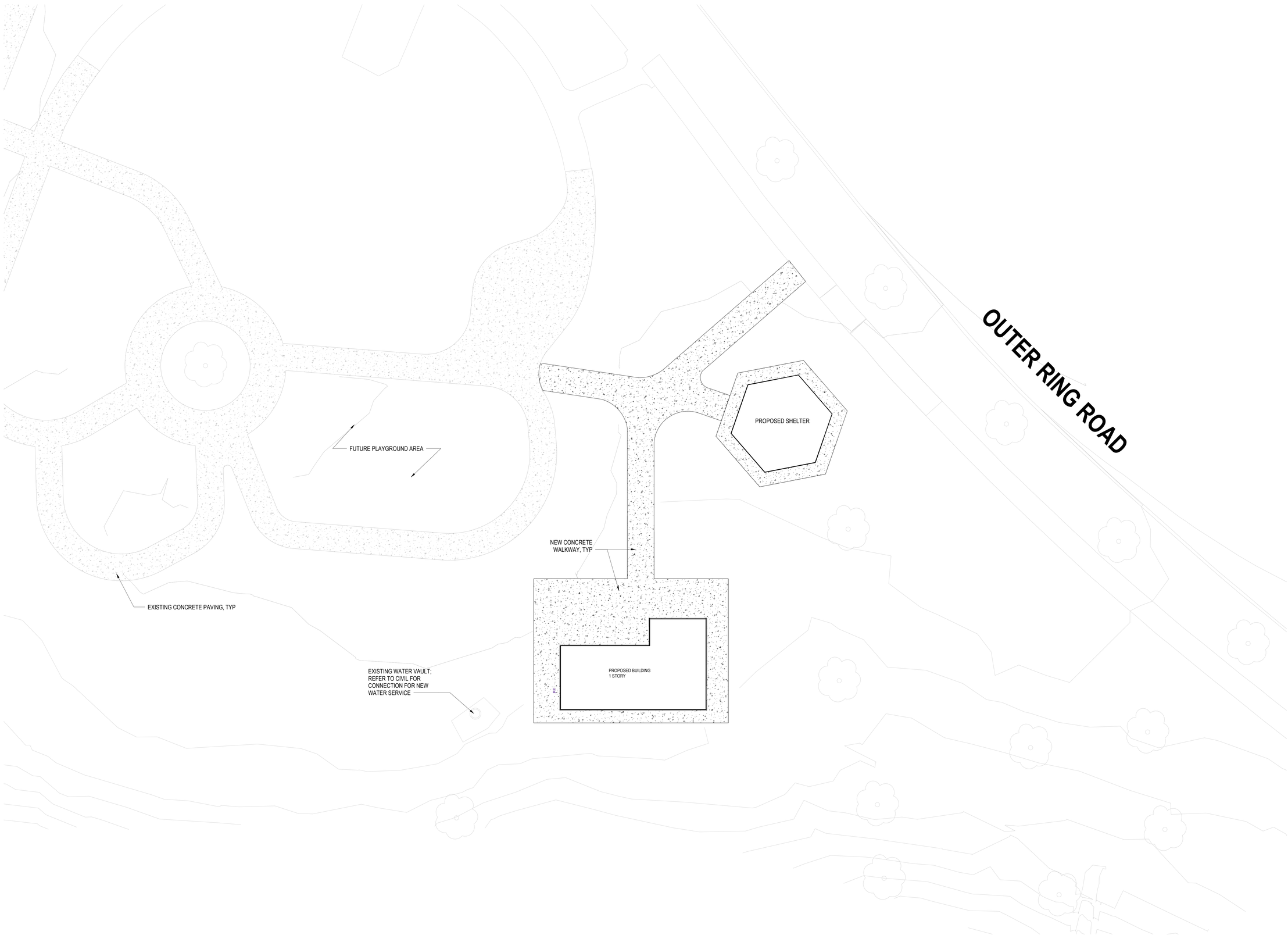
2218 N Prospect Rd
Peoria, IL 61603

SITE DETAILS

DRAWN:	MS
CHECKED:	KH
APPROVED:	KH
JOB NO:	24-172

SHEET NO.
C-501



1 **SITE PLAN**
1/8" = 1'-0"

PROJECT NORTH
TRUE NORTH

16' 8' 4' 0
SCALE: 1/8" = 1'-0"

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INCLUSIVE BATHROOM & SITE IMPROVEMENTS
GLEN OAK PARK
PEORIA PARK DISTRICT

ISSUED FOR BID

STATE OF ILLINOIS
MARK M. STROMBERG
001-017758
LICENSED ARCHITECT

EXPIRES: 11/30/2024

No.	Description	Date
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3	ISSUED FOR BID	2024-08-22

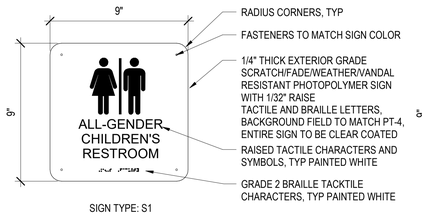
GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
2218 N Prospect Rd
Peoria, IL 61603

SITE PLAN

DRAWN:	AH
CHECKED:	BS
APPROVED:	SC
JOB NO:	24-1006

SHEET NO.
A-100

8/22/2024 2:42:21 PM



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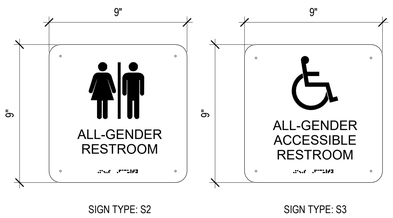
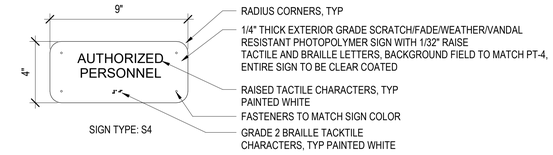


SIGN TYPE: S2

SIGN TYPE: S3



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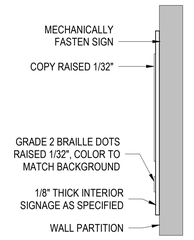
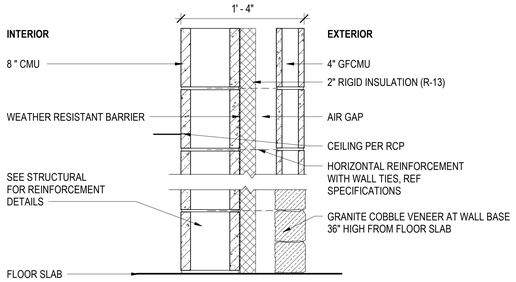
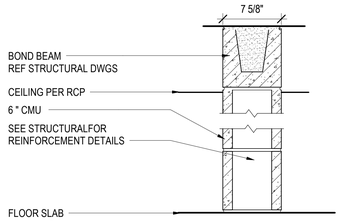


3 BATHROOM SIGNAGE
3" = 1'-0"

4 SIGNAGE MOUNTING DETAIL
3" = 1'-0"

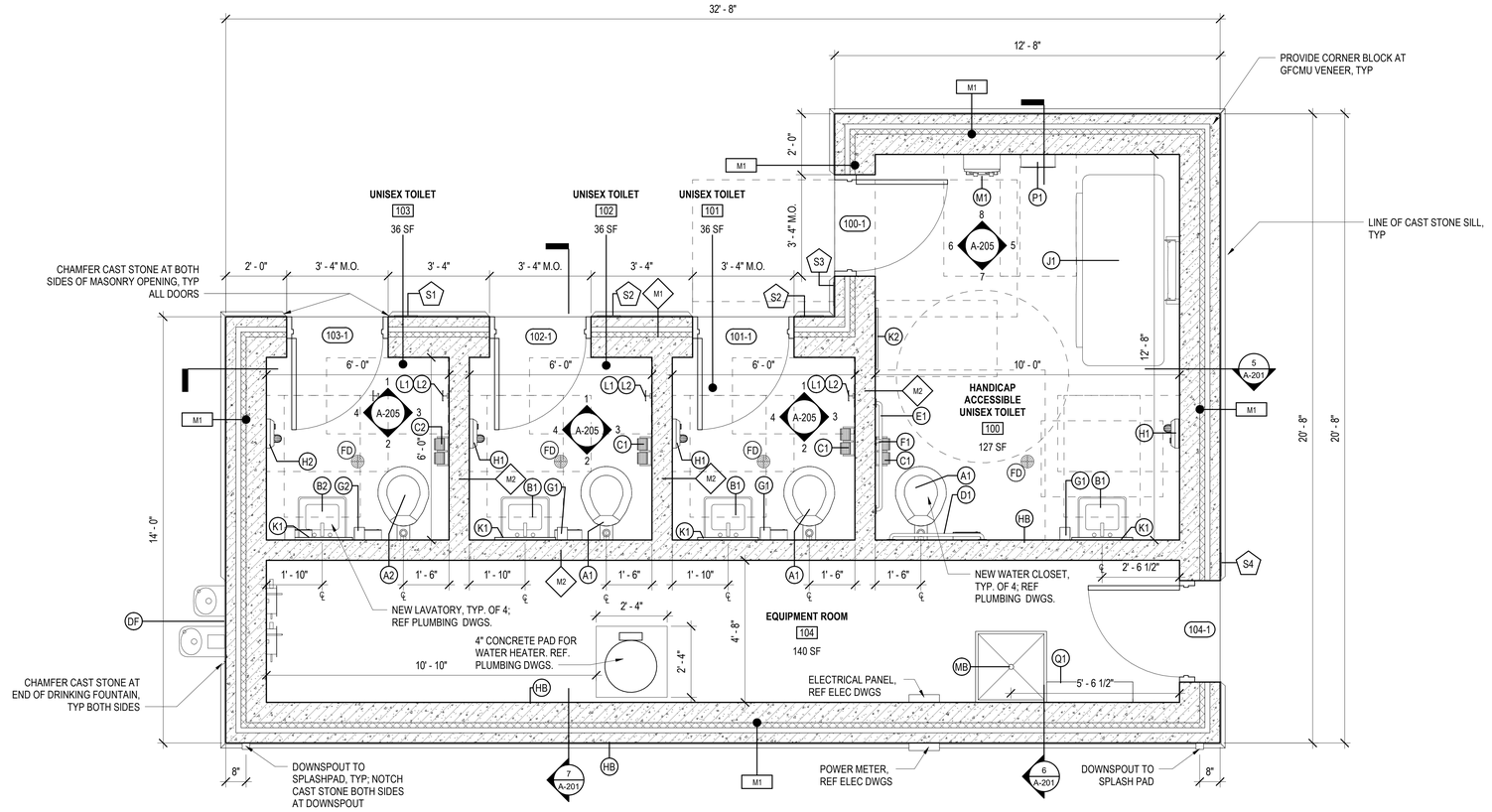


M1 TYPICAL EXTERIOR PARTITION



M2 TYPICAL INTERIOR PARTITION

2 PARTITION TYPES
1 1/2" = 1'-0"



1 FLOOR PLAN
1/2" = 1'-0"

PROJECT NORTH / TRUE NORTH

FLOOR PLAN NOTES

1. CONTRACTOR TO COORDINATE ALL UNDERGROUND UTILITIES, INCLUDING ELECTRICAL CONDUIT, AND PLUMBING SUPPLY / WASTE DRAINAGE.
2. HEATING AND VENTILLATION, ELECTRICAL, AND PLUMBING COMPONENTS, INCLUDING BUT NOT LIMITED TO CONDUIT AND PIPES/DOWNSPOUTS, ARE SHOWN ON ARCHITECTURAL PLANS FOR REFERENCE ONLY.
3. CONTRACTOR TO COORDINATE CODE REQUIRED SIZES FOR CONCRETE PADS OF MEP EQUIPMENT. SEE MEP DRAWINGS.
4. REFER TO FINISH SCHEDULE ON SHEET A-205 FOR ALL FINISH INFORMATION.
5. REFER TO DOOR SCHEDULE ON SHEET A-204.

ACCESSORY NOTES

1. ACCESSIBLE MOUNTING HEIGHTS ARE BASED ON TWO STANDARD AGE RANGES:
   A. CHILD: AGE 5-12
   B. ADULT: AGE OVER 12
2. IN LOCATIONS WITH FULL LENGTH MIRRORS, ENSURE CLEAR FLOOR SPACE FOR A FRONT APPROACH WITH NO DOOR SWING INTERENCE.
3. ACCESSORIES SHALL NOT PROTRUDE MORE THAN 4" INTO THE ACCESSIBLE PATH OF TRAVEL OR CANE DETECTION SHALL BE REQUIRED AT 2'-3" AFF OR MUST BE LOCATED OUTSIDE THE CIRCULATION ROUTE.
4. COORDINATE FIXTURE LOCATIONS WITH ELECTRICAL AND PLUMBING EQUIPMENT AS REQUIRED.

SIGNAGE NOTES

2. ALL SIGNAGE SHALL BE NON-GLARE FINISH WITH CONTRASTING COLOR BETWEEN TEXT/ IMAGERY ADN BACKGROUND.
3. ALL ROOM AND SPACE SIGNAGE SHALL INCLUDE TACTILE CHARACTERS.
4. WHERE A TACTILE SIGN IS PROVIDED AT A DOOR, THE SIGN SHALL BE ALONG THE LATCH SIDE OF THE DOOR. WHERE THERE IS NO WALL SPACE ON THE LATCH SIDE OF A SINGLE DOOR SIGN SHALL BE ON THE NEAREST ADJACENT WALL. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR AREA 18"X18" MIN. CENETERED ON THE TACTILE CHARACTERS IS PROVIDED BEYODN THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45-DEGREES OPEN POSITION.
5. CENTER OF SIGN SHALL BE 5'-0" MAX. ABOVE FINISH FLOOR. 48" MIN. ABOVE THE FLOOR TO BASELIEN OF LOWEST TACTILE CHARACTER, 60" MAX. TO BASELIEN OF HIGHEST TACTILE CHARACTER.

ALTERNATE NOTES

1. CMU AT INTERIOR OF TOILET ROOMS:
   A. BASE BID: STANDARD CMU, PAINTED. ASSUME 2 COLORS (3 WALLS TYPICAL, AND 1 ACCENT WALL)
   B. ALTERNATE 1: PRE-FACED CMU WITH COVE BASE. ASSUME 2 COLORS SELECTED FROM MANUFACTURERS STANDARD RANGE. ASSUME 3 WALLS TYPICAL, AND 1 ACCENT WALL). EQUIPMENT ROOM AND CMU ABOVE CEILING TO REMAIN STANDARD CMU PAINTED.

TOILET ACCESSORY LEGEND

SYMBOL	DESCRIPTION	MOUNTING REQUIREMENTS	REMARKS
A1	WATER CLOSET	HEIGHT (ADULT ADA): 1'-6" AFF TO TOP OF SEAT CENTERLINE: 1'-6"	REFER TO PLUMBING DRAWINGS
A2	WATER CLOSET	HEIGHT (CHILD): 1'-3" AFF TO TOP OF SEAT CENTERLINE: 1'-3"	REFER TO PLUMBING DRAWINGS
B1	LAVATORY	HEIGHT (ADULT ADA): 2'-10" AFF MAX RIM HEIGHT KNEE SPACE: 2'-3" AFF MIN. BOTTOM OF APRON: 2'-5" AFF MIN.	REFER TO PLUMBING DRAWINGS
B2	LAVATORY	HEIGHT (CHILD): 2'-7" AFF MAX RIM HEIGHT KNEE SPACE: 2'-0" AFF MIN. BOTTOM OF APRON: 2'-3" AFF MIN.	REFER TO PLUMBING DRAWINGS
C1	TOILET PAPER DISPENSER	HEIGHT (ADULT ADA): 3'-11" AFF MAX TO OUTLET (2'-8" TYP) CENTERLINE: 7"-9" FROM FRONT OF SEAT	OWNER PROVIDED, GC INSTALLED
C2	TOILET PAPER DISPENSER	HEIGHT (CHILD): 3'-1" AFF MAX TO OUTLET (2'-8" TYP) CENTERLINE: 7"-9" FROM FRONT OF SEAT	OWNER PROVIDED, GC INSTALLED
D1	GRAB BAR HORIZONTAL (BACK WALL)	HEIGHT: 2'-11" AFF TO TOP OF BAR (2'-9" TO 3'-0" MAX ALLOWABLE DIMENSION)	
E1	GRAB BAR HORIZONTAL (SIDE WALL)	HEIGHT: 2'-11" AFF TO TOP OF BAR (2'-9" TO 3'-0" MAX ALLOWABLE DIMENSION)	
F1	GRAB BAR VERTICAL	HEIGHT: 3'-4" AFF TO TOP OF BAR (3'-3" TO 3'-5" MAX ALLOWABLE DIMENSION)	
G1	SOAP DISPENSER	OVER LAVATORY HEIGHT (ADULT): 3'-8" AFF TO HIGHEST OPERABLE PART (4'-0" MAX ALLOWABLE DIM.)	OWNER PROVIDED, GC INSTALLED
G2	SOAP DISPENSER	OVER LAVATORY HEIGHT (CHILD): 3'-4" AFF TO HIGHEST OPERABLE PART (ALIGN WITH BOTTOM OF MIRROR)	OWNER PROVIDED, GC INSTALLED
H1	ELECTRIC HAND DRYER	HEIGHT (ADULT): 3'-11" AFF TO HIGHEST OPERABLE PART	DAYTON MODEL # 5W630A
H2	ELECTRIC HAND DRYER	HEIGHT (CHILD): 3'-4" AFF TO HIGHEST OPERABLE PART	DAYTON MODEL # 5W630A
J1	CHANGING STATION - ADULT	HEIGHT: 2'-10" AFF MAX TO HIGHEST WORK SURFACE	MANUAL OPERATION, KOALA CARE MODEL KB3000-AHL
K1	MIRROR - OVER SINK	HEIGHT: 3'-4" AFF TO BOTTOM OF THE REFLECTIVE SURFACE OF MIRROR	BOBRICK MODEL B-292-1936
K2	MIRROR - FULL LENGTH	HEIGHT: 1'-3" AFF TO BOTTOM OF THE REFLECTIVE SURFACE OF MIRROR (2'-11" MAX ALLOWABLE DIM.)	24" X 60" STAINLESS STEEL FRAME
L1	COAT HOOK	HEIGHT (ADULT): 3'-11" AFF TO TOP (4'-0" MAX ALLOWABLE DIMENSION)	
L2	COAT HOOK	HEIGHT (CHILD): 3'-4" AFF TO TOP (4'-0" MAX ALLOWABLE DIMENSION)	
M1	SANITARY NAPKIN DISPENSER	HEIGHT: 3'-8" AFF TO HIGHEST OPERABLE PART (4'-0" MAX ALLOWABLE DIMENSION)	BOBRICK MODEL B-47069C
N1	SANITARY NAPKIN DISPOSAL	HEIGHT: 1'-6" AFF TO OPENING (1'-3" MIN. ALLOWABLE DIMENSION)	BOBRICK MODEL B-254
P1	SHARPS DISPOSAL	HEIGHT: 4'-0" AFF TO TOP	BOBRICK MODEL B-350169
Q1	UTILITY BOP AND BROOM HOLDER W/ BOOKS AND SHELF	HEIGHT: 4'-0" AFF TO TOP	BOBRICK MODEL B-239X34
HB	HOSE BIBB	HEIGHT: 1'-3" AFF TO SPOUT	REFER TO PLUMBING DRAWINGS
DF	DRINKING FOUNTAIN - DUAL FOUNTAIN	HEIGHT (ADULT): 3'-0" AFF MAX TO SPOUT HEIGHT (REDUCED BENDING): 3'-6" AFF TO SPOUT (3'-2" AFF MIN. TO 3'-7" AFF ALLOWABLE DIMENSION)	REFER TO PLUMBING DRAWINGS; PROVIDE MODEL WITH BOTTLE FILLER
MB	MOP BASIN	HEIGHT: 3'-0" AFF TO FAUCET OPERABLE PART	REFER TO PLUMBING DRAWINGS

NOTES:
1. ALL ACCESSORIES TO BE MOUNTED AT CURRENT MOUNTING HEIGHTS AS PER ADA REQUIREMENTS.
2. TOILET ROOM 100 TO MEET ALL ADA REQUIREMENTS FOR STANDARD ADA INCLUDING PLUMBING FIXTURES AND ACCESSORIES.
3. TOILET ROOM 103 TO MEET ADA REQUIREMETNS FOR CHILD INCLUDING PLUMBING FIXTURES AND ACCESSORIES.

FLOOR PLAN LEGEND

- 2A-3 EXTERIOR WALL TYPE
- 2A-3 INTERIOR WALL TYPE
- S## SIGN TYPE
- ## PLUMBING FIXTURE & ACCESSORY TYPE

12" 8" 4" 0 SCALE: 3" = 1'-0"

24" 16" 8" 0 SCALE: 1 1/2" = 1'-0"

4' 2' 1' 0 SCALE: 1/2" = 1'-0"

MULLER2
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Chicago, IL 60642
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f 312.432.4184

INCLUSIVE BATHROOM & SITE IMPROVEMENTS
GLEN OAK PARK
PEORIA PARK DISTRICT
ISSUED FOR BID

STATE OF ILLINOIS
MARK M. STROMBERG
001-017758
LICENSED ARCHITECT
EXPIRES: 11/30/2024

No.	Description	Date
1	ISSUED FOR 60% DESIGN	2024-05-23
2	ISSUED FOR 90% DESIGN	2024-07-11
3	ISSUED FOR BID	2024-08-22

GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
2218 N Prospect Rd
Peoria, IL 61603

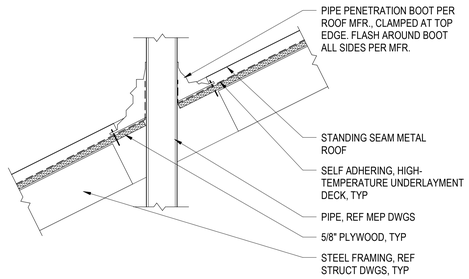
FLOOR PLAN

DRAWN:	AH
CHECKED:	BS
APPROVED:	SC
JOB NO:	24-1006

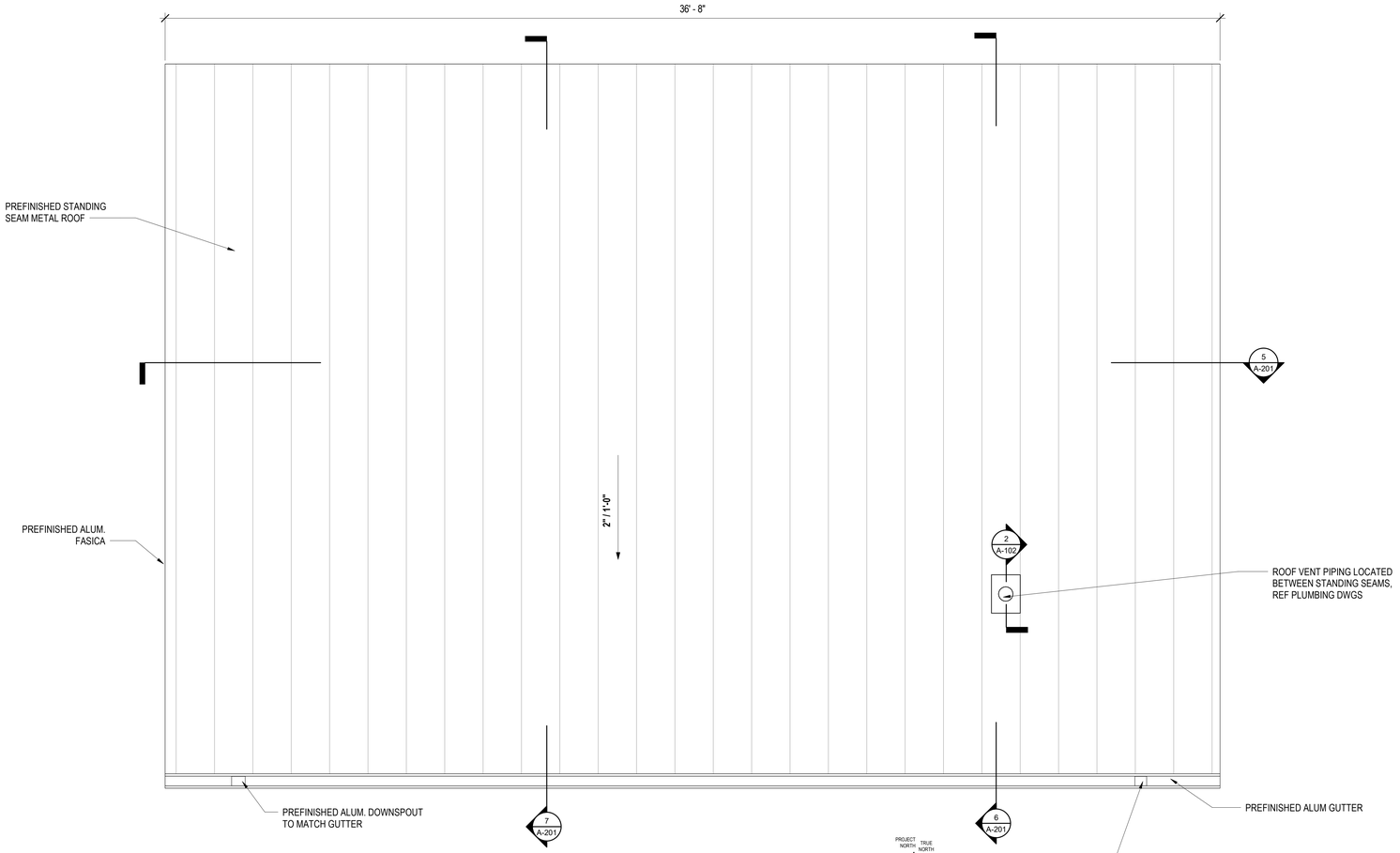
SHEET NO. A-101

ROOF PLAN NOTES

1. MEP COMPONENTS, INCLUDING BUT NOT LIMITED TO, CONDUIT AND PIPES/DOWNSPOUTS, ARE SHOWN ON ARCHITECTURAL PLANS FOR REFERENCE ONLY. NOT ALL PENETRATIONS AND MEP COMPONENTS ARE SHOWN. CONTRACTOR TO COORDINATE AND ADJUST CHASES AND COLUMN ENCLOSURES AS REQUIRED TO FIT MEP COMPONENTS UPON ARCHITECTS APPROVAL.
2. ALL PENETRATIONS SHALL BE CENTERED IN ROOF PANELS.



2 ROOF PENETRATION DETAIL
1 1/2" = 1'-0"



1 ROOF PLAN
1/2" = 1'-0"

24" 16" 8" 0
SCALE: 1 1/2" = 1'-0"

4' 2' 1' 0
SCALE: 1/2" = 1'-0"

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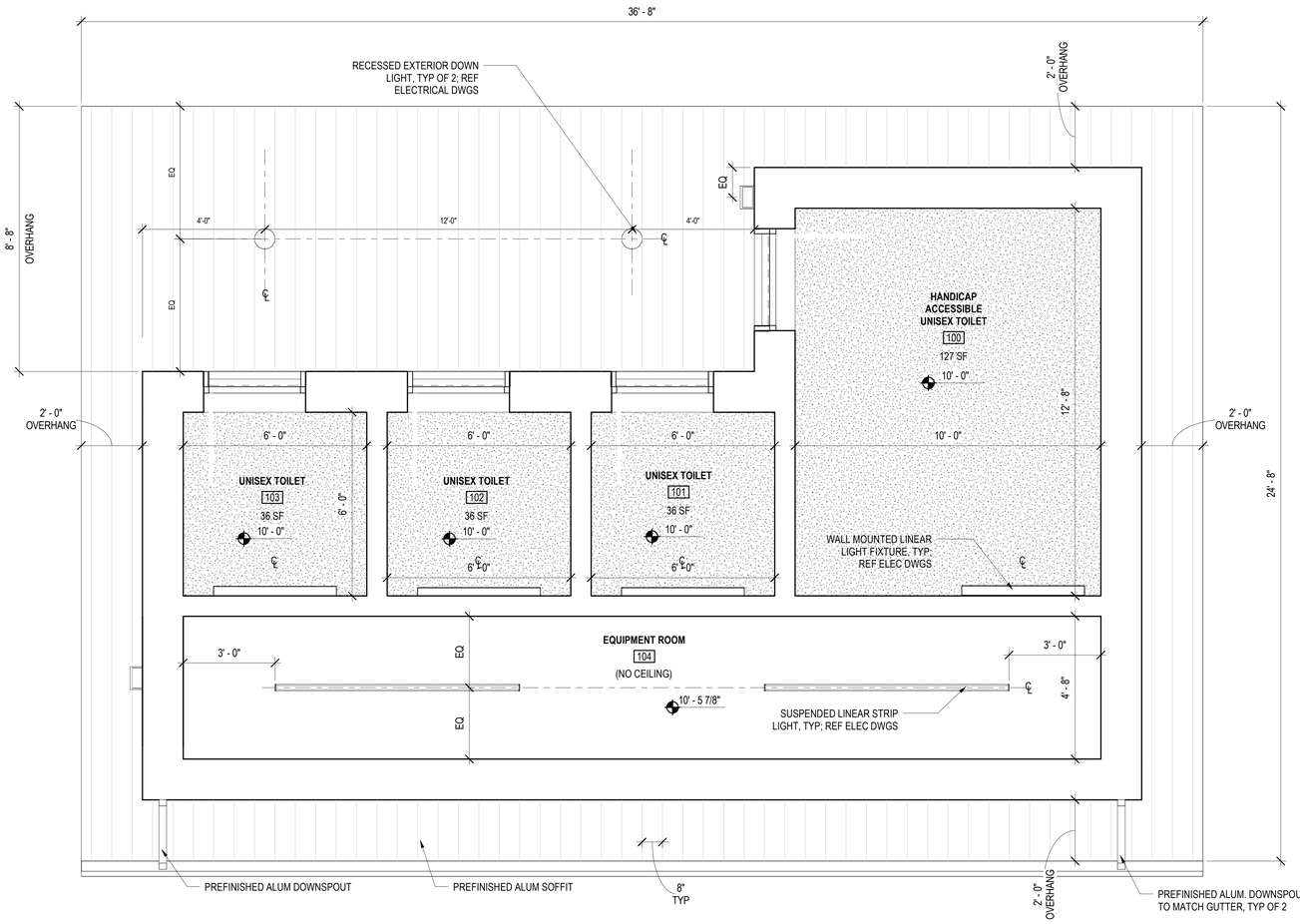
Peoria, IL 61603

ROOF PLAN

DRAWN:	AH
CHECKED:	BS
APPROVED:	SC
JOB NO:	24-1006

SHEET NO.
A-102



1 **REFLECTED CEILING PLAN**
1/2" = 1'-0"

RCP NOTES

1. REFERENCE ELEC DWGS FOR ADDITIONAL LIGHT FIXTURE INFO.
2. ALL CEILING FIXTURES AND DEVICES TO BE CENTERED IN CEILING AND/OR ALIGNED WITH ARCHITECTURAL ELEMENTS UNLESS NOTED OTHERWISE.
3. PROVIDE ACCESS PANELS IN CEILING AND WALLS AS REQUIRED. SEE SPECS FOR MORE INFORMATION. OBTAIN APPROVAL OF LOCATIONS WITH OWNER/ARCHITECT DURING ACCESS PANEL PRE-INSTALLATION CONFERENCE.
4. ALL GYPSUM BOARD AND CEMENT BOARD CEILINGS AND SOFFITS SHALL BE PAINTED (PT-3).

RCP LEGEND

- GWB CEILING, PTD
- AP — 2x2 CEILING ACCESS PANEL
- RECESSED EXTERIOR DOWNLIGHT FIXTURE; REF ELEC DWGS
- SUSPENDED LINEAR STRIP LIGHT FIXTURE; REF ELEC DWGS
- WALL MOUNTED LINEAR LIGHT FIXTURE; REF ELEC DWGS

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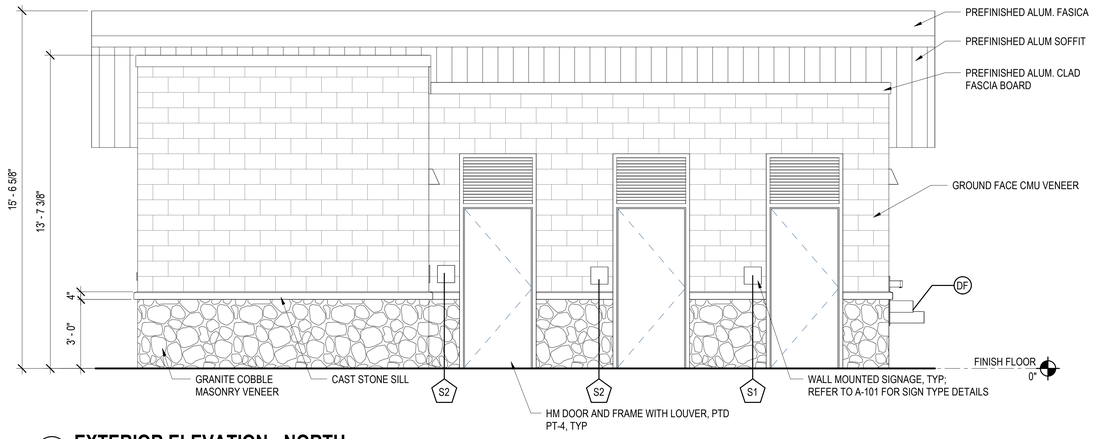
2218 N Prospect Rd
Peoria, IL 61603

REFLECTED CEILING PLAN

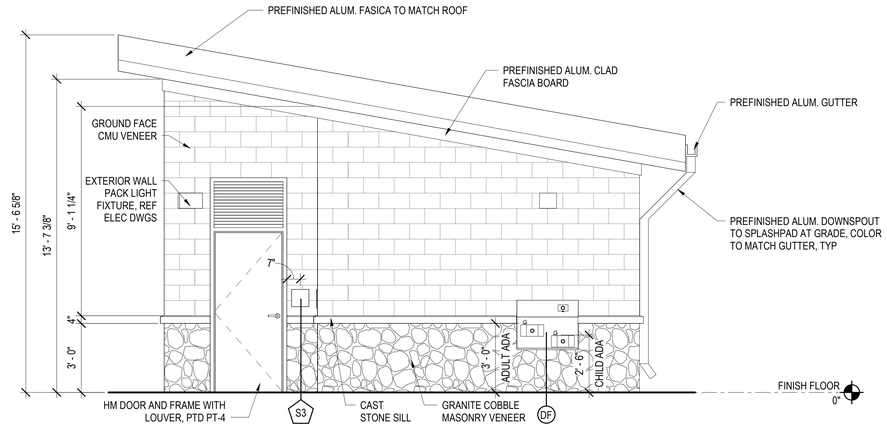
DRAWN:	AH
CHECKED:	BS
APPROVED:	SC
JOB NO:	24-1006

SHEET NO. A-103

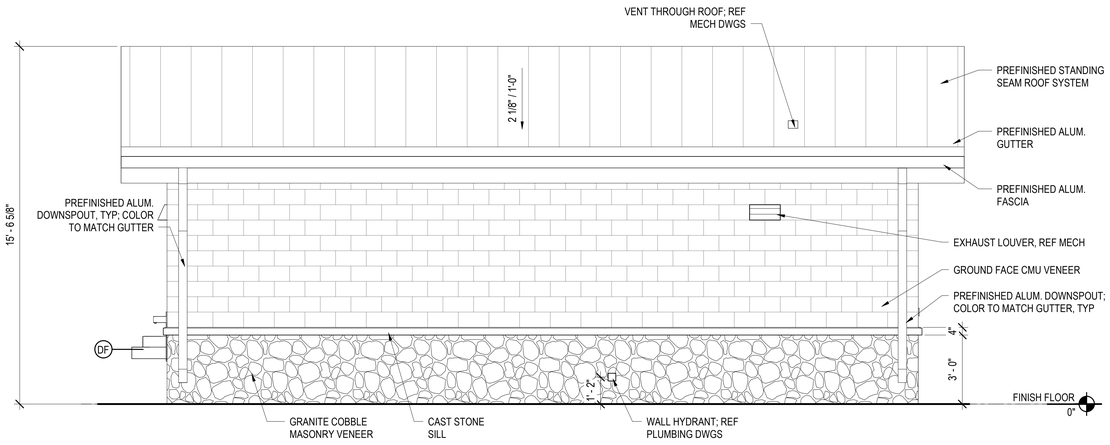
4' 2' 1' 0
SCALE: 1/2" = 1'-0"



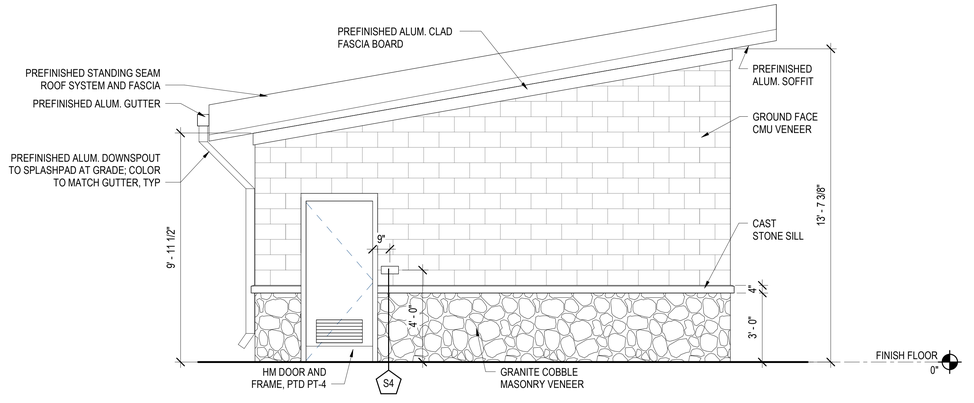
1 EXTERIOR ELEVATION - NORTH
3/8" = 1'-0"



