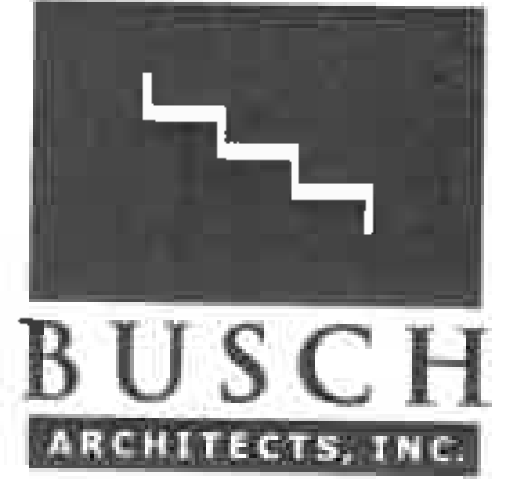


MILLE LACS BAND OF OJIBWE DII WAREHOUSE REMODEL - MCGREGOR



310 FOURTH AVENUE SOUTH
SUITE 1000
MINNEAPOLIS, MINNESOTA 55415

TEL: 612.333.2279
A.MALDO@BUSCH-ARCHITECTS.COM

CONSULTANT

BID ISSUE SET

CERTIFICATION
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: JUNE 11, 2024 REG. NO. 58877
PRINTED NAME: AMANDA MALDONADO

COMMISSION NO.: 23-11

DRAWN BY: CABJAM

CHECKED BY: AM

DATE: JUNE 17, 2024

BID ISSUE DATE: JUNE 18, 2024

REVISION DATES: JUNE 24, 2024

PROJECT TITLE

DII WAREHOUSE REMODEL
MCGREGOR, MN

20898 360TH STREET
MCGREGOR, MN 55760

OWNER

MILLE LACS BAND OF OJIBWE
43408 OODENA DRIVE
ONAMIA, MN 56359

SHEET TITLE

TITLE SHEET

T1.0

SHEET NO.
SHEET 1 OF 12

PROJECT PARTICIPANTS

OWNER
MILLE LACS BAND OF OJIBWE
43408 OODENA DRIVE
ONAMIA, MN 56359
320.532.4163
CARLA DUNKLEY, PROJECT MANAGER

ARCHITECT
BUSCH ARCHITECTS, INC.
310 FOURTH AVENUE SOUTH, SUITE 1000
MINNEAPOLIS, MN 55415
612.333.2279
AMANDA MALDONADO, AIA, NCARB

MECHANICAL AND ELECTRICAL ENGINEER
EMAUNELSON-PODAS, INC.
7705 BUSH LAKE ROAD
EDINA, MN 55439
952.930.0050
BRIAN RINGSVEN, P.E. (MECHANICAL)
BRIAN GALLAGHER, EIT (ELECTRICAL)

CIVIL ENGINEER
LARSON ENGINEERING
3524 LABORE ROAD
WHITE BEAR LAKE, MN 55110
651.481.9201
ERIC MEYER, P.E.

STRUCTURAL ENGINEER
MBJ
510 S MARQUETTE AVENUE, UNIT 900
MINNEAPOLIS, MN 55402
612.338.0713
CHRIS SCHEEVEL, P.E.

LOCATION MAP

20898 360TH ST
MCGREGOR, MN 55760



CODE DATA

APPLICABLE CODES STATE
2020 MINNESOTA STATE BUILDING CODE
2020 MINNESOTA ACCESSIBILITY CODE
2020 MINNESOTA CONSERVATION CODE

FEDERAL
2012 NFPA 101 - LIFE SAFETY CODE

OCCUPANCY
MIXED: B, S

CONSTRUCTION
TYPE: 3B

FLOOR AREA
LOWER LEVEL: 9600 SQFT
MEZZANINE: 640 SQFT
TOTAL: 10,240 SQFT

NO CHANGE TO EXISTING FLOOR AREA

MATERIALS KEY

NOT TO SCALE

EARTH	WOOD FRAMING
CONCRETE	ALUMINUM
STONE	CONCRETE BLOCK
PLYWOOD	FACE BRICK
STEEL	SAND/GRAVEL
GLASS	RIGID INSULATION
STRUCTURAL TILE	FIBERGLASS BATT INSULATION
HARDBOARD	EXISTING CONSTRUCTION
ACOUSTICAL TILE	GYPSUM BOARD
CERAMIC TILE	STUCCO/PLASTER
WOOD BLOCKING	FINISHED WOOD

SHEET INDEX

SHEET NO.	SHEET NAME
T1.0	TITLE SHEET
CIVIL	
C100	DEMOLITION PLAN
C200	PAVING AND DIMENSION PLAN
C300	GRADING AND EROSION CONTROL PLAN
C400	SWPP
C401	SWPP