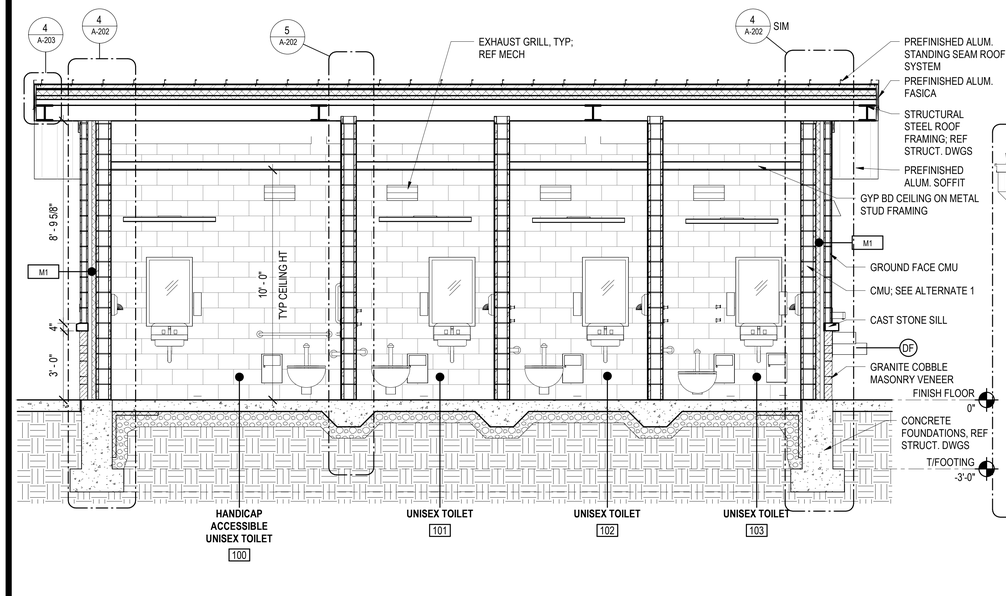
2 EXTERIOR ELEVATION - WEST
3/8" = 1'-0"



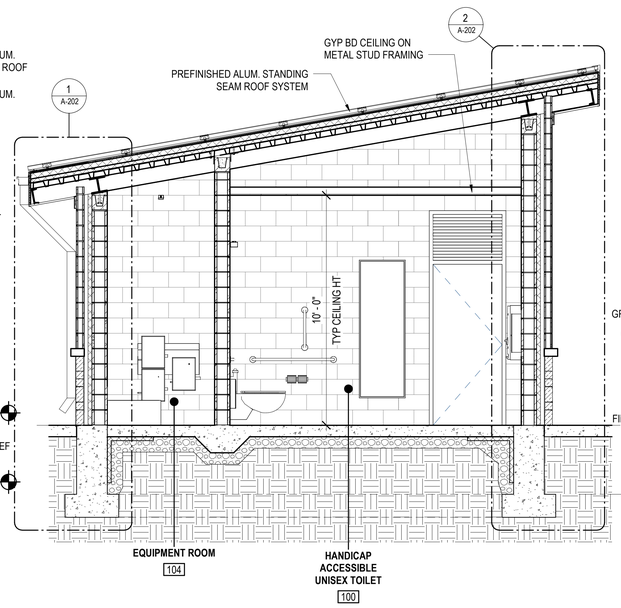
3 EXTERIOR ELEVATION - SOUTH
3/8" = 1'-0"



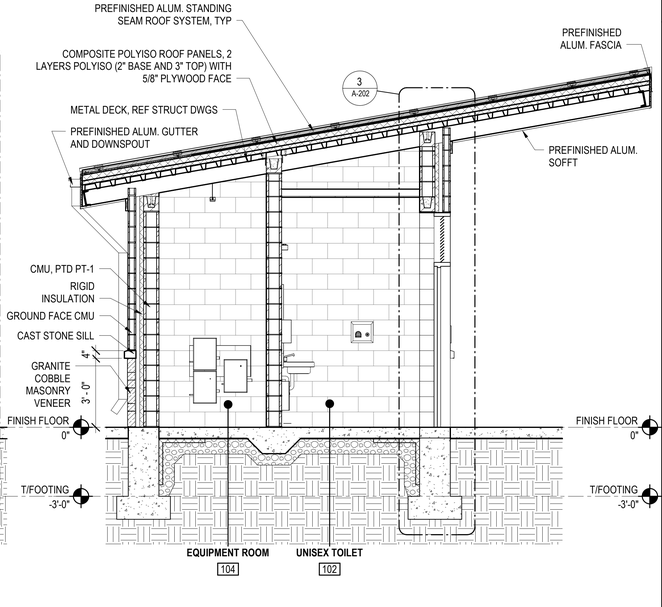
4 EXTERIOR ELEVATION - EAST
3/8" = 1'-0"



5 BUILDING SECTION - EAST WEST
3/8" = 1'-0"



6 BUILDING SECTION - NORTH SOUTH
3/8" = 1'-0"



7 BUILDING SECTION - NORTH SOUTH1
3/8" = 1'-0"

6' 3' 1.5' 0
SCALE: 3/8" = 1'-0"

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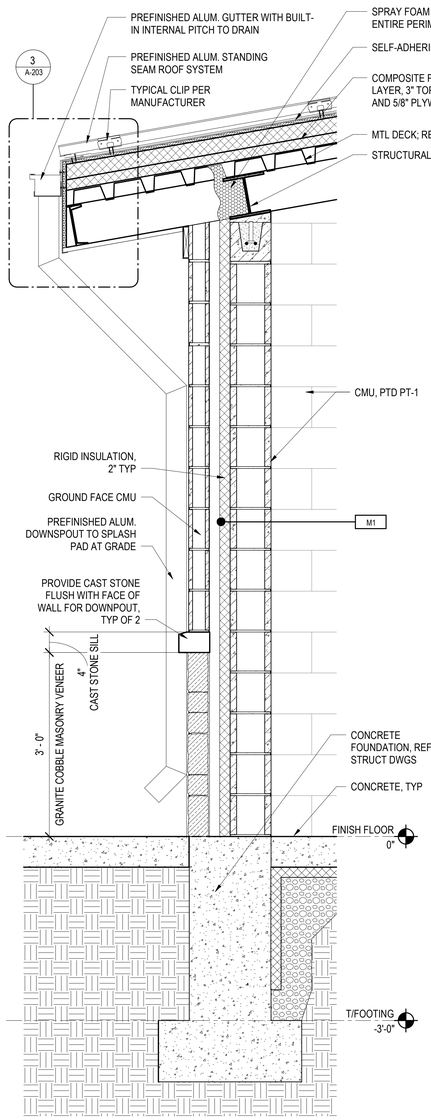
GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
2218 N Prospect Rd
Peoria, IL 61603

BUILDING ELEVATIONS

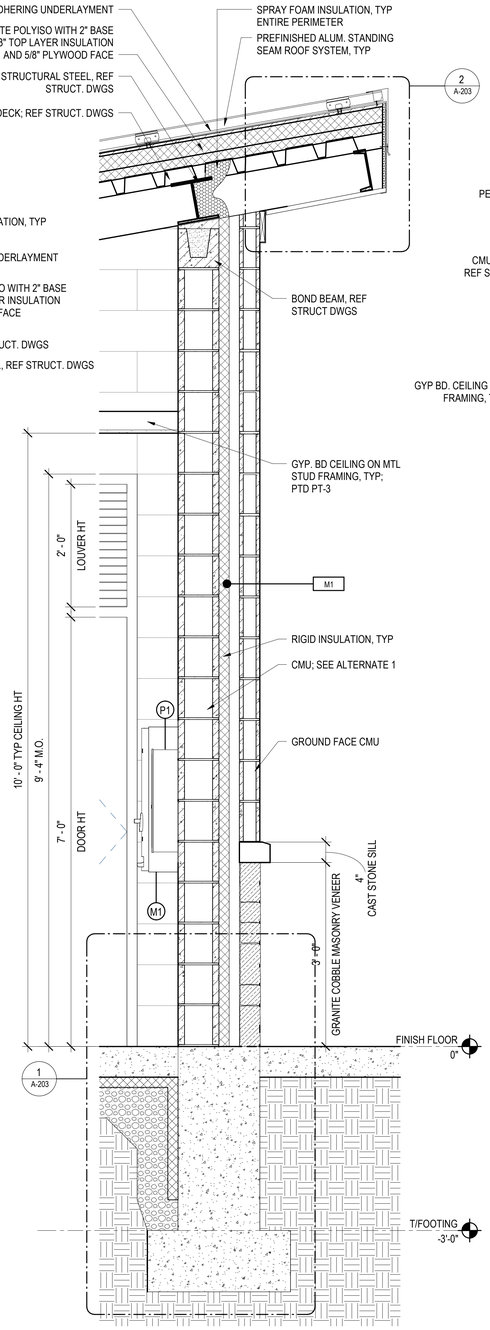
DRAWN:	AH	SHEET NO.
CHECKED:	BC	A-201
APPROVED:	SC	
JOB NO:	24-1006	

ALTERNATE NOTES

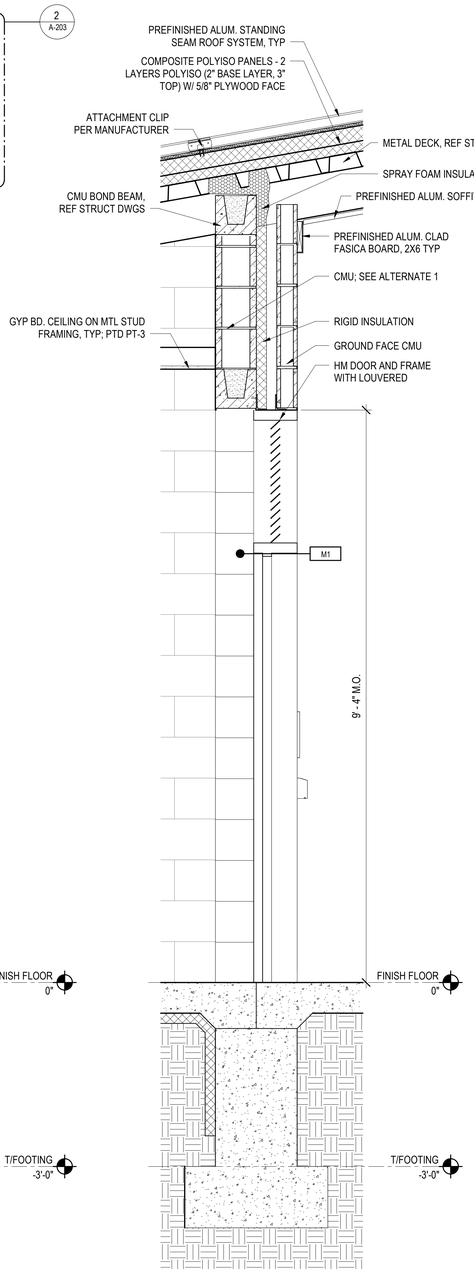
1. CMU AT INTERIOR OF TOILET ROOMS:
   A. BASE BID: STANDARD CMU, PAINTED. ASSUME 2 COLORS (3 WALLS TYPICAL, AND 1 ACCENT WALL)
   B. ALTERNATE 1: PRE-FACED CMU WITH COVE BASE. ASSUME 2 COLORS SELECTED FROM MANUFACTURERS STANDARD RANGE. ASSUME 3 WALLS TYPICAL, AND 1 ACCENT WALL). EQUIPMENT ROOM AND CMU ABOVE CEILING TO REMAIN STANDARD CMU PAINTED.



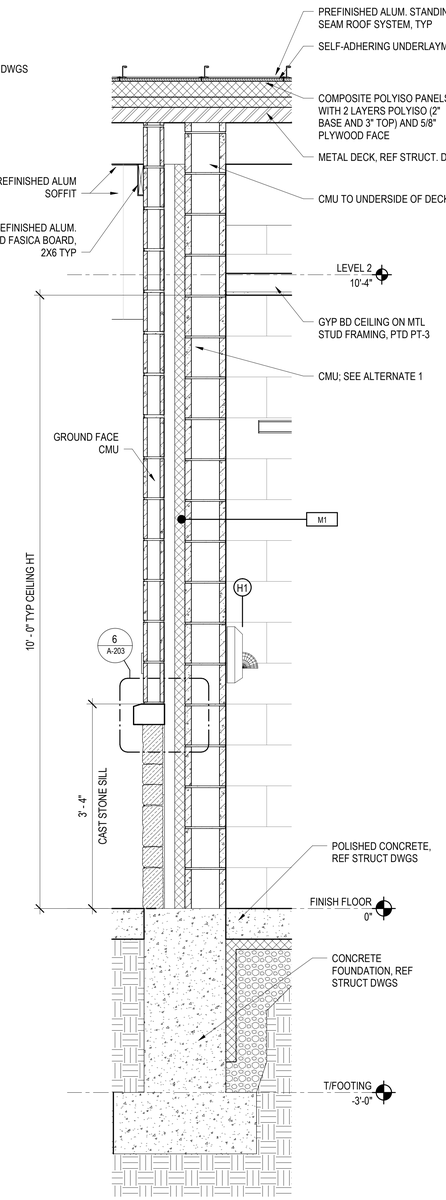
1 WALL SECTION @ REAR FACE
1" = 1'-0"



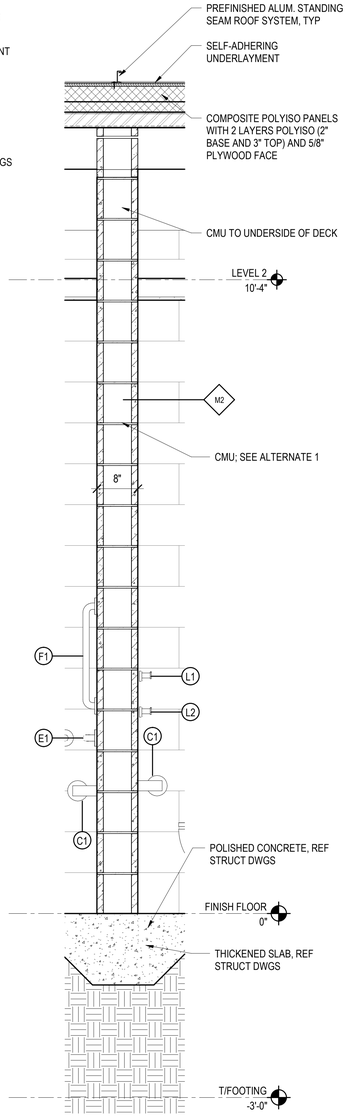
2 WALL SECTION @ FRONT FACE
1" = 1'-0"



3 WALL SECTION @ DOOR FRAME
1" = 1'-0"



4 WALL SECTION @ SIDE FACE
1" = 1'-0"



5 WALL SECTION @ INTERIOR
1" = 1'-0"

3" 2" 1" 0
SCALE: 12" = 1'-0"

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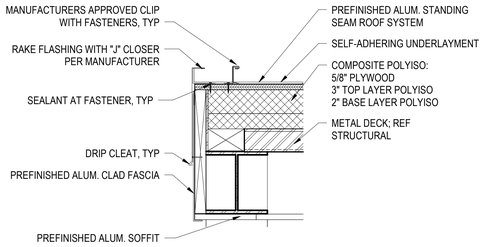
Peoria, IL 61603

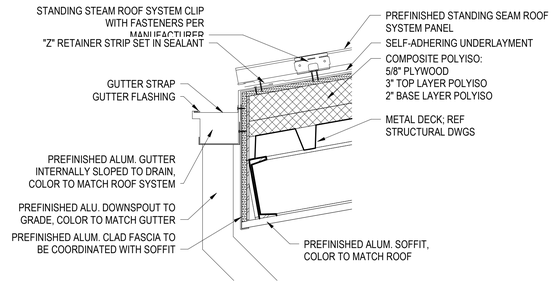
WALL SECTIONS

DRAWN:	AH
CHECKED:	BS
APPROVED:	SC
JOB NO:	24-1006

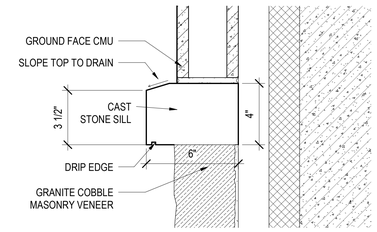
SHEET NO. A-202



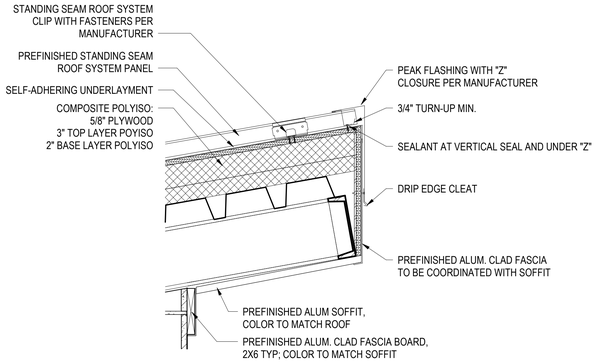
SECTION DETAIL
4 ROOF EDGE AT RAKE
1 1/2" = 1'-0"



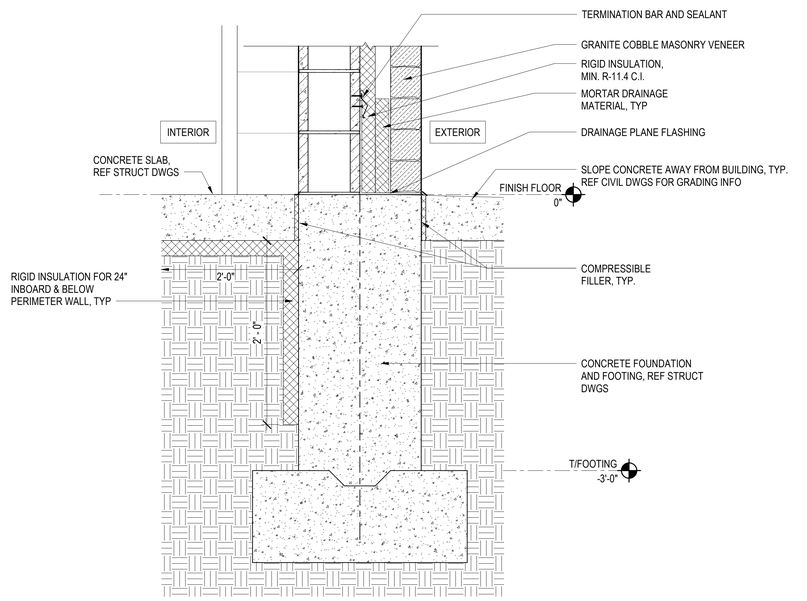
SECTION DETAIL
3 ROOF EDGE AT GUTTER
1 1/2" = 1'-0"



6 SECTION DETAIL AT CAST STONE SILL
3" = 1'-0"



SECTION DETAIL
2 ROOF EDGE DETAIL AT PEAK
1 1/2" = 1'-0"



SECTION DETAIL
1 AT CONCRETE FOUNDATION
1 1/2" = 1'-0"

12" 8" 4" 0
SCALE: 3" = 1'-0"

24" 16" 8" 0
SCALE: 1 1/2" = 1'-0"

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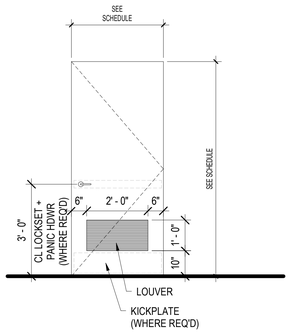
Peoria, IL 61603

SECTIONS & DETAILS

DRAWN:	AH
CHECKED:	BS
APPROVED:	SC
JOB NO:	24-1006

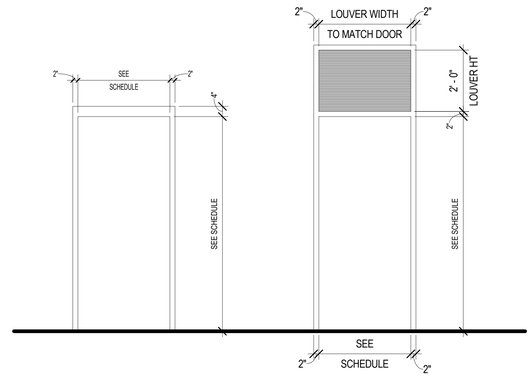
SHEET NO.
A-203

DOOR TYPES



L FLUSH WITH LOUVER

FRAME TYPES

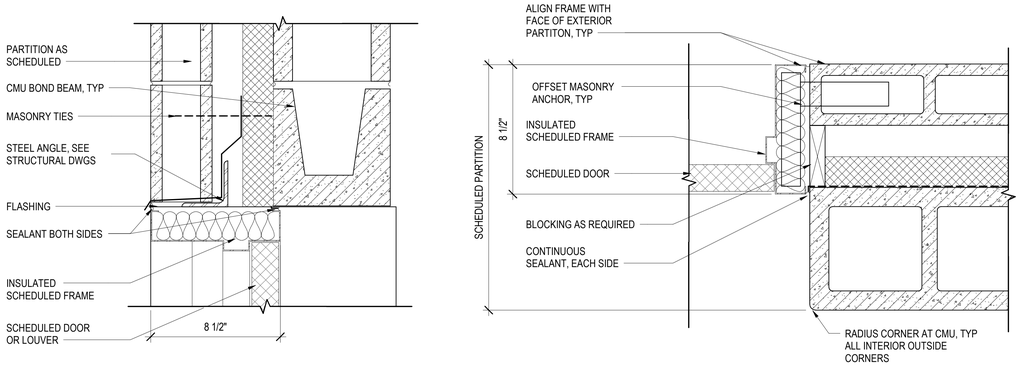


F1 STANDARD FRAME

F2 STANDARD FRAME W/ TRANSOM

4 DOOR AND FRAME TYPES

1/2" = 1'-0"

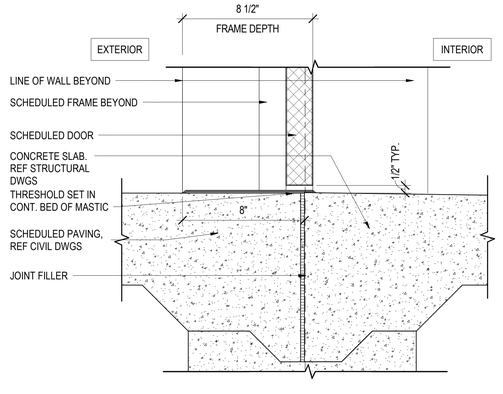


1 EXTERIOR DOOR HEAD DETAIL

3" = 1'-0"

2 EXTERIOR DOOR JAMB DETAIL

3" = 1'-0"



3 EXTERIOR DOOR SILL DETAIL

3" = 1'-0"

DOOR SCHEDULE

DOOR NO.	ROOM NAME	ROOM NO.	DOOR SIZE TYPE	WIDTH	HEIGHT	THICKNESS	MATERIAL	FINISH	FRAME TYPE	MATERIAL	FINISH	DETAILS HEAD	JAMB	SILL	HARDWARE SET	COMMENTS
100-1	HANDICAP ACCESSIBLE UNISEX TOILET	100	F	3'-0"	7'-0"	1 3/4"	HM	PT-4	F2	HM	PT-4	1/A-204	2/A-204	3/A-204	2	LOUVER FINISH TO MATCH FRAME
101-1	UNISEX TOILET	101	F	3'-0"	7'-0"	1 3/4"	HM	PT-4	F2	HM	PT-4	1/A-204	2/A-204	3/A-204	1	LOUVER FINISH TO MATCH FRAME
102-1	UNISEX TOILET	102	F	3'-0"	7'-0"	1 3/4"	HM	PT-4	F2	HM	PT-4	1/A-204	2/A-204	3/A-204	1	LOUVER FINISH TO MATCH FRAME
103-1	UNISEX TOILET	103	F	3'-0"	7'-0"	1 3/4"	HM	PT-4	F2	HM	PT-4	1/A-204	2/A-204	3/A-204	1	LOUVER FINISH TO MATCH FRAME
104-1	EQUIPMENT ROOM	104	L	3'-0"	7'-0"	1 3/4"	HM	PT-4	F1	HM	PT-4	1/A-204	2/A-204	3/A-204	3	

GENERAL DOOR NOTES

1. UNLESS NOTED OTHERWISE THE WIDTH OF HOLLOW METAL FRAMES ARE ACTUAL PARTITION THICKNESS PLUS 1 INCH.
2. PROVIDE SPECIFIED FRAME ANCHORS TO ACCOMMODATE PARTITION TYPES AND REQUIREMENTS FOR FIRE RATING.
3. PROVIDE SEALANT AT JUNCTION OF ALL FRAMES TO PARTITIONS.
4. HEIGHT & WIDTH OF DOOR OPENING INDICATED ON SCHEDULE ARE DIMENSIONS EXCLUSIVE OF HOLLOW METAL FRAME.
5. ALL HOLLOW METAL DOORS/FRAMES SHALL BE PAINTED PT-4.
6. ALL EXTERIOR DOORS TO BE INSULATED MIN. R-4.75.
7. ALL PERSONNEL DOORS TO HAVE LEVER OPERATED HARDWARE.
8. ALL DOORS LEADING TO HAZARDOUS ROOMS SHALL HAVE KNURLED HARDWARE.
9. ALL EXTERIOR DOORS TO HAVE 8.5# MAX FORCE TO OPEN PER IAC 400.310 (J-10)

FINISH HARDWARE GENERAL NOTES:

1. **ACCESSIBILITY REQUIREMENTS:**

A. PROVIDE PROPER MANEUVERING CLEARANCE AT DOORS PER ICC/ ANSI A117.1-2003 CHAPTER 4.404.2.3
B. ALL DOORS MUST HAVE 32 INCHES CLEAR DOOR OPENING MEASURED FROM THE FACE OF THE DOOR WHEN IT IS OPENED 90% TO THE DOOR STOP PER ICC/ANSI A117.1-2003 CHAPTER 4.404.
C. ALL DOORS LEADING TO HAZARDOUS ROOMS SHALL HAVE KNURLED HARDWARE. SEE DOOR HARDWARE NOTES.
D. ALL DOORS TO HAVE LEVER OPERATED HARDWARE PER ICC/ANSI A-117.1-2003 CHAPTER 4.404

12" 8" 4" 0
SCALE: 3" = 1'-0"

4' 2' 1' 0
SCALE: 1/2" = 1'-0"

700 N Sangamon
Chicago, IL 60642
t 312.432.4180
f 312.432.4184
MULLER2

INCLUSIVE BATHROOM & SITE IMPROVEMENTS
GLEN OAK PARK
PEORIA PARK DISTRICT
ISSUED FOR BID

STATE OF ILLINOIS
MARK M. STROMBERG
001-017758
LICENSED ARCHITECT
EXPIRES: 11/30/2024

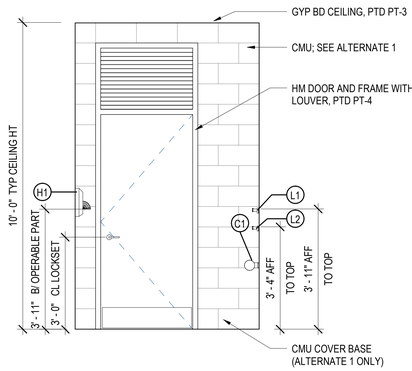
No.	Description	Date
1	ISSUED FOR 60% DESIGN	2024-05-23
2	ISSUED FOR 90% DESIGN	2024-07-11
3	ISSUED FOR BID	2024-08-22

GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
2218 N Prospect Rd
Peoria, IL 61603

DOOR SCHEDULE AND DETAILS

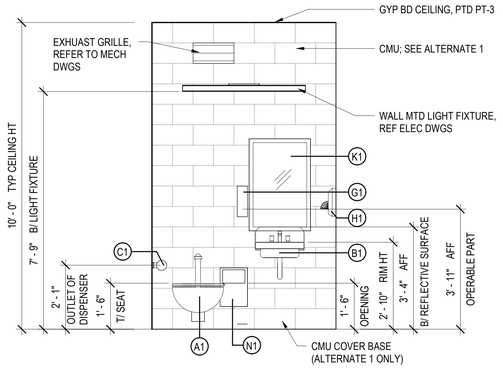
DRAWN:	AH
CHECKED:	BC
APPROVED:	SC
JOB NO:	24-1006

SHEET NO. A-204



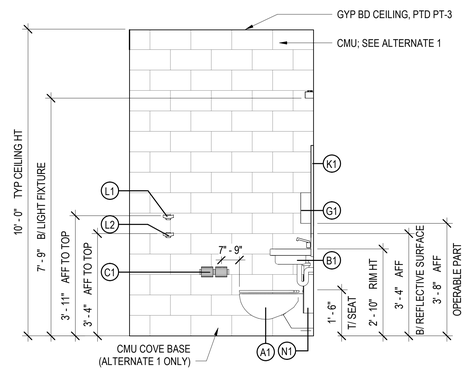
1 UNISEX STALL - NORTH VIEW

1/2" = 1'-0"



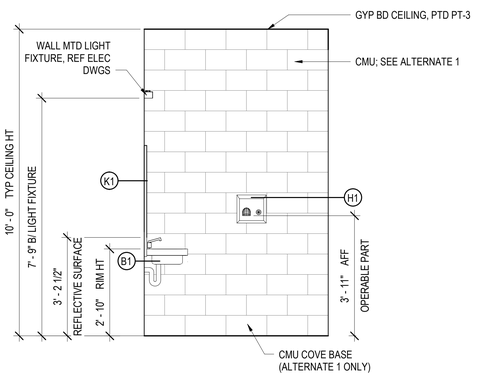
2 UNISEX STALL - SOUTH VIEW

1/2" = 1'-0"



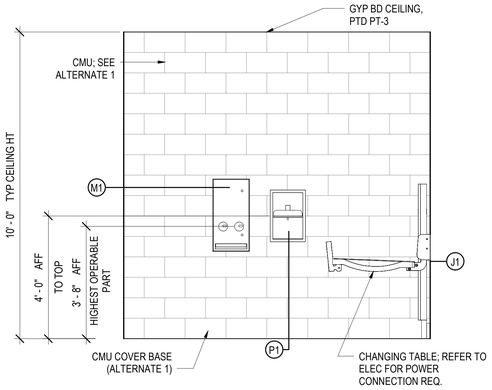
3 UNISEX STALL - EAST VIEW

1/2" = 1'-0"



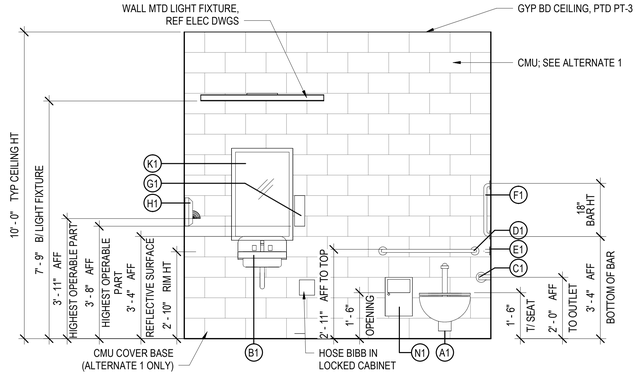
4 UNISEX STALL - WEST VIEW

1/2" = 1'-0"



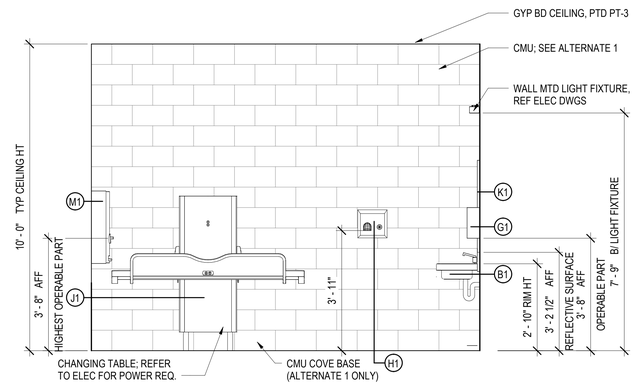
8 HANDICAP ACCESSIBLE STALL - NORTH VIEW

1/2" = 1'-0"



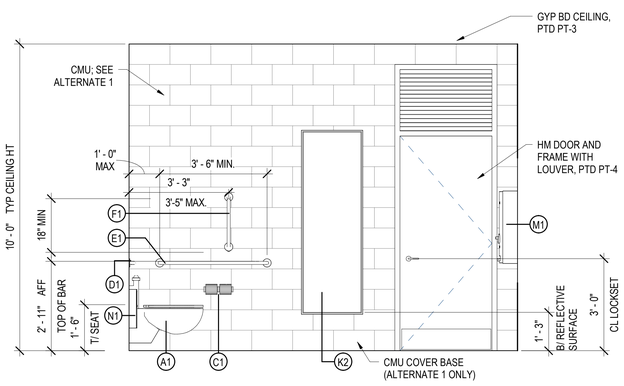
7 HANDICAP ACCESSIBLE STALL - SOUTH VIEW

1/2" = 1'-0"



5 HANDICAP ACCESSIBLE STALL - EAST VIEW

1/2" = 1'-0"



6 HANDICAP ACCESSIBLE STALL - WEST VIEW

1/2" = 1'-0"

MATERIAL & FINISH LEGEND

HIGHLIGHTED CELLS REFER TO ALTERNATE 1 ONLY

ABBREV.	DESCRIPTION	SPECIFICATION	REMARKS
GFCMU-1	GROUND FACE CONCRETE MASONY UNIT (CMU)	04 20 00 UNIT MASONRY	BASIS OF DESIGN: TO MATCH GCV-1 REFER TO SPECIFICATION. PROVIDE GRAFFITI RESISTANT COATING
GCMU-1	PRE-FACED CONCRETE MASONY UNIT (CMU)	04 20 00 UNIT MASONRY	PROVIDED ON INTERIOR FACE ONLY, ONE COURSE ABOVE FINISH CEILING TO BE PRE-FACED. PROVIDE CMU COVE BASE. COLOR SELECTED FROM MANUFACTURER STANDARD RANGE; HUE - OFF WHITE
GCMU-2	PRE-FACED CONCRETE MASONY UNIT (CMU)	04 20 00 UNIT MASONRY	PROVIDED ON INTERIOR FACE ONLY, ONE COURSE ABOVE FINISH CEILING TO BE PRE-FACED. PROVIDE CMU COVE BASE. COLOR SELECTED FROM MANUFACTURER STANDARD RANGE; HUE - GREEN
CMU-1	CONCRETE MASONY UNIT (CMU)	04 20 00 UNIT MASONRY	REFER TO SPECIFICATION. ALTERNATE 1 LIMITED TO IN BACK OF HOUSE AND ABOVE FINISH CEILING
GCV-1	GRANITE COBBLE MASONRY VENEER	04 43 13.13 ANCHORED STONE MASONRY VENEER	BASIS OF DESIGN: BUECHEL STONE CORP, GRANITE COBBLES
CS-1	CAST STONE	04 72 00 CAST STONE MASONRY	REFER TO SPECIFICATION
SSMR-1	STANDING SEAM METAL ROOF	07 41 13.16 STANDING-SEAM METAL ROOF PANELS	BASIS OF DESIGN: PAC-CLAD TITE-LOC PLUS, 16" PANEL WIDTH; COLOR EVERGREEN
SP-1	SOFFIT PANELS	07 42 93 SOFFIT PANELS	COLOR TO MATCH STANDING SEAM METAL ROOF, COLOR EVERGREEN
GB-1	GYPSUM BOARD	09 29 00 GYPSUM BOARD	MOLD RESISTANT, PTD PT-3
PT-1	PAINT - TYPICAL INTERIOR	09 91 24 INTERIOR PAINTING 09 91 14 EXTERIOR PAINTING 09 96 11 HIGH-PERFORMANCE COATINGS	COLOR HUE - OFF WHITE
PT-2	PAINT - ACCENT INTERIOR	09 91 24 INTERIOR PAINTING 09 96 11 HIGH-PERFORMANCE COATINGS	COLOR HUE - GREEN / EVERGREEN
PT-3	PAINT - CEILINGS	09 91 24 INTERIOR PAINTING 09 91 14 EXTERIOR PAINTING	COLOR HUE - WHITE
PT-4	PAINT - DOORS/FRAMES	09 91 24 INTERIOR PAINTING 09 91 14 EXTERIOR PAINTING	COLOR HUE - GREEN/ EVERGREEN
SIGN-1	SIGN PANEL	10 14 23 PANEL SIGNAGE	COLOR TO MATCH PT-4

ALTERNATE NOTES

1. CMU AT INTERIOR OF TOILET ROOMS:
   A. BASE BID: STANDARD CMU, PAINTED. ASSUME 2 COLORS (3 WALLS TYPICAL, AND 1 ACCENT WALL)
   B. ALTERNATE 1: PRE-FACED CMU WITH COVE BASE. ASSUME 2 COLORS SELECTED FROM MANUFACTURERS STANDARD RANGE. ASSUME 3 WALLS TYPICAL, AND 1 ACCENT WALL). EQUIPMENT ROOM AND CMU ABOVE CEILING TO REMAIN STANDARD CMU PAINTED.

TOILET ACCESSORY LEGEND

SYMBOL	DESCRIPTION	MOUNTING REQUIREMENTS	REMARKS
A1	WATER CLOSET	HEIGHT (ADULT ADA): 1'-6" AFF TO TOP OF SEAT CENTERLINE: 1'-6"	REFER TO PLUMBING DRAWINGS
A2	WATER CLOSET	HEIGHT (CHILD): 1'-3" AFF TO TOP OF SEAT CENTERLINE: 1'-3"	REFER TO PLUMBING DRAWINGS
B1	LAVATORY	HEIGHT (ADULT ADA): 2'-10" AFF MAX RIM HEIGHT KNEE SPACE: 2'-3" AFF MIN. BOTTOM OF APRON: 2'-5" AFF MIN.	REFER TO PLUMBING DRAWINGS
B2	LAVATORY	HEIGHT (CHILD): 2'-7" AFF MAX RIM HEIGHT KNEE SPACE: 2'-0" AFF MIN. BOTTOM OF APRON: 2'-3" AFF MIN.	REFER TO PLUMBING DRAWINGS
C1	TOILET PAPER DISPENSER	HEIGHT (ADULT ADA): 3'-11" AFF MAX TO OUTLET (2'-8" TYP) CENTERLINE: 7'-9" FROM FRONT OF SEAT	OWNER PROVIDED, GC INSTALLED
C2	TOILET PAPER DISPENSER	HEIGHT (CHILD): 3'-1" AFF MAX TO OUTLET (2'-8" TYP) CENTERLINE: 7'-9" FROM FRONT OF SEAT	OWNER PROVIDED, GC INSTALLED
D1	GRAB BAR HORIZONTAL (BACK WALL)	HEIGHT: 2'-11" AFF TO TOP OF BAR (2'-9" TO 3'-0" MAX ALLOWABLE DIMENSION)	
E1	GRAB BAR HORIZONTAL (SIDE WALL)	HEIGHT: 2'-11" AFF TO TOP OF BAR (2'-9" TO 3'-0" MAX ALLOWABLE DIMENSION)	
F1	GRAB BAR VERTICAL	HEIGHT: 3'-4" AFF TO TOP OF BAR (3'-3" TO 3'-5" MAX ALLOWABLE DIMENSION)	
G1	SOAP DISPENSER	OVER LAVATORY HEIGHT (ADULT): 3'-8" AFF TO HIGHEST OPERABLE PART (4'-0" MAX ALLOWABLE DIM.)	OWNER PROVIDED, GC INSTALLED
G2	SOAP DISPENSER	OVER LAVATORY HEIGHT (CHILD): 3'-4" AFF TO HIGHEST OPERABLE PART (ALIGN WITH BOTTOM OF MIRROR)	OWNER PROVIDED, GC INSTALLED
H1	ELECTRIC HAND DRYER	HEIGHT (ADULT): 3'-11" AFF TO HIGHEST OPERABLE PART	DAYTON MODEL # 5W630A
H2	ELECTRIC HAND DRYER	HEIGHT (CHILD): 3'-4" AFF TO HIGHEST OPERABLE PART	DAYTON MODEL # 5W630A
J1	CHANGING STATION - ADULT	HEIGHT: 2'-10" AFF MAX TO HIGHEST WORK SURFACE	MANUAL OPERATION, KOALA CARE MODEL KB3000-AHL
K1	MIRROR - OVER SINK	HEIGHT: 3'-4" AFF TO BOTTOM OF THE REFLECTIVE SURFACE OF MIRROR	BOBRICK MODEL B-292-1936
K2	MIRROR - FULL LENGTH	HEIGHT: 1'-3" AFF TO BOTTOM OF THE REFLECTIVE SURFACE OF MIRROR (2'-11" MAX ALLOWABLE DIM.)	24" X 60" STAINLESS STEEL FRAME
L1	COAT HOOK	HEIGHT (ADULT): 3'-11" AFF TO TOP (4'-0" MAX ALLOWABLE DIMENSION)	
L2	COAT HOOK	HEIGHT (CHILD): 3'-4" AFF TO TOP (4'-0" MAX ALLOWABLE DIMENSION)	
M1	SANITARY NAPKIN DISPENSER	HEIGHT: 3'-8" AFF TO HIGHEST OPERABLE PART (4'-0" MAX ALLOWABLE DIMENSION)	BOBRICK MODEL B-47069C
N1	SANITARY NAPKIN DISPOSAL	HEIGHT: 1'-6" AFF TO OPENING (1'-3" MIN. ALLOWABLE DIMENSION)	BOBRICK MODEL B-254
P1	SHARPS DISPOSAL	HEIGHT: 4'-0" AFF TO TOP	BOBRICK MODEL B-350169
Q1	UTILITY BOP AND BROOM HOLDER W/ BOOKS AND SHELF	HEIGHT: 4'-0" AFF TO TOP	BOBRICK MODEL B-239X34
HB	HOSE BIBB	HEIGHT: 1'-3" AFF TO SPOUT	REFER TO PLUMBING DRAWINGS
DF	DRINKING FOUNTAIN - DUAL FOUNTAIN	HEIGHT (ADULT): 3'-0" AFF MAX TO SPOUT HEIGHT (REDUCED BENDING): 3'-6" AFF TO SPOUT (3'-2" AFF MIN. TO 3'-7" AFF ALLOWABLE DIMENSION)	REFER TO PLUMBING DRAWINGS; PROVIDE MODEL WITH BOTTLE FILLER
MB	MOP BASIN	HEIGHT: 3'-0" AFF TO FAUCET OPERABLE PART	REFER TO PLUMBING DRAWINGS

NOTES:
1. ALL ACCESSORIES TO BE MOUNTED AT CURRENT MOUNTING HEIGHTS AS PER ADA REQUIREMENTS.
2. TOILET ROOM 100 TO MEET ALL ADA REQUIREMENTS FOR STANDARD ADA INCLUDING PLUMBING FIXTURES AND ACCESSORIES.
3. TOILET ROOM 103 TO MEET ADA REQUIREMETNS FOR CHILD INCLUDING PLUMBING FIXTURES AND ACCESSORIES.

ROOM FINISH SCHEDULE

ROOM NO.	Name	FLOOR	WALL				BASE	CEILING	
		FINISH	NORTH	EAST	WEST	SOUTH		FINISH	NOTES
100	HANDICAP ACCESSIBLE UNISEX TOILET	CONCRETE	CMU-1, PT-1 GCMU-1	CMU-1, PT-1 GCMU-1	CMU-1, PT-1 GCMU-1	CMU-1, PT-2 GCMU-2	- GCMU	GB-1, PTD PT-3	ALL DORS/FRAMES/LOUVERS PTD PT-4 ALT 1:GCMU COVE BASE TO MATCH WALL
101	UNISEX TOILET	CONCRETE	CMU-1, PT-1 GCMU-1	CMU-1, PT-1 GCMU-1	CMU-1, PT-1 GCMU-1	CMU-1, PT-2 GCMU-2	- GCMU	GB-1, PTD PT-3	ALL DORS/FRAMES/LOUVERS PTD PT-4 ALT 1:GCMU COVE BASE TO MATCH WALL
102	UNISEX TOILET	CONCRETE	CMU-1, PT-1 GCMU-1	CMU-1, PT-1 GCMU-1	CMU-1, PT-1 GCMU-1	CMU-1, PT-2 GCMU-2	- GCMU	GB-1, PTD PT-3	ALL DORS/FRAMES/LOUVERS PTD PT-4 ALT 1:GCMU COVE BASE TO MATCH WALL
103	UNISEX TOILET	CONCRETE	CMU-1, PT-1 GCMU-1	CMU-1, PT-1 GCMU-1	CMU-1, PT-1 GCMU-1	CMU-1, PT-2 GCMU-2	- GCMU	GB-1, PTD PT-3	ALL DORS/FRAMES/LOUVERS PTD PT-4 ALT 1:GCMU COVE BASE TO MATCH WALL
104	EQUIPMENT ROOM	CONCRETE	CMU	CMU	CMU	CMU			

HIGHLIGHTED CELLS REFER TO ALTERNATE 1 ONLY

4' 2' 1' 0

SCALE: 1/2" = 1'-0"

MULLER2
700 N Sangamon
Chicago, IL 60642
T 312.432.4180
F 312.432.4184

INCLUSIVE BATHROOM & SITE IMPROVEMENTS
GLEN OAK PARK
PEORIA PARK DISTRICT

ISSUED FOR BID

STATE OF ILLINOIS
MARK M. STROMBERG
001-017758
LICENSED ARCHITECT

EXPIRES: 11/30/2024

No.	Description	Date
1	ISSUED FOR 60% DESIGN	2024-05-23
2	ISSUED FOR 90% DESIGN	2024-07-11
3	ISSUED FOR BID	2024-08-22

GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
2218 N Prospect Rd
Peoria, IL 61603

INTERIOR ELEVATIONS

DRAWN:	AH
CHECKED:	BS
APPROVED:	SC
JOB NO:	24-1006

SHEET NO. A-205

STRUCTURAL GENERAL NOTES

CODE INFORMATION

1. PEORIA MUNICIPAL CODE WITH HAS ADOPTED IBC 2018

SOIL DATA

1. A REPORT ON SUBSURFACE CONDITION ENTITLED *SUBSURFACE EXPLORATION AND FOUNDATION RECOMENDATIONS* DATED MAY 21, 2024 HAS BEEN PREPARED BY MIDWEST ENGINEERING AND TESTING. SEE SPECIFICATIONS FOR A COPY OF THIS DOCUMENT.

EXCAVATION

1. THE CONTRACTOR SHALL DESIGN, PROVIDE, INSTALL, AND MAINTAIN ALL UNDERPINNING, SHORING, SHEETING, AND BRACING AS MAY BE REQUIRED FOR THE SUPPORT OF SURROUNDING PROPERTY, BUILDINGS, PAVEMENTS, SIDEWALKS, UTILITIES, UTILITY EQUIPMENT, ETC., UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
2. THE CONTRACTOR SHALL REMOVE ALL OR PARTS OF ANY EXISTING STRUCTURES AND OTHER DEBRIS WHICH INTERFERE WITH THE WORK, AND SHALL TAKE CARE TO PREVENT DAMAGE TO PORTIONS WHICH ARE TO REMAIN TEMPORARILY OR PERMANENTLY IN PLACE. THE CONTRACTOR SHALL ALSO PROTECT FROM DAMAGE ALL UTILITIES WHICH ARE TO REMAIN IN SERVICE.
3. ALL EXCAVATIONS SHALL BE CARRIED OUT IN ACCORDANCE WITH O.S.H.A. GUIDELINES. THE SIDEWALLS OF ANY EXCAVATION SHALL BE SLOPED AS REQUIRED TO PROVIDE STABLE SLOPES. WHERE ADEQUATE SLOPES CANNOT BE OBTAINED, THE EXCAVATION SHALL BE PERFORMED USING ALTERNATIVE METHODS TO RETAIN THE SOILS. PERFORM EARTHWORK IN COMPLIANCE WITH THE APPLICABLE REQUIREMENTS OF THE LOCAL CODES.
4. THE CONTRACTOR SHALL EFFECTIVELY MAINTAIN THE CONSTRUCTION AREA IN A DEWATERED STATE.
5. THE CONTRACTOR SHALL PREPARE ALL CONSTRUCTION AND EXCAVATION PROCEDURES AND SEQUENCES AND SUBMIT SUCH FOR THE OWNER'S AND ARCHITECT'S INFORMATION AND THE OWNER'S GEOTECHNICAL TESTING AGENCY'S REVIEW PRIOR TO THE START OF CONSTRUCTION.
6. THE CONTRACTOR SHALL PROOF ROLL AND UNIFORMLY COMPACT THE SUBGRADE AFTER STRIPPING THE AREAS THAT WILL NOT BE EXCAVATED FURTHER FOR BASEMENT CONSTRUCTION.

BACKFILL

1. WHERE BACKFILL IS REQUIRED ON BOTH SIDES OF A WALL OR GRADE BEAM, THE BACKFILL OPERATION SHALL PROCEED ON BOTH SIDES SIMULTANEOUSLY AT UNIFORM LEVELS OF FILL SO AS NOT TO CREATE UNBALANCED LATERAL EARTH PRESSURES WHICH COULD DAMAGE THE STRUCTURE.
2. BACKFILL MATERIAL WITHIN THE BUILDING AREA SHALL BE STRUCTURAL FILL MATERIAL PLACED AND COMPACTED IN THIN LIFTS TO A MINIMUM OF 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST (ASTM D-698). THIS MATERIAL SHALL BE APPROVED BY THE OWNER'S GEOTECHNICAL TESTING AGENCY. THIS TYPE OF FILL SHALL BE PLACED TO WITHIN 9" OF THE BOTTOM OF SLAB ELEVATION, WHERE SLAB OCCURS (SEE GEOTECHNICAL REPORT).
3. BACKFILL ADJACENT TO WALLS, FOUNDATIONS AND OVER UTILITY TRENCHES SHALL BE FILL MATERIAL PLACED AND COMPACTED IN THIN LIFTS TO A MINIMUM OF 90% OF MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST (ASTM D-1557). THIS FILL MATERIAL SHALL BE APPROVED BY THE OWNER'S GEOTECHNICAL AGENCY. (SEE GEOTECHNICAL REPORT)

FOUNDATIONS

1. THE BOTTOM OF THE FOOTINGS SHALL REST ON MATERIAL APPROVED BY THE OWNER'S GEOTECHNICAL TESTING AGENCY WITH A MINIMUM BEARING CAPACITY OF 2,000 PSF. (SEE GEOTECHNICAL REPORT)
2. THE BOTTOM OF FOOTING ELEVATIONS AND SOIL BEARING CAPACITIES AS SHOWN ON DRAWINGS ARE ESTIMATED FROM THE SOIL BEARING DATA. (SEE GEOTECHNICAL REPORT.)
3. ALL FOUNDATION EXCAVATIONS SHALL BE CLEAN AND DRY PRIOR TO PLACING CONCRETE. BOTTOM SHALL BE INSPECTED AND DESIGN BEARING CAPACITY CONFIRMED BY THE OWNER'S GEOTECHNICAL TESTING AGENCY BEFORE FOOTINGS ARE PLACED.
4. NO FOOTING SHALL BE PLACED ON OR AGAINST SUBGRADES CONTAINING FREE WATER, FROST, OR ICE. SHOULD WATER, FROST, OR ICE ENTER AN AREA AFTER SUBGRADE APPROVAL, THE SUBGRADE SHALL BE REINSPECTED BY THE OWNER'S GEOTECHNICAL AGENCY AFTER REMOVAL OF WATER, FROST, OR ICE.

SLAB ON GRADE

1. THE SLABS ON GRADE SHALL BE PLACED ON A VAPOR RETARDER UNDERLAIN BY A MINIMUM 6-INCH FREE-DRAINING AGGREGATE LAYER (IDOT GRADATION CA-6) OVER COMPACTED SUBGRADE. THE SUBGRADE SHALL BE COMPACTED TO A MINIMUM OF 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST (ASTM D-1557). SUBGRADE SHALL BE APPROVED BY THE OWNER'S GEOTECHNICAL TESTING AGENCY PRIOR TO SLAB PLACEMENT.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING FLOOR DRAIN LOCATIONS WITH PLUMBING PLANS AND PLUMBING SUBCONTRACTOR. PROVIDE PROPER PITCH TO DRAIN AS INDICATED ON THE PLANS OR AS SPECIFIED.
3. SEE SPECIFICATIONS SECTION 03 3000 FOR VAPOR RETARDER PRODUCT INFORMATION.

CONCRETE (CAST IN PLACE)

1. CONCRETE COMPRESSIVE STRENGTHS (28 DAYS MINIMUM) SHALL BE AS FOLLOWS:

SPREAD FOOTINGS, STRIP FOOTINGS	4,000 PSI	NORMAL WT. CONCRETE
FOUNDATION WALLS, PIERS	4,000 PSI	NORMAL WT. CONCRETE
SLABS-ON-GRADE	5,000 PSI	NORMAL WT. CONCRETE

2. CONCRETE PROTECTION FOR REINFORCING BARS SHALL BE AS FOLLOWS, UNLESS OTHERWISE SHOWN ON THE DRAWINGS:

SURFACES CAST AGAINST EARTH	3 INCHES
FORMED SURFACES EXPOSED TO EARTH OR WEATHER	
#5 BARS AND SMALLER	1 1/2 INCHES
#6 BARS AND LARGER	2 INCHES
FORMED SURFACES NOT EXPOSED TO EARTH OR WEATHER	
SLABS, WALLS, AND JOISTS	
#11 BAR AND SMALLER	3/4 INCH
#14 AND #18 BAR	1 1/2 INCHES
BEAMS AND COLUMNS	1/12 INCHES
SLABS ON METAL DECK	
TOP	3/4 INCH
BOTTOM	3/4 INCH

3. FOR ADMIXTURES SEE SPECIFICATION SECTION 03 30 00. THE USE OF SUPERPLASTICIZERS AND WATER REDUCERS IS ALLOWED, BUT NOT REQUIRED. ALL ADMIXTURES SHALL BE CHLORIDE FREE.
4. FORMWORK FOR ARCHITECTURALLY EXPOSED CONCRETE SHALL BE SMOOTH TO PROVIDE A FINISH ACCEPTABLE TO THE ARCHITECT. SEE SPECIFICATION SECTION 03 30 00.
5. THE CONTRACTOR SHALL VERIFY THE DIMENSIONS AND LOCATIONS OF ALL OPENINGS, PIPE SLEEVES, ECT. AS REQUIRED BY ALL TRADES BEFORE THE CONCRETE IS POURED. THE CONTRACTOR SHALL CONSULT THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION DRAWINGS (AS WELL AS THE STRUCTURAL DRAWINGS) FOR THE LOCATION, NUMBER, AND SIZE OF ALL OPENINGS, SLEEVES, ECT. HOWEVER, OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE INSTALLED ONLY AFTER APPROVAL OF THE ARCHITECT IS OBTAINED.
6. A COORDINATED COMPOSITE DRAWING INDICATING ALL SLEEVES, OPENINGS, BOX-OUTS, AND CORES REQUIRED FOR THE WORK OF ALL DISCIPLINES SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL PRIOR TO CONSTRUCTION. A COMPOSITE DRAWING SHALL BE SUBMITTED FOR EACH SLAB AND/OR WALL AND THE SIZE AND DIMENSIONED LOCATION OF ALL SLEEVES, OPENINGS, BOX-OUTS, CORES, ECT. SHALL BE INDICATED.
7. ALL SLEEVES AND PENETRATIONS SHALL BE PROVIDED BY THE SUBCONTRACTOR REQUIRING THE OPENING. THE PLACEMENT OF THESE SLEEVES AND PENETRATIONS IS THE RESPONSIBILITY OF THE TRADE INVOLVED.

REINFORCING STEEL

1. ALL REINFORCING STEEL SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:

REINFORCING STEEL	ASTM A 615 GRADE 60, DEFORMED
WELDED WIRE FABRIC	ASTM A 1064

2. EPOXY COATED REBAR SHALL BE INSTALLED AT LOCATIONS INDICATED ON THE PLAN OR IN THE SPECIFICATIONS. EPOXY COATING SHALL CONFORM TO ASTM A 775 OR ASTM A 934.
3. REINFORCING DETAILS SHALL CONFORM TO THE REQUIREMENTS OF THE A.C.I. 318 BUILDING CODE, LATEST EDITION AND A.C.I. 315, LATEST EDITION UNLESS OTHERWISE SHOWN OR NOTED.
4. LAP ALL BARS 36 DIAMETERS BUT NOT LESS THAN 24" AT SPLICES UNLESS OTHERWISE SHOWN. WELDED WIRE FABRIC SHALL BE LAPPED ONE (1) SPACE TRANSVERSELY AND TWO (2) SPACES LONGITUDINALLY.
5. UNLESS OTHERWISE SHOWN PROVIDE 2-#5 ADDITIONAL BARS TOP AND BOTTOM AND AT THE SIDE OF OPENINGS 8" SQUARE AND LARGER IN WALLS AND SLABS AND EXTEND 2'-6" BEYOND OPENING.
6. PROVIDE ADEQUATE BOLSTERS, HIGH CHAIRS, SUPPORT BARS, ETC., TO MAINTAIN SPECIFIED CLEARANCES FOR THE ENTIRE LENGTH OF ALL REINFORCING BARS AND WELDED WIRE FABRIC.
7. SHOP DRAWINGS CHECKED BY THE CONTRACTOR SHOWING REINFORCING DETAILS, INCLUDING STEEL SIZES, SPACING, PLACEMENT, AND SUPPORT SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW PRIOR TO FABRICATION.

STRUCTURAL STEEL

1. ALL STEEL SECTIONS AND PLATES (INCLUDING BEAM BEARING EMBEDS) SHOWN ON STRUCTURAL DRAWINGS ARE TO BE INCLUDED IN THE STRUCTURAL STEEL CONTRACT UNLESS OTHERWISE NOTED.
2. ALL STEEL SHALL BE NEW STEEL MANUFACTURED IN THE U.S.A., SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH CURRENT A.I.S.C. STANDARDS AND APPLICABLE CODES, AND SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS UNLESS OTHERWISE NOTED:

WIDE FLANGES AND STRUCTURAL TEES (WT):	ASTM A992
CHANNELS, ANGLES, PLATES, CONN. MAT'L:	ASTM A36

3. ALL STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" AND THE AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" (LATEST EDITIONS).
4. ALL STRUCTURAL STEEL SHALL BE OF SIZE SHOWN ON DRAWINGS AND SHALL BE STRAIGHT AND FREE OF TWIST. SUBSTITUTIONS WILL NOT BE PERMITTED WITHOUT APPROVAL OF THE ARCHITECT.
5. ALL COLUMN BEARING ENDS TO BE TRUE AND SQUARE. ALL COLUMNS TO BE PLUMB AND LEVEL BEARING.
6. THE FABRICATOR/ERECTOR SHALL SUBMIT TO THE ARCHITECT FOR REVIEW, DRAWINGS SHOWING SHOP FABRICATION, DETAILS, FIELD ASSEMBLY DETAILS, AND ERECTION DIAGRAMS FOR ALL STRUCTURAL STEEL. ALL SHOP DRAWINGS MUST BE COMPLETE FOR ALL STRUCTURAL STEEL WITH BEAM SIZES, MARKS, ETC. SHOWN ON ERECTION PLANS.
7. ALL BEAMS SHALL BE FABRICATED WITH THE NATURAL CAMBER UP AND WITH CAMBER INDICATED CLEARLY ON THE STEEL WITH INDELIBLE IDENTIFICATION.
8. SEE SPECIFICATIONS FOR METHOD OF SURFACE PREPARATION AND FOR SHOP AND FIELD PAINT.
9. THERE SHALL BE NO FIELD CUTTING OF STRUCTURAL MEMBERS FOR THE WORK OF OTHER TRADES WITHOUT THE PRIOR WRITTEN APPROVAL OF THE ARCHITECT.
10. SEE SPECIFICATIONS FOR FIELD INSPECTION AND TESTING OF STRUCTURAL STEEL.
11. BOLTED CONNECTIONS SHALL BE BEARING TYPE CONNECTIONS WITH THREADS INCLUDED IN SHEAR PLANE (A325-N) UTILIZING 3/4" DIAMETER BOLTS TIGHTENED TO AISC SNUG-TIGHT CONDITIONS UNLESS OTHERWISE SHOWN OR NOTED. ALL BOLTS SHALL BE MANUFACTURED IN THE U.S.A.
12. WELDED CONNECTIONS SHALL BE AS SHOWN ON DETAILS. ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS AND IN ACCORDANCE WITH THE PUBLISHED RECOMMENDATIONS OF THE AMERICAN WELDING SOCIETY AND AS NOTED IN THE AISC SPECIFICATIONS, UNLESS OTHERWISE SHOWN. MINIMUM TENSILE STRENGTH OF ELECTRODES SHALL BE 70 KSI.
13. ALL STEEL MEMBERS AND FASTENERS EXPOSED TO WEATHER IN THE COMPLETED BUILDING OR WITHIN EXTERIOR WALLS (SUCH AS GRILLAGE STEEL, LINTELS, AND SHELF ANGLES) SHALL BE HOT-DIP GALVANIZED.

METAL DECK

1. DECKS SHALL BE AS CALLED FOR ON DRAWINGS AND IN THE SPECIFICATIONS AND SHALL BE SECURELY FASTENED TO THE STEEL FRAMEWORK BY WELDS NO LESS THAN 5/8" DIAMETER AT 12" CENTERS MAXIMUM. SIDE LAPS SHALL BE FASTENED 36" MAXIMUM ON CENTER (MINIMUM 3 PER SPAN) UNLESS NOTED OTHERWISE.
2. ALL DECKING SHALL BE WELDED TO STRUCTURAL STEEL BY QUALIFIED WELDERS USING PRE-QUALIFIED PROCEDURES.
3. ALL METAL DECKS SHALL BE DESIGNED FOR AT LEAST THE CONDITIONS SHOWN ON THE DRAWINGS. METAL DECK SHALL BE MANUFACTURER'S STANDARD OF TYPE, MINIMUM GAUGE, AND SECTION INDICATED ON THE DRAWINGS. SECTION PROPERTIES SHALL BE COMPUTED IN ACCORDANCE WITH A.I.S.I. "SPECIFICATION FOR THE DESIGN OF LIGHT GAUGE COLD FORMED STEEL STRUCTURAL MEMBERS" (LATEST EDITION). THE METAL DECK SHALL BE DESIGNED TO BE CONTINUOUS OVER THREE (3) SPANS AND SHALL SATISFY LOAD AND DEFLECTION REQUIREMENTS. SINGLE AND DOUBLE SPANS, IF REQUIRED, SHALL ALSO SATISFY LOAD AND DEFLECTION REQUIREMENTS.
4. THE FABRICATOR/ERECTOR SHALL PROVIDE PUBLISHED MANUFACTURER'S DATA TO THE ARCHITECT FOR REVIEW. PROVIDE SHOP DRAWINGS CHECKED BY THE CONTRACTOR INDICATING LOCATION, GAUGE, AND SIZE OF EACH PIECE OF DECKING. THE DRAWINGS SHALL CLEARLY SHOW WELDING DETAILS TO STRUCTURAL FRAMING AND SIDE LAP CONNECTION DETAILS. THE SHOP DRAWINGS SHALL CLEARLY SHOW ALL EDGE CLOSURES.
5. NO LOADS SHALL BE PERMITTED TO BE HUNG DIRECTLY FROM METAL ROOF DECKING (FOR EXAMPLE: SUSPENDED MECHANICAL EQUIPMENT, DUCTWORK, CONDUIT, PIPING, LIGHTING, CEILINGS) WITHOUT PRIOR APPROVAL OF THE ARCHITECT. PROPOSED HANGING LOADS, DETAILS, AND FASTENERS SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION. MAXIMUM HANGING LOAD PER FASTENER IS NOT TO EXCEED 50 LBS AT METAL ROOF DECKING.

CONSTRUCTION DETAILS

1. DATUM: EL 100'-0" = 632'-0" (CIVIL).
2. THE CONTRACTOR MUST CHECK WITH ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND VERIFY THE SIZE AND LOCATION OF OPENINGS, SLEEVES, CHASES, CONDUIT, DEPRESSED AREAS, FLOOR FINISHES, FILLS, ANCHORS, PRECAST, STONE AND MASONRY DETAILS, HANGERS, CURBS, AND OTHER MISCELLANEOUS ITEMS CONNECTED WITH CONCRETE CONSTRUCTION BEFORE PLACING CONCRETE. SUBMIT SLEEVE AND EMBEDDED ITEM SHOP DRAWINGS FOR REVIEW BEFORE PLACING CONCRETE.
3. WHERE MONOLITHIC OR INTEGRAL FINISH IS CALLED FOR ON THE DRAWINGS, DEPTH MUST BE MEASURED FROM FINISHED FLOOR.
4. WHERE FLOOR IS DEPRESSED FOR FINISHES AS SHOWN ON THE DRAWINGS, THE DEPTH OF THE SLABS AND BEAMS MUST BE MEASURED FROM THE DEPRESSED AREA.
5. THE SIZE AND LOCATION OF OPENINGS THROUGH SLABS AND WALLS AS SHOWN ON THE STRUCTURAL DRAWINGS SHALL NOT BE CHANGED WITHOUT THE APPROVAL OF THE ARCHITECT. ALL OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS INCLUDING PIPE SLEEVES AND CORED HOLES MUST BE SUBMITTED TO AND APPROVED BY THE ARCHITECT BEFORE PROCEEDING WITH WORK.
6. FOR LINTELS OVER EXTERIOR AND INTERIOR OPENINGS SEE ARCHITECTURAL DRAWINGS. LOOSE LINTELS TO HAVE A MINIMUM END BEARING OF 8".
7. LOCATION OF CONSTRUCTION JOINTS IS TO BE APPROVED BY THE ARCHITECT.
8. NO HORIZONTAL CONSTRUCTION JOINTS WILL BE ALLOWED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS.
9. ALL DESIGN AND CONSTRUCTION MUST CONFORM TO THE INTERNATIONAL BUILDING CODE, 2018 EDITION AND ALL APPLICABLE LOCAL CODES.
10. NO CONDUIT OF ANY KIND SHALL BE EMBEDDED IN CONCRETE CONSTRUCTION OTHER THAN SLAB ON GRADE CONSTRUCTION.

CONCRETE MASONRY

1. MASONRY UNIT STRENGTHS SHALL BE AS FOLLOWS (PSI):

HOLLOW MASONRY UNITS	2000 PSI (ASTM C90)
MASONRY ASSEMBLY STRENGTH (f'm)	2000 PSI (ASTM C90)
MORTAR	TYPE S
GROUT	2000 PSI (ASTM C476)
REINFORCING BARS	60,000 PSI (ASTM A615)
COLD DRAWN STEEL WIRE	70,000 PSI (ASTM A82)

2. DESIGN IS BASED ON VALUES AS PUBLISHED IN THE "BUILDING CODE REQUIREMENTS FOR CONCRETE MASONRY STRUCTURES" (ACI-530 / ASCE-5 / TMS-402, LATEST EDITIONS).
3. ALL HOLLOW UNIT BLOCK COMPRESSION TEST STRENGTHS REQUIRED TO ACHIEVE THE f'm STATED ABOVE SHALL BE ACCORDING TO "SPECIFICATIONS FOR MASONRY STRUCTURES" (TMS-602-16) BASED ON STRENGTHS BY THE UNIT STRENGTH METHOD SECTION.
4. PROVIDE #5 AT 32" O.C. VERTICAL REINFORCEMENT AT CMU WALLS UNLESS NOTED OTHERWISE.
5. PROVIDE #5 VERTICAL REINFORCEMENT AT WALL ENDS, WALL CORNERS, AND AT FIRST TWO CELLS AT EACH SIDE OF OPENINGS FOR FULL HEIGHT OF WALL.
6. PROVIDE CONTINUOUS BOND BEAM REINFORCEMENT WITH (2) #5 BARS, OR AS NOTED.
7. PROVIDE DOWELS BETWEEN FOUNDATIONS & WALLS EQUAL TO THE SIZE & SPACING OF THE VERTICAL REINFORCING UNLESS OTHERWISE NOTED.
8. PROVIDE 9 GA. HORIZONTAL JOINT REINFORCEMENT AT EVERY OTHER BED JOINT.
9. REINFORCEMENT SPLICED SHALL BE A MINIMUM OF 48 BAR DIAMETERS FOR TENSION SPLICES & 30 BAR DIAMETERS FOR COMPRESSION SPLICES. ALL SPLICES SHALL MEET TENSION REQUIREMENTS UNLESS OTHERWISE NOTED.
10. ALL NONBEARING MASONRY WALLS SHALL BE PROVIDED WITH VERTICAL SLIP CONNECTIONS AT THE TOP OF THE WALL.
11. FULLY GROUT ALL CELLS CONTAINING REINFORCEMENT.
12. WHERE NOT SHOWN OTHERWISE, MINIMUM SOLID GROUTED MASONRY BELOW BEAM REACTIONS SHALL BE 16 INCHES DEEP BY 32 INCHES LONG.
13. WHERE NOT SHOWN OTHERWISE, MINIMUM SOLID GROUTED MASONRY BELOW LINTEL REACTIONS SHALL BE 16 INCHES DEEP BY 16 INCHES LONG.

DESIGN DETAILS

1. DEAD LOADS

SUPERIMPOSED ROOF DEAD LOAD	
CEILING	5 PSF
ROOFING	7 PSF

2. LIVE LOADS

MIN ROOF LIVE LOAD	20 PSF
RESTROOM	40 PSF

3. SNOW LOADS

GROUND SNOW LOAD,	Pg = 20 PSF
IMPORTANCE FACTOR,	Is = 1.0
SNOW EXPOSURE FACTOR,	Ce = 0.90
THERMAL FACTOR,	Ct = 1.0
FLAT ROOF SNOW LOAD,	Ps = 20 PSF

4. WIND LOADS

BASIC WIND SPEED,	V = 107 MPH
EXPOSURE CATEGORY,	B
IMPORTANCE FACTOR,	Iw = 1.0
VELOCITY PRESSURE	
DIRECTIONAL, C+C,	qz = 14.0 PSF
ENVELOPE,	qz = 17.4 PSF
PARTIALLY ENCLOSED	

5. SEISMIC DESIGN

BASIC LATERAL FORCE RESISTING SYSTEM:	
SHORT PERIOD ACCELERATION,	Ss = 0.133
SITE COEFFICIENT,	Fa = 1.6
MAX CONSIDERED EARTHQUAKE,	Sms = 0.213
DAMPED SHORT PERIOD ACCELERATION,	Sds = 0.142
ONE SECOND PERIOD ACCELERATION,	S1 = 0.076
SITE COEFFICIENT,	Fv = 2.4
MAX CONSIDERED EARTHQUAKE,	Sm1 = 0.183
DAMPED ONE SECOND PERIOD ACCEL,	Sd1 = 0.122

EQUIVALENT LATERAL FORCE DESIGN PROCEDURE

OCCUPANCY CATEGORY - II
SEISMIC IMPORTANCE FACTOR, Ie = 1.0
SEISMIC DESIGN CATEGORY - B
SITE CLASS - D

RESPONSE MODIFICATION FACTOR,	R = 2.0
FUNDAMENTAL BUILDING PERIOD,	T = 0.143
SEISMIC RESPONSE COEFFICIENT,	Cs = 0.071
DESIGN SEISMIC BASE SHEAR,	V = 11.75 kips

ABBREVIATIONS

ADD	ADDENDUM
ADD'L	ADDITIONAL
ALT	ALTERNATE
ANCH	ANCHOR(AGE)
APPROX	APPROXIMATE
ARCH	ARCHITECT(URAL)
BLDG	BUILDING
BM	BEAM
BOTT	BOTTOM
BS	BOTH SIDES
BSMT	BASEMENT
CF	CUBIC FOOT
CL	CENTER LINE
CLR	CLEAR (COVER)
CMU	CONC MAS UNIT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUE, CONTINUOUS
CU	CUBIC
CY	CUBIC YARD
DBL	DOUBLE
DEG	DEGREE
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DL	DEAD LOAD
DTL	DETAIL
DWG	DRAWING
E	EAST
EA	EACH
EF	EACH FACE
EL	ELEVATION
EQ	EQUAL
EW	EACH WAY
(E)	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
FIN	FINISH(ED)
FLR	FLOOR(ING)
FND	FOUNDATION
FP	FIREPROOF(ING)
FS	FAR SIDE
FT	FEET
FTG	FOOTING
GA	GAUGE
GC	GENERAL CONTRACTOR
HORIZ	HORIZONTAL
HP	HIGH POINT
HT	HEIGHT
ID	INSIDE DIAMETER
IN	INCH
INFO	INFORMATION
INT	INTERIOR
JT	JOINT
K	KIPS
KSF	KIPS PER SQ. FT
KSI	KIPS PER SQ. IN
L	LENGTH
LB	POUND
LL	LIVE LOAD
LLH	LONG LEG HORIZ
LLV	LONG LEG VERT
LW	LIGHTWEIGHT
M	MOMENT
MAX	MAXIMUM
MECH	MECHANIC(AL)
MIN	MINIMUM
MISC	MISCELLANEOUS
MTL	METAL
N	NORTH
NO	NUMBER
NOM	NOMINAL
NS	NEAR SIDE
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OH	OPPOSITE HAND
OPP	OPPOSITE
PCF	POUNDS PER CUBIC FOOT
PEN	PENETRATION
PERP	PERPENDICULAR
PL	PLATE
PLBG	PLUMBING
PLF	POUNDS PER LINEAR FOOT
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT
QTY	QUANTITY
RAD	RADIUS
REF	REFERENCE
REINF	REINFORCED(ING)(MENT)
REQ'D	REQUIRED
S	SOUTH
SC	SLIP CRITICAL
SCHED	SCHEDULE
SIM	SIMILAR
SP	SPECIAL
SPEC	SPECIFICATION(S)
SQ	SQUARE
STD	STANDARD
STIFF	STIFFENER
STL	STEEL
STRUCT	STRUCTURE(AL)
SYM	SYMMETRY(ICAL)
T&B	TOP AND BOTTOM
T/	TOP OF
TEMP	TEMPERATURE
THRU	THROUGH
TYP	TYPICAL
V	SHEAR FORCE
VERT	VERTICAL
W	WEST
W	WIDTH, WIDE
W/	WITH
W/O	WITH OUT
WP	WORK POINT
WT	WEIGHT
WWF	WELDED WIRE FABRIC

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Chicago, IL 60642
312.432.4180
312.432.4184

INCLUSIVE BATHROOM & SITE IMPROVEMENTS
GLEN OAK PARK
PEORIA PARK DISTRICT

ISSUED FOR BID

LICENSED STRUCTURAL ENGINEER
THOMAS HARRISON
081.005869
STATE OF ILLINOIS
Expires 11-30-2024

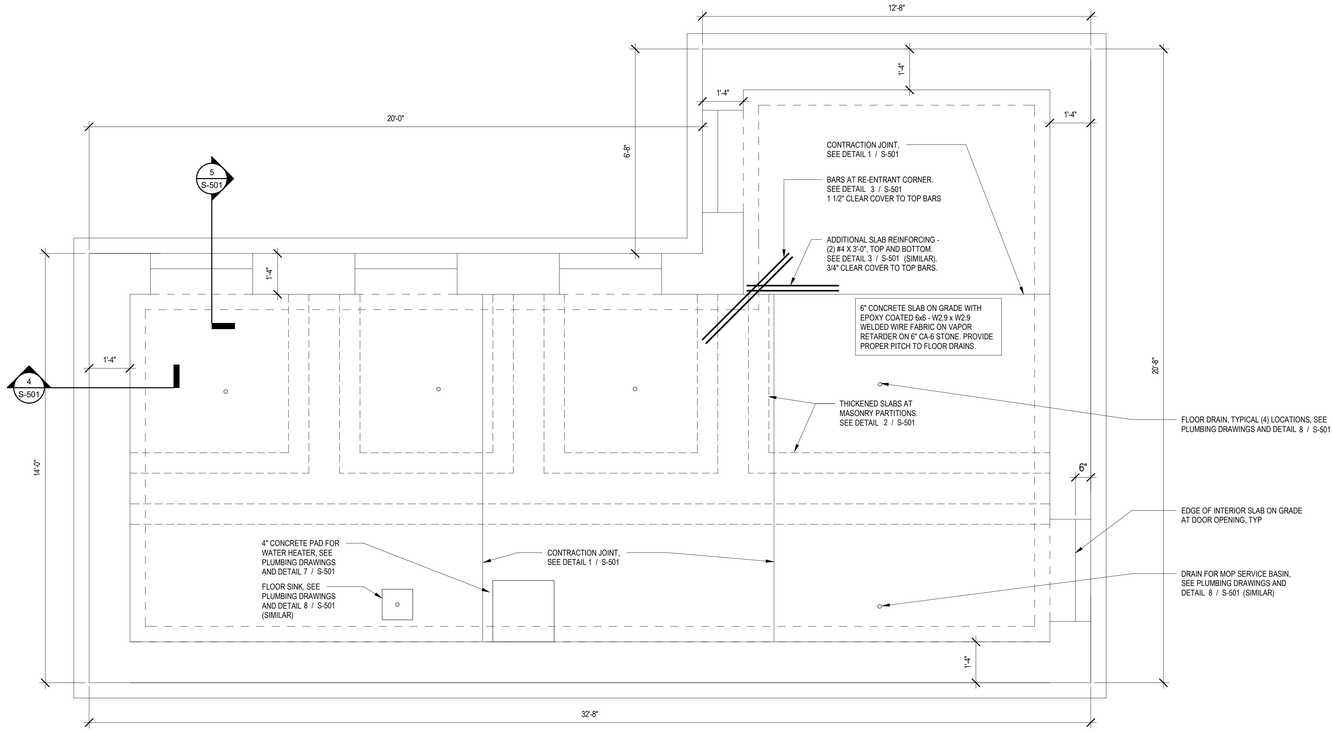
No.	Description	Date
1	ISSUED FOR 60% DESIGN	2024-05-23
2	ISSUED FOR 90% DESIGN	2024-07-11
3	ISSUED FOR BID	2024-08-22

GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
2218 N Prospect Rd
Peoria, IL 61603

STRUCTURAL GENERAL NOTES AND ABBREVIATIONS

DRAWN:	SMC
CHECKED:	TH
APPROVED:	TH
JOB NO:	24-1006

SHEET NO.
S-001



1 STRUCTURAL FOUNDATION PLAN
1/2" = 1'-0"

4' 2' 1' 0
SCALE: 1/2" = 1'-0"

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INCLUSIVE BATHROOM & SITE IMPROVEMENTS
GLEN OAK PARK
PEORIA PARK DISTRICT
ISSUED FOR BID

LICENSED STRUCTURAL ENGINEER
THOMAS HARRISON
081.005889
STATE OF ILLINOIS
Expires 11-30-2024

No.	Description	Date
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2	ISSUED FOR 90% DESIGN	2024-07-11
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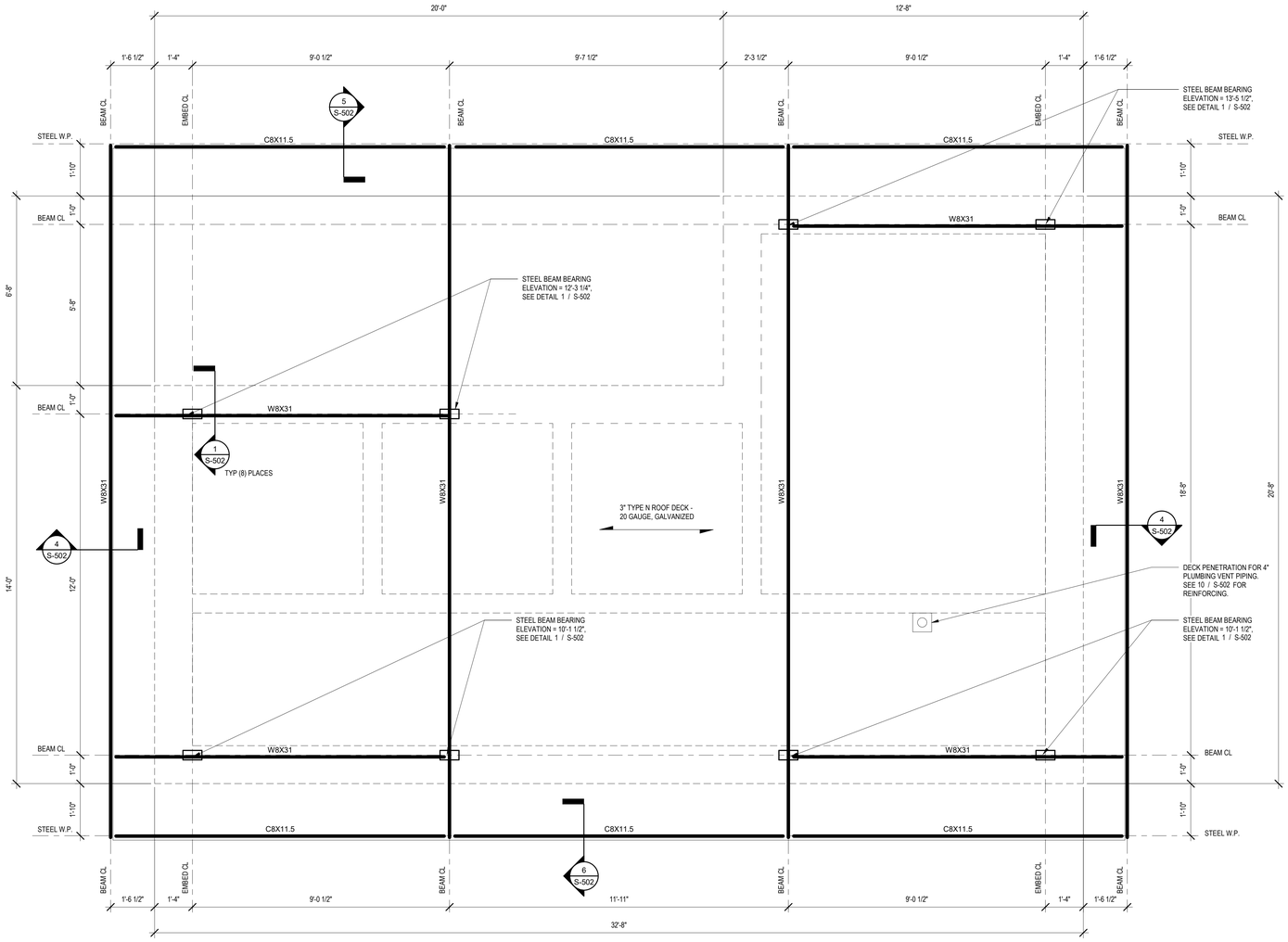
GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
2218 N Prospect Rd
Peoria, IL 61603

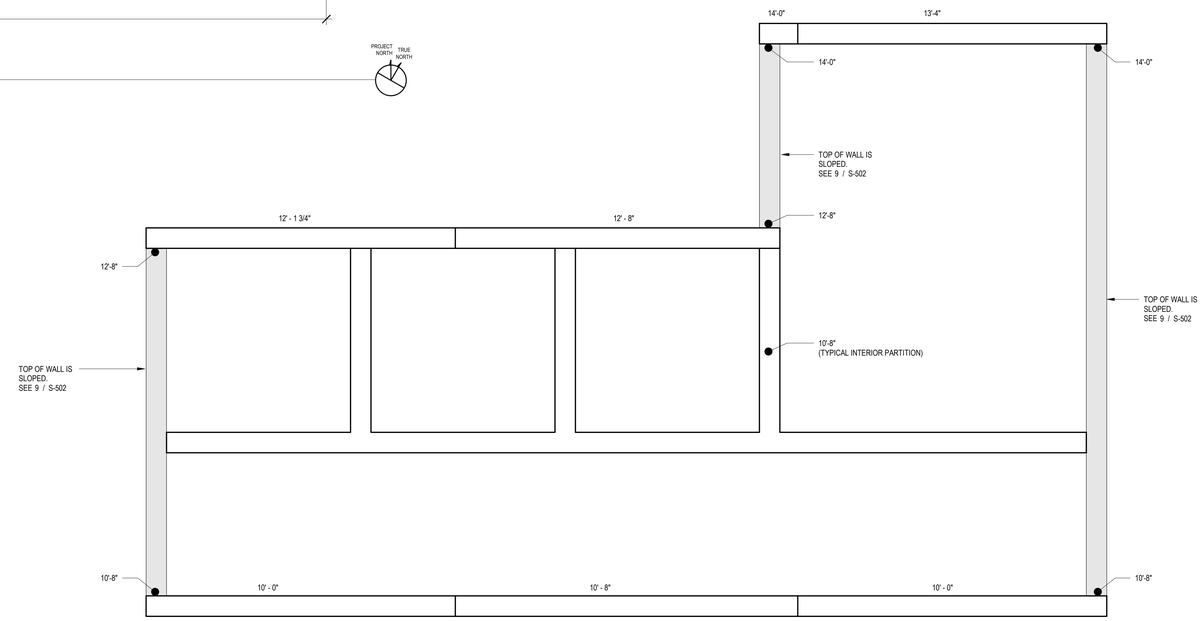
STRUCTURAL FOUNDATION PLAN

DRAWN:	SMC
CHECKED:	TH
APPROVED:	TH
JOB NO:	24-1006

SHEET NO.
S-101



1 STRUCTURAL ROOF PLAN
1/2" = 1'-0"



2 WALL HEIGHTS FOR 8" CMU WALLS
1/2" = 1'-0"

4' 2' 1' 0
SCALE: 1/2" = 1'-0"

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GLEN OAK PARK
PEORIA PARK DISTRICT
ISSUED FOR BID

LICENSED STRUCTURAL ENGINEER
THOMAS HARRISON
081.005689
STATE OF ILLINOIS
Expires 11-30-2024

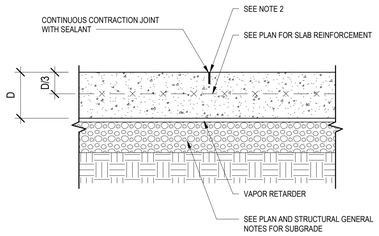
No.	Description	Date
1	ISSUED FOR 60% DESIGN	2024-05-23
2	ISSUED FOR 90% DESIGN	2024-07-11
3	ISSUED FOR BID	2024-08-22

GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
2218 N Prospect Rd
Peoria, IL 61603

STRUCTURAL ROOF PLAN

DRAWN:	SMC
CHECKED:	TH
APPROVED:	TH
JOB NO:	24-1006

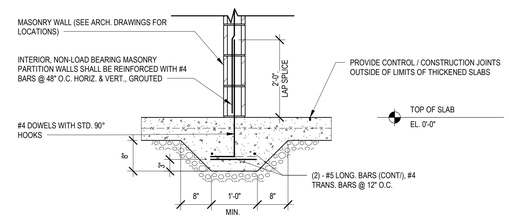
SHEET NO.
S-102



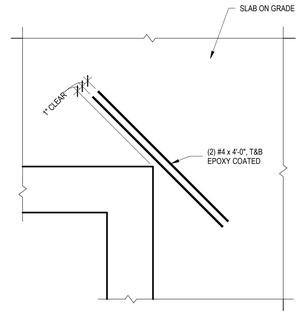
SLAB NOTES:

1. CONTRACTION JOINTS SHALL BE PLACED AS INDICATED ON PLANS.
2. CONTRACTION JOINTS MAY BE SAWED JOINTS OR MADE WITH PLASTIC INSERTS (DEPTH = 0.25 * SLAB THICKNESS). FILL ALL JOINTS WITH SEALANT. SAWING TO BE COMPLETED WITHIN THE FIRST 12 HOURS.
3. CONTRACTION JOINTS PARALLEL WITH THICKENED SLABS SHOULD OCCUR OUTSIDE THE LIMITS OF THE THICKENED SLABS.

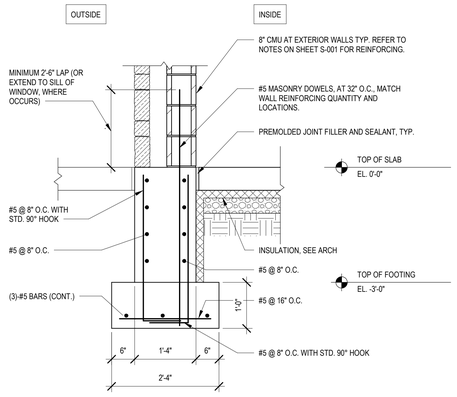
1 TYPICAL SLAB ON GRADE CONTRACTION JOINT
1 1/2" = 1'-0"



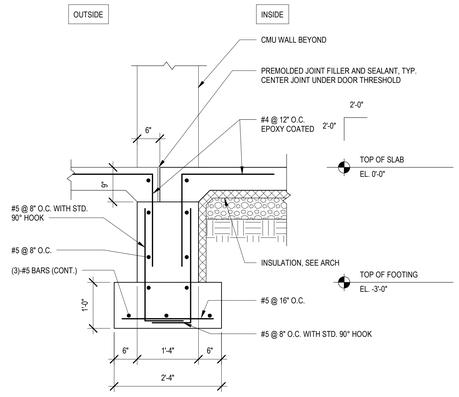
2 TYPICAL THICKENED SLAB AT INTERIOR MASONRY PARTITION
3/4" = 1'-0"



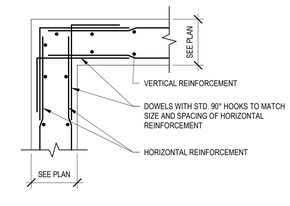
3 SLAB ON GRADE REINFORCEMENT AT RE-ENTRANT CORNER
3/4" = 1'-0"



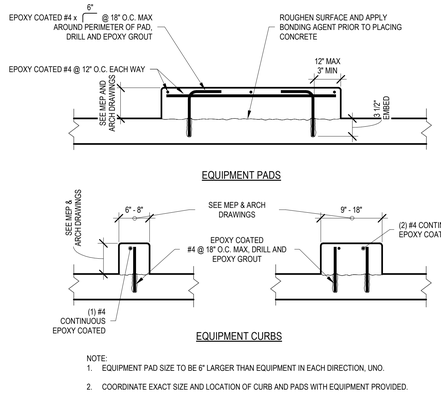
4 EXTERIOR WALL FOOTING DETAIL
3/4" = 1'-0"



5 EXTERIOR WALL FOOTING DETAIL AT DOOR
3/4" = 1'-0"

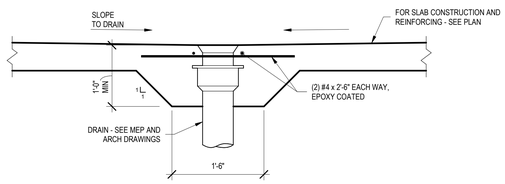


6 TYPICAL WALL CORNER REINFORCEMENT
3/4" = 1'-0"



NOTE:
1. EQUIPMENT PAD SIZE TO BE 6" LARGER THAN EQUIPMENT IN EACH DIRECTION, UNO.
2. COORDINATE EXACT SIZE AND LOCATION OF CURB AND PADS WITH EQUIPMENT PROVIDED.

7 EQUIPMENT CURBS AND PADS ON CONCRETE SLABS
1" = 1'-0"



8 FLOOR DRAIN AT SLAB ON GRADE
1" = 1'-0"

24" 16" 8" 0
SCALE: 1 1/2" = 1'-0"

3' 1.5' 0.8' 0
SCALE: 3/4" = 1'-0"

700 N Sangamon
Chicago, IL 60642
t 312.432.4180
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INCLUSIVE BATHROOM & SITE IMPROVEMENTS
GLEN OAK PARK
PEORIA PARK DISTRICT
ISSUED FOR BID

LICENSED STRUCTURAL ENGINEER
THOMAS HARRISON
081.005869
STATE OF ILLINOIS
Expires 11-30-2024

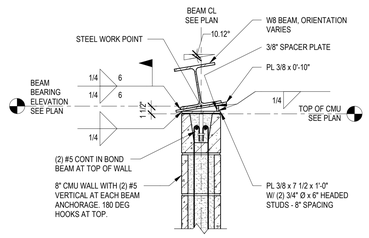
No.	Description	Date
1	ISSUED FOR 60% DESIGN	2024-05-23
2	ISSUED FOR 90% DESIGN	2024-07-11
3	ISSUED FOR BID	2024-08-22

GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
2218 N Prospect Rd
Peoria, IL 61603

STRUCTURAL FOUNDATION DETAILS

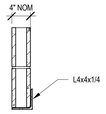
DRAWN:	SMC
CHECKED:	TH
APPROVED:	TH
JOB NO:	24-1006

SHEET NO. S-501



1 BEAM BEARING ON MASONRY WALL
1" = 1'-0"

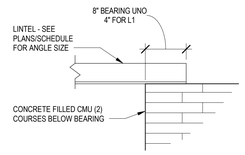
(5) LOCATIONS THUS
(3) LOCATIONS SIMILAR



NOTES:
1. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF OPENINGS.

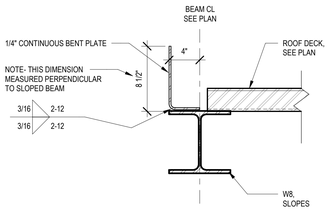
2. ALL LINTELS SHALL BE HOT-DIPPED GALVANIZED.

2 STEEL LINTEL FOR 4" CMU VENEER
1" = 1'-0"

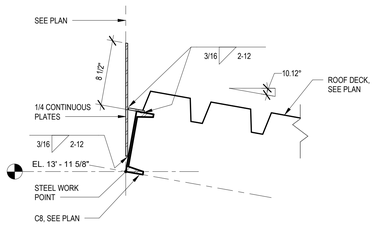


ANGLE LINTEL BEARING

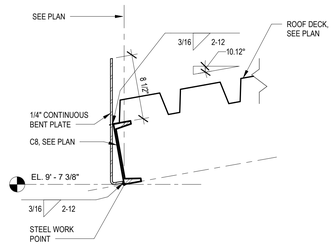
3 LINTEL BEARING DETAILS
1" = 1'-0"



4 DECK EDGE DETAIL
1 1/2" = 1'-0"



5 ROOF EDGE HIGH SIDE
1 1/2" = 1'-0"

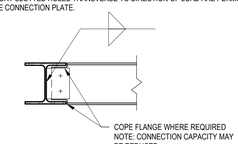


6 ROOF EDGE LOW SIDE
1 1/2" = 1'-0"

BEAM SIZE	NO. OF BOLTS	AISC CONNECTION CAPACITY (LRFD)
W8/C8	2	26.1 K

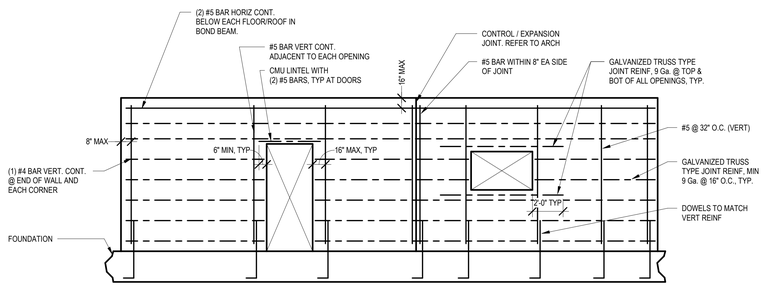
NOTES:
1. REFER TO AISC MANUAL OF STEEL CONSTRUCTION (14TH EDITION) FOR PLATE DIMENSIONS AND WELDS (TABLE 10-10a)

2. SHORT SLOTTED HOLES TRANSVERSE TO DIRECTION OF LOAD ARE PERMITTED IN THE CONNECTION PLATE.



BEAM TO BEAM

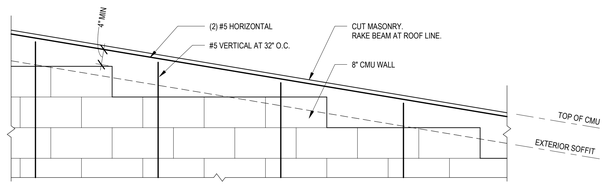
7 SINGLE-PLATE SHEAR CONNECTION
1" = 1'-0"



NOTES:

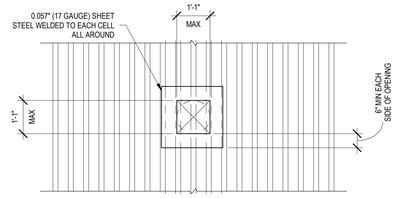
1. FILL ALL CORES WITH REINFORCING BARS W/ 2000 PSI GROUT.
2. THIS IS MINIMUM REINFORCING REQUIRED. SEE WALL SECTIONS FOR ADDITIONAL INFORMATION.

8 TYPICAL REINFORCING FOR 8" CONCRETE MASONRY WALLS
1/4" = 1'-0"



NOTE: MASONRY VENEER TO HAVE CUT UNITS AT TOP OF SLOPED WALL. MAINTAIN HORIZONTAL COURSING FOR CMU VENEER AS SHOWN ON ARCHITECTURAL ELEVATIONS (EXPOSED TO VIEW).

9 CMU BACKUP WALLS SLOPED AT TOP
3/4" = 1'-0"



DETAIL FOR OPENINGS UP TO 13" PERPENDICULAR TO DECK

10 DECK SUPPORT AT SMALL ROOF OPENINGS
1/2" = 1'-0"

24" 16" 8" 0
SCALE: 1 1/2" = 1'-0"

3' 1.5' 0.8' 0
SCALE: 3/4" = 1'-0"

MULLER2
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GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
2218 N Prospect Rd
Peoria, IL 61603

STRUCTURAL FRAMING DETAILS

DRAWN:	SMC
CHECKED:	TH
APPROVED:	TH
JOB NO:	24-1006

SHEET NO.
S-502

ABBREVIATIONS

Ø	ROUND	LVR	LOUVER
ABV	ABOVE	LWT	LEAVING WATER TEMPERATURE
AC	AIR CONDITIONING	M/A	MIXED AIR
AD	AREA DRAIN	MAX	MAXIMUM
ADD	ADDENDUM	MBH	ONE THOUSAND BTU PER HOUR
AFF	ABOVE FINISHED FLOOR	MCF	ONE THOUSAND CUBIC FEET
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY	MD	MOTORIZED DAMPER
ALT	ALTERNATE	MECH	MECHANICAL
AP	ACCESS PANEL	MFR	MANUFACTURER
ARCH	ARCHITECT/ARCHITECTURAL	MIN	MINIMUM
BFF	BELOW FINISHED FLOOR	MISC	MISCELLANEOUS
BLW	BELOW	MTR	MOTOR
BTU	BRITISH THERMAL UNITS	MU/A	MAKE-UP/AIR
BTUH	BRITISH THERMAL UNITS PER HOUR	NC	NOISE CRITERIA
CAP	CAPACITY	NC	NORMALLY CLOSED
CB	CATCH BASIN	NIC	NOT IN CONTRACT
CFM	CUBIC FEET PER MINUTE	NO	NUMBER
CLG	CEILING	NO	NORMALLY OPEN
CO	CLEAN OUT	NTS	NOT TO SCALE
CW	COLD WATER	O	OXYGEN
D	DEGREE	O/A	OUTSIDE AIR
DB	DRY BULB	ORD	OVERFLOW ROOF DRAIN
DIA	DIAMETER	PD	PRESSURE DROP
DN	DOWN	PIV	POST INDICATOR VALVE
DW	DISTILLED WATER	PLBG	PLUMBING
EA	EACH	PRESS	PRESSURE
EAT	ENTERING AIR TEMPERATURE	PRV	PRESSURE REDUCING VALVE
ELEC	ELECTRICAL	PSI	POUNDS PER SQUARE INCH
EQUIP	EQUIPMENT	PSIG	POUNDS PER SQUARE INCH GAUGE
EWC	ELECTRIC WATER COOLER	PWR	POWER
EWT	ENTERING WATER TEMPERATURE	R	DUCT RISER
E/A	EXHAUST AIR	R/A	RETURN AIR
EXIST	EXISTING	RCP	RADIANT CEILING PANEL
F	DEGREES FAHRENHEIT	RD	ROOF DRAIN
FCO	FLOOR CLEAN OUT	REC	RECESSED
FD	FLOOR DRAIN	RED	REDUCER
FDC	FIRE DEPARTMENT CONNECTION	RH	RELATIVE HUMIDITY
FL	FLOOR	RL/A	RELIEF AIR
FO	FUEL OIL	RM	ROOM
FOV	FUEL OIL VENT	RPM	REVOLUTIONS PER MINUTE
FOR	FUEL OIL RETURN	RW	RAIN WATER
FOS	FUEL OIL SUPPLY	SF	SQUARE FOOT
FPM	FEET PER MINUTE	S/A	SUPPLY AIR
FS	FLOOR SINK	SAN	SANITARY
FT	FOOT/FEET	SF	SQUARE FOOT
FTR	FIN TUBE RADIATION	SD	SMOKE DAMPER
GAL	GALLON	SM	SURFACE MOUNT
GF	GAS-FIRED	SP	STAND/PIPE
GC	GENERAL CONTRACTOR	SP	STATIC PRESSURE
GPM	GALLONS PER MINUTE	STM	STEAM
GW	GREASE WASTE	T	TIN/STMOSTAT
HB	HOSE BIB	TD	TEMPERATURE DROP
HP	HORSE POWER	TDR	TRENCH DRAIN
HTG	HEATING	TEMP	TEMPERATURE
HTR	HEATER	TYP	TYPICAL
HW	HOT WATER	UG	UNDERGROUND
HYD	HYDRANT	VAC	VACUUM
ID	INDIRECT	V	VENT
IN	INCH	VAV	VARIABLE AIR VOLUME
INV	INVERT	VENT	VENTILATION
LB	POUND	VTR	VENT THROUGH ROOF
LB/HR	POUNDS PER HOUR	W	WASTE
LAT	LEAVING AIR TEMPERATURE	WB	WET BULB
LP	LOW PRESSURE	WCO	WALL CLEAN OUT
LPG	LIQUEFIED PETROLEUM GAS	WH	WALL HYDRANT

EQUIPMENT ABBREVIATIONS

AC	AIR CONDITIONING UNIT	ET	EXPANSION TANK
ACCU	AIR COOLING CONDENSING UNIT	EWH	ELECTRIC WATER HEATER
AHU	AIR HANDLING UNIT	FCU	FAN COIL UNIT
AS	AIR SEPARATOR	FP	FIRE PUMP
B	BOILER	GI	GREASE INTERCEPTOR
CH	CHILLER	GRV	GRAVITY ROOF VENTILATOR
CT	COOLING TOWER	HWP	HEATING WATER PUMP
CUH	CABINET UNIT HEATER	HRU	HEAT RECOVERY UNIT
CHWP	CHILLED WATER PUMP	PRV	POWER ROOF VENTILATOR
DBP	DOMESTIC WATER BOOSTER PUMP	RE	RETURN/EXHAUST FAN
DC	DUCT MOUNTED COIL	RTU	ROOFTOP UNIT
DCP	DOMESTIC WATER CIRCULATING PUMP	SP	SUMP PUMP
EF	EXHAUST FAN	UH	UNIT HEATER
EDC	ELECTRIC DUCT COIL	WH	WATER HEATER

* NOTE *

ALL OF GENERAL NOTES ON THIS SHEET ARE TO BE APPLIED TO ALL OTHER DRAWINGS IN THIS SET.THE SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY OR MAY NOT BE USED IN THIS SET OF DRAWINGS.

GENERAL PLAN SYMBOLS

- PLAN REVISION NUMBER
- DETAIL NUMBER ON SHEET / SHEET NUMBER WHERE DETAIL IS PLACED
- KEYNOTE SYMBOL
- CONTINUATION SYMBOL
- POINT WHERE NEW CONNECTS TO EXISTING
- Room 1 — ROOM NAME / NUMBER
- AREA BEING DEMOLISHED
- AREA NOT IN CONTRACT
- MARK — SCHEDULED EQUIPMENT (UNDERLINED)
- MARK — NONSCHEDULED EQUIPMENT
- (E)MARK — EXISTING EQUIPMENT - (E) PREFIX & HALFTONE
- (R)MARK — EXISTING RELOCATED EQUIPMENT - (R) PREFIX

DUCTWORK SYMBOLS

- 24/12 — RECT. DUCT SIZE (WIDTH X HEIGHT)
- 18"Ø — ROUND DUCT SIZE (DIAMETER)
- 18/12 SA — EXISTING DUCT TO REMAIN
- DUCT TO BE DEMOLISHED
- SA — SUPPLY AIR
- RA — RETURN AIR
- EA — EXHAUST AIR
- OA — OUTSIDE AIR
- FLUE — FLUE GAS VENT
- CA — COMBUSTION AIR
- RECT. SUPPLY DUCT RISE / DROP
- ROUND SUPPLY DUCT RISE / DROP
- RECT. RETURN DUCT RISE / DROP
- ROUND RETURN DUCT RISE / DROP
- RECT. EXHAUST DUCT RISE / DROP
- ROUND EXHAUST DUCT RISE / DROP

DAMPER TYPES

- MANUAL DAMPER
- MOTORIZED DAMPER
- BACKDRAFT DAMPER
- SMOKE DAMPER
- FIRE DAMPER
- COMB. FIRE/ SMOKE DAMPER

MECHANICAL PIPING SYMBOLS

- 2" — NOMINAL PIPE SIZE
- 2" @ 1/8" / 12" — BELOW GROUND PIPING / PIPE SLOPE (WHEN APPLICABLE)
- 2" CHWS — EXISTING PIPE TO REMAIN
- PIPE TO BE DEMOLISHED
- BD — BOILER BLOW DOWN
- BFW — BOILER FEED-WATER
- CHWS — CHILLED WATER SUPPLY
- CHWR — CHILLED WATER RETURN
- CWS — CONDENSER WATER SUPPLY
- CWR — CONDENSER WATER RETURN
- FOS — FUEL OIL SUPPLY
- FOR — FUEL OIL RETURN
- GLS — GEOTHERMAL WATER SUPPLY
- GLR — GEOTHERMAL WATER RETURN
- HWS — HEATING WATER SUPPLY
- HWR — HEATING WATER RETURN
- RL — REFRIGERANT LINES
- LPS — LOW PRESSURE STEAM
- LPR — LOW PRESSURE RETURN
- MPS — MEDIUM PRESSURE STEAM
- MPR — MEDIUM PRESSURE RETURN
- HPS — HIGH PRESSURE STEAM
- HPR — HIGH PRESSURE RETURN
- NG — NATURAL GAS
- CD — DRAIN
- PD — PUMPED DRAIN
- PIPE RISE / DROP

INLINE PIPE ACCESSORIES

- BALANCING VALVE
- BALL VALVE
- BUTTERFLY VALVE
- 2-WAY / 3-WAY ELEC. CONTROL VALVE
- FLOW, PRESSURE, TEMPERATURE SENSOR
- GATE VALVE
- GENERIC ISOLATION VALVE (SEE SPEC.)
- PRESSURE REDUCING VALVE
- STRAINER

MECHANICAL DEVICES

- AHU-1 — TEMPERATURE SENSOR (TS)
- TEMP/ HUMIDITY SENSOR (TH)
- TEMP/ CO2 SENSOR (TC)
- THERMOSTAT (T)
- HUMIDISTAT (H)
- HUMIDITY SENSOR (HS)
- CARBON DIOXIDE DETECTOR (DCO2)
- CARBON MONOXIDE DETECTOR (DCO)
- HYDROGEN GAS DETECTOR (HZ)
- HAZARDOUS GAS DETECTOR (HZG)
- NITROGEN DIOXIDE DETECTOR (NO2)
- OXYGEN GAS DETECTOR (O2)

GENERAL NOTES - MECHANICAL

1. PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE HVAC SYSTEMS AS INDICATED ON DRAWINGS, AS SPECIFIED, AND AS REQUIRED BY MOST CURRENT INTERNATIONAL MECHANICAL CODE AND ANY APPLICABLE LOCAL CODES. PROVIDE CLEARANCE FOR INSPECTION, REPAIR, REPLACEMENT, AND SERVICE TO ALL EQUIPMENT TO INCLUDE A MINIMUM OF 36 INCHES FROM ALL OBSTRUCTIONS (WALLS, STRUCTURE, DUCTWORK, PIPES, ETC.). CLEARANCE SHALL MAINTAIN ACCESS TO ALL ELECTRICAL PANELS, ACCESS DOORS, CONTROLLERS, VALVES, JUNCTION BOXES AND OPERATORS AND INCLUDE THE AREA DIRECTLY IN FRONT OF AND ABOVE THE SYSTEM COMPONENTS.
2. CONTRACTOR SHALL VISIT THE JOB SITE AND EXAMINE THE DRAWINGS OF OTHER TRADES PRIOR TO BIDDING TO THOROUGHLY FAMILIARIZE HIMSELF WITH EXISTING CONDITIONS AND THE SCOPE OF THE PROJECT. FAILURE TO DO SO DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO UNDERSTAND THE SCOPE OR OF UNDERSTANDING ANY FIELD CONDITIONS WHICH COULD BE REASONABLY EXPECTED TO BE KNOWN BY A THOROUGH INVESTIGATION.
3. IT IS NOT INTENDED THAT THE DRAWINGS SHOW EVERY DUCT, FITTING, TRANSITION, DAMPER, ETC., AND IT IS UNDERSTOOD THAT WHILE THE DRAWINGS MUST BE FOLLOWED AS CLOSELY AS CIRCUMSTANCES WILL PERMIT, THE PROPER INSTALLATION ACCORDING TO THE TRUE INTENT AND MEANING OF THE DRAWINGS, LOCAL CODES AND STANDARD PRACTICES SHALL BE PROVIDED. CONTRACTOR TO PROVIDE ALL DUCTWORK TRANSITIONS, FLEXIBLE CONNECTIONS, AND ACCESSORIES AS REQUIRED. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO INSTALLATION. REPORT ANY PROBLEMS OR CONFLICTS TO THE OWNER OR ENGINEER.
4. ANY MINOR CHANGES IN THE LOCATION OF EQUIPMENT, DUCTS, PIPE CONTROL DEVICES, ETC., FROM THOSE LOCATIONS SHOWN ON THE DRAWINGS SHALL BE MADE WITHOUT EXTRA COST IF SO DIRECTED BY THE OWNERS REPRESENTATIVE OR ENGINEER BEFORE THE INSTALLATION IS MADE. A MINOR CHANGE IN LOCATION SHALL BE CONSIDERED TO BE WITHIN 6'-0 " OF THE ORIGINALLY INDICATED LOCATIONS.
5. VERIFY ALL DIMENSIONS BY FIELD MEASUREMENTS. VERIFY FINAL LOCATIONS FOR ROUGH-INS WITH FIELD MEASUREMENTS AND WITH THE REQUIREMENTS OF THE ACTUAL EQUIPMENT TO BE CONNECTED.
6. WHERE MOUNTING HEIGHTS ARE NOT DETAILED OR DIMENSIONED, INSTALL SYSTEMS, MATERIALS AND EQUIPMENT TO PROVIDE THE MAXIMUM HEADROOM POSSIBLE.
7. INSTALL SYSTEMS, MATERIALS AND EQUIPMENT LEVEL AND PLUMB, PARALLEL AND PERPENDICULAR TO OTHER BUILDING SYSTEMS AND COMPONENTS WHERE INSTALLED EXPOSED IN FINISHED SPACES AND GIVING RIGHT-OF-WAY PRIORITY TO SYSTEMS REQUIRED TO BE INSTALLED AT A SPECIFIED SLOPE.
8. INSTALL ALL HVAC EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, CONTRACT DOCUMENTS, AND APPLICABLE CODES AND REGULATIONS.
9. ALL OPENINGS IN FIRE WALLS DUE TO DUCTWORK, PIPING AND CONTROL CONDUIT SHALL BE FIRE STOPPED WITH AN APPROVED FIRE STOP MATERIAL. COORDINATE INSTALLATION WITH ARCHITECTURAL CODE PLANS.
10. PROVIDE ACCESS DOORS IN DUCTWORK OR WALLS/CEILING FOR OPERATION, ADJUSTMENT, AND MAINTENANCE OF ALL FANS, VALVES, COILS, AND MECHANICAL EQUIPMENT. COILS LOCATED IN DUCTWORK TO BE PROVIDED WITH ACCESS DOORS ON OUTLET SIDE OF COIL.
11. LOCATIONS AND SIZES OF ALL FLOOR, CEILING AND WALL OPENINGS SHALL BE COORDINATED WITH ALL OTHER TRADES INVOLVED AND THE OWNER.
12. CONTRACTOR SHALL COORDINATE CEILING DIFFUSER/GRILLE/REGISTER LOCATIONS WITH LIGHTING, FIRE ALARM EQUIPMENT AND FIRE SUPPRESSION SYSTEMS.
13. WHERE DEMOLITION WORK OCCURS, CONTRACTOR SHALL PATCH AND SEAL ALL WALLS, FLOORS AND CEILINGS TO MATCH EXISTING. CONTRACTOR SHALL VERIFY WITH OWNER ALL PATCHING MATERIALS AND INSTALLATION METHODS.
14. VENTILATING CONTRACTOR SHALL PROVIDE MANUAL BALANCE DAMPERS IN ALL BRANCH TAKE-OFFS TO SUPPLY DIFFUSERS. PROVIDE ADDITIONAL MANUAL BALANCE DAMPERS IN MAIN AND SUB-MAIN DUCTS AS REQUIRED TO ENSURE THE SUPPLY AND RETURN AIR SYSTEMS CAN BE BALANCED TO THE SPECIFIED DESIGN AIRFLOW.
15. IN AREAS WHERE A CEILING GRID EXISTS, THE VENTILATING CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND REPLACEMENT OF EXISTING CEILING GRID AND TILES AS NECESSARY FOR INSTALLATION OF VENTILATING WORK. ANY PORTION OF THE EXISTING TILES OR GRID WHICH BECOME DAMAGED DURING REMOVAL SHALL BE REPLACED BY THE VENTILATING CONTRACTOR.
16. INSTALL PIPING SO THAT ALL VALVES, STRAINERS, UNIONS, FLANGES AND OTHER APPARATUS REQUIRING ACCESS ARE ACCESSIBLE.
17. DO NOT ROUTE DUCT OR PIPING ABOVE OR BELOW ELECTRICAL PANELS INCLUDING SERVICE CLEARANCES.
18. ALL RECTANGULAR AND/OR ROUND SUPPLY AND RETURN DUCTWORK SHOWN ON THE PLANS MAY BE CONVERTED TO EQUIVALENT ROUND/RECTANGULR DUCTWORK AT THE DISCRETION OF THE VENTILATING CONTRACTOR. ANY DUCT CONVERSIONS SHALL BE SUBMITTED AS PART OF THE DUCTWORK SHOP DRAWINGS FOR APPROVAL BY THE ENGINEER.
19. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING METHODS OF BRINGING IN MECHANICAL EQUIPMENT THROUGH BUILDING INTO MECHANICAL ROOMS.
20. PIPING SHALL NOT BE SUPPORTED FROM OTHER PIPING, CONDUIT, OR DUCTWORK.
21. PROVIDE CHAIN WHEEL OPERATORS FOR ALL VALVES IN EQUIPMENT ROOMS MOUNTED GRATER THAN 7'-0" ABOVE FLOOR LEVEL. CHAIN SHALL EXTEND TO 7'-0" ABOVE FLOOR LEVEL.
22. COORDINATE PIPE ROUTING TO AVOID RUNNING PIPING BELOW ROOF HATCHES, SKYLIGHTS AND ACCESS PANELS.
23. ALL CONTROL WIRING ROUTED EXPOSED IN SPACES SUCH AS MECHANICAL ROOMS OR ABOVE HARD CEILINGS SHALL BE ROUTED IN 3/4" CONDUIT. CONTROL WIRING ROUTED ABOVE ACCESSIBLE CEILINGS IS NOT REQUIRED TO BE RUN IN CONDUIT, BUT SHOULD BE SECURELY STRAPPED TO PERMANENT SUPPORTS FOR A CLEAN INSTALLATION.