ARCHITECTURAL

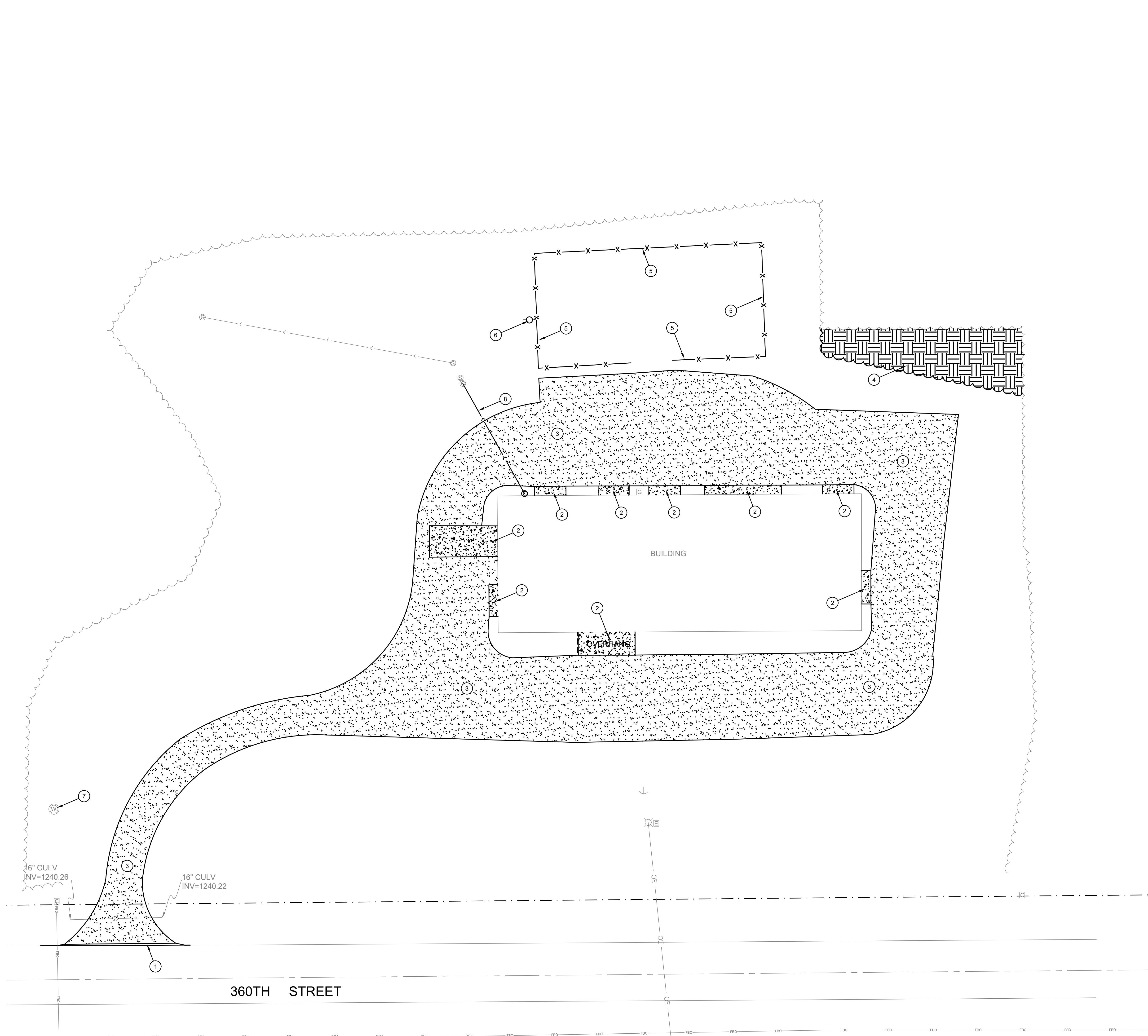
AX.0	LIFE-SAFETY PLAN
D1.0	DEMOLITION PLAN
A1.0	SITE PLAN
A2.0	FLOOR PLANS
A3.0	EXTERIOR ELEVATIONS AND DETAILS
A4.0	REFLECTED CEILING PLAN
A5.0	INTERIOR ELEVATIONS AND DETAILS
A5.1	INTERIOR DETAILS
A6.0	SECTIONS
A6.1	SECTIONS
A7.0	FINISH PLAN & SCHEDULES

MECHANICAL

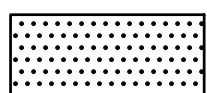
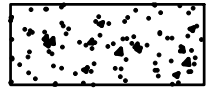
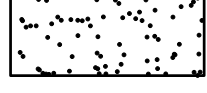

M0.0	MECHANICAL TITLE SHEET
M0.1	MECHANICAL GENERAL NOTES
M0.2	SITE PLAN - MECHANICAL
MD0.1	MAIN LEVEL PLAN - MECHANICAL DEMOLITION
M1.0	BELOW FLOOR PLAN - PLUMBING
M1.1	MAIN LEVEL PLAN - PLUMBING
M2.1	MAIN LEVEL PLAN - HVAC
M4.1	PLUMBING RISER DIAGRAMS
M5.1	MECHANICAL DETAILS
M6.1	MECHANICAL SCHEDULES

ELECTRICAL

E0.0	ELECTRICAL TITLE SHEET
E0.1	SITE PLAN - ELECTRICAL
ED0.1	DEMOLITION PLAN - ELECTRICAL
E1.1	MAIN LEVEL PLAN - LIGHTING
E1.2	MEZZANINE LEVEL PLAN - LIGHTING
E2.1	MAIN LEVEL PLAN - POWER
E2.2	MEZZANINE LEVEL PLAN - POWER
E3.1	ELECTRICAL DETAILS
E4.1	ELECTRICAL SCHEDULES