EXHAUST FAN SCHEDULE

MARK	DESIGN BASIS MAKE	MODEL	LOCATION	DESCRIPTION	DRIVE	PERFORMANCE AIRFLOW (CFM)	PERFORMANCE ESP (IN H2O)	ELECTRICAL RPM	ELECTRICAL MOTOR HP	ELECTRICAL FLA	ELECTRICAL V/PH	REMARKS
EF-1	GREENHECK (OR EQUAL)	SQ-90	EQUIPMENT ROOM	INLINE	DIRECT	375	0.43	1550	1/10	-	115/1	SEE NOTE 1-2

NOTES:
1. PROVIDE FACTORY MOUNTED DISCONNECT SWITCH AND HANGING ISOLATION KIT.
2. INTERLOCK CONTROL WITH RESTROOM LIGHTING. SEE ELECTRICAL

GRILLE, REGISTER, AND DIFFUSER SCHEDULE

MARK	DESIGN BASIS MAKE	DESIGN BASIS MODEL / SERIES	DESCRIPTION	MODULE SIZE	NECK SIZE	AIR PATTERN	MATERIAL	REMARKS
EG-1	TITUS	350FL	EXHAUST GRILLE - 35 DEGREE - 3/4" SPACING	-	SEE NOTE: 1	RETURN	ALUMINUM	SEE NOTES: 1-4

NOTES:
1. REFER TO DIFFUSER TAGS ON SHEETS FOR NECK SIZES.
2. PROVIDE DUCT TRANSITION FROM NECK SIZE TO DUCT SIZE AS INDICATED ON DRAWING.
3. PROVIDE BALANCING DAMPER IN DEVICE. MATERIAL TO MATCH DEVICE.
4. ARCHITECT TO SELECT SURFACE COLOR.

SHEET METAL CONSTRUCTION NOTES:

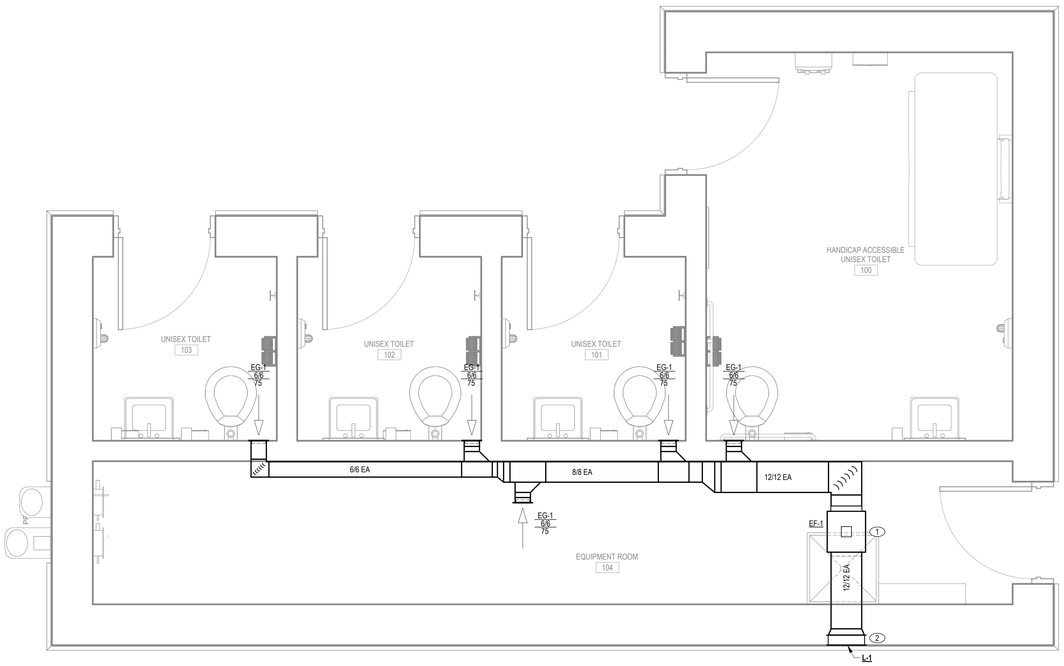
1. PROVIDE ALL LABOR, FITTINGS AND TRANSITION NECESSARY TO INSTALL DUCTWORK ABOVE CEILING. COORDINATE EXACT ROUTING OF DUCTWORK WITH OTHER TRADES.
2. ALL SHEET METAL DUCTWORK TO CONFORM TO NFPA 90A, SMACNA STANDARDS FOR DUCT CONSTRUCTION GALVANIZED SHEET STEEL TO BE LOCK-FORMING QUALITY, ASTM A527.
3. STRAPS AND ROD SIZES: CONFORM WITH TABLE 4-1 IN SMACNA "HVAC DUCT CONSTRUCTION STANDARDS", 1995 EDITION.
4. DUCT ATTACHMENTS: SHEET METAL SCREWS, BLIND RIVETS, OR SELF-TAPING METAL SCREWS; COMPATIBLE WITH DUCT MATERIALS. STEEL SHAPES CONFORMING WITH ASTM A36.
5. RECTANGULAR DUCT FABRICATION IN ACCORDANCE WITH PRESSURE CLASSIFICATIONS INDICATED ON PLANS, AND SMACNA "HVAC DUCT CONSTRUCTION STANDARDS," 1995 EDITION, TABLES 1-3 THROUGH 1-20, INCLUDING THEIR ASSOCIATED DETAILS.
6. RECTANGULAR DUCT FITTINGS: FABRICATE ELBOWS, TRANSITIONS, OFFSETS, BRANCH CONNECTIONS, AND OTHER DUCT CONSTRUCTION IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARD," 1995 EDITION, FIGURES 2-1 THROUGH 2-22.
7. SEAL ALL DUCT SEAMS AND JOINTS. USE STANDARD DUCT SEALANT.
8. INSTALL RIGID FOUND AND RECTANGULAR METAL DUCT WITH SUPPORT SYSTEMS INDICATED IN SMACNA "HVAC DUCT CONSTRUCTION STANDARD," 1995 EDITION, FIGURES 4-1 THROUGH 4-10, AND TABLES 4-1 THROUGH 4-3.
9. BRANCH CONNECTIONS: COMPLY WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARD," 1995 EDITION, FIGURES 2-5 THROUGH 2-6.
10. ALL SUPPLY AIR AND EXHAUST AIR DIFFUSERS SHALL HAVE CONTROL DAMPERS IN THE BRANCH TAKEOFF. FURNISH AND INSTALL ADDITIONAL BALANCE DAMPERS AS INDICATED ON PLANS.
11. LOW PRESSURE RUN-OUTS TO DIFFUSERS SHALL BE ROUND, SOUND ABSORBING INSULATED, FLEXIBLE DUCT WHERE SHOWS ON THE DRAWINGS. LENGTH SHALL NOR EXCEED 48" AND INSTALLATION SHALL BE AT TERMINAL ENDS ONLY. FLEX DUCT SHALL BE FACTORY PRE-INSULATED WITH A RE-REINFORCED INTERIOR LINER ENCAPSULATING A CORROSION RESISTANT COATED STEEL HELICAL WIRE, EXTERNAL INSULATION THICKNESS SHALL BE 3/4" THICK, 3/4" LB DENSITY FIBERGLASS WITH A FIRE RETARDANT REINFORCED METALIZED FLEXIBLE JACKET.

TEST AND BALANCE NOTES

1. SUBMIT THREE COPIES OF REPORTS PREPARED, ON APPROVED FORMS CERTIFIED BY TAB FIRM. USE STANDARD FORMS AND REPORTS FROM AN APPROVED TEST AND AND BALANCE ORGANIZATION.
2. THE TAB FIRM WHO WILL PERFORM THE TESTING AND BALANCING OF THE PROJECT SYSTEMS SHALL BE CERTIFIED BY ONE OR MORE OF THE FOLLOWING ORGANIZATIONS:
   a. AABC - ASSOCIATED AIR BALANCE COUNCIL
   b. SMACNA - SHEET METAL & AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION
   c. NEBB - NATIONAL ENVIRONMENTAL BALANCING BUREAU, ILLINOIS CHAPTER
3. COORDINATE THE EFFORTS OF FACTORY-AUTHORIZED SERVICE REPRESENTATIVES FOR SYSTEMS AND EQUIPMENT, HVAC CONTROLS INSTALLERS, AND OTHER MECHANICS TO OPERATE HVAC SYSTEMS AND EQUIPMENT TO SUPPORT AND ASSIST TAB ACTIVITIES.
4. MARK EQUIPMENT AND BALANCING DEVICE SETTINGS WITH PAINT OR OTHER SUITABLE, PERMANENT IDENTIFICATION MATERIAL, INCLUDING DAMPER-CONTROL POSITIONS, AND SIMILAR CONTROLS AND DEVICES, TO SHOW FINAL SETTINGS.
5. PERFORM ALL CORRECTIVE MEASURES CAUSED BY FAULTY INSTALLATION. RETEST, READJUST AND REBALANCE SYSTEM(S) UNTIL SATISFACTORY RESULTS ARE ACHIEVED.
6. ADJUST SUPPLY AND EXHAUST FANS TO DELIVER TOTAL INDICATED AIRFLOWS WITHIN THE MAXIMUM ALLOWABLE FAN SPEED LISTED BY FAN MANUFACTURER. MAKE REQUIRED ADJUSTMENTS TO PULLEY SIZES, MOTOR SIZES, AND ELECTRICAL CONNECTIONS TO ACCOMMODATE FAN-SPEED CHANGES. DO NOT MAKE FAN SPEED ADJUSTMENTS THAT RESULT IN MOTOR OVERLOAD. CONSULT EQUIPMENT MANUFACTURERS ABOUT FAN-SPEED SAFETY FACTORS. MODULATE DAMPERS AND MEASURE FAN-MOTOR AMPERAGE TO ENSURE THAT NO OVERLOAD WILL OCCUR.
7. ADJUST VOLUME DAMPERS FOR MAIN SUPPLY, RETURN, EXHAUST AND OUTDOOR AIR DUCTWORK. ADJUST VOLUME DAMPERS FOR ALL BRANCH SUPPLY, RETURN, EXHAUST AND OUTDOOR AIR DUCTS AS REQUIRED TO INDICATED AIRFLOWS WITHIN SPECIFIED TOLERANCES
8. ADJUST VOLUME DAMPERS FOR MAIN SUPPLY, RETURN, EXHAUST AND OUTDOOR AIR DUCTWORK. ADJUST VOLUME DAMPERS FOR ALL BRANCH SUPPLY, RETURN, EXHAUST AND OUTDOOR AIR DUCTS AS REQUIRED TO INDICATED AIRFLOWS WITHIN SPECIFIED TOLERANCES
9. USE CALIBRATED VENTURI TUBES, ORIFICES, METERED FITTINGS, PRESSURE GAUGES AND DIRECT READING INSTRUMENTATION TO DETERMINE FLOW RATES FOR SYSTEM BALANCE.

KEYED MECHANICAL NOTES:

1. FURNISH AND INSTALL SUSPENDED INLINE EXHAUST FAN PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
2. FURNISH AND INSTALL 16/12 ALUMINUM DRAINABLE STATIONARY EXHAUST LOUVER (L-1); RUSKIN MODEL ELF6375X OR EQUAL.



N

1 FIRST FLOOR MECHANICAL PLAN
1/2" = 1'-0"

MECHANICAL SHEET INDEX

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No.	Description	Date
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2	ISSUED FOR 90% DESIGN	2024-07-11
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MECHANICAL FIRST FLOOR PLAN

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APPROVED:	AEC
JOB NO:	24-1006

SHEET NO. M-101

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PLUMBING SHEET INDEX

GENERAL PLAN SYMBOLS

- PLAN REVISION NUMBER
- DETAIL NUMBER ON SHEET / SHEET NUMBER WHERE DETAIL IS PLACED
- KEYNOTE SYMBOL
- CONTINUATION SYMBOL
- POINT WHERE NEW CONNECTS TO EXISTING
- Room 2 — ROOM NAME / NUMBER
- AREA BEING DEMOLISHED
- AREA NOT IN CONTRACT
- MARK — SCHEDULED EQUIPMENT (UNDERLINED)
- MARK — NONSCHEDULED EQUIPMENT
- (E)MARK — EXISTING EQUIPMENT - (E) PREFIX & HALFTONE
- (R)MARK — EXISTING RELOCATED EQUIPMENT - (R) PREFIX

ABBREVIATIONS

Ø	ROUND	LVR	LOUVER
ABV	ABOVE	LWT	LEAVING WATER TEMPERATURE
AC	AIR CONDITIONING	M/A	MIXED AIR
AD	AREA DRAIN	MAX	MAXIMUM
ADD	ADDENDUM	MBH	ONE THOUSAND BTU PER HOUR
AFF	ABOVE FINISHED FLOOR	MCF	ONE THOUSAND CUBIC FEET
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY	MD	MOTORIZED DAMPER
ALT	ALTERNATE	MECH	MECHANICAL
AP	ACCESS PANEL	MFR	MANUFACTURER
ARCH	ARCHITECT/ARCHITECTURAL	MIN	MINIMUM
BFF	BELOW FINISHED FLOOR	MISC	MISCELLANEOUS
BLW	BELOW	MTR	MOTOR
BTU	BRITISH THERMAL UNITS	MUA	MAKE-UP/AIR
BTUH	BRITISH THERMAL UNITS PER HOUR	NC	NOISE CRITERIA
CAP	CAPACITY	NC	NORMALLY CLOSED
CB	CATCH BASIN	NIC	NOT IN CONTRACT
CFM	CUBIC FEET PER MINUTE	NO	NUMBER
CLG	CEILING	NO	NORMALLY OPEN
CO	CLEAN OUT	NTS	NOT TO SCALE
CW	COLD WATER	O	OXYGEN
D	DEGREE	O/A	OUTSIDE AIR
DB	DRY BULB	ORD	OVERFLOW ROOF DRAIN
DIA	DIAMETER	PD	PRESSURE DROP
DN	DOWN	PIV	POST INDICATOR VALVE
DW	DISTILLED WATER	PLBG	PLUMBING
EA	EACH	PRESS	PRESSURE
EAT	ENTERING AIR TEMPERATURE	PRV	PRESSURE REDUCING VALVE
ELEC	ELECTRICAL	PSI	POUNDS PER SQUARE INCH
EQUIP	EQUIPMENT	PSIG	POUNDS PER SQUARE INCH GAUGE
EWC	ELECTRIC WATER COOLER	PWR	POWER
EWT	ENTERING WATER TEMPERATURE	R	DUCT RISER
E/A	EXHAUST AIR	R/A	RETURN AIR
EXIST	EXISTING	RCP	RADIANT CEILING PANEL
F	DEGREES FAHRENHEIT	RD	ROOF DRAIN
FCO	FLOOR CLEAN OUT	REC	RECESSED
FD	FLOOR DRAIN	RED	REDUCER
FDC	FIRE DEPARTMENT CONNECTION	RH	RELATIVE HUMIDITY
FL	FLOOR	RL/A	RELIEF AIR
FO	FUEL OIL	RM	ROOM
FOV	FUEL OIL VENT	RPM	REVOLUTIONS PER MINUTE
FOR	FUEL OIL RETURN	RW	RAIN WATER
FOS	FUEL OIL SUPPLY	SF	SQUARE FOOT
FPM	FEET PER MINUTE	S/A	SUPPLY AIR
FS	FLOOR SINK	SAN	SANITARY
FT	FOOT/FEET	SF	SQUARE FOOT
FTR	FIN TUBE RADIATION	SD	SMOKE DAMPER
GAL	GALLON	SM	SURFACE MOUNT
GF	GAS-FIRED	SP	STANDPIPE
GC	GENERAL CONTRACTOR	SP	STATIC PRESSURE
GPM	GALLONS PER MINUTE	STM	STEAM
GW	GREASE WASTE	T	THERMOSTAT
HB	HOSE BIB	TD	TEMPERATURE DROP
HP	HORSE POWER	TDR	TRENCH DRAIN
HTG	HEATING	TEMP	TEMPERATURE
HTR	HEATER	TYP	TYPICAL
HW	HOT WATER	UG	UNDERGROUND
HYD	HYDRANT	VAC	VACUUM
ID	INDIRECT	V	VENT
IN	INCH	VAV	VARIABLE AIR VOLUME
INV	INVERT	VENT	VENTILATION
LB	POUND	VTR	VENT THROUGH ROOF
LB/HR	POUNDS PER HOUR	W	WASTE
LAT	LEAVING AIR TEMPERATURE	WB	WET BULB
LP	LOW PRESSURE	WCO	WALL CLEAN OUT
LPG	LIQUEFIED PETROLEUM GAS	WH	WALL HYDRANT

EQUIPMENT ABBREVIATIONS

AC	AIR CONDITIONING UNIT	ET	EXPANSION TANK
ACCU	AIR COOLING CONDENSING UNIT	EWH	ELECTRIC WATER HEATER
AHU	AIR HANDLING UNIT	FCU	FAN COIL UNIT
AS	AIR SEPARATOR	FP	FIRE PUMP
B	BOILER	GI	GREASE INTERCEPTOR
CH	CHILLER	GRV	GRAVITY ROOF VENTILATOR
CT	COOLING TOWER	HWP	HEATING WATER PUMP
CUH	CABINET UNIT HEATER	HRU	HEAT RECOVERY UNIT
CHWP	CHILLED WATER PUMP	PRV	POWER ROOF VENTILATOR
DBP	DOMESTIC WATER BOOSTER PUMP	RE	RETURN/EXHAUST FAN
DC	DUCT MOUNTED COIL	RTU	ROOFTOP UNIT
DCP	DOMESTIC WATER CIRCULATING PUMP	SP	SUMP PUMP
EF	EXHAUST FAN	UH	UNIT HEATER
EDC	ELECTRIC DUCT COIL	WH	WATER HEATER

* NOTE *

ALL OF GENERAL NOTES ON THIS SHEET ARE TO BE APPLIED TO ALL OTHER DRAWINGS IN THIS SET.THE SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY OR MAY NOT BE USED IN THIS SET OF DRAWINGS.

PLUMBING SYMBOLS

- 2" — NOMINAL PIPE SIZE
- BELOW GROUND PIPING
- 1/8" / 12" SLOPE — PIPE SLOPE (WHEN APPLICABLE)
- 2" CW — EXISTING PIPE TO REMAIN
- PIPE TO BE DEMOLISHED
- CW — COLD WATER
- SCW — SOFTENED COLD WATER
- HW — HOT WATER
- HW 140° — HOT WATER 140°
- SHW — SOFTENED HOT WATER
- HWC — HOT WATER RECIRC
- HWC 140° — HOT WATER RECIRC 140°
- SHWC — SOFTENED HOT WATER RECIRC
- DI — DEIONIZED WATER
- DIR — DEIONIZED WATER RETURN
- RO — REVERSE OSMOSIS
- ROR — REVERSE OSMOSIS RETURN
- WS — WATER SERVICE
- ST — STORM
- STO — STORM OVERFLOW
- SAN — SANITARY
- PD — PUMPED SANITARY DISCHARGE
- V — VENT
- AW — ACID WASTE
- AV — ACID VENT
- GSAN — GREASE SANITARY
- GV — GREASE VENT
- OW — OIL WASTE
- OV — OIL VENT
- CA — COMPRESSED AIR
- LP — PROPANE
- NG — NATURAL GAS
- PIPE RISE / DROP

INLINE PIPE ACCESSORIES

- BALANCING VALVE
- BALL VALVE
- ELEC. CONTROL VALVE
- GATE VALVE
- GENERIC ISOLATION VALVE. (SEE SPEC.)
- PRESSURE REDUCING VALVE
- STRAINER
- DOUBLE CHECK VALVE
- REDUCED PRESSURE ZONE

FIXTURE SYMBOLS

- AD — AREA DRAIN
- FD — FLOOR DRAIN
- HD — HUB DRAIN (FUNNEL TYPE)
- FCO — FLOOR CLEANOUT
- FS — FLOOR SINK
- SD — ROOF DRAIN
- SD — COMBINATION ROOF DRAIN

MEDICAL GAS SYMBOLS

- COZ — CARBON DIOXIDE
- IA — INSTRUMENT AIR
- MA — MEDICAL AIR
- MAI — MEDICAL AIR INTAKE
- MVE — MEDICAL VACUUM EXHAUST
- VAC — MEDICAL VACUUM SUCTION
- N — NITROGEN GAS
- NO2 — NITROUS OXIDE GAS
- O2 — OXYGEN GAS
- WG — WASTE ANESTHESIA GAS DISPOSAL

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PLUMBING TITLE SHEET

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CHECKED:	JPH
APPROVED:	AEC
JOB NO:	24-1006

SHEET NO. P-001

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MATERIAL SPECIFICATIONS

WASTE AND VENT PIPING:
BELOW GRADE: SCHEDULE-40 PVC PIPE AND DWV FITTINGS WITH SOLVENT CEMENT JOINTS.
ABOVE GRADE: SCHEDULE-40 PVC PIPE AND DWV FITTINGS WITH SOLVENT CEMENT JOINTS.

PLUMBING CONTRACTOR SHALL NOT INSTALL PVC WASTE AND VENT PIPING IN A RETURN AIR PLENUM. CAST IRON PIPE IS REQUIRED TO BE INSTALLED IN A RETURN AIR PLENUM.

DOMESTIC WATER PIPING:
ABOVE GRADE: TYPE-L COPPER PIPE WITH WROT COPPER SOLDERED OR PRESSED FITTINGS. SUPPORT PIPING AS OUTLINED IN THE COPPER DEVELOPMENT ASSOCIATION (CDA) TABLES. PRESSED FITTINGS TO BE VIEGA ONLY.

BALL VALVES:
COMMERCIAL QUALITY TWO-PIECE, FULL PORT, SWEAT OR THREADED BRONZE BALL VALVES. VALVES SHALL BARE "WOG" STAMPING WHERE USED FOR GAS SYSTEMS.

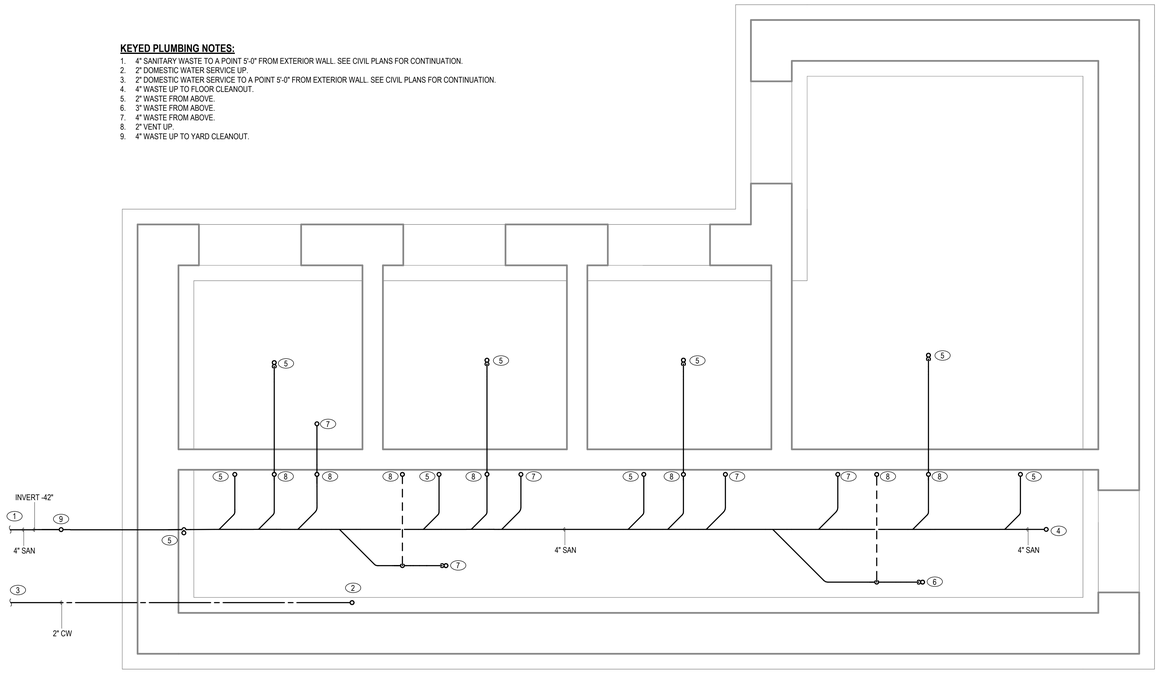
INSULATION:
INSULATE ALL DOMESTIC COLD AND HOT WATER PIPING WITH FOIL-BACKED FIBERGLASS INSULATION. SEAL COLD WATER INSULATION WITH VAPOR BARRIER.
NPS-1/2: INSULATION THICKNESS = 1/2-INCH
NPS-3/4 AND ABOVE: INSULATION THICKNESS = 1-INCH.

GENERAL PLUMBING NOTES

1. ALL PLUMBING WORK SHOULD BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE ILLINOIS STATE PLUMBING CODE AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
2. THESE DRAWINGS ARE DIAGRAMMATIC, NOT ALL PIPING, FITTINGS, OFFSETS, VENTS OR DRAINS ARE SHOWN. THE PLUMBING CONTRACTOR SHALL VISIT THE SITE AND VERIFY EXISTING CONDITIONS PRIOR TO BIDDING THIS PROJECT. THE PLUMBING CONTRACTOR SHALL PROVIDE AND INSTALL ANY/ALL NECESSARY PIPING, FITTINGS, VALVES, REGULATORS, HANGERS, INSULATION, EQUIPMENT, FIXTURES, ETC, REQUIRED FOR A COMPLETE FUNCTIONAL SYSTEM AS SHOWN ON PLUMBING PLANS AND AS OUTLINED IN SPECIFICATION INFORMATION UNLESS OTHERWISE NOTED.
3. ALL DOMESTIC WATER AND VENT PIPING DROPS TO PLUMBING FIXTURES SHALL BE CONCEALED IN THE WALL UNLESS OTHERWISE NOTED.
4. WHEN CONNECTING TO EXISTING SYSTEMS THE PLUMBING CONTRACTOR SHALL BE REQUIRED TO MOVE HIS PIPING UP TO 5'-0" IN ANY DIRECTION AND ADJUST CONNECTION SIZES UP OR DOWN TO THE NEXT NOMINAL PIPE SIZE WITHOUT ANY ADDITIONAL COST.
5. PLUMBING FORMAN SHOULD UTILIZE THESE PLANS AND PROVIDE RECORD DRAWING COMMENTARY REFLECTING ACTUAL INSTALLATION. PROVIDE ONE HARD-COPY SET TO A/E.
6. PC WILL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH EXCAVATING, BACKFILL, AND CORING REQUIRED FOR INSTALLATION OF NEW PLUMBING SYSTEMS. CORING ACTIVITIES SHOULD BE CLOSELY COORDINATED WITH OWNER'S REPRESENTATIVE. DEMARCATE INTENDED CORING LOCATIONS AND REVIEW WITH OWNER PRIOR TO PROCEEDING WITH WORK. PATCH TO MATCH EXISTING.
7. GC WILL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH CUTTING AND PATCHING REQUIRED FOR INSTALLATION OF NEW PLUMBING SYSTEMS. CORING ACTIVITIES SHOULD BE CLOSELY COORDINATED WITH OWNER'S REPRESENTATIVE. DEMARCATE INTENDED CORING LOCATIONS AND REVIEW WITH OWNER PRIOR TO PROCEEDING WITH WORK. PATCH TO MATCH EXISTING.
8. PLUMBING CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL FEES AND PERMITS REQUIRED TO ACCOMPLISH THIS WORK.
9. FLUSH NEW WATER PIPING AS OUTLINED IN ILLINOIS STATE PLUMBING CODE PRIOR TO RESTORING SERVICE TO USER. COORDINATE WITH OWNER'S PERSONNEL TO MINIMIZE SHUT-DOWNS TO OCCUPIED AREAS.
10. REFERENCE ARCHITECTURAL DRAWINGS FOR FIRE WALL AREAS. PROVIDE UL RATED, FM APPROVED FIRE STOP AT ALL NEW PLUMBING PIPE PENETRATIONS THROUGH FIRE RATED WALLS AND CEILINGS.
11. CORING REQUIRED TO INSTALL FLOOR DRAIN AND PIPING BY PC. COPING THE EXISTING CONCRETE FLOOR SURFACE BY GC.
12. COORDINATE FLOOR DRAIN AND CLEANOUT ROUGH-IN SELECTED FLOOR COVERING SYSTEM.
13. INSTALL AIR CHAMBERS IN WALL, OR AT EACH DROP SERVING EACH FIXTURE. EXCEPTION: PROVIDE WATER HAMMER ARRESTORS FOR ALL PLUMBING FIXTURES OR EQUIPMENT HAVING QUICK-CLOSING VALVES.
14. DO NOT UTILIZE COMBINATION WASTE AND VENT SYSTEM FOR SINKS AND LAVATORIES ROUGHED IN ABOVE FLOOR.
15. NOTIFY LOCAL INSPECTOR PRIOR TO BACKFILL OF ALL UNDER SLAB PLUMBING.
16. FILL/SEAL ALL DRAIN TRAPS WITH MINERAL OIL.
17. DO NOT USE PVC MATERIALS IN PLENUM AREAS. REFERENCE ARCHITECTURAL CEILING PLAN AND MECHANICAL PLANS.
18. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR TESTS AND CERTIFICATION OF REDUCED PRESSURE BACKFLOW DEVICE PER ISPC. POST CERTIFICATION ON BACKFLOW DEVICE ONCE TESTING HAS BEEN COMPLETED.
19. PLUMBING CONTRACTOR SHOULD REVIEW ANTICIPATED MAN/MATERIAL LIFT EQUIPMENT WITH OWNER'S REPRESENTATIVE PRIOR TO UTILIZING FOR INSTALLATION. DAMAGED FLOORING RESULTING FROM UNAPPROVED EQUIPMENT WILL BE REPLACED AT THE PLUMBING CONTRACTOR'S EXPENSE.
20. REFER TO WRITTEN SPECIFICATIONS FOR EQUIPMENT AND MATERIAL RELATED TO THIS WORK.
21. COORDINATE SEQUENCE OF PLUMBING WORK CLOSELY WITH GC AND OTHER TRADES.
22. ADA COMPLIANCE SHALL BE MAINTAINED WHERE ADJUSTMENTS ARE MADE TO FIXTURES LOCATED WITHIN ADA TOILET ROOMS.
23. PLUMBING CONTRACTOR SHOULD TAKE PRECAUTIONS NECESSARY TO MINIMIZE CONSTRUCTION DEBRIS TRANSFER TO ADJACENT NON-WORK AREAS.
24. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR SUPPLYING AND INSTALLING ALL LOW VOLTAGE CABLING AND POWER WIRING/CONDUIT INDICATED THIS PLAN UNLESS SPECIFICALLY NOTED OTHERWISE. COORDINATE ALL WORK WITH ELECTRICAL CONTRACTOR PRIOR TO BID.
25. SOIL AND WASTE PIPE SHALL SLOPE 2% MINIMUM, UNLESS OTHERWISE NOTED OR REQUIRED BY CODE.
26. ALL DRAWN WATER & GAS LINES SHALL BE KEPT TIGHT TO THE UNDERSIDE OF EQUIPMENT & SECURED IN PLACE.
27. VERIFY THE LOCATION OF THE SANITARY SEWER ON THE SITE PLAN AND SHALL REVISE THE SEWER SYSTEM AS REQUIRED.
28. PROVIDE TRAP PRIMERS FOR FLOOR DRAINS IN RESTROOMS, WHERE REQUIRED BY CODES. PROVIDE DEEP SEAL TRAPS FOR FLOOR DRAINS WITHOUT TRAP PRIMERS.
29. ALL CLEANOUTS SHALL BE INSTALLED WHERE READILY ACCESSIBLE. THE CONTRACTOR SHALL COORDINATE ALL CLEANOUT LOCATIONS WITH EQUIPMENT, CABINETS, ETC. AND THE OWNERS REPRESENTATIVE PRIOR TO ANY INSTALLATION.
30. ALL VALVES, TRAP PRIMERS, WATER HAMMER ARRESTORS OR OTHER EQUIPMENT SHOWN IN WALLS OR ABOVE NON-ACCESSIBLE CEILING SHALL BE INSTALLED BEHIND AN ACCESS PANEL.
31. ALL PLUMBING FIXTURE VENTS SHALL TERMINATE A MINIMUM OF 12 INCHES FROM ANY VERTICAL SURFACE AND 10 FEET FROM ANY OUTSIDE AIR INTAKE.
32. INSTALL SHUT-OFF VALVES ON ALL HOT & COLD WATER LINES TO FIXTURE OR APPLIANCE. ALL EXPOSED WATER AND WASTE LINES TO BE CHROME PLATED.
33. ALL VALVES, UNIONS, ETC. SHALL BE SAME SIZE AS PIPE UNLESS OTHERWISE INDICATED ON DRAWINGS.
34. REFER TO MECHANICAL SHEETS FOR HVAC PLUMBING REQUIREMENTS.
35. ALL PLUMBING PIPING SHALL BE SUPPORTED SEE SPECS.
36. ALL FLOOR SINKS AND FLOOR DRAINS IN TRAFFIC AREAS SHALL BE INSTALLED FLUSH TO FLOOR SURFACE.
37. PROVIDE WATER HAMMER ARRESTOR FOR ALL HAND SINKS AND URINAL WATER LINES.
38. PROVIDE AIR GAPS FOR INDIRECT DRAINS AS REQUIRED BY CODE. AIR GAP SHALL BE MINIMUM 2 TIMES THE DIAMETER OF THE INDIRECT DRAIN.
39. PRIOR TO COMMENCING WORK ON THIS PROJECT, VERIFY DEPTH, SIZE, LOCATION AND CONDITION OF ALL EXISTING UTILITIES IN FIELD. SHOULD CONDITIONS EXIST OTHER THAN THOSE INDICATED WHICH WOULD CAUSE THE DESIGN TO BE ALTERED, CONTRACTOR SHALL NOTIFY OWNER IMMEDIATELY.
40. COORDINATE INSTALLATION OF PLUMBING WORK WITH ALL OTHER TRADES SO AS TO AVOID UNNECESSARY DELAY OR INTERFERENCES. CONTRACTOR SHALL REVIEW ARCHITECTURAL AND EQUIPMENT SHEETS.
41. FURNISH & INSTALL ALL BACKFLOW PROTECTION DEVICES REQUIRED BY AGENCIES HAVING JURISDICTION. BACKFLOW DEVICES REQUIRING TESTING SHALL BE INSTALLED NO HIGHER THAN 5'-0" A.F.F.
42. PROVIDE CONDENSATE DRAIN FROM A/C UNITS TO APPROVED DRAIN, GAS PIPING TO UNITS AND ALL FINAL CONNECTIONS REQUIRED FOR OPERATION.
43. THE OWNER MAY SUBSTITUTE EQUIPMENT OR THE EQUIPMENT MAY VARY FROM WHAT IS SHOWN. THEREFORE, VERIFY ALL CRITICAL DIMENSIONS WITH THE OWNER PRIOR TO CONSTRUCTION. FAILURE OF THE CONTRACTOR TO VERIFY THESE DIMENSIONS SHALL PLACE THE RESPONSIBILITY FOR ANY SUBSEQUENT RELOCATION DIRECTLY UPON THE CONTRACTOR.
44. ALL WATER LINES SHALL BE RUN OVERHEAD.
45. ALL WATER LINES SHALL BE FLUSHED PRIOR TO CONNECTING ANY FIXTURES OR EQUIPMENT.
46. PROVIDE ESCUTCHEON PLATES AND SILICONE SEALANT AT ALL UTILITY PENETRATIONS INTO WALLS, CEILINGS, AND FLOORS. DO NOT USE CAULKS OR EXPANDING FOAMS FOR SEALANT.
47. PLUMBING CONTRACTOR SHALL RUN ALL DOMESTIC WATER, SANITARY WASTE, AND VENT PIPING AS HIGH AS POSSIBLE WITHIN THE CEILING / TRUSS SPACE. COORDINATE THE LOCATION OF ALL PIPING WITH THE STRUCTURAL PLANS, ARCHITECTURAL CEILING HEIGHTS AND OTHER TRADES TO AVOID CONFLICTS. NOTIFY CONSTRUCTION MANAGER AS SOON AS ANY CONFLICTS ARE DETECTED. FAILURE TO PROPERLY COORDINATE PIPE ROUTING WITH OTHER TRADES WILL BE REQUIRED TO BE MOVED AT THE PLUMBING CONTRACTOR'S EXPENSE.
48. PLUMBING CONTRACTOR TO PROVIDE AND INSTALL A 4" THICK CONCRETE PAD FOR INSTALLATION OF NEW BASE-MOUNTED PLUMBING EQUIPMENT.
49. SLOPE DOMESTIC WATER PIPING FROM HIGHEST POINT TO ALLOW FOR DRAINDOWN AND WINTERIZATION OF DOMESTIC WATER SYSTEM.

KEYED PLUMBING NOTES:

1. 4" SANITARY WASTE TO A POINT 5'-0" FROM EXTERIOR WALL. SEE CIVIL PLANS FOR CONTINUATION.
2. 2" DOMESTIC WATER SERVICE UP.
3. 2" DOMESTIC WATER SERVICE TO A POINT 5'-0" FROM EXTERIOR WALL. SEE CIVIL PLANS FOR CONTINUATION.
4. 4" WASTE UP TO FLOOR CLEANOUT.
5. 2" WASTE FROM ABOVE.
6. 3" WASTE FROM ABOVE.
7. 4" WASTE FROM ABOVE.
8. 2" VENT UP.
9. 4" WASTE UP TO YARD CLEANOUT.