SYMBOL LEGEND

-  REMOVE AND DISPOSE OF EXISTING BITUMINOUS PAVEMENT SECTION
-  REMOVE AND DISPOSE OF EXISTING CONCRETE PAVEMENT SECTION
-  REMOVE AND DISPOSE OF EXISTING GRAVEL SECTION
-  CLEAR AND GRUB AREA

KEY NOTES

- ① REMOVE AND DISPOSE OF EXISTING BITUMINOUS PAVEMENT.
- ② REMOVE AND DISPOSE OF EXISTING CONCRETE PAVEMENT.
- ③ REMOVE AND DISPOSE OF EXISTING GRAVEL.
- ④ CLEAR AND GRUB EXISTING TREES
- ⑤ REMOVE AND DISPOSE OF EXISTING FENCE.
- ⑥ REMOVE AND DISPOSE OF EXISTING LIGHT POLE.
- ⑦ PROTECT EXISTING WELL AND SERVICE LINE.
- ⑧ REPLACE EXISTING SEWER SERVICE. SEE SEPTIC DESIGN.

DEMOLITION NOTES

1. Verify all existing utility locations.
2. It is the responsibility of the Contractor to perform or coordinate all necessary utility demolitions and relocations from existing utility locations to all onsite amenities and buildings. These connections include, but are not limited to, water, sanitary sewer, cable tv, telephone, gas, electric, site lighting, etc.
3. Prior to beginning work, contact Gopher State OneCall (651-454-0002) to locate utilities throughout the area under construction. The Contractor shall retain the services of a private utility locator to locate the private utilities.
4. Sawcut along edges of pavements, sidewalks, and curbs to remain.
5. All construction shall be performed in accordance with state and local standard specifications for construction.



310 FOURTH AVENUE SOUTH
SUITE 1000
MINNEAPOLIS, MINNESOTA 55415
TEL: 612.333.2279
A.MALDO@BUSCH-ARCHITECTS.COM

CONSULTANT
Larson Engineering, Inc.
3524 Labore Road
White Bear Lake, MN 55110
651.481.9120 (f) 651.481.9201
www.larsonengr.com

© 2024 Larson Engineering, Inc. All rights reserved.

CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Eric Meyer
DATE: 06/17/2024 REG. NO. 44592
PRINTED NAME: ERIC G. MEYER

COMMISSION NO.: 12236150

DRAWN BY: KBK

CHECKED BY: EGM

DATE: 06/17/2024

BID ISSUE DATE:

REVISION DATES:

PROJECT TITLE

**DII WAREHOUSE REMODEL
MCGREGOR, MN**

20898 360TH STREET
MCGREGOR, MN 55760

OWNER

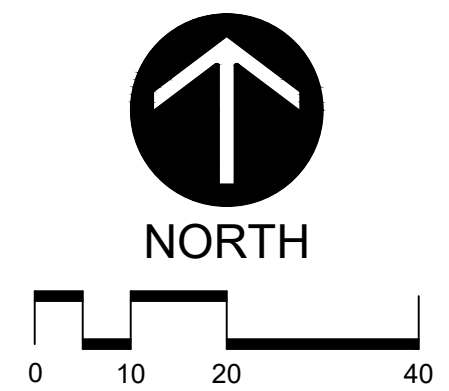
MILLE LACS OF OJIBWE

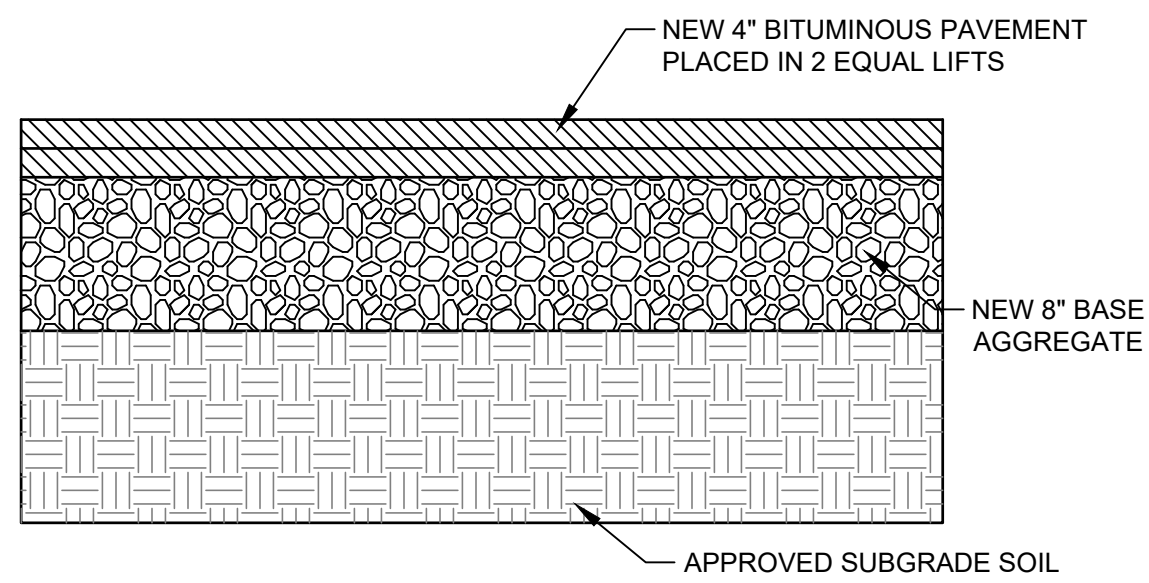
43408 OODENA DRIVE
ONAMIA, MN 56359

SHEET TITLE

DEMOLITION PLAN

C100





1
C200
BITUMINOUS PAVEMENT SECTION
NOT TO SCALE

KEY NOTES

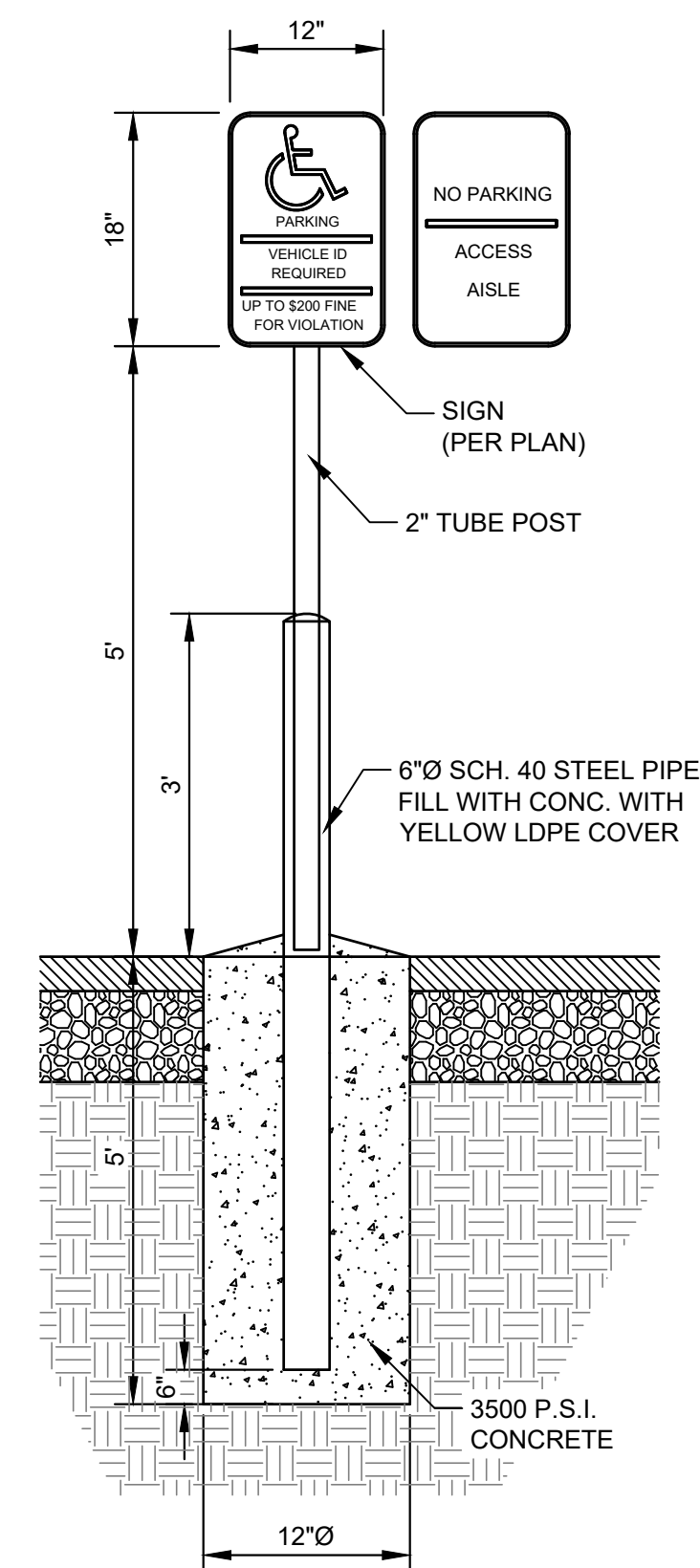
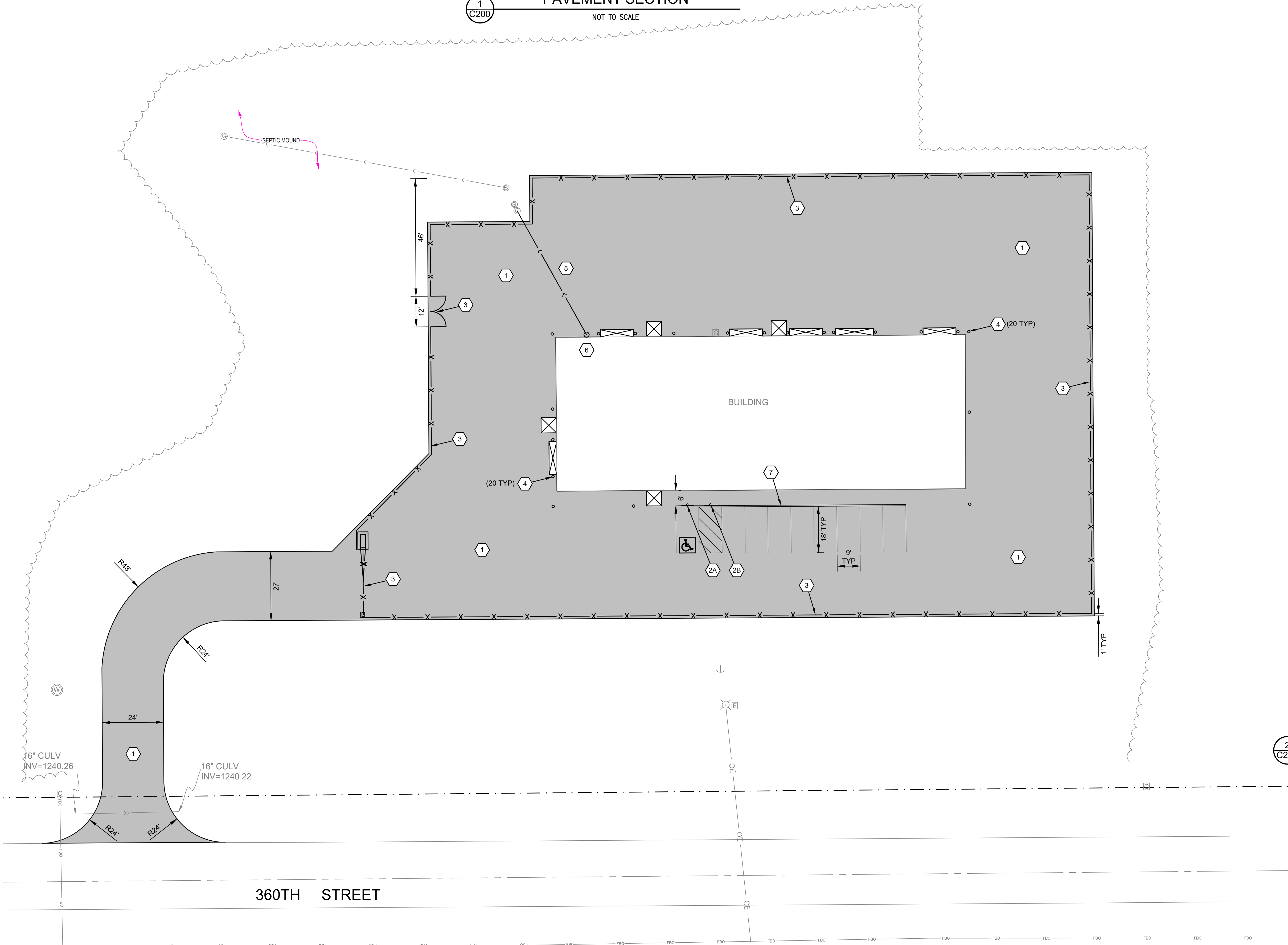
- 1 NEW BITUMINOUS PAVEMENT SECTION, SEE DETAIL 1/C200
- 2 NEW ADA SIGN, SEE DETAIL 2/C200
A: ADA PARKING
B: NO PARKING ACCESS AISLE
- 3 NEW FENCE AND GATES, SEE ARCHITECT
- 4 NEW BOLLARD, SEE ARCHITECT
- 5 NEW INSULATED 4" SCHEDULE 40 PVC.
- 6 NEW TWO-WAY CLEANOUT.
- 7 NEW CURB STOPS, SEE ARCHITECT