N

1 PLUMBING UNDERFLOOR PLAN
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2	ISSUED FOR 90% DESIGN	2024-07-11
3	ISSUED FOR BID	2024-08-22

GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
2218 N Prospect Rd
Peoria, IL 61603

PLUMBING UNDERFLOOR PLAN

DRAWN:	BKB
CHECKED:	JPH
APPROVED:	AEC
JOB NO:	24-1006

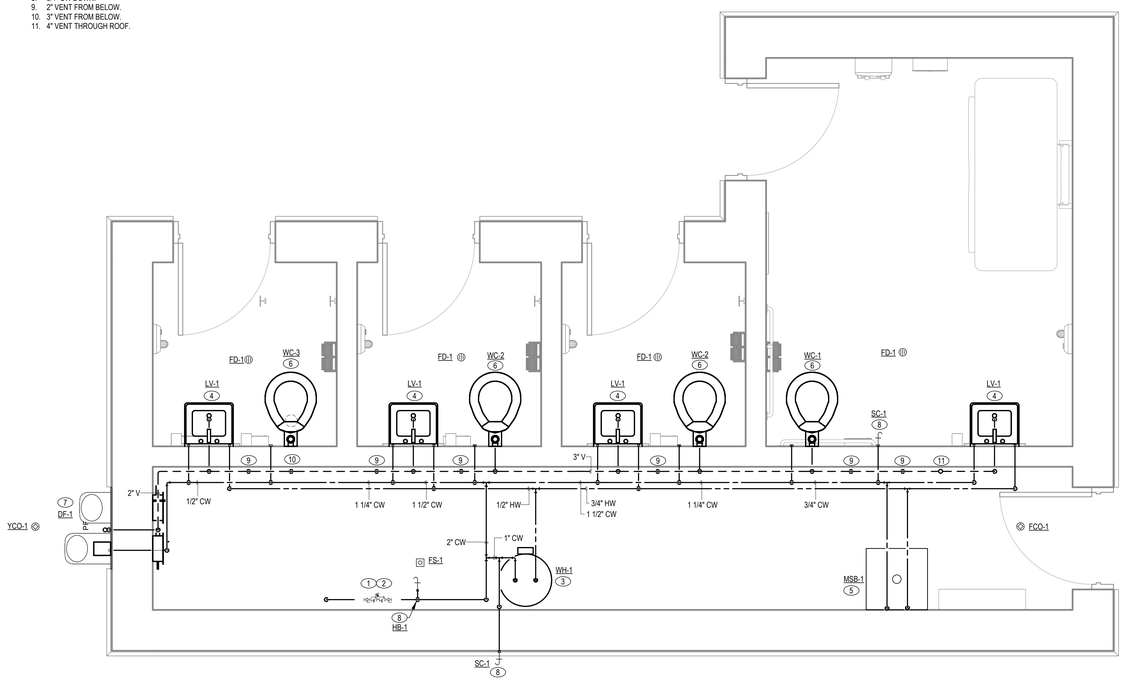
SHEET NO.
P-100

PLUMBING FIXTURE & EQUIPMENT SCHEDULE

TAG	DESCRIPTION	ROUGH-IN SIZE (NPS) W / V	CW	HW	ACCESSORIES/ TRIM
WC-1 (ADA)	WATER CLOSET: WALL HUNG, BATTERY POWERED SENSOR FLUSH VALVE, TOP SPUD, 304 STAINLESS STEEL, 1.6 GPF. SEE ARCHITECTURAL SHEETS FOR MOUNTING HEIGHTS. ACORN ENGINEERING MODEL 2100-HPS OR APPROVED EQUAL. FLUSH VALVE: SLOAN MODEL G2 8111 OR APPROVED EQUAL.	4" / 2"	1-1/4"	-	• OPEN FRONT ANTI-MICROBIAL SEAT • HIGH POLISH INTEGRAL SEAT
WC-2	WATER CLOSET: WALL HUNG, BATTERY POWERED SENSOR FLUSH VALVE, TOP SPUD, 304 STAINLESS STEEL, 1.6 GPF. SEE ARCHITECTURAL SHEETS FOR MOUNTING HEIGHTS. ACORN ENGINEERING MODEL 2100-HPS OR APPROVED EQUAL. FLUSH VALVE: SLOAN MODEL G2 8111 OR APPROVED EQUAL.	4" / 2"	1-1/4"	-	• OPEN FRONT ANTI-MICROBIAL SEAT • HIGH POLISH INTEGRAL SEAT
WC-3	CHILD SIZED WATER CLOSET: FLOOR SET, BATTERY POWERED SENSOR FLUSH VALVE, TOP SPUD, VITREOUS CHINA, 1.28 GPF. 10-1/4" RIM HEIGHT. AMERICAN STANDARD MODEL 2282001.020 OR APPROVED EQUAL. FLUSH VALVE: SLOAN MODEL G2 8111 OR APPROVED EQUAL.	4" / 2"	1-1/4"	-	• OPEN FRONT ANTI-MICROBIAL SEAT
LV-1 (ADA)	LAVATORY: WALL HUNG, FRONT OVERFLOW, 304 STAINLESS STEEL, BATTERY OPERATED SENSOR FAUCET. ACORN ENGINEERING MODEL 1950LC OR APPROVED EQUAL. FAUCET: CHICAGO FAUCETS MODEL EVR-A12A-11ABCP OR APPROVED EQUAL. THERMOSTATIC MIXING VALVE: SYMMONS MODEL 8210CK OR APPROVED EQUAL.	2" / 2"	1/2"	1/2"	• 1-1/2" PVC P-TRAP. • LOOSE KEY STOPS. • BRAIDED S.S. RISERS. • PROVIDE AND INSTALL ADA INSULATION KIT FOR OPEN FRONT COUNTERS • COORDINATE FAUCET HOLE PUNCHES BEFORE ORDERING.
DF-1 (ADA)	DRINKING FOUNTAIN: STAINLESS STEEL HI-LO OUTDOOR DRINKING FOUNTAIN AND BOTTLE FILLER, PUSH BUTTON ACTIVATION, VANDAL RESISTANT. SEE ARCHITECTURAL SHEETS FOR MOUNTING HEIGHTS. HAWS MODEL 1119FRP OR APPROVED EQUAL.	3" / 2"	3/4"	3/4"	• BOTTLE FILLER MOUNTING PLATE.
MSB-1	MOP SERVICE BASIN: ONE-PIECE, MOLDED FIBERGLASS, 24" X 24". E.L. MUSTEE MODEL 63M OR APPROVED EQUAL. FAUCET: CHICAGO FAUCETS MODEL 897-CP OR APPROVED EQUAL.	3" / 2"	3/4"	3/4"	-
SC-1	WALL HYDRANT: FREEZE-PROOF, ROUGH BRASS. WOODFORD MODEL 65 OR APPROVED EQUAL.	- / -	3/4"	-	• INSTALL AT 18" ABOVE GRADE.
HB-1	HOSE BIBB: CAST-BRASS, VACUUM BREAKER. WATTS MODEL SC8-4 OR APPROVED EQUAL.	- / -	3/4"	-	• INSTALL AT FINISHED FLOOR FOR DRAINDOWN OF DOMESTIC SYSTEM.
BFP-1	DOMESTIC WATER BACKFLOW PREVENTER ASSEMBLY: REDUCES PRESSURE ZONE, LEAD FREE. WATTS MODEL LF009 OR APPROVED EQUAL.	- / -	2"	-	• STRAINER. • NON-RISING STEM GATE VALVES. • TEST COCKS.
WH-1	WATER HEATER; 10 GALLON, ELECTRIC, GLASSLINED STORAGE TANK (150 PSI), 240V, 4 kW, 18 GPH @ 90 DEGREE F. RISE. A.O. SMITH MODEL DEL-10-4 OR APPROVED EQUAL. EXPANSION TANK: AMTROL MODEL ST-5C OR APPROVED EQUAL.	3/4" / -	3/4"	3/4"	• POWER WIRING BY ELECTRICAL CONTRACTOR.
FD-1	FLOOR DRAIN: CAST-IRON BODY, NICKEL BRONZE TOP. ZURN MODEL Z415-BZ1 OR APPROVED EQUAL.	SEE SHEET	-	-	-
FS-1	FLOOR SINK: CAST-IRON BODY, SQUARE GRATE WITH SLOTTED OPENINGS, 12" X 12" X 6", ANTI-SPLASH BOTTOM DOME STRAINER. ZURN MODEL Z1900 OR APPROVED EQUAL.	SEE SHEET	-	-	-
FCO-1	FLOOR CLEANOUT: CAST-IRON BODY, DUCTILE IRON TOP. ZURN MODEL Z1400-BZ1 OR APPROVED EQUAL.	SEE SHEET	-	-	-
YCO-1	YARD CLEANOUT: HEAVY DUTY, CAST-IRON BODY, DUCTILE IRON TOP. ZURN MODEL Z1400 OR APPROVED EQUAL.	SEE SHEET	-	-	-

KEYED PLUMBING NOTES:

1. SLOPE DOMESTIC WATER PIPING FROM HIGHEST POINT TO ALLOW FOR DRAIN DOWN AND WINTERIZATION OF THE DOMESTIC WATER SYSTEM.
2. 2" DOMESTIC WATER SERVICE FROM BELOW. 2" DOMESTIC WATER BACKFLOW PREVENTER AND SHUT OFF VALVE. COORDINATE WITH LOCAL UTILITY FOR INSTALLATION OF WATER METER.
3. 3/4" H&CW DOWN TO WATER HEATER. INSTALL WATER HEATER ON 4" CONCRETE PAD AND PER MANUFACTURER'S INSTRUCTIONS.
4. 1/2" H&CW DOWN. 2" VENT FROM BELOW.
5. 3/4" H&CW DOWN. 3" MAIN VENT FROM BELOW.
6. 1-1/4" CW DOWN. 2" VENT FROM BELOW.
7. 1/2" CW DOWN. 2" VENT FROM BELOW.
8. 3/4" CW DOWN.
9. 2" VENT FROM BELOW.
10. 3" VENT FROM BELOW.
11. 4" VENT THROUGH ROOF.



1 FIRST FLOOR PLUMBING PLAN
1/2" = 1'-0"

MULLER2
700 N Sangamon
Chicago, IL 60642
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PEORIA PARK DISTRICT
GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
ISSUE FOR BID

LICENSED PROFESSIONAL ENGINEER
ADAM E. CAMP
062-072502
EXPIRES: 30NOV24
STATE OF ILLINOIS

No.	Description	Date
1	ISSUED FOR 60% DESIGN	2024-05-23
2	ISSUED FOR 90% DESIGN	2024-07-11
3	ISSUED FOR BID	2024-08-22

GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
2218 N Prospect Rd
Peoria, IL 61603

PLUMBING FIRST FLOOR PLAN

DRAWN:	BKB
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ELECTRICAL ABBREVIATIONS

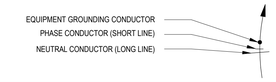
1P	1 POLE (2P, 3P, 4P, ETC.)	MCB	MAIN CIRCUIT BREAKER
A	6" ABOVE COUNTER OR BACKSPLASH TO CENTERLINE OF DEVICE	MCC	MOTOR CONTROL CENTER
		MDC	MAIN DISTRIBUTION CENTER
A, AMP	AMPERE	MDP	MAIN DISTRIBUTION PANEL
AC	ABOVE COUNTER	MFR	MANUFACTURER
ACLG	ABOVE CEILING	MFS	MAIN FUSED DISCONNECT SWITCH
AF	AMP FRAME	MH	MANHOLE
AFF	ABOVE FINISHED FLOOR	MIC	MICROPHONE
AFG	ABOVE FINISHED GRADE	MIN	MINIMUM
AFCI	ARC FAULT CIRCUIT INTERRUPTER	MISC	MISCELLANEOUS
		MLO	MAIN LUGS ONLY
AHU	AIR HANDLING UNIT	MMS	MANUAL MOTOR STARTER
AL	ALUMINUM	MOA	MULTIOUTLET ASSEMBLY
ALT	ALTERNATE	MSP	MOTOR STARTER PANELBOARD
AMP	AMPERE	MSBD	MAIN SWITCHBOARD
AMPL	AMPLIFIER	MSS	MOTOR STARTER SWITCH
ANNUN	ANNUNCIATOR	MT	MOUNT
APPROX	APPROXIMATELY	MTS	MANUAL TRANSFER SWITCH
AQ-STAT	AQUASTAT	MTR	MOTOR, MOTORIZED
ARCH	ARCHITECT, ARCHITECTURAL	N.C.	NORMALLY CLOSED
AS	AMP SWITCH	NEC	NATIONAL ELECTRICAL CODE
AT	AMP TRIP	NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
A.T.C.	AUTOMATIC TEMPERATURE CONTROLS CONTRACTOR	NFDS	NON-FUSED SAFETY DISCONNECT SWITCH
ATS	AUTOMATIC TRANSFER SWITCH		
AUTO	AUTOMATIC	NIC	NOT IN CONTRACT
AUX	AUXILIARY	NL	NIGHT LIGHT
AV	AUDIO VISUAL	N.O.	NORMALLY OPEN
AWG	AMERICAN WIRE GAUGE	NPF	NORMAL POWER FACTOR
B	BLACK DEVICE COLOR WITH BLACK UNBREAKABLE THERMOPLASTIC COVER	NTS	NOT TO SCALE
		OC	ON CENTER
	PLATE	OH	OVERHEAD
BATT	BATTERY	OL	OVERLOADS
BD	BOARD	PA	PUBLIC ADDRESS
BLDG	BUILDING	PB	PULL BOX OR PUSHBUTTON
BMS	BUILDING MANAGEMENT SYSTEM	PC	PLUMBING CONTRACTOR
C	CONDUIT	PE	PNEUMATIC ELECTRIC
CAB	CABINET	PED	PEDIESTAL
CAT	CATALOG	PF	POWER FACTOR
CATV	CABLE TELEVISION	PH	PHASE
CB	CIRCUIT BREAKER	PIV	POST INDICATING VALVE
CCTV	CLOSED CIRCUIT TELEVISION	PNL	PANEL
CKT	CIRCUIT	PP	POWER POLE
CLG	CEILING	PR	PAIR
CM	CONSTRUCTION MANAGER	PRI	PRIMARY
COMB	COMBINATION	PROJ	PROJECTION
CMPR	COMPRESSOR	PRV	POWER ROOF VENTILATOR
CONN	CONNECTION	PT	POTENTIAL TRANSFORMER
CONST	CONSTRUCTION	PVC	POLYVINYL CHLORIDE (CONDUIT)
CONT	CONTINUATION OR CONTINUOUS	PWR	POWER
CONTR	CONTRACTOR	QUAN	QUANTITY
CONV	CONVECTOR	RAC	RIGID ALUMINUM CONDUIT
CP	CIRCULATING PUMP	RCPT	RECEPTACLE
CRT	CATHODE-RAY TUBE	REQD	REQUIRED
CT	CURRENT TRANSFORMER	RM	ROOM
CTR	CENTER	RMC	RIGID METALLIC CONDUIT
CU	COPPER	RTU	ROOF TOP UNIT
DEPT	DEPARTMENT	SC	SURFACE CONDUIT
DET	DETAIL	SEC	SECONDARY
DIA	DIAMETER	SHT	SHEET
DISC	DISCONNECT	SIM	SIMILAR
DIST	DISTRIBUTION	SLD	SINGLE-LINE DIAGRAM
DN	DOWN	S/N	SOLID NEUTRAL
DO	AUTOMATIC DOOR OPENER	SPEC	SPECIFICATION
DPR	DAMPER	SPKR	SPEAKER
DS	SAFETY DISCONNECT SWITCH	SP	SPARE
DT	DOUBLE THROW	SPP	SINGLE-POINT POWER
DWG	DRAWING	SR	SURFACE RACEWAY
EC	ELECTRICAL CONTRACTOR	SS	STAINLESS STEEL
ELEC	ELECTRIC, ELECTRICAL	SSW	SELECTOR SWITCH
ELEV	ELEVATOR	S/S	STOP/START PUSHBUTTONS
ELU	EMERGENCY LIGHTING UNIT	STA	STATION
EM	EMERGENCY	STD	STANDARD
EMS	ENERGY MANAGEMENT SYSTEM	SURF	SURFACE MOUNTED
EMT	ELECTRICAL METALLIC TUBING	SW	SWITCH
EP	ELECTRIC PNEUMATIC	SWBD	SWITCHBOARD
EPO	EMERGENCY POWER OFF	SYM	SYMMETRICAL
EQUIP	EQUIPMENT	SYS	SYSTEM
EWC	ELECTRIC WATER COOLER	TEL	TELEPHONE
EXIST	EXISTING	TERM	TERMINAL
EXH	EXHAUST	T	TAMPER RESISTANT
EXP	EXPLOSION PROOF	TL	TWIST LOCK
FA	FIRE ALARM	T-STAT	THERMOSTAT
FABP	FIRE ALARM BOOSTER POWER SUPPLY PANEL	TTC	TELEPHONE TERMINAL CABINET
		TV	TELEVISION
FACP	FIRE ALARM CONTROL PANEL	TVTC	TELEVISION TERMINAL CABINET
FCU	FAN COIL UNIT	TYP	TYPICAL
FIXT	FIXTURE	UC	UNDER COUNTER
FLR	FLOOR	UE	UNDERGROUND ELECTRICAL
FLUOR	FLUORESCENT	UG	UNDERGROUND
F.P.C.	FIRE PROTECTION CONTRACTOR	UH	UNIT HEATER
FU	FUSE	UT	UNDERGROUND TELEPHONE
FUDS	FUSED SAFETY DISCONNECT SWITCH	UTIL	UTILITY
GA	GAUGE	UV	ULTRAVIOLET
GAL	GALLON	V	VOLT
GALV	GALVANIZED	VA	VOLT-AMPERES
GC	GENERAL CONTRACTOR	VDT	VIDEO DISPLAY TERMINAL
GEN	GENERATOR	VERT	VERTICAL
GFI	GROUND FAULT CIRCUIT INTERRUPTER	VFD	VARIABLE FREQUENCY DRIVE
GFP	GROUND FAULT PROTECTOR	VOL	VOLUME
GND	GROUND	W	WATT
GYP BD	GYPSUM BOARD	W/	WITH
HWC#	DOMESTIC WATER CIRCULATING PUMP	WG	WIRE GUARD
HOA	HANDS-OFF-AUTOMATIC SWITCH	WH	WATER HEATER
H	INSTALL DEVICE HORIZONTALLY	W/O	WITHOUT
HP	HORSEPOWER	WP	WEATHERPROOF
HPF	HIGH POWER FACTOR	XFMR	TRANSFORMER
HT	HEIGHT	XFR	TRANSFER
HTG	HEATING	XX	LOCATION-SPECIFIC MOUNTING HEIGHT ABOVE FINISHED FLOOR TO CENTERLINE OF DEVICE
HTR	HEATER		
HV	HIGH VOLTAGE		
HVAC	HEATING, VENTILATING AND AIR CONDITIONING		
IC	INTERRUPTING CAPACITY		
IG	ISOLATED GROUND	∠	ANGLE
IMC	INTERMEDIATE METAL CONDUIT	@	AT
INCAND	INCANDESCENT	▲	DELTA
IR	INFRARED	'	FEET
I/W	INTERLOCK WITH	"	INCHES
J-BOX	JUNCTION BOX	#	NUMBER
K.E.C.	KITCHEN EQUIPMENT CONTRACTOR	Ø	PHASE
KV	KILOVOLT	C	CENTER LINE
KVA	KILOVOLT-AMPERE	P	PLATE
KVAR	KILOVOLT-AMPERE REACTIVE		
KW	KILOWATT		
KWH	KILOWATT HOUR		
LOC	LOCATE OR LOCATION		
LT	LIGHT		
LTG	LIGHTING		
LTNG	LIGHTNING		
LV	LOW VOLTAGE		
M	INSTALL DEVICE IN MILLWORK		
MAX	MAXIMUM		
MAG.S	MAGNETIC STARTER		
M/C	MOMENTARY CONTACT		
MC	MECHANICAL CONTRACTOR		

BREAKER FUNCTION SCHEDULE

SYMBOL	DESCRIPTION
A	ARC FAULT INTERUPTER (AFCI)
AR	ARC ENERGY REDUCTION MAINTENANCE SWITCH
E	EXISTING BREAKER TO REMAIN
EM	PROVIDE IDENTIFICATION PER NEC 700.12(I)(2)(4
G	GROUND FAULT CIRCUIT INTERUPTER (GFCI)PROTECTION (5mA)
GE	GROUND FAULT CIRCUIT INTERUPTER FOR EQUIPMENT (30mA)
GF	ADJUSTABLE GROUND FAULT PROTECTION FOR EQUIPMENT
HL	HANDLE LOCK TO LOCK BREAKER IN CLOSED POSITION
K#	KEY INTERLOCK (# REPRESENTS GROUPED KEYING)
LSI	LONG-TIME, SHORT-TIME, INSTANTANEOUS ADJUSTMENT
LSIG	LONG-TIME, SHORT-TIME, INSTANTANEOUS ADJUSTMENT, AND GROUND FAULT ADJUSTMENT
LSIA	LONG-TIME, SHORT-TIME, INSTANTANEOUS ADJUSTMENT, AND GROUND FAULT ALARM
N	NEW BREAKER IN EXISTING PANEL
NE	NEW BREAKER SERVING EXISTING CIRCUIT
SD	DENOTE SERVICE DISCONNECT
ST	SHUNT TRIP (120V OPERATED UNLESS NOTED OTHERWISE)

EQUIPMENT/DEVICE HOME RUN KEY

1. BRANCH CIRCUIT WIRING SHALL BE #12AWG UNLESS NOTED OTHERWISE ON THE PLAN OR IN THE SCHEDULES.
2. AS A MINIMUM USE 10 AWG CONDUCTOR FOR 20 AMPERE, 120 VOLT BRANCH CIRCUIT HOME RUNS LONGER THAN 100 FEET AND 277 VOLT BRANCH CIRCUIT HOME RUNS LONGER THAN 200 FEET.
3. REFER TO SPECIFICATION SECTION 260519 FOR ADDITIONAL REQUIREMENTS.



PLAN SYMBOLS

SYMBOL	DESCRIPTION
EQUIPMENT	SCHEDULED EQUIPMENT (UNDERLINED)
EQUIPMENT	NON SCHEDULED EQUIPMENT
X_EQUIPMENT	EXISTING EQUIPMENT (X_PREFIX)
/	USED BETWEEN TWO OR MORE SUBSCRIPTS
# / #	SECTION VIEW, TOP REPRESENTS DETAIL NUMBER, BOTTOM REPRESENTS SHEET NUMBER
# / #	ENLARGED VIEW, TOP REPRESENTS VIEW NUMBER, BOTTOM REPRESENTS SHEET NUMBER
	NEW WORK BY THE E.C. (DARK SOLID LINE)
	NEW UNDERGROUND WORK BY THE E.C. (DARK DASHED LINE)
	WORK BY OTHERS AND/OR EXISTING (LIGHT SOLID LINE)
	DEMO WORK BY THE E.C. (DARK DASHED LINE)
	MATCHLINE
1	KEYED NOTE
1	LIGTHING CONTROL SYMBOL (DIAMOND)
1	KITCHEN EQUIPMENT SYMBOL (OCTOGON)

GENERAL ELECTRICAL SYMBOLS

	CONNECTION TO MECHANICAL EQUIPMENT
	ELECTRICAL CONNCTION TO MISC EQUIPMENT
EPO #	EMERGENCY STOP PUSH BUTTON. REFER TO SCHEDULE FOR ADDITIONAL INFORMATION.
DPM	DIGITAL POWER METER, LCD DISPLAY, MONITORING OF VOLTAGE, CURRENT, POWER, PF, FREQUENCY, MIN/MAX AND AVERAGE VALUES, AND ENERGY
	PANELBOARD - SEE SCHEDULES FOR MORE INFORMATION
	UTILITY TRANSFORMER - PROVIDED BY UTLITY
	SWITCHBOARD - SEE SCHEDULES FOR MORE INFORMATION
	TRANSFORMER - SEE SCHEDULES FOR MORE INFORMATION
	DISCONNECT SWITCH, SEE SCHEDULES FOR MORE INFORMATION
	POWER METER
	COMBINATION STARTER, SEE SCHEDULES FOR MORE INFORMATION
	VARIABLE FREQUENCY DRIVE, SEE SCHEDULES FOR MORE INFORMATION

GENERAL FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
FAP	FIRE ALARM CONTROL PANEL
NEP	NOTIFICATION APPLIANCE CIRCUIT EXTENDER PANEL
FAA	FIRE ALARM REMOTE ANNUNCIATOR PANEL
PIV	FIRE PROTECTION POST INDICATOR VALVE AND TAMPER SWITCH
PS	FIRE PROTECTION AIR PRESSURE SWITCH
TS	FIRE PROTECTION VALVE TAMPER SWITCH
FS	FIRE PROTECTION WATER FLOW SWITCH
SD BR	BEAM SMOKE REFLECTOR
SD B#	LINEAR BEAM SMOKE DETECTOR
SD SD	LINEAR BEAM SMOKE DETECTOR
DSD	DUCT SMOKE DETECTOR
RI	DUCT SMOKE DETECTOR REMOTE INDICATOR STATION
H	HEAT INDICATOR ADDRESSABLE
LHD	LINEAR HEAT DETECTION CABLE
F	ADDRESSABLE FIRE ALARM MANUAL PULL STATION
SD	SMOKE DETECTOR
	FIRE ALARM AUDIO/VISUAL NOTIFICATION APPLIANCE, CEILING MOUNTED
	FIRE ALARM VISUAL NOTIFICATION APPLIANCE, CEILING MOUNTED
S	FIRE ALARM SPEAKER NOTIFICATION APPLIANCE, CEILING MOUNTED
	FIRE ALARM SPEAKER/VISUAL NOTIFICATION APPLIANCE, CEILING MOUNTED
A	FIRE ALARM HORN NOTIFICATION APPLIANCE, WALL MOUNTED
	FIRE ALARM AUDIO/VISUAL NOTIFICATION APPLIANCE, WALL MOUNTED
S	FIRE ALARM SPEAKER NOTIFICATION APPLIANCE, WALL MOUNTED
S	FIRE ALARM SPEAKER/VISUAL NOTIFICATION APPLIANCE, WALL SWITCH
	FIRE ALARM VISUAL NOTIFICATION APPLIANCE, WALL MOUNTED
AM	ADDRESSABLE MONITOR MODULE
AR	ADDRESSABLE RELAY MODULE
	MAGNETIC DOOR HOLDER
HD	HVAC ELEVATOR HOISTWAY DAMPER
SD	HVAC SMOKE DAMPER
ZAM	ZONE ADAPTER MODULES
CO	CO DETECTOR
VCC	VOICE COMMAND CENTER
DCD	DUCT CO DETECTOR
F	BELL
S HS	HIGH FIDELITY SPEAKER - CEILING MOUNT
S HS	HIGH FIDELITY SPEAKER - WALL MOUNT
ASD	AIR SAMPLING SMOKE DETECTOR

GENERAL LIGHTING SYMBOLS

SYMBOL	DESCRIPTION
	DOUBLE FACED EXIT SIGN
	SINGLE FACED EXIT SIGN
	RECESSED ARCHITECTURAL TROFFER
	RECESSED DOWNLIGHT
	EMERGENCY FIXTURE
	POLE MOUNTED SITE FIXTURE
	POLE MOUNTED SITE FIXTURE
	INDUSTRIAL FIXTURE
	SURFACE OR PENDANT LINEAR FIXTURE
	SURFACE OR PENDANT CIRCULAR FIXTURE
	WALL MOUNTED FIXTURE
	WALL SCONCE
	HIGH BAY

GENERAL SWITCH SYMBOLS

SYMBOL	DESCRIPTION
$	SWITCH,REFER TO SUBSCRIPT SCHEDULE FOR MORE INFORMATION
DM	REFER TO SUBSCRIPT SCHEDULE FOR MORE INFORMATION
M	REFER TO SUBSCRIPT SCHEDULE FOR MORE INFORMATION
LM	REFER TO SUBSCRIPT SCHEDULE FOR MORE INFORMATION

GENERAL POWER SYMBOLS

SYMBOL	DESCRIPTION
	DUPLEX RECEPTACLE, NEMA 5-20R, EMERGENCY POWER
	DUPLEX RECEPTACLE, REFER TO SUBSCRIPT SCHEDULE FOR MORE INFORMATION
CR	CORD REEL
CD	CORD DROP
	DOUBLE DUPLEX RECEPTACLE, NEMA 5-20R
	SIMPLEX RECEPTACLE, NEMA 5-20R
	SPECIAL RECEPTACLE
	RECESSED FLOOR BOX OR POKE-THRU
	DOUBLE DUPLEX RECEPTACLE, NEMA 5-20R, EMERGENCY POWER

GENERAL NOTES

1. ALL ELECTRICAL WORK SHALL BE COMPLETED IN A WORKMANSHIP LIKE MANNER AND IN ACCORDANCE WITH N.E.C., LOCAL, AND ALL OTHER APPLICABLE CODES.
2. ALL MATERIAL FURNISHED SHALL BE NEW, FREE OF DEFECTS, AND LISTED BY A NATIONALLY RECOGNIZED TESTING LABORATORY UNLESS NOTED OTHERWISE.
3. INSTALLATION OF EQUIPMENT SHALL BE IN ACCORDANCE WITH CURRENT STANDARDS AND SPECIFICATIONS APPROVED BY THE AUTHORITY HAVING JURISDICTION (AHJ). PLACE ALL CABLE/WIRING IN CONDUIT OR RACEWAY UNLESS NOTED OTHERWISE. DO NOT LIE ON, OR SUPPORT CABLE FROM, CEILING DEVICES, PIPING OR DUCTWORK. PROVIDE NEW WIRING FOR ALL BRANCH CIRCUITS AND FEEDERS.
4. FEEDERS ON DRAWINGS ARE SCHEMATIC ONLY. CONDUIT RUNS SHALL COMPLY WITH CONDUIT SPECIFICATIONS AND CONTAIN BENDS THAT ARE NOT GREATER THAN 90 DEGREES. CONDUITS ABOVE GRADE SHALL BE RUN PARALLEL TO OR PERPENDICULAR WITH BUILDING LINES AND STRUCTURE.
5. CIRCUIT WIRING FOR THE EMERGENCY SYSTEM SHALL BE INSTALLED IN SEPARATE CONDUIT/RACEWAY AND BE KEPT ENTIRELY INDEPENDENT OF ALL OTHER WIRING AND EQUIPMENT PER THE N.E.C.
6. ALL FEEDER AND BRANCH CIRCUITS TO PANELS, MOTORS, LIGHTS, RECEPTACLES, GENERAL DISTRIBUTION, ETC. SHALL CONTAIN AN EQUIPMENT GROUNDING CONDUCTOR SIZED ACCORDING TO THE N.E.C. THE CONDUIT SYSTEM SHALL NOT BE CONSIDERED AN ACCEPTABLE GROUND.
7. REFER TO MECHANICAL EQUIPMENT SCHEDULES FOR DETAILED INFORMATION ON EQUIPMENT, DISCONNECTS, AND CONTROLS. E.C. SHALL PROVIDE AND INSTALL ITEMS AS NOTED BY THE E.C. ON THE MECHANICAL SCHEDULES.
8. ELECTRICAL INSTALLATION SHALL BE INSTALLED IN PHASES AS DIRECTED BY THE C.M. PROVIDE TEMPORARY AND PERMANENT CONNECTIONS AS REQUIRED TO MEET THE PHASING REQUIREMENTS. COORDINATE ALL REQUIRED OUTAGES WITH THE C.M. AND OWNER AS OUTLINED IN THE SPECIFICATIONS.
9. RELOCATE EXISTING CONDUITS, WIRING, AND BOXES AS REQUIRED FOR INSTALLATION OF MECHANICAL EQUIPMENT AND PIPING, TEMPORARY AND PERMANENT WALLS, AND STRUCTURES.
10. SURFACE-MOUNTED CONDUITS AND/OR RACEWAYS IN NEW CONSTRUCTION OF FINISHED AREAS ARE NOT ACCEPTABLE. CONDUIT MUST BE INSTALLED CONCEALED AND ROUGH-INS MOUNTED FLUSH IN THESE AREAS.
11. ALL WIRING AND FEEDER SIZES ON DRAWINGS ARE SIZED FOR COPPER WIRING UNLESS SPECIFICALLY NOTED OTHERWISE.
12. COORDINATE LOCATIONS OF DEVICES WITH ARCHITECTURAL ELEVATIONS AND DETAILS. ARCHITECTURAL ELEVATIONS AND DETAILS TAKE PRECEDENCE OVER LOCATIONS SHOWN ON ELECTRICAL DRAWINGS.
13. IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO COORDINATE INSTALLATION OF ELECTRICAL SYSTEM AND THOSE REQUIRING ELECTRICAL CONNECTIONS TO MAINTAIN NEC REQUIRED CLEARANCES, INCLUDING BUT NOT LIMITED TO AREAS ABOVE ACCESSIBLE CEILINGS.
14. PROVIDE CABLE OR CONDUIT AND WIRE AS REQUIRED TO ACHIEVE CIRCUITING AS SHOWN. SIZE CONDUCTOR PER NEC AMPACITIES AND WIRE FILL CRITERIA. PROVIDE DEDICATED NEUTRALS AND GROUND CONDUCTOR FOR CIRCUITING. UNLESS NOTED OTHERWISE.
15. CONDUIT FOR POWER WIRING SHALL BE PERMITTED TO BE LOCATED BENEATH FLOOR SLAB UNLESS NOTED OTHERWISE. RACEWAYS FOR LOW VOLTAGE CABLING FOR CONTROL, TELECOMMUNICATIONS, AND OTHER LOW VOLTAGE SYSTEMS SHALL NOT BE ALLOWED BENEATH, NOR WITHIN THE FLOOR SLAB UNLESS SPECIFICALLY NOTED ON THE DRAWINGS. WHERE CABLING IS ROUTED BENEATH OR WITHIN THE FLOOR SLAB, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THE CABLING IS LISTED FOR SUCH USE.

ELECTRICAL SHEET LIST

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Peoria, IL - 61603 — 309 / 214-0063 - fax

PEORIA PARK DISTRICT
GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
ISSUE FOR BID

LICENSED PROFESSIONAL ENGINEER
BRIAN R. KEITH
062-050306
EXPIRES: 30NOV23
STATE OF ILLINOIS

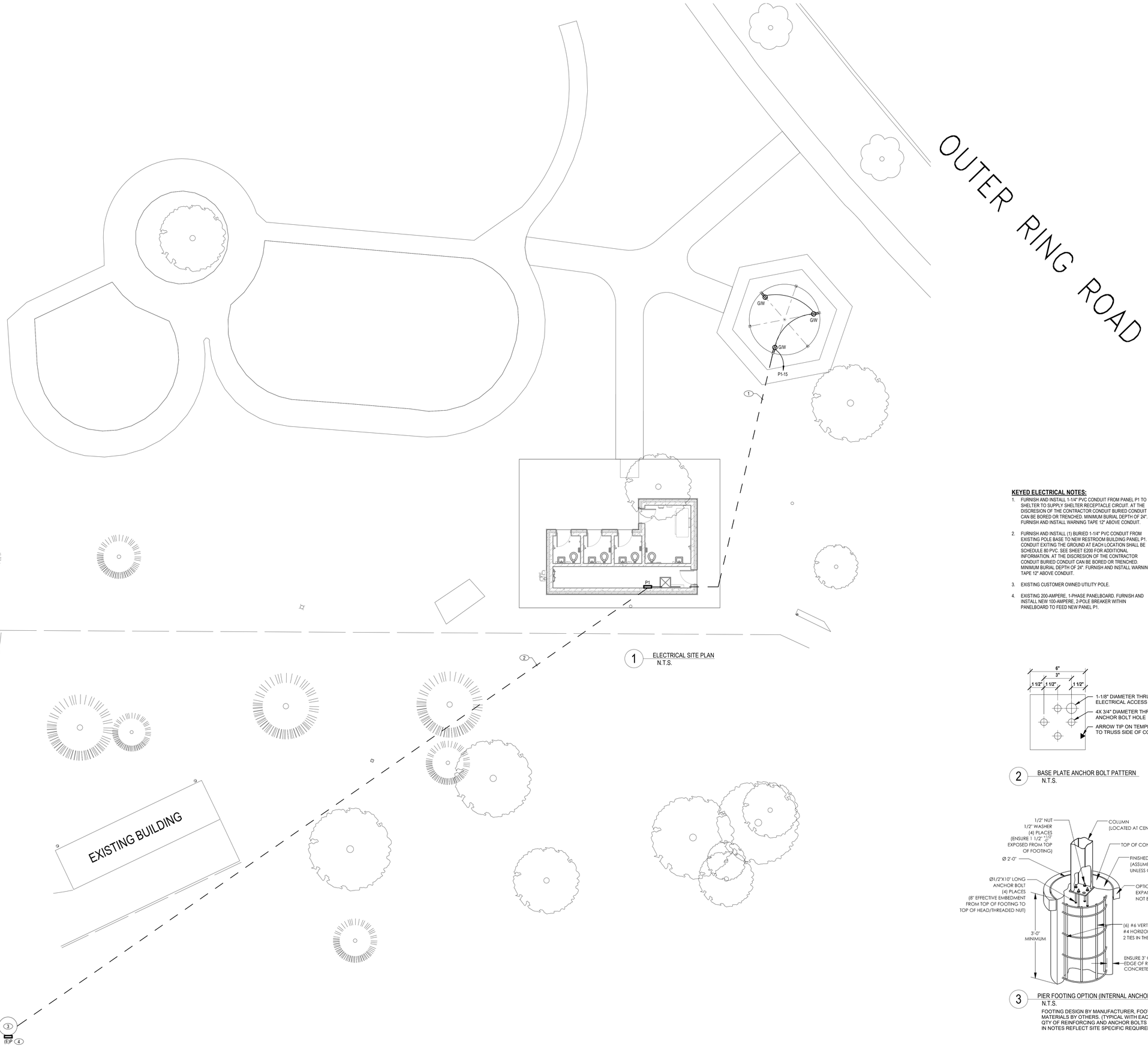
No.	Description	Date
1	ISSUED FOR 60% DESIGN	2024-05-23
2	ISSUED FOR 90% DESIGN	2024-07-11
3	ISSUED FOR BID	2024-08-22

GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
2218 N Prospect Rd
Peoria, IL 61603

ELECTRICAL TITLE SHEET

DRAWN:	ATF
CHECKED:	BRK
APPROVED:	BRK
JOB NO:	24-1006

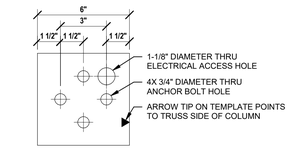
SHEET NO. E-001



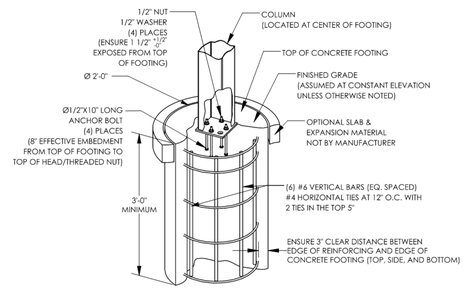
1 ELECTRICAL SITE PLAN
N.T.S.