SYMBOL LEGEND

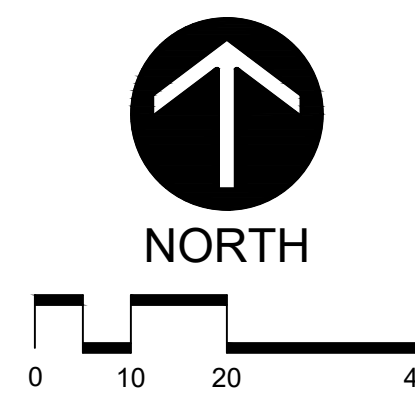
- NEW BITUMINOUS PAVEMENT
SEE DETAIL 1/C200.
- NEW STOOP/APRON,
SEE ARCHITECT

GENERAL

- PROPERTY LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE



2
C200
ACCESSIBLE PARKING SIGN AND POST DETAIL
NOT TO SCALE



310 FOURTH AVENUE SOUTH
SUITE 1000
MINNEAPOLIS, MINNESOTA 55415
TEL: 612.333.2279
A.MALDO@BUSCH-ARCHITECTS.COM

CONSULTANT
 Larson Engineering, Inc.
3524 Labore Road
White Bear Lake, MN 55110
651.481.9120 (f) 651.481.9201
www.larsonengr.com

© 2024 Larson Engineering, Inc. All rights reserved.

CERTIFICATION
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: 06.17.2024 REG. NO. 44592
PRINTED NAME: ERIC G. MEYER

COMMISSION NO.: 12236150
DRAWN BY: KBK
CHECKED BY: EGM
DATE: 06/17/2024
BID ISSUE DATE:
REVISION DATES:

PROJECT TITLE
DII WAREHOUSE REMODEL
MCGREGOR, MN
20898 360TH STREET
MCGREGOR, MN 55760

OWNER
MILLE LACS OF OJIBWE
43408 OODENA DRIVE
ONAMIA, MN 56359

SHEET TITLE
PAVING AND DIMENSION PLAN

C200

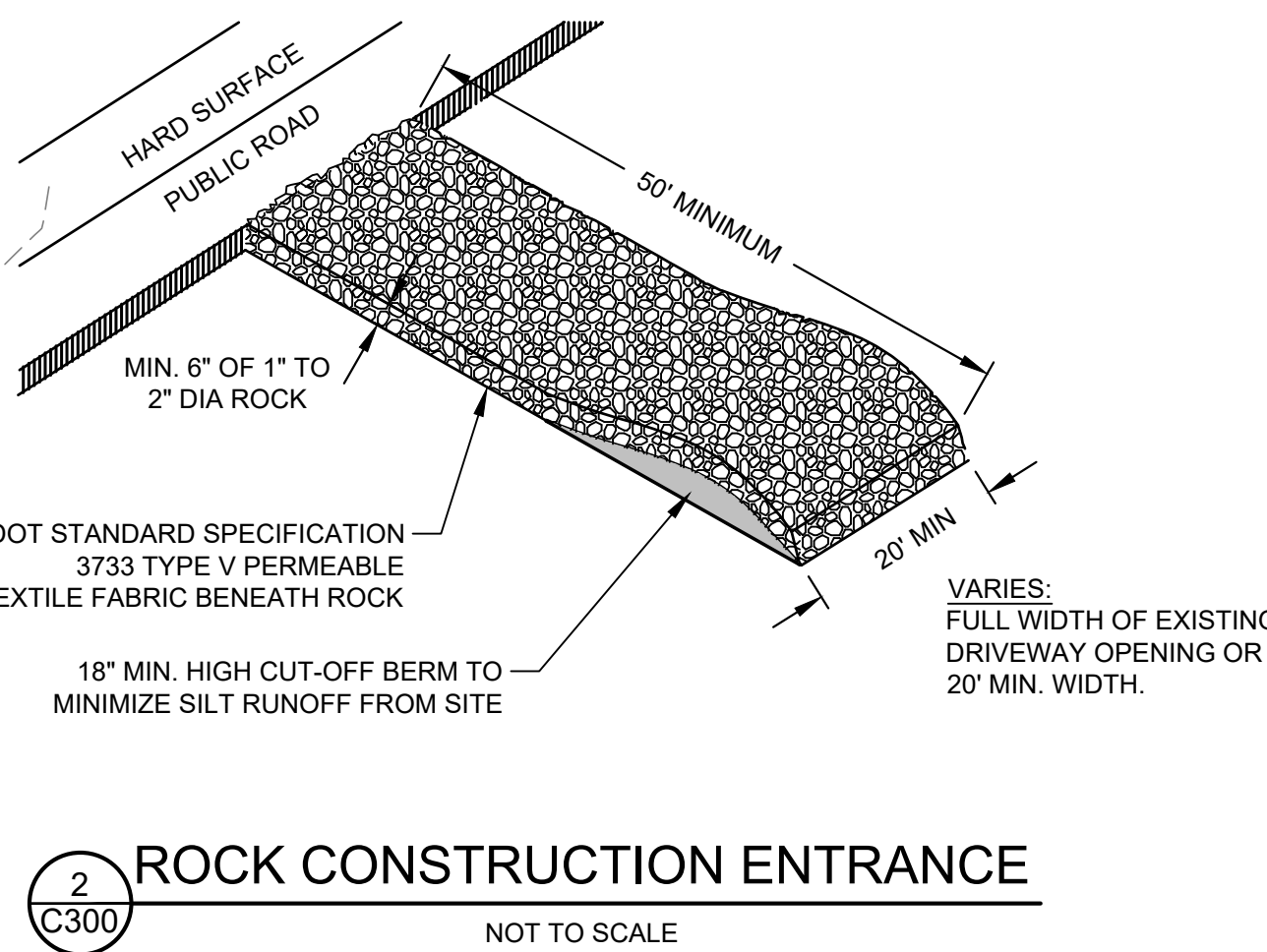
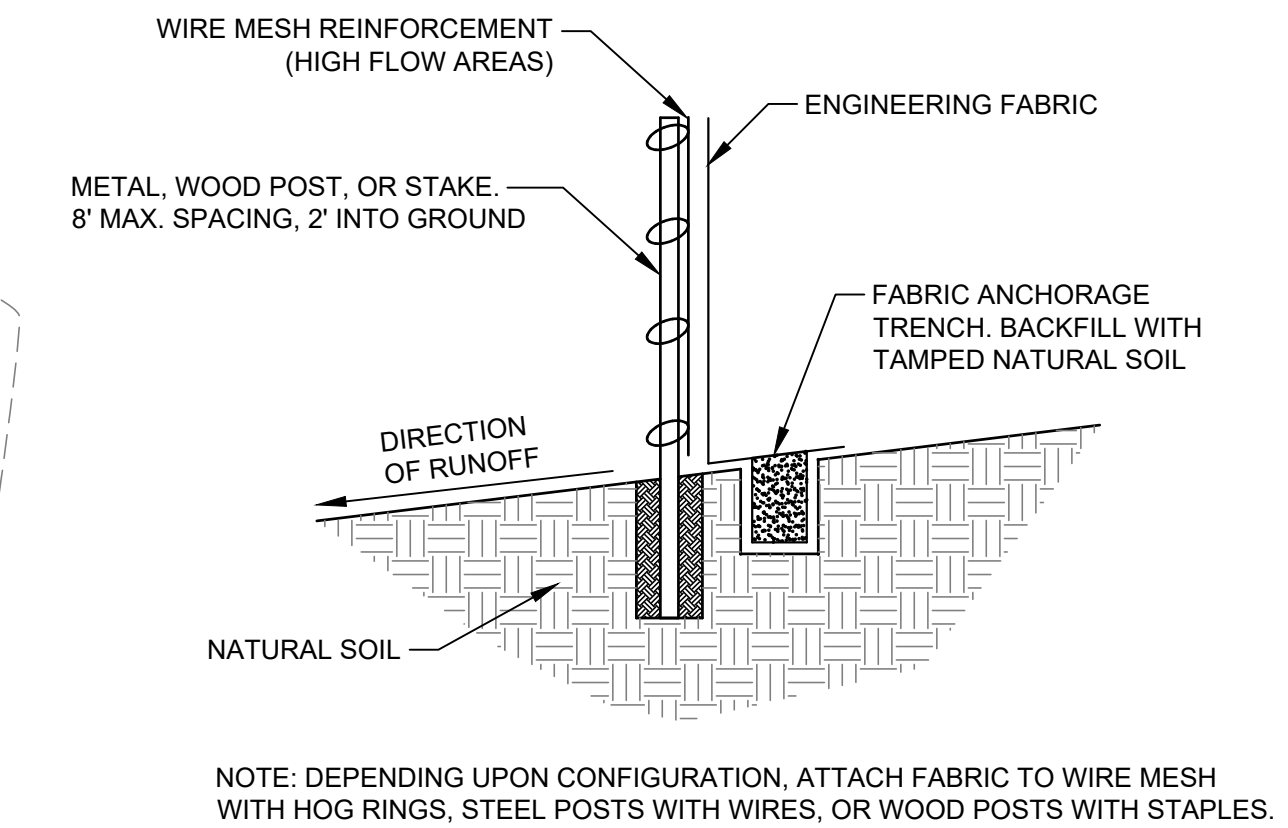
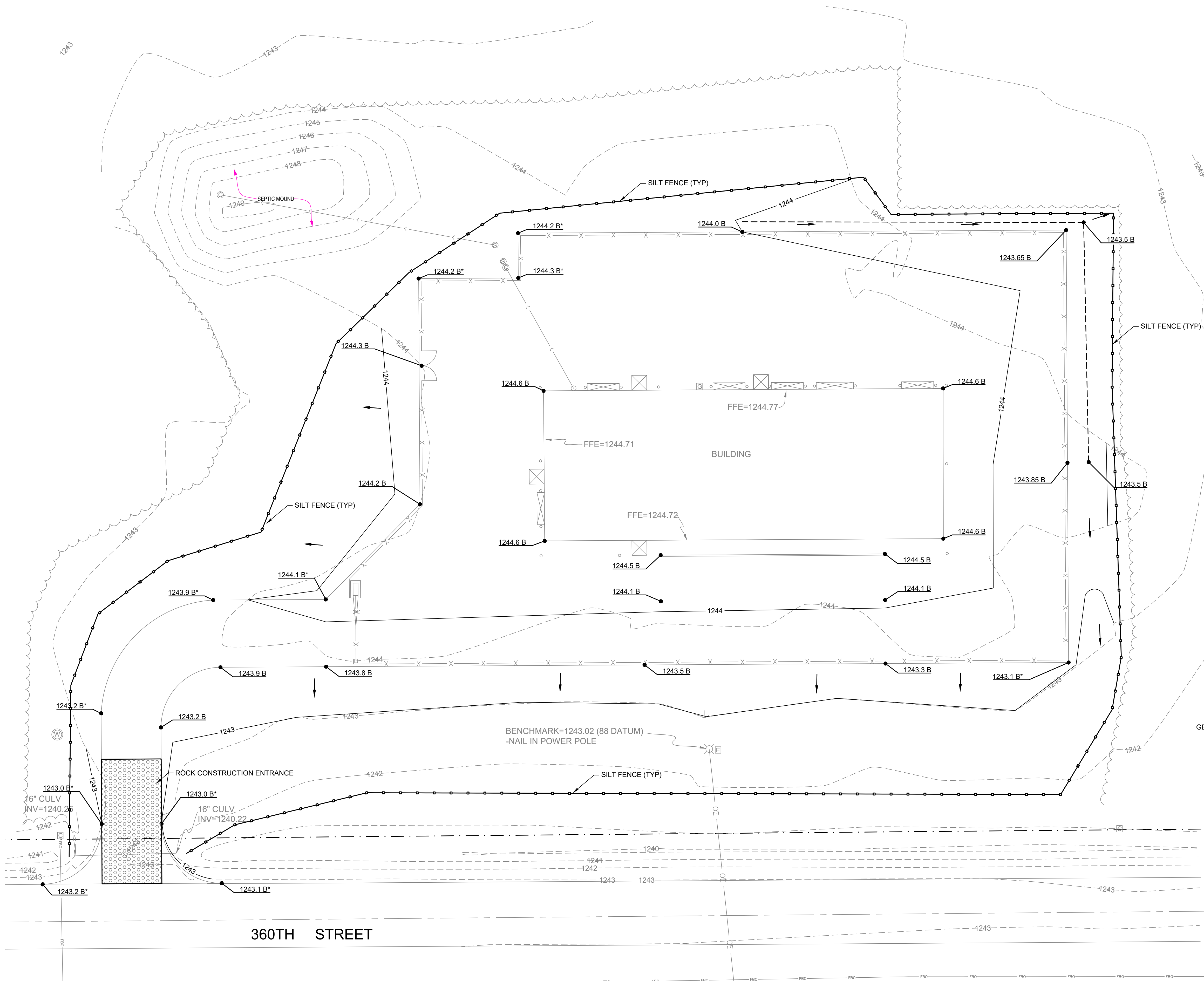
GRADING NOTES