KEYED ELECTRICAL NOTES:

1. FURNISH AND INSTALL 1-1/4" PVC CONDUIT FROM PANEL P1 TO SHELTER TO SUPPLY SHELTER RECEPTACLE CIRCUIT. AT THE DISCRESION OF THE CONTRACTOR CONDUIT BURIED CONDUIT CAN BE BORED OR TRENCHED. MINIMUM BURIAL DEPTH OF 24". FURNISH AND INSTALL WARNING TAPE 12" ABOVE CONDUIT.
2. FURNISH AND INSTALL (1) BURIED 1-1/4" PVC CONDUIT FROM EXISTING POLE BASE TO NEW RESTROOM BUILDING PANEL P1. CONDUIT EXITING THE GROUND AT EACH LOCATION SHALL BE SCHEDULE 80 PVC. SEE SHEET E200 FOR ADDITIONAL INFORMATION. AT THE DISCRESION OF THE CONTRACTOR CONDUIT BURIED CONDUIT CAN BE BORED OR TRENCHED. MINIMUM BURIAL DEPTH OF 24". FURNISH AND INSTALL WARNING TAPE 12" ABOVE CONDUIT.
3. EXISTING CUSTOMER OWNED UTILITY POLE.
4. EXISTING 200-AMPERE, 1-PHASE PANELBOARD. FURNISH AND INSTALL NEW 100-AMPERE, 2-POLE BREAKER WITHIN PANELBOARD TO FEED NEW PANEL P1.



2 BASE PLATE ANCHOR BOLT PATTERN
N.T.S.



3 PIER FOOTING OPTION (INTERNAL ANCHOR BOLTS)
N.T.S.
FOOTING DESIGN BY MANUFACTURER, FOOTING MATERIALS BY OTHERS. (TYPICAL WITH EACH COLUMN, QTY OF REINFORCING AND ANCHOR BOLTS SPECIFIED IN NOTES REFLECT SITE SPECIFIC REQUIREMENTS).

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Peoria, IL 61603

ELECTRICAL SITE PLAN

DRAWN:	ATF
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APPROVED:	BRK
JOB NO:	24-1006

SHEET NO.
E-100

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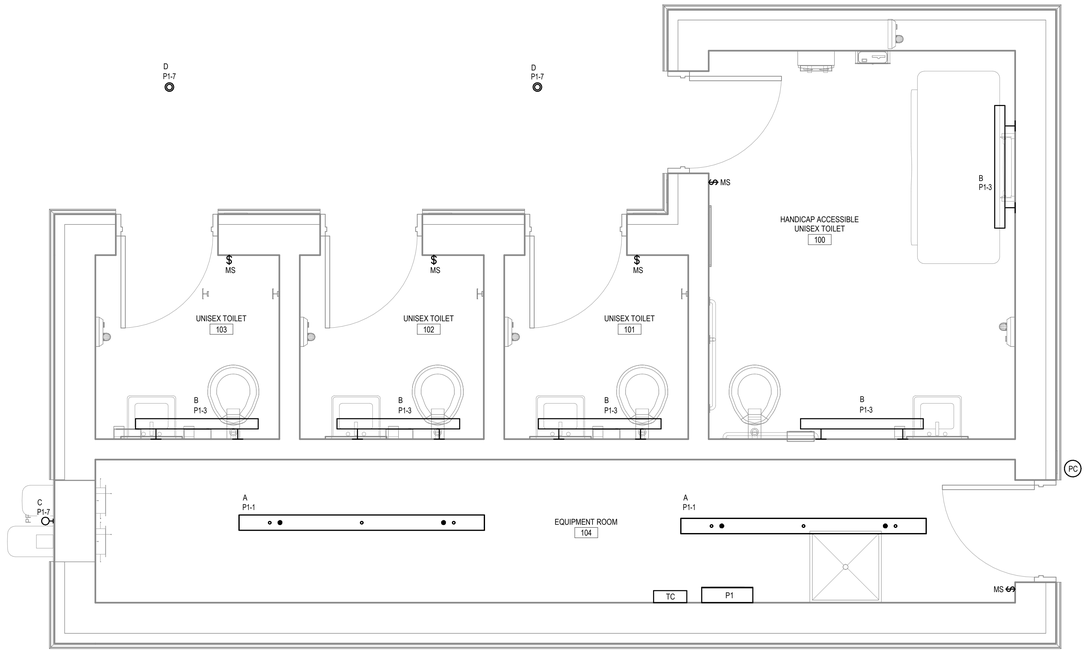

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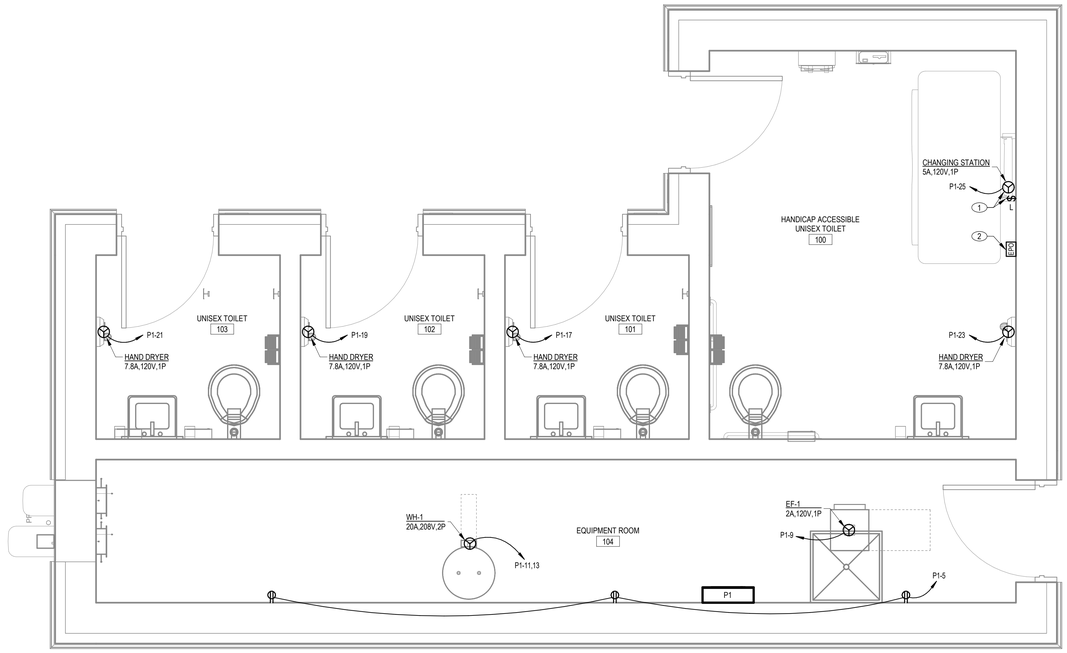
1 FIRST FLOOR PLAN LIGHTING
1/2" = 1'-0"



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2 FIRST FLOOR ELECTRICAL PLAN
1/2" = 1'-0"

KEYED ELECTRICAL NOTES:

1. "EMERGENCY POWER OFF' PUSH BUTTON FURNISHED BY CHANGING STATION EQUIPMENT SUPPLIER SHALL BE INSTALLED WITHIN 32" OF THE EDGE OF THE CHANGING STATION WALL MOUNTING BRACKET AND 36" A.F.F. LABEL PUSH BUTTON "CHANGING STATION EMERGENCY POWER OFF." LABEL SHALL HAVE 1/2" WHITE LETTERING WITH A RED BACKGROUND. FURNISH AND INSTALL LOCKABLE WEATHERPROOF SWITCH AND EQUIPMENT CONNECTION WITHIN DOUBLE GANG BOX. REFER TO CHANGING STATION MANUFACTURER'S INSTALLATION REQUIREMENTS FOR ADDITIONAL INFORMATION.

LUMINAIRE SCHEDULE

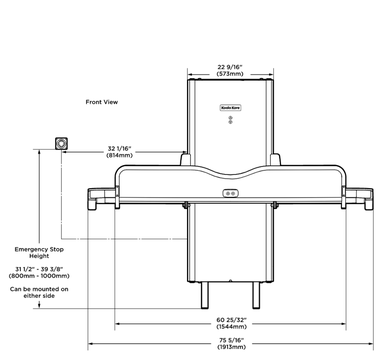
TYPE	DESCRIPTION	MANUFACTURER	ACCEPTABLE MANUFACTURERS	MOUNTING	NOTES
A	8' STRIP LIGHT, STEEL HOUSING, FLAT LENS, 80CRI, MINIMUM 8000 LUMEN, 120-VOLT, 4000K	LITHONIA CLX	COOPER	SUSPENDED	MOUNT 10'AFF
B	4' SURFACE MOUNTED LINEAR, MAXIMUM 3" WIDTH, SEALED AND GASKETED, ALUMINUM HOUSING, 120-VOLT, 4000K, MINIMUM 500 LUMEN PER FOOT, ASYMMETRIC DISTRIBUTION	AXIS EX2WD	COOPER	WALL	MOUNT 8' AFF
C	EXTERIOR WALL PACK, DIE CAST ALUMINIM HOUSING, 4000K, MINIMUM 80 CRI, MINIMUM 1100 LUMEN, WIDE DISTRIBUTION, 120-VOLT, BLACK FINISH	LITHONIA WDGE1 LED	COOPER	WALL	MOUNT 8'-6" AFF
D	RECESSED 6" ROUND EXTERIOR DOWNLIGHT, TILTING ADJUSTABLE LIGHT SOURCE, SUITABLE FOR MOUNTING WITHIN SLOPED CEILING, BLACK REFLECTOR, 120-VOLT, 4000K, 80 CRI, MINIMUM 35° DISTRIBUTION, MINIMUM 1700 LUMENS, DAMP LOCATION LISTED,	LITHONIA LA6	COOPER	RECESSED	COORDINATE INSTALLTION WITH OTHERS. PROVIDE SUPLIMENTAL FRAMING AS REQUIRED FOR SUPPORT OF FIXTURE WITHIN SOFFIT.

LIGHTING CONTROL SCHEDULE

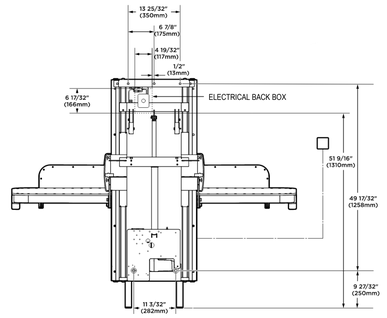
TYPE	DESCRIPTION	MODEL
MS	STAND-ALONE AUTOMATIC WALL SWITCH/OCCUPANCY SENSOR, 180 DEGREE COVERAGE OF 900 SF, INFRARED/PIR TECHNOLOGY, 120-VOLT, DIGITAL TIME DELAY ADJUSTMENT FROM 30 SECONDS TO 30 MINUTES, ADJUSTABLE SENSITIVITY FROME 20% TO 100%, COMPATIBLE WITH LED DRIVERS, LED INDICATOR LIGHT TO INDICATE OCCUPANCY, FIVE YEAR WARRANTY. ADJUST FOR VACANCY OPERATION WHERE REQUIRED BY CODE.	SENSORSWITCH WSXA PDT WATTSTOPPER
TC	7-DAY ASTRONOMIC DIGITAL TIME CLOCK, 120-VOLT, SINGLE POLE, SINGLE THROW, UL LISTED	TORK DG180A
PC	LIGHTING CONTROL PHOTOCELL , 120-VOLT, 20-AMPERE, SINGLE POLE, SINGLE THROW, UL LISTED. MOUNT 1'-0" BELOW BUILDING SOFFIT.	INTERMATIC EK4036S

MATERIAL SCHEDULE

SYMBOL:	DESCRIPTION:	MANUFACTURER:
COVER PLATES	ALL COVER PLATES FOR DEVICES SHALL BE THERMOPLASTIC CONSTRUCTION IN FINISHED AREAS, COLOR AS SELECTED BY ARCHITECT. COVER PLATES IN SHOP SPACES AND MECHANICAL SPACES SHALL BE GALVANIZED STEEL CONSTRUCTION.	HUBBELL LEVITON PASS & SEYMOUR COOPER
	DUPLEX RECEPTACLE, SPECIFICATION GRADE, 125-VOLT, 20-AMPERE, 3 WIRE GROUNDING, STRAIGHT BLADE, NEMA 5-20R.	HUBBELL 5300 SERIES LEVITON PASS & SEYMOUR COOPER
G	GROUND-FAULT INTERRUPTING DUPLEX RECEPTACLE, SPECIFICATION GRADE, 125-VOLT, 20-AMPERE, 3 WIRE GROUNDING, STRAIGHT BLADE, NEMA 5-20R. TEST AND RESET BUTTONS IN FACE.	HUBBELL 5300 SERIES LEVITON PASS & SEYMOUR COOPER
G/W	GROUND-FAULT INTERRUPTING WEATHERPROOF DUPLEX RECEPTACLE, SPECIFICATION GRADE, 125-VOLT, 20-AMPERE, 3 WIRE GROUNDING, STRAIGHT BLADE, NEMA 5-20R. TEST AND RESET BUTTONS IN FACE. FEDERAL SPECIFICATION AND U.L. LISTED, 2003 U.L. 943 COMPLIANT WITH WEATHERPROOF BOX AND GASKETED COVERPLATE, NEMA-4 RATED "WHILE-IN-USE" HINGED COVER.	HUBBELL 5300 SERIES WITH IN-USE COVER LEVITON PASS & SEYMOUR COOPER
	EQUIPMENT CONNECTION. E.C. SHALL FURNISH AND INSTALL FINAL CONNECTION TO EQUIPMENT FURNISHED BY OTHERS.	
L	LOCKABLE WEATHERPROOF SWITCH.	
EPO	EMERGENCY POWER OFF PUSH BUTTON FURNISHED BY CHANGING STATION EQUIPMENT SUPPLIER.	
(E)P	EXISTING PANELBOARD, 200-AMPERE, SINGLE PHASE, 3-WIRE, 120/240-VOLT, NEMA -3 SEE ONE-LINE DIAGRAM AND PANEL SCHEDULE FOR ADDITIONAL INFORMATION.	SQUARE D NQ SERIES
P1	PANELBOARD, 100-AMPERE, SINGLE PHASE, 3-WIRE, 120/240-VOLT, NEMA -1, COPPER BUSSING, NEUTRAL BAR, GROUND BAR. SEE ONE-LINE DIAGRAM AND PANEL SCHEDULE FOR ADDITIONAL INFORMATION.	SQUARE D NQ SERIES GE SIEMENS



3 CHANGING STATION FRONT VIEW DETAIL
N.T.S.



4 CHANGING STATION BACK VIEW DETAIL
N.T.S.

NOTE:

ALL CONDUIT LOCATED IN PUBLIC SPACES IS NOT PERMITTED TO BE EXPOSED AND SHALL BE COMPLETELY RECESSED IN BLOCK CONSTRUCTION. CONDUIT IN EQUIPMENT ROOM 104 MAY BE SURFACE MOUNTED.

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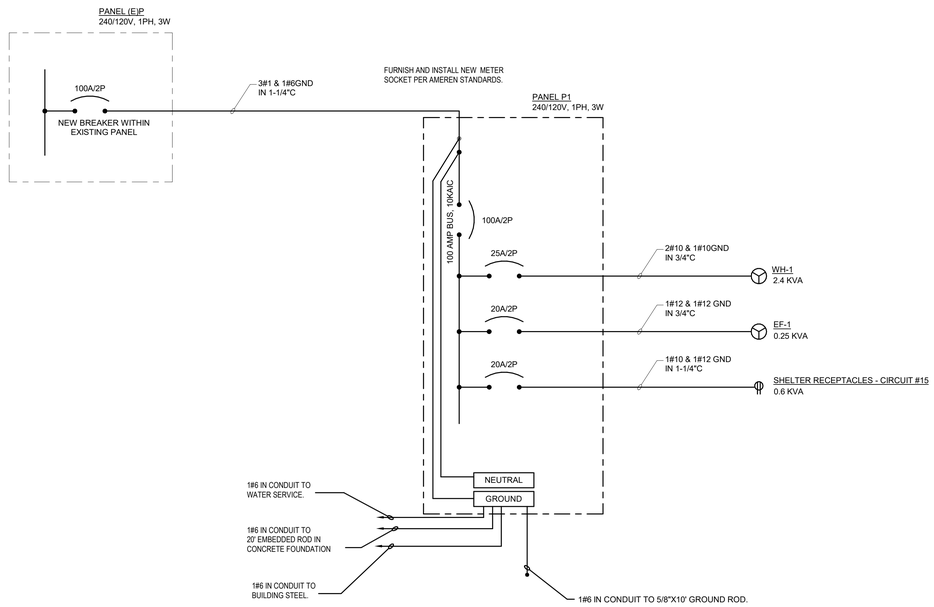
Peoria, IL 61603

ELECTRICAL FIRST FLOOR PLANS

DRAWN:	ATF
CHECKED:	BRK
APPROVED:	BRK
JOB NO:	24-1006

SHEET NO.
E-101



1 ONE-LINE DIAGRAM
N.T.S.

NOTE:
REFERENCE PANEL SCHEDULES FOR ADDITIONAL INFORMATION.

Branch Panel: P1

Location: EQUIPMENT ROOM 104
Supply From:
Mounting: SURFACE
Enclosure: NEMA 1

Volts: 120/240
Phases: 1
Wires: 3

A.I.C. Rating: 10,000
Mains Type: MCB
Mains Rating: 100.0 A
MCB Rating: 100.0 A

Notes:

CKT	Circuit Description	Trip	Poles	A	B	Poles	Trip	Circuit Description	CKT
1	LIGHTING EQUIPMENT ROOM 104	20.0 A	1	84 VA					2
3	LIGHTING INTERIOR ROOMS 101, 102, 103, 100	20.0 A	1		83 VA				4
5	RCPT EQUIPMENT ROOM 104	20.0 A	1	540 VA					6
7	EXTERIOR LIGHTING	20.0 A	1		253 VA				8
9	EF-1, EQUIPMENT ROOM 104	20.0 A	1	240 VA					10
11	WH-1, EQUIPMENT ROOM 104	25.0 A	2		2400 VA				12
13				2400 VA					14
15	SHELTER RECEPTACLES	20.0 A	1		540 VA				16
17	HAND DRYER, UNISEX TOILET 101	20.0 A	1	936 VA					18
19	HAND DRYER, UNISEX TOILET 102	20.0 A	1		936 VA				20
21	HAND DRYER, UNISEX TOILET 103	20.0 A	1	936 VA					22
23	HAND DRYER, HANDICAP ACCESSIBLE UNISE...	20.0 A	1		936 VA				24
25	CHANGING STATION, HANDICAP ACCESSIBLE...	20.0 A	1	600 VA					26
27									28
29									30
31									32
33									34
35									36
37									38
39									40
41									42
		Total Load:		5736 VA	5149 VA				
		Total Amps:		47.8 A	42.9 A				

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting - Exterior	253 VA	100.00%	253 VA		
Motor	9384 VA	112.79%	10584 VA	**Total Conn. Load:**	10885 VA
Lighting - Interior	168 VA	125.00%	210 VA	**Total Est. Demand:**	12127 VA
RCPT	1080 VA	100.00%	1080 VA	**Total Conn.:**	45.4 A
				Total Est. Demand:	50.5 A

Notes:

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ELECTRICAL ONE-LINE, SCHEDULES, AND DETAILS

DRAWN:	ATF
CHECKED:	BRK
APPROVED:	BRK
JOB NO:	24-1006

SHEET NO.
E-200

ELECTRICAL SPECIFICATIONS

SECTION 260500 - COMMON WORK RESULTS FOR ELECTRICAL

PART 1 - GENERAL
1.1 SUMMARY
A. Section Includes:
1. Electrical equipment coordination and installation.
2. Sleeves for raceways and cables.
3. Common electrical installation requirements.
1.2 COORDINATION
A. Coordinate arrangement, mounting, and support of electrical equipment:
1. To allow maximum possible headroom unless specific mounting heights that reduce headroom are indicated.
2. To provide for ease of disconnecting the equipment with minimum interference to other installations.
3. To allow right of way for piping and conduit installed at required slope
4. So connecting raceways, cables, wireways, cable trays, and busways will be clear of obstructions and of the working and access space of other equipment.
B. Coordinate installation of required supporting devices, and other structural components as they are constructed.

PART 2 - PRODUCTS
2.1 SLEEVES FOR RACEWAYS AND CABLES
A. Steel Pipe Sleeves: ASTM A 53/A 53M, Type E, Grade B, Schedule 40, galvanized steel, plain ends.
2.2 GROUT
A. Nonmetallic, Shrinkage-Resistant Grout: ASTM C 1107, factory-packaged, nonmetallic aggregate grout, noncorrosive, nonstaining, mixed with water to consistency suitable for application and a 30-minute working time.

PART 3 - EXECUTION
3.1 COMMON REQUIREMENTS FOR ELECTRICAL INSTALLATION
A. Comply with NECA 1.
B. Measure indicated mounting heights to bottom of unit for suspended items and to center of unit for wall-mounting items.
C. Headroom Maintenance: If mounting heights or other location criteria are not indicated, arrange and install components and equipment to provide maximum possible headroom consistent with these requirements.
D. Equipment: Install to facilitate service, maintenance, and repair or replacement of components of both electrical equipment and other nearby installations. Connect in such a way as to facilitate future disconnecting with minimum interference with other items in the vicinity.
E. Right of Way: Give to piping systems installed at a required slope.
3.2 SLEEVE INSTALLATION FOR ELECTRICAL PENETRATIONS
A. Electrical penetrations occur when raceways or cables, penetrate concrete slabs, concrete or masonry walls, or fire-rated floor and wall assemblies.
B. Use pipe sleeves unless penetration arrangement requires rectangular sleeved opening.
C. Fire-Rated Assemblies: Install sleeves for penetrations of fire-rated floor and wall assemblies unless openings compatible with firestop system used are fabricated during construction of floor or wall.
D. Cut sleeves to length for mounting flush with both surfaces of walls, above finished floor level.
E. Extend sleeves installed in floors 2 inches.
F. Size pipe sleeves to provide 1/4-inch annular clear space between sleeve and raceway or cable, unless indicated otherwise.
G. Interior Penetrations of Non-Fire-Rated Walls and Floors: Seal annular space between sleeve and raceway or cable, using joint sealant appropriate for size, depth, and location of joint.
H. Fire-Rated-Assembly Penetrations: Maintain indicated fire rating of walls, partitions, ceilings, and floors at raceway and cable penetrations. Install sleeves and seal raceway and cable penetration sleeves with firestop materials.
3.3 FIRESTOPPING
A. Apply firestopping to penetrations of fire-rated floor and wall assemblies for electrical installations to restore original fire-resistance rating of assembly.

END OF SECTION 260500

SECTION 260519 - CONDUCTORS AND CABLES

PART 1 - GENERAL
1.1 SUMMARY
A. This Section includes the following:
1. Building wires and cables rated 600 V and less.
2. Connectors, splices, and terminations rated 600 V and less.
3. Sleeves for cables.
1.2 QUALITY ASSURANCE
A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
B. Comply with NFPA 70.

PART 2 - PRODUCTS
2.1 CONDUCTORS AND CABLES
A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
1. Alcan Products Corporation; Alcan Cable Division.
2. American Insulated Wire Corp.; a Leviton Company.
3. General Cable Corporation.
4. Senator Wire & Cable Company.
5. Southwire Company.
B. Copper Conductors: Comply with NEMA WC 70.
C. Conductor Insulation: Comply with NEMA WC 70 for Types THHN-THWN.
D. Multiconductor Cable: Comply with NEMA WC 70 for metal-clad cable, Type MC with ground wire.
2.2 CONNECTORS AND SPLICES
A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
1. AFC Cable Systems, Inc.
2. Hubbell Power Systems, Inc.
3. O-Z/Gedney; EGS Electrical Group LLC.
4. 3M; Electrical Products Division.
5. Tyco Electronics Corp.
B. Description: Factory-fabricated connectors and splices of size, ampacity rating, material, type, and class for application and service indicated.
2.3 SLEEVES FOR CABLES
A. Steel Pipe Sleeves: ASTM A 53/A 53M, Type E, Grade B, Schedule 40, galvanized steel, plain ends.

PART 3 - EXECUTION
3.1 CONDUCTOR MATERIAL APPLICATIONS
A. Feeders: Copper. Stranded for all conductor sizes.
B. Branch Circuits: Copper. Stranded for all conductor sizes.
3.2 CONDUCTOR INSULATION AND MULTICONDUCTOR CABLE APPLICATIONS AND WIRING METHODS
A. Feeders Concealed in Ceilings, Walls, Partitions, and Crawlspaces: Type THHN-THWN, single conductors in raceway.
B. Branch Circuits Concealed in Ceilings, Walls, and Partitions: Type THHN-THWN, single conductors in raceway for home runs. Metal-clad cable, Type MC for drops from home run junction boxes to devices in local area.
3.3 INSTALLATION OF CONDUCTORS AND CABLES
A. Conceal cables in finished walls, ceilings, and floors, unless otherwise indicated. B. Use manufacturer-approved pulling compound or lubricant where necessary; compound used must not deteriorate conductor or insulation. Do not exceed manufacturer's recommended maximum pulling tensions and sidewall pressure values.
C. Use pulling means, including fish tape, cable, rope, and basket-weave wire/cable grips, that will not damage cables or raceway.
D. Install exposed cables parallel and perpendicular to surfaces of exposed structural members, and follow surface contours where possible.
3.4 CONNECTIONS
A. Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A and UL 486B.
B. Make splices and taps that are compatible with conductor material and that possess equivalent or better mechanical strength and insulation ratings than unspliced conductors.
C. Wiring at Outlets: Install conductor at each outlet, with at least 6 inches of slack.
3.5 FIRESTOPPING
A. Apply firestopping to electrical penetrations of fire-rated floor and wall assemblies to restore original fire-resistance rating of assembly.

END OF SECTION 260519

SECTION 260526 - GROUNDING AND BONDING

PART 1 - GENERAL
1.1 SUMMARY
A. This Section includes methods and materials for grounding systems and equipment.
1.2 QUALITY ASSURANCE
A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

PART 2 - PRODUCTS
2.1 CONDUCTORS
A. Insulated Conductors: Copper wire insulated for 600 V unless otherwise required by applicable Code or authorities having jurisdiction.
B. Bare Copper Conductors: Stranded Conductors: ASTM B 8.
2.2 CONNECTORS
A. Listed and labeled by a nationally recognized testing laboratory acceptable to authorities having jurisdiction for applications in which used, and for specific types, sizes, and combinations of conductors and other items connected.

PART 3 - EXECUTION
3.1 EQUIPMENT GROUNDING
A. Install insulated equipment grounding conductors with all feeders and branch circuits.
B. Install insulated equipment grounding conductors with the following items, in addition to those required by NFPA 70:
1. Feeders and branch circuits.
2. Receptacle circuits.
3. Three-phase motor and appliance branch circuits.
4. Flexible raceway runs.
3.4 FIELD QUALITY CONTROL
A. Perform the following tests and inspections and prepare test reports:
1. After installing grounding system but before permanent electrical circuits have been energized, test for compliance with requirements.
B. Report measured ground resistances that exceed the following values:
1. Power and Lighting Equipment or System with Capacity 500 kVA and Less: 5 ohms.
C. Excessive Ground Resistance: If resistance to ground exceeds specified values, notify Architect promptly and include recommendations to reduce ground resistance.

END OF SECTION 260526

SECTION 260529 - HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL
1.1 SUMMARY
A. This Section includes the following:
1. Hangers and supports for electrical equipment and systems.
1.2 QUALITY ASSURANCE
A. Welding: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code - Steel."
B. Comply with NFPA 70.

PART 2 - PRODUCTS
2.1 SUPPORT, ANCHORAGE, AND ATTACHMENT COMPONENTS
A. Steel Slotted Support Systems: Comply with MFMA-4, factory-fabricated components for field assembly.
1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
a. Allied Tube & Conduit.
b. Cooper B-Line, Inc.; a division of Cooper Industries.
c. ERICO International Corporation.
d. GS Metals Corp.
e. Thomas & Betts Corporation.
f. Unistrut; Tyco International, Ltd.
g. Wesanco, Inc.
2. Metallic Coatings: Hot-dip galvanized after fabrication and applied according to MFMA-4.
3. Channel Dimensions: Selected for applicable load criteria.
B. Raceway and Cable Supports: As described in NECA 1 and NECA 101.
C. Conduit and Cable Support Devices: Steel and malleable-iron hangers, clamps, and associated fittings, designed for types and sizes of raceway or cable to be supported.
D. Mounting, Anchoring, and Attachment Components: Items for fastening electrical items or their supports to building surfaces include the following:
1. Mechanical-Expansion Anchors: Insert-wedge-type, zinc-coated steel, for use in hardened portland cement concrete with tension, shear, and pullout capacities appropriate for supported loads and building materials in which used.
a. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
1) Cooper B-Line, Inc.; a division of Cooper Industries.
2) Empire Tool and Manufacturing Co., Inc.
3) Hilti Inc.
4) ITW Ramset/Red Head; a division of Illinois Tool Works, Inc.
5) MKT Fastening, LLC.
2. Concrete Inserts: Steel or malleable-iron, slotted support system units similar to MSS Type 18; complying with MFMA-4 or MSS SP-58.
3. Clamps for Attachment to Steel Structural Elements: MSS SP-58, type suitable for attached structural element.
4. Through Bolts: Structural type, hex head, and high strength. Comply with ASTM A 325.
5. Toggle Bolts: All-steel springhead type.
6. Hanger Rods: Threaded steel.

PART 3 - EXECUTION
3.1 APPLICATION
A. Comply with NECA 1 and NECA 101 for application of hangers and supports for electrical equipment and systems except if requirements in this Section are stricter.
B. Maximum Support Spacing and Minimum Hanger Rod Size for Raceway: Space supports for EMT as required by NFPA 70. Minimum rod size shall be 1/4 inch in diameter.
C. Multiple Raceways or Cables: Install trapeze-type supports fabricated with steel slotted or other support system, sized so capacity can be increased by at least 25 percent in future without exceeding specified design load limits.
1. Secure raceways and cables to these supports with two-bolt conduit clamps, single-bolt conduit clamps, or single-bolt conduit clamps using spring friction action for retention in support channel.
D. Spring-steel clamps designed for supporting single conduits without bolts may be used for 1-1/2-inch and smaller raceways serving branch circuits and communication systems above suspended ceilings and for fastening raceways to trapeze supports.
3.2 SUPPORT INSTALLATION
A. Comply with NECA 1 and NECA 101 for installation requirements except as specified in this Article.
B. Raceway Support Methods: In addition to methods described in NECA 1, EMT may be supported by openings through structure members, as permitted in NFPA 70.
C. Strength of Support Assemblies: Where not indicated, select sizes of components so strength will be adequate to carry present and future static loads within specified loading limits. Minimum static design load used for strength determination shall be weight of supported components plus 200 lb. D. Mounting and Anchorage of Surface-Mounted Equipment and Components: Anchor and fasten electrical items and their supports to building structural elements by the following methods unless otherwise indicated by code:
1. To Wood: Fasten with lag screws or through bolts.
2. To New Concrete: Bolt to concrete inserts.
3. To Masonry: Approved toggle-type bolts on hollow masonry units and expansion anchor fasteners on solid masonry units.
4. To Existing Concrete: Expansion anchor fasteners
5. To Light Steel: Sheet metal screws.
6. Items Mounted on Hollow Walls and Nonstructural Building Surfaces: Mount cabinets, panelboards, disconnect switches, control enclosures, pull and junction boxes, transformers, and other devices on slotted-channel racks attached to substrate.
E. Drill holes for expansion anchors in concrete at locations and to depths that avoid reinforcing bars.
3.3 PAINTING
A. Touchup: Clean field welds and abraded areas of shop paint. Paint exposed areas immediately after erecting hangers and supports. Use same materials as used for shop painting. Comply with SSPC-PA 1 requirements for touching up field-painted surfaces.
1. Apply paint by brush or spray to provide minimum dry film thickness of 2.0 mils.
B. Galvanized Surfaces: Clean welds, bolted connections, and abraded areas and apply galvanizing-repair paint to comply with ASTM A 780.

END OF SECTION 260529

SECTION 260533 - RACEWAYS AND BOXES

PART 1 - GENERAL
1.1 SUMMARY
A. This Section includes raceways, fittings, boxes, enclosures, and cabinets for electrical wiring.
1.2 QUALITY ASSURANCE
A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
B. Comply with NFPA 70.

PART 2 - PRODUCTS
2.1 METAL CONDUIT AND TUBING
A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
1. AFC Cable Systems, Inc.
2. Alflex Inc.
3. Allied Tube & Conduit; a Tyco International Ltd. Co
4. Anamet Electrical, Inc.; Anaconda Metal Hose.
5. Electri-Flex Co.
6. Manhattan/CDT/Cole-Flex.
7. Maverick Tube Corporation.
8. O-Z Gedney; a unit of General Signal.
9. Wheatland Tube Company.
B. EMT: ANSI C80.3.
C. Fittings for Conduit (including all Types and Flexible and Liquidtight), EMT, and Cable: NEMA FB 1; listed for type and size raceway with which used, and for application and environment in which installed.
1. Conduit Fittings for Hazardous (Classified) Locations: Comply with UL 886.
2. Fittings for EMT: Steel, set-screw or compression type.

PART 3 - EXECUTION
3.1 RACEWAY APPLICATION
A. Outdoors: Apply raceway products as specified below, unless otherwise indicated:
1. Conduit Exposed to weather or potentially damaging contact: RMC/IMC.
B. Comply with the following indoor applications, unless otherwise indicated:
1. Concealed in Ceilings and Interior Walls and Partitions: EMT.
C. Minimum Raceway Size: 3/4-inch trade size.
D. Raceway Fittings: Compatible with raceways and suitable for use and location.
3.2 INSTALLATION
A. Comply with NECA 1 for installation requirements applicable to products specified in Part 2 except where requirements on Drawings or in this Article are stricter.
B. Keep raceways at least 6 inches away from parallel runs of flues and steam or hot-water pipes. Install horizontal raceway runs above water and steam piping.
C. Complete raceway installation before starting conductor installation.
D. Arrange stub-ups so curved portions of bends are not visible above the finished slab.
E. Install no more than the equivalent of three 90-degree bends in any conduit run except for communications conduits, for which fewer bends are allowed.
F. Conceal conduit and EMT within finished walls, ceilings, and floors, unless otherwise indicated.
G. Raceway Terminations at Locations Subject to Moisture or Vibration: Use insulating bushings to protect conductors, including conductors smaller than No. 4 AWG.
H. Install pull wires in empty raceways. Use polypropylene or monofilament plastic line with not less than 200-lb tensile strength. Leave at least 12 inches of slack at each end of pull wire.
I. Install raceway sealing fittings at suitable, approved, and accessible locations and fill them with listed sealing compound. For concealed raceways, install each fitting in a flush steel box with a blank cover plate having a finish similar to that of adjacent plates or surfaces. Install raceway sealing fittings at the following points:
1. Where conduits pass from warm to cold locations.
2. Where otherwise required by NFPA 70.

END OF SECTION 260533

SECTION 260553 - ELECTRICAL IDENTIFICATION

PART 1 - GENERAL
1.1 SUMMARY
A. Section Includes:
1. Identification for raceways.
2. Identification of power and control cables.
3. Identification for conductors.
4. Equipment identification labels.
5. Miscellaneous identification products.
1.2 QUALITY ASSURANCE
A. Comply with ANSI A13.1 and IEEE C2.
B. Comply with NFPA 70.
C. Comply with 29 CFR 1910.144 and 29 CFR 1910.145.
D. Comply with ANSI Z535.4 for safety signs and labels.
E. Adhesive-attached labeling materials, including label stocks, laminating adhesives, and inks used by label printers, shall comply with UL 969.
1.3 COORDINATION
A. Coordinate identification names, abbreviations, colors, and other features with requirements in other Sections requiring identification applications, Drawings, Shop Drawings, manufacturer's wiring diagrams, and the Operation and Maintenance Manual; and with those required by codes, standards, and 29 CFR 1910.145. Use consistent designations throughout Project.
B. Coordinate installation of identifying devices with completion of covering and painting of surfaces where devices are to be applied.
C. Install identifying devices before installing acoustical ceilings and similar concealment.

PART 2 - PRODUCTS
2.1 POWER AND CONTROL CABLE IDENTIFICATION MATERIALS
A. Comply with ANSI A13.1 for minimum size of letters for legend and for minimum length of color field for each raceway and cable size.
B. Self-Adhesive Vinyl Labels: Preprinted, flexible label laminated with a clear, weather- and chemical-resistant coating and matching wraparound adhesive tape for securing ends of legend label.
C. Write-On Tags: Polyester tag, 0.010 inch thick, with corrosion-resistant grommet and cable tie for attachment to conductor or cable.
1. Marker for Tags: Permanent, waterproof, black ink marker recommended by tag manufacturer.
2. Marker for Tags: Machine-printed, permanent, waterproof, black ink marker recommended by printer manufacturer.
2.2 CONDUCTOR IDENTIFICATION MATERIALS
A. Color-Coding Conductor Tape: Colored, self-adhesive vinyl tape not less than 3 mils thick by 1 to 2 inches wide.
B. Self-Adhesive Vinyl Labels: Preprinted, flexible label laminated with a clear, weather- and chemical-resistant coating and matching wraparound adhesive tape for securing ends of legend label.
C. Marker Tapes: Vinyl or vinyl-cloth, self-adhesive wraparound type, with circuit identification legend machine printed by thermal transfer or equivalent process.
D. Write-On Tags: Polyester tag, 0.010 inch thick, with corrosion-resistant grommet and cable tie for attachment to conductor or cable.
1. Marker for Tags: Permanent, waterproof, black ink marker recommended by tag manufacturer.
2. Marker for Tags: Machine-printed, permanent, waterproof, black ink marker recommended by printer manufacturer.
2.3 EQUIPMENT IDENTIFICATION LABELS
A. Self-Adhesive, Engraved, Laminated Acrylic or Melamine Label: Adhesive backed, with white letters on a dark-gray background. Minimum letter height shall be 3/8 inch.

PART 3 - EXECUTION
3.1 INSTALLATION
A. Verify identity of each item before installing identification products.
B. Location: Install identification materials and devices at locations for most convenient viewing without interference with operation and maintenance of equipment.
C. Apply identification devices to surfaces that require finish after completing finish work.
D. Self-Adhesive Identification Products: Clean surfaces before application, using materials and methods recommended by manufacturer of identification device.
E. Attach signs and plastic labels that are not self-adhesive type with mechanical fasteners appropriate to the location and substrate.
3.2 IDENTIFICATION SCHEDULE
A. Power-Circuit Conductor Identification, 600 V or Less: For conductors in vaults, pull and junction boxes, manholes, and handholes, use color-coding conductor tape to identify the phase.
1. Color-Coding for Phase Identification, 600 V or Less: Use colors listed below for ungrounded service, feeder, and branch-circuit conductors.
a. Color shall be factory applied or field applied for sizes larger than No. 8 AWG, if authorities having jurisdiction permit.
b. Field-Applied, Color-Coding Conductor Tape: Apply in half-lapped turns for a minimum distance of 6 inches from terminal points and in boxes where splices or taps are made. Apply last two turns of tape with no tension to prevent possible unwinding. Locate bands to avoid obscuring factory cable markings.
B. Equipment Identification Labels: On each unit of equipment, install unique designation label that is consistent with wiring diagrams, schedules, and the Operation and Maintenance Manual. Apply labels to disconnect switches and protection equipment, central or master units, control panels, control stations, terminal cabinets, and racks of each system. Systems include power, lighting, control, communication, signal, monitoring, and alarm systems unless equipment is provided with its own identification.
1. Labeling Instructions:
a. Indoor Equipment: Self-adhesive, engraved, laminated acrylic or melamine label. Unless otherwise indicated, provide a single line of text with 1/2-inch- high letters on 1-1/2-inch- high label; where two lines of text are required, use labels 2 inches high.
b. Outdoor Equipment: Engraved, laminated acrylic or melamine label.
c. Elevated Components: Increase sizes of labels and letters to those appropriate for viewing from the floor.
d. Unless provided with self-adhesive means of attachment, fasten labels with appropriate mechanical fasteners that do not change the NEMA or NRTL rating of the enclosure.
2. Equipment to Be Labeled:
a. Panelboards: Typewritten directory of circuits in the location provided by panelboard manufacturer. Panelboard identification shall be self-adhesive, engraved, laminated acrylic or melamine label.
b. Enclosed switches.
c. Enclosed circuit breakers.

END OF SECTION 260553

SECTION 262726 - WIRING DEVICES

PART 1 - GENERAL
1.1 SUMMARY
A. This Section includes the following:
1. Receptacles, receptacles with integral GFCI, and associated device plates.
1.2 SUBMITTALS
A. Product Data: For each type of product indicated.
B. Shop Drawings: List of legends and description of materials and process used for premarking wall plates.
C. Operation and Maintenance Data: For wiring devices to include in all manufacturers' packing label warnings and instruction manuals that include labeling conditions.
1.3 QUALITY ASSURANCE
A. Source Limitations: Obtain each type of wiring device and associated wall plate through one source from a single manufacturer. Insofar as they are available, obtain all wiring devices and associated wall plates from a single manufacturer and one source.
B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
C. Comply with NFPA 70.
1.4 COORDINATION
A. Receptacles for Owner-Furnished Equipment: Match plug configurations.

PART 2 - PRODUCTS
2.1 STRAIGHT BLADE RECEPTACLES
A. Convenience Receptacles, 125 V, 20 A: Comply with NEMA WD 1, NEMA WD 6 configuration 5-20R, and UL 498.
2.3 WALL PLATES
A. Wet-Location, Weatherproof Cover Plates: NEMA 250, complying with type 3R weather-resistant, die-cast aluminum or thermoplastic with lockable cover.
B. Unfinished area cover plates: Stamped galvanized steel.
2.4 FINISHES
A. Color: Selected by Architect during interior finish selections.

PART 3 - EXECUTION
3.1 INSTALLATION
A. Comply with NECA 1, including the mounting heights listed in that standard, unless otherwise noted.
B. Coordination with Other Trades:
1. Take steps to insure that devices and their boxes are protected. Do not place wall finish materials over device boxes and do not cut holes for boxes with routers that are guided by riding against outside of the boxes.
2. Keep outlet boxes free of plaster, drywall joint compound, mortar, cement, concrete, dust, paint, and other material that may contaminate the raceway system, conductors, and cables.
3. Install device boxes in brick or block walls so that the cover plate does not cross a joint unless the joint is troweled flush with the face of the wall.
4. Install wiring devices after all wall preparation, including painting, is complete.
C. Conductors:
1. Do not strip insulation from conductors until just before they are spliced or terminated on devices.
2. Strip insulation evenly around the conductor using tools designed for the purpose. Avoid scoring or nicking of solid wire or cutting strands from stranded wire.
3. The length of free conductors at outlets for devices shall meet provisions of NFPA 70, Article 300, without pigtails.
4. Existing Conductors:
a. Cut back and pigtail, or replace all damaged conductors.
b. Straighten conductors that remain and remove corrosion and foreign matter.
c. Pigtailing existing conductors is permitted provided the outlet box is large enough.
D. Device Installation:
1. Replace all devices that have been in temporary use during construction or that show signs that they were installed before building finishing operations were complete.
2. Keep each wiring device in its package or otherwise protected until it is time to connect conductors.
3. Do not remove surface protection, such as plastic film and smudge covers, until the last possible moment.
4. Connect devices to branch circuits using pigtails that are not less than 6 inches in length.
5. When there is a choice, use side wiring with binding-head screw terminals. Wrap solid conductor tightly clockwise, 2/3 to 3/4 of the way around terminal screw.
6. Use a torque screwdriver when a torque is recommended or required by the manufacturer.
7. When conductors larger than No. 12 AWG are installed on 15- or 20-A circuits, splice No. 12 AWG pigtails for device connections.
8. Tighten unused terminal screws on the device.
9. When mounting into metal boxes, remove the fiber or plastic washers used to hold device mounting screws in yokes, allowing metal-to-metal contact.

E. Receptacle Orientation:
1. Install ground pin of vertically mounted receptacles up, and on horizontally mounted receptacles to the right.
F. Device Plates: Do not use oversized or extra-deep plates. Repair wall finishes and remount outlet boxes when standard device plates do not fit flush or do not cover rough wall opening.
G. Arrangement of Devices: Unless otherwise indicated, mount flush, with long dimension vertical and with grounding terminal of receptacles on top. Group adjacent switches under single, multigang wall plates.
3.2 IDENTIFICATION
A. Comply with "Electrical Identification."
1. Receptacles: Identify panelboard and circuit number from which served. Use hot, stamped or engraved machine printing with black-filled lettering on face of plate, and durable wire markers or tags inside outlet boxes.

END OF SECTION 262726

MULLER2
700 N Sangamon
Chicago, IL 60642
t 312.432.4180
f 312.432.4184

KEITH Engineering Design
www.keithmep.com
707 NE Jefferson Ave
Peoria, IL 61603
309 / 838-4005 - office
309 / 214-0053 - fax

PEORIA PARK DISTRICT
GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
ISSUE FOR BID

LICENSED PROFESSIONAL ENGINEER
BRIAN R. KEITH
062-050306
EXPIRES: 30NOV25
STATE OF ILLINOIS

No.	Description	Date
1	ISSUED FOR 60% DESIGN	2024-05-23
2	ISSUED FOR 90% DESIGN	2024-07-11
3	ISSUED FOR BID	2024-08-22

GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
2218 N Prospect Rd
Peoria, IL 61603

ELECTRICAL SPECIFICATIONS

DRAWN:	ATF
CHECKED:	BRK
APPROVED:	BRK
JOB NO:	24-1006

SHEET NO.
E-300

8/20/2024 3:58:51 PM

poligon®

A Division of PORTERCORP 4240 N. 136th AVE HOLLAND, MI 49424 (616) 888-3500

PROJECT NAME: GLEN OAK PARK

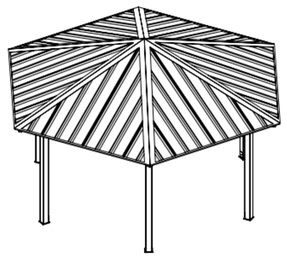
PROJECT LOCATION: PEORIA, IL

BUILDING TYPE: HXE 20

ROOF TYPE: MULTI-RIB

BUILDING NUMBER: P19724

ORDER NUMBER: 79889



DRAWING LIST:

SHEET NUMBER	DRAWING DESCRIPTION
CS	COVER SHEET
1	ARCHITECTURAL ELEVATIONS
2-2.1	ANCHOR AND FOOTING LAYOUT / DETAILS
3	STRUCTURAL FRAMING PLAN
4-4.1	FRAME CONNECTION DETAILS
5	ELECTRICAL VIEWS
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 STRUCTURAL STEEL PLATE	A1003 (GRADE 50)
ROOF PANELS (STEEL)	A36
ANCHOR BOLTS	A653
	SEE SHEET 2.1

GENERAL NOTES:

1. 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.
2. 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.
3. 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.
4. 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.
5. ALL WELDING IS PERFORMED BY AMERICAN WELDING SOCIETY (AWS) CERTIFIED WELDERS AND CONFORMS TO AWS D1.1 OR D1.3 AS REQUIRED.
6. 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.
7. 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.
8. 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.
9. 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.
10. 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. 23-0915.11
PCI (POWDER COATING INSTITUTE) 4000 CERTIFIED

FABRICATOR APPROVALS:
CITY OF PHOENIX, AZ APPROVED FABRICATOR #CQB-2010
CITY OF LOS ANGELES, CA APPROVED FABRICATOR #FBO1596
CITY OF RIVERSIDE, CA APPROVED FABRICATOR #SF_000042
CITY OF HOUSTON, TX APPROVED FABRICATOR #4470
CLARK COUNTY, NV APPROVED FABRICATOR #264
STATE OF UTAH APPROVED FABRICATOR 022008-14
AISC APPROVED FABRICATOR C-00024530
AWS CERTIFIED WELDING FABRICATOR #2210031

DESIGN CRITERIA:

GENERAL:
2018 INTERNATIONAL 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): 20 PSF
FLAT ROOF SNOW LOAD (Pf): 17 PSF
SNOW EXPOSURE FACTOR (Ce): 1.0
SNOW LOAD IMPORTANCE FACTOR (Is): 1.0
THERMAL FACTOR (Ct): 1.0
RAIN ON SNOW SURCHARGE (Cs): 1.0
DRIFT SURCHARGE LOAD (Pd): 0 PSF
WIDTH OF SNOW DRIFT (w): 0 FT
MINIMUM HORIZONTAL SEPARATION DISTANCE (s): 20 FT

WIND DESIGN DATA:
BASIC WIND SPEED (V): 115 MPH
ALLOWABLE STRESS DESIGN WIND SPEED (Vasd): 89 MPH
GUST EFFECT FACTOR (G): 0.85
INTERNAL PRESSURE COEFFICIENT (GCpi): 0
WIND EXPOSURE: C

SEISMIC DESIGN DATA:
STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE
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): 0.11
RESPONSE MODIFICATION COEFFICIENT (R): 3.00
EQUIVALENT LATERAL FORCE PROCEDURE
SEE CALCULATIONS FOR ADDITIONAL DATA

ADDITIONAL CRITERIA:
NONE

JOSHUA T HOST
081.008001
STATE OF ILLINOIS
DATE: 07/18/2024
EXPIRES: 11/30/2024

IF THESE DRAWINGS ARE SEALED, THE SEAL APPLIES ONLY TO BUILDING COMPONENTS DETAILED WITHIN THESE DRAWINGS AND SUPPLIED BY PORTER CORP AS WELL AS THE FOUNDATION DESIGN, IF APPLICABLE.

poligon® WWW.POLIGON.COM FIELD SUPPORT: (616) 888-3506 by PORTER CORP

DRAFT DATE: 7/9/2024 | SCALE: 1:48 | DRAWN BY: jmarinnicodemopd | CHECK DATE: 11/13/2018 | ORDER NO.: 79889 | CAD MODEL: ...\P19724

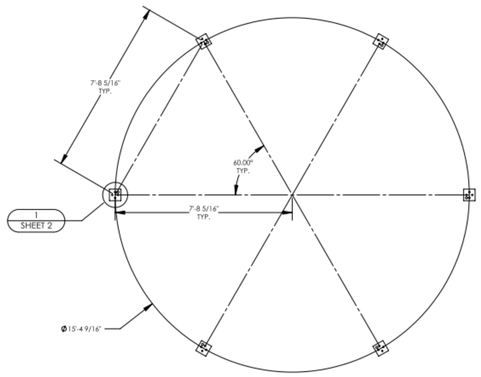
GLEN OAK PARK PEORIA, IL

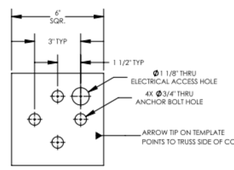
PROJECT | PROJECT NUMBER | DRAWING: COVER SHEET

SHEET: CS

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: 1/2"

JOSHUA T HOST
081.008001
STATE OF ILLINOIS
DATE: 07/18/2024
EXPIRES: 11/30/2024

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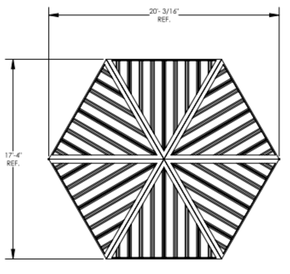
poligon® WWW.POLIGON.COM FIELD SUPPORT: (616) 888-3506 by PORTER CORP

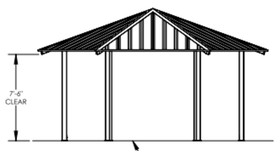
DRAFT DATE: 7/9/2024 | SCALE: 1:32 | DRAWN BY: jmarinnicodemopd | CHECK DATE: 11/13/2018 | ORDER NO.: 79889 | CAD MODEL: ...\P19724

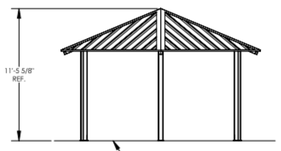
GLEN OAK PARK PEORIA, IL

PROJECT | PROJECT NUMBER | DRAWING: ANCHOR AND FOOTING LAYOUT

SHEET: 2







JOSHUA T HOST
081.008001
STATE OF ILLINOIS
DATE: 07/18/2024
EXPIRES: 11/30/2024

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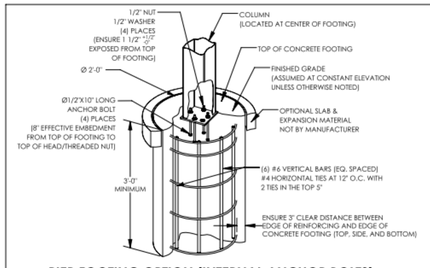
DRAFT DATE: 7/9/2024 | SCALE: 1:64 | DRAWN BY: jmarinnicodemopd | CHECK DATE: 11/13/2018 | ORDER NO.: 79889 | CAD MODEL: ...\P19724

GLEN OAK PARK PEORIA, IL

PROJECT | PROJECT NUMBER | DRAWING: ARCHITECTURAL ELEVATIONS

SHEET: 1



PIER FOOTING OPTION (INTERNAL ANCHOR BOLTS)

FOOTING DESIGN BY MANUFACTURER. FOOTING MATERIALS BY OTHERS.
(TYPICAL WITH EACH COLUMN. QTY OF REINFORCING AND ANCHOR BOLTS SPECIFIED IN NOTES REFLECT SITE SPECIFIC REQUIREMENTS)

ANCHOR BOLT NOTES - INTERNAL (ANCHOR BOLTS LOCATED WITHIN COLUMN):

1. ANCHOR BOLTS SHALL BE ASTM A307 (GRADE A) MATERIAL 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. BE SURE TO KEEP THE ANCHOR BOLT TEMPLATE PROPERLY ORIENTED WHEN ELECTRICAL ACCESS TO THE COLUMN IS REQUIRED. TEMPLATE MUST BE REMOVED BEFORE INSTALLING COLUMNS.
8. THE CALCULATIONS FOR THIS STRUCTURE ASSUME A PINNED COLUMN BASE.
9. THE FOLLOWING ADHESIVE ANCHORS MAY BE SUBSTITUTED FOR THE CAST-IN-PLACE ANCHOR BOLTS:
   - HILTI HIT-HY 200 (A OR R) V3 ADHESIVE WITH Ø 1/2" HAS-E ROD WITH 6" EFFECTIVE EMBEDMENT.
   CONTRACTOR SHALL FOLLOW ALL INSTALLATION SPECIFICATIONS AND REQUIREMENTS OF ANCHOR MANUFACTURER.

CONCRETE NOTES:

1. ALL CONCRETE CONSTRUCTION SHALL CONFORM TO THE CURRENT "ACI MANUAL OF CONCRETE PRACTICE".
2. PORTLAND CEMENT SHALL CONFORM TO ASTM C-150 TYPE II OR TYPE V.
3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE CONCRETE MIX DESIGN MEETS THE "ACI MANUAL OF CONCRETE PRACTICE" REQUIREMENTS FOR CONCRETE BY EXPOSURE CLASS.
4. THE USE OF CHLORIDE ACCELERATORS IS NOT PERMITTED.
5. COARSE AGGREGATE SHALL BE #57 OR LARGER.
6. CONCRETE AT PLACEMENT SHALL HAVE A SLUMP OF 4" +/- 1".
7. MINIMUM CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS: 4500 PSI.
8. REINFORCING STEEL SHALL BE DEFORMED STEEL CONFORMING TO THE REQUIREMENTS OF ASTM A615 (DEFORMATIONS SHALL BE IN ACCORDANCE WITH ASTM A305) AS FOLLOWS:
   GRADE 60: #4 BARS AND LARGER
   GRADE 40: #3 BARS
   PRIOR TO PLACING OF CONCRETE, REINFORCING STEEL AND EMBEDDED ITEMS SHALL BE WELL SECURED IN POSITION.
10. MAINTAIN 3" CONCRETE COVERAGE TO FACE OF BARS UNLESS OTHERWISE NOTED.
11. BARS SHALL BE CLEAN OF RUST, GREASE OR OTHER MATERIAL LIKELY TO IMPAIR BOND. BENDS SHALL BE MADE COLD.
12. WELDING OF REINFORCEMENT IS NOT ALLOWED.
13. ALL EXPOSED EXTERNAL CORNER OF FOUNDATIONS TO BE CHAMFERED BY 3/4" BY 45 DEGREES UNLESS NOTED OTHERWISE.
14. ALL NEW CONCRETE SHALL BE CURED IMMEDIATELY AFTER FINISHING OF REMOVING FORMWORK. CURING SHALL BE EITHER A MOIST CURE METHOD OR THE USE OF A CURING COMPOUND.

FOUNDATION NOTES:

1. FOUNDATIONS SHALL BEAR ON COMPETENT, UNDISTURBED SOIL OR 95% COMPACTED FILL. IF SIGNS OF ORGANIC MATERIAL, UNCONTROLLED FILL, CLAY OR SILT, HIGH WATER TABLE OR OTHER POSSIBLE DETRIMENTAL CONDITIONS ARE FOUND, CONSTRUCTION OF THE FOUNDATIONS MUST BE STOPPED AND A GEOTECHNICAL ENGINEER BE CONTACTED.
2. NO FOUNDATIONS SHALL BE PLACED INTO OR ADJACENT TO SUBGRADE CONTAINING WATER, ICE, FROST, ORGANIC OR LOOSE MATERIAL.
3. WATER SHALL NOT BE PERMITTED TO ACCUMULATE IN FOUNDATION EXCAVATIONS.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCAL FROST DEPTH REQUIREMENT PRIOR TO CONSTRUCTION.
5. IF FOUNDATIONS SHOWN DO NOT MEET LOCAL FROST DEPTH REQUIREMENTS, EXTEND THE DRILLED PIER FOUNDATION AS REQUIRED, EXTENDING THE VERTICAL BARS AND PROVIDING ADDITIONAL TIES TO MEET SPACING REQUIREMENTS AS SHOWN. IF FROST DEPTH REQUIREMENTS ARE NOT MET, AND NO DRILLED PIER DESIGN IS PROVIDED, CONTACT POLIGON.
6. ALLOWABLE SOIL PRESSURES (AS APPLICABLE):

DRILLED PIER	
VERTICAL BEARING	1500 PSF
LATERAL BEARING	100 PSF/FT

THE FOUNDATION DESIGN SHOWN ON THESE DRAWINGS IS NOT SITE SPECIFIC, BUT BASED ON THE PRESUMPTIVE ALLOWABLE FOUNDATION PRESSURES IN CHAPTER 18 OF THE BUILDING CODE (CLASS 5 SOIL). THE BUILDING OFFICIAL IN THE JURISDICTION IN WHICH THIS STRUCTURE IS LOCATED MAY REQUIRE A SITE SPECIFIC GEOTECHNICAL REPORT OR LETTER FROM A QUALIFIED LOCAL PROFESSIONAL ENGINEER ATTESTING TO WHETHER THE ACTUAL SITE CONDITIONS MEET THE ASSUMPTIONS IDENTIFIED ABOVE.

JOSHUA T HOST
081.008001
STATE OF ILLINOIS
DATE: 07/18/2024
EXPIRES: 11/30/2024

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DRAFT DATE: 7/9/2024 | SCALE: 1:12 | DRAWN BY: jmarinnicodemopd | CHECK DATE: 11/13/2018 | ORDER NO.: 79889 | CAD MODEL: ...\P19724

GLEN OAK PARK PEORIA, IL

PROJECT | PROJECT NUMBER | DRAWING: ANCHOR AND FOOTING DETAILS

SHEET: 2.1

700 N Sangamon
Chicago, IL 60642
t 312.432.4180
f 312.432.4184

MULLER2

INCLUSIVE BATHROOM & SITE IMPROVEMENTS
GLEN OAK PARK
PEORIA PARK DISTRICT
ISSUED FOR BID

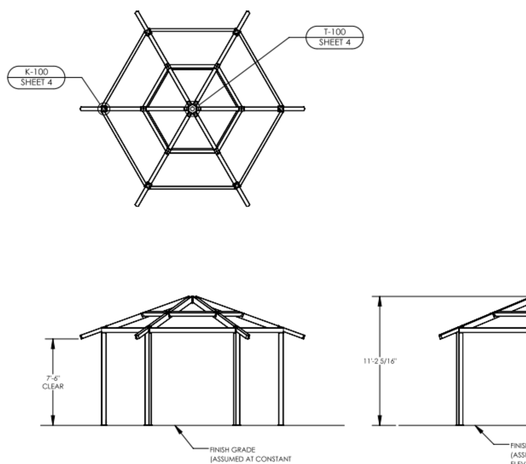
No.	Description	Date
1	ISSUED FOR BID	2024-08-22

GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
2218 N Prospect Rd
Peoria, IL 61603

SHELTER DRAWINGS
(1 OF 4)

DRAWN:	POLIGON	SHEET NO.
CHECKED:	POLIGON	AX-101
APPROVED:	POLIGON	
JOB NO:	24-1006	

8/22/2024 10:43:09 AM



ITEM	QTY.	PART NO.	DESCRIPTION	MATERIAL	WEIGHT
5	1	-	HEX C-RING ASM	3/8" PLATE	28.62
4	6	-	PURLIN A ASM	HSS4"X4"X1/8"	27.19
3	6	-	T-MEM ASM	HSS5"X3"X1/8"	50.01
2	6	-	TRUSS ASM	HSS6"X4"X1/8"	65.23
1	6	-	COLUMN ASM	HSS5"X5"X3/16"	121.90

JOSHUA T HOST
081.008001
STATE OF ILLINOIS
DATE: 07/18/2024
EXPIRES: 11/30/2024

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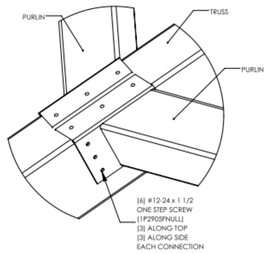
poligon by PORTER CORP
WWW.PDLOGON.COM
MAIN: (918) 388-3000
FIELD SUPPORT: (918) 388-3060

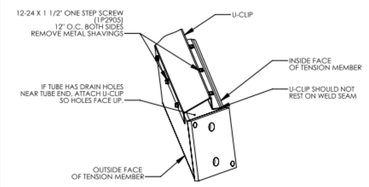
PROJECT: GLEN OAK PARK
PROJECT DESCRIPTION: PEORIA, IL
DRAWING: STRUCTURAL FRAMING PLAN

SHEET 3

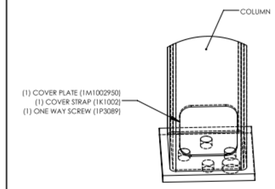


PURLIN CONNECTION | P-100

NOTE:
U-CLIP MUST BE ATTACHED TO TENSION MEMBER AS SHOWN PRIOR TO BUILDING ASSEMBLY.



U-CLIP CONNECTION | UC-100



ANCHOR ACCESS COVER PLATE | A-100

JOSHUA T HOST
081.008001
STATE OF ILLINOIS
DATE: 07/18/2024
EXPIRES: 11/30/2024

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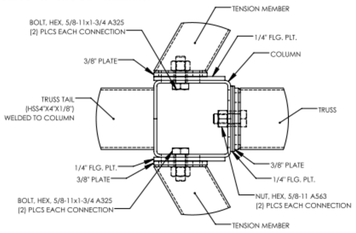
FIELD SUPPORT: (918) 388-3060

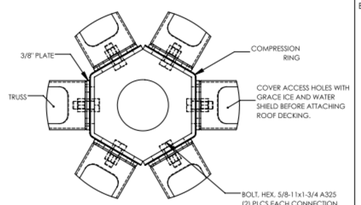
PROJECT: GLEN OAK PARK
PROJECT DESCRIPTION: PEORIA, IL
DRAWING: FRAME CONNECTION DETAILS

SHEET 4.1

NOTE:
SEE UC-100 FOR U-CLIP INSTALLATION



COLUMN CONNECTIONS | K-100

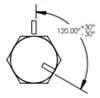


COMPRESSION MEMBER CONNECTION | T-100

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. HIGH STRENGTH BOLTS SHALL BE ASTM F3125 (A325, TYPE 1) MATERIAL.
2. HIGH STRENGTH NUTS SHALL BE ASTM A563 (GRADE DH) MATERIAL.
3. HIGH STRENGTH WASHERS SHALL CONFORM TO ASTM F436.
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
   B. CALIBRATED WRENCH 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 8.4.1, 8.4.2, AND 8.4.3 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. PRIOR TO THE ERECTION OF SHELTER COMPONENTS, IT IS RECOMMENDED TO CHASE AND TAP STRUCTURAL HARDWARE.
12. 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.
13. TO PREVENT RUST STAINING OF FINISH, ALL METAL SHAVINGS MUST BE REMOVED AFTER INSTALLATION. ENSURE NO SHAVING ARE TRAPPED BETWEEN MATING SURFACES.
14. TOUCH-UP PAINT MUST BE APPLIED TO ALL EXPOSED FASTENERS. PERIODIC TOUCH-UP AT THESE CONNECTIONS IS REQUIRED.

JOSHUA T HOST
081.008001
STATE OF ILLINOIS
DATE: 07/18/2024
EXPIRES: 11/30/2024

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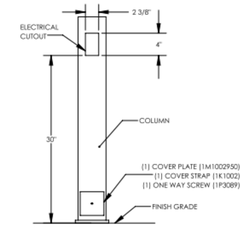
FIELD SUPPORT: (918) 388-3060

PROJECT: GLEN OAK PARK
PROJECT DESCRIPTION: PEORIA, IL
DRAWING: FRAME CONNECTION DETAILS

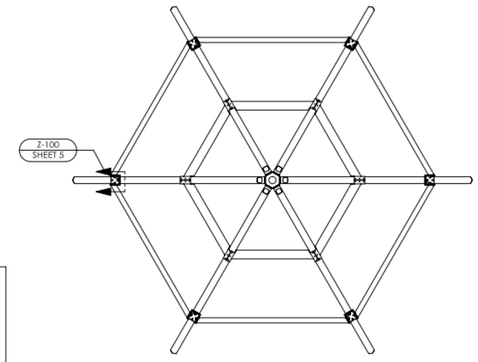
SHEET 4

NOTE: COVER PLATES PROVIDED FOR ALL ELECTRICAL CUTOUTS



CUTOUT LOCATED IN ALL COLUMNS (6)
CUSTOMER TO VERIFY CUTOUT SIZE AND LOCATION

ELECTRICAL CUTOUT LOCATION | Z-100



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081.008001
STATE OF ILLINOIS
DATE: 07/18/2024
EXPIRES: 11/30/2024

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MAIN: (918) 388-3000
FIELD SUPPORT: (918) 388-3060

PROJECT: GLEN OAK PARK
PROJECT DESCRIPTION: PEORIA, IL
DRAWING: ELECTRICAL VIEWS

SHEET 5

MULLER2
700 N Sangamon
Chicago, IL 60642
T 312.432.4180
F 312.432.4184

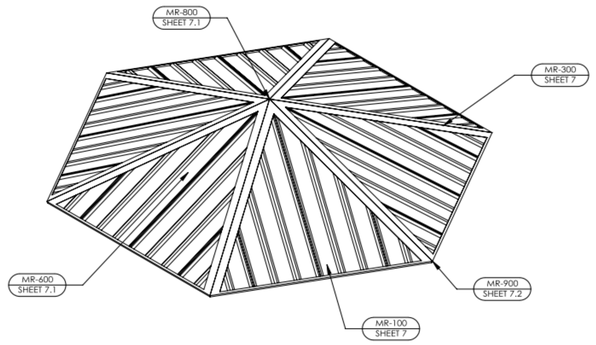
INCLUSIVE BATHROOM & SITE IMPROVEMENTS
GLEN OAK PARK
PEORIA PARK DISTRICT
ISSUED FOR BID

No.	Description	Date
1	ISSUED FOR BID	2024-08-22

GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
2218 N Prospect Rd
Peoria, IL 61603

SHELTER DRAWINGS
(2 OF 4)

DRAWN:	POLIGON	SHEET NO.
CHECKED:	POLIGON	AX-102
APPROVED:	POLIGON	
JOB NO:	24-1006	



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DATE 7/9/2024 | SCALE 1:32 | DRAWN BY mmcdermold | REVISION A | CREATION DATE 11/15/2016 | ORDER NO. 79889 | CAD MODEL –P19724

PROJECT GLEN OAK PARK | PROJECT LOCATION PEORIA, IL | DRAWING ROOF OVERVIEW | SHEET 6

LICENSED STRUCTURAL ENGINEER 081.008001 JOSHUA T HOST STATE OF ILLINOIS

DATE: 07/18/2024
EXPIRES: 11/30/2024

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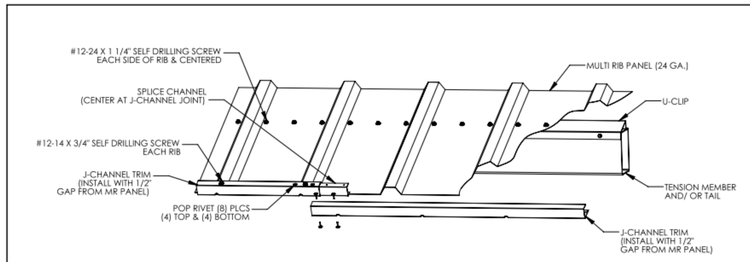
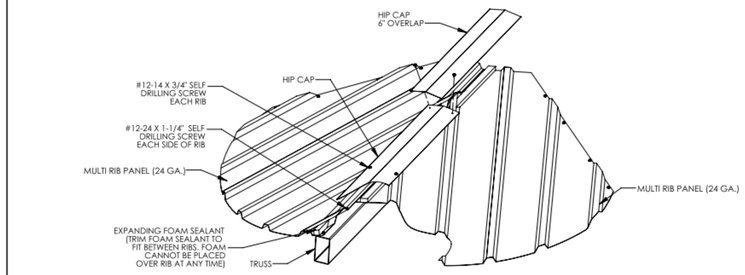


2023A | EAVE DETAIL | MR-100



2023A | TRUSS DETAIL | MR-300

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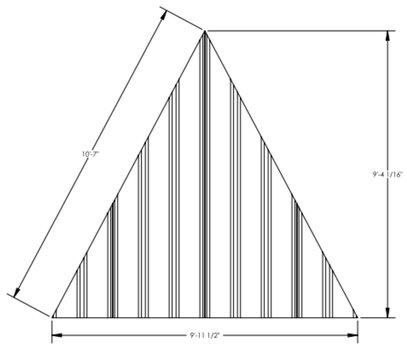
DATE 7/9/2024 | SCALE NTS | DRAWN BY mmcdermold | REVISION A | CREATION DATE 11/15/2016 | ORDER NO. 79889 | CAD MODEL –P19724

PROJECT GLEN OAK PARK | PROJECT LOCATION PEORIA, IL | DRAWING ROOF CONNECTION DETAILS | SHEET 7

LICENSED STRUCTURAL ENGINEER 081.008001 JOSHUA T HOST STATE OF ILLINOIS

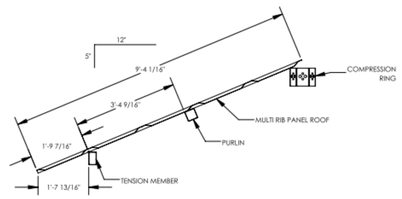
DATE: 07/18/2024
EXPIRES: 11/30/2024

IF THESE DRAWINGS ARE SEALED, THE SEAL APPLIES ONLY TO BUILDING COMPONENTS UNDER ITS INSCRIPTION DESIGN IF APPLICABLE) DETAILED WITHIN THESE DRAWINGS



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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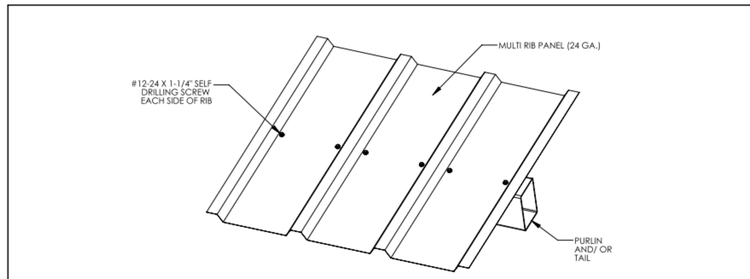
DATE 7/9/2024 | SCALE 1:24 | DRAWN BY mmcdermold | REVISION A | CREATION DATE 11/15/2016 | ORDER NO. 79889 | CAD MODEL –P19724

PROJECT GLEN OAK PARK | PROJECT LOCATION PEORIA, IL | DRAWING ROOF LAYOUT | SHEET 6.1

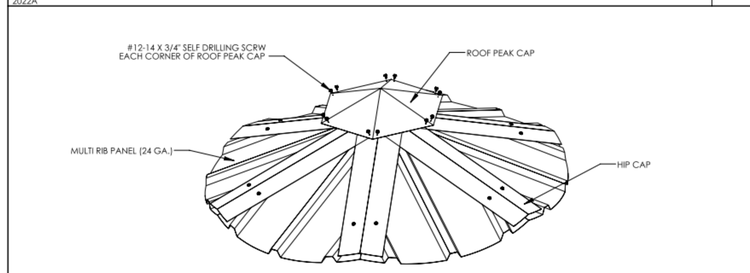
LICENSED STRUCTURAL ENGINEER 081.008001 JOSHUA T HOST STATE OF ILLINOIS

DATE: 07/18/2024
EXPIRES: 11/30/2024

IF THESE DRAWINGS ARE SEALED, THE SEAL APPLIES ONLY TO BUILDING COMPONENTS UNDER ITS INSCRIPTION DESIGN IF APPLICABLE) DETAILED WITHIN THESE DRAWINGS



2022A | PURLIN DETAIL | MR-600



2022A | ROOF PEAK DETAIL | MR-800

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PROJECT GLEN OAK PARK | PROJECT LOCATION PEORIA, IL | DRAWING ROOF CONNECTION DETAILS | SHEET 7.1

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GLEN OAK PARK
PEORIA PARK DISTRICT
ISSUED FOR BID

No.	Description	Date
1	ISSUED FOR BID	2024-08-22

GLEN OAK PARK INCLUSIVE BATHROOM & SITE IMPROVEMENTS
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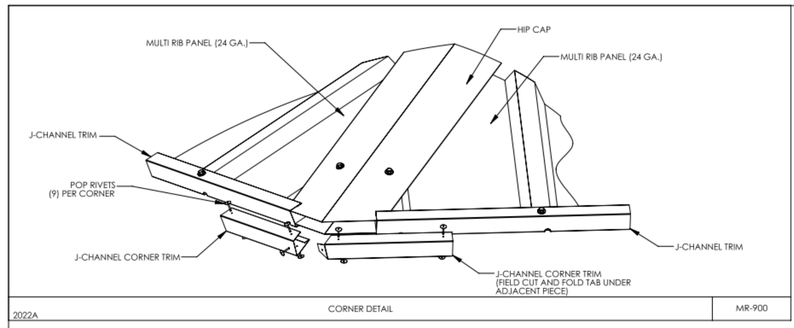
Peoria, IL 61603

SHELTER DRAWINGS
(3 OF 4)

DRAWN:	POLIGON	SHEET NO.
CHECKED:	POLIGON	AX-103
APPROVED:	POLIGON	
JOB NO:	24-1006	



2022A | CORNER DETAIL | MR-900

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PROJECT	24-1006
SCALE	NTS
DRAWN BY	Author
CHECKED BY	Checker
APPROVED BY	Approver
CREATION DATE	11/15/2016
USER NAME	76989
CAD FILENAME	P19724

BUILDING: GLEN OAK PARK
PROJECT ADDRESS: PEORIA, IL
DRAWING: ROOF CONNECTION DETAILS

SHEET 7.2

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INCLUSIVE BATHROOM & SITE IMPROVEMENTS
GLEN OAK PARK
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No.	Description	Date
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SHELTER DRAWINGS
(4 OF 4)

DRAWN:	POLIGON	SHEET NO.
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