1. Tree protection consisting of snow fence or safety fence installed at the drip line shall be in place prior to beginning any grading or demolition work at the site.
2. All elevations with an asterisk (*) shall be field verified. If elevations vary significantly, notify the Engineer for further instructions.
3. Grades shown in paved areas represent finish elevation.
4. All disturbed areas to receive 4" of good quality topsoil and seed.
5. All construction shall be performed in accordance with state and local standard specifications for construction.

SYMBOL LEGEND

- 950 --- EXISTING CONTOURS
- 950 --- PROPOSED CONTOURS - MAJOR INTERVAL
- 949 --- PROPOSED CONTOURS - MINOR INTERVAL
- - - - - GRADE BREAK LINE
- 2.0% GRADE SLOPE
- SILT FENCE, SEE DETAIL 1/C300
- ROCK CONST. ENTRANCE, SEE DETAIL 2/C300

SPOT ABBREVIATIONS:
 B - BITUMINOUS
 (*) - EXISTING TO BE VERIFIED



310 FOURTH AVENUE SOUTH
 SUITE 1000
 MINNEAPOLIS, MINNESOTA 55415

TEL: 612.333.2279
 A.MALDO@BUSCH-ARCHITECTS.COM

CONSULTANT
Larson Engineering, Inc.
 3524 Labore Road
 White Bear Lake, MN 55110
 651.481.9120 (f) 651.481.9201
 www.larsonengr.com

© 2024 Larson Engineering, Inc. All rights reserved.

CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

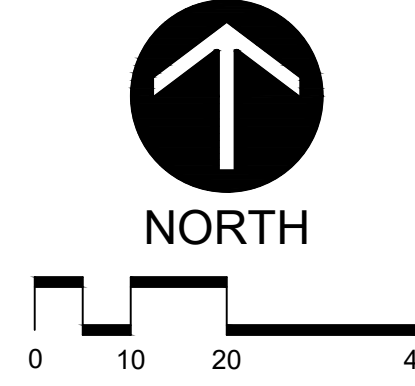
Eric G. Meyer
 DATE: 06/17/2024 REG. NO. 44592
 PRINTED NAME: ERIC G. MEYER

COMMISSION NO.: 12236150
 DRAWN BY: KBK
 CHECKED BY: EGM
 DATE: 06/17/2024
 BID ISSUE DATE:
 REVISION DATES:

PROJECT TITLE
DII WAREHOUSE REMODEL
McGREGOR, MN
 20898 360TH STREET
 MCGREGOR, MN 55760

OWNER
MILLE LACS OF OJIBWE
 43408 OODENA DRIVE
 ONAMIA, MN 56359

SHEET TITLE
 GRADING AND
 EROSION CONTROL PLAN



C300

PROJECT SPECIFIC SWPPP INFORMATION:

I. GENERAL CONSTRUCTION ACTIVITY INFORMATION

PROJECT NAME: MLBO DII WAREHOUSE
PROJECT LOCATION: 20898 360TH STREET
MCGREGOR, MN 55760

PROJECT CONTACTS OWNER: MILLE LACS BAND OF OJIBWE
43408 OODENA DRIVE
ONAMIA, MN 56359
CONTACT: CARLA DUNKLEY, 320-532-4163

ENGINEER: LARSON ENGINEERING, INC.
352 LABORE ROAD
WHITE BEAR LAKE, MN 55110
CONTACT: ERIC MEYER, P.E., 651-481-9120
EMEYER@LARSONENGR.COM

CONTRACTOR: COMPANY (TBD)
ADDRESS
CITY, STATE, ZIP
CONTACT: NAME, PHONE, EMAIL

CITY WHERE WORK WILL TAKE PLACE: MCGREGOR, MN
COUNTY WHERE WORK WILL TAKE PLACE: AITKIN

LATITUDE/LONGITUDE OF APPROXIMATE CENTROID OF PROJECT: 46°32'04.4"N 93°16'49.3"W

PROJECT TYPE (CIRCLE ONE): RESIDENTIAL COMMERCIAL/INDUSTRIAL

ROAD CONSTRUCTION RESIDENTIAL & ROAD CONSTRUCTION

OTHER (DESCRIBE): _____

DATES OF CONSTRUCTION (ESTIMATED):
Construction start date: 06/2024
Construction completion date: 12/2024

PROJECT DESCRIPTION:
Construction will consist of remodeling an existing warehouse. Site improvements to include paving of the existing gravel parking, new fencing, and septic system upgrades.

PROJECT LIMITS:
See the project plans, in particular the grading & erosion control plans, for site disturbance limits.

SITE DISTURBANCE SUMMARY (to nearest tenth acre):

Total number of acres to be disturbed:	1.6
Pre-Construction acres of impervious:	0.9
Post-Construction acres of impervious:	1.2
Total new impervious acres:	0.3

II. RECEIVING WATERS

RECEIVING WATERS (WITHIN ONE MILE OF PROJECT PROPERTY EDGE):

NAME OF WATER BODY	TYPE	SPECIAL WATER?	IMPAIRED WATER?
UNNAMED	WETLAND	NO	NO
WAKEFIELD BROOK	STREAM	NO	NO

TOTAL MAXIMUM DAILY LOAD (TMDL) WATERS
n/a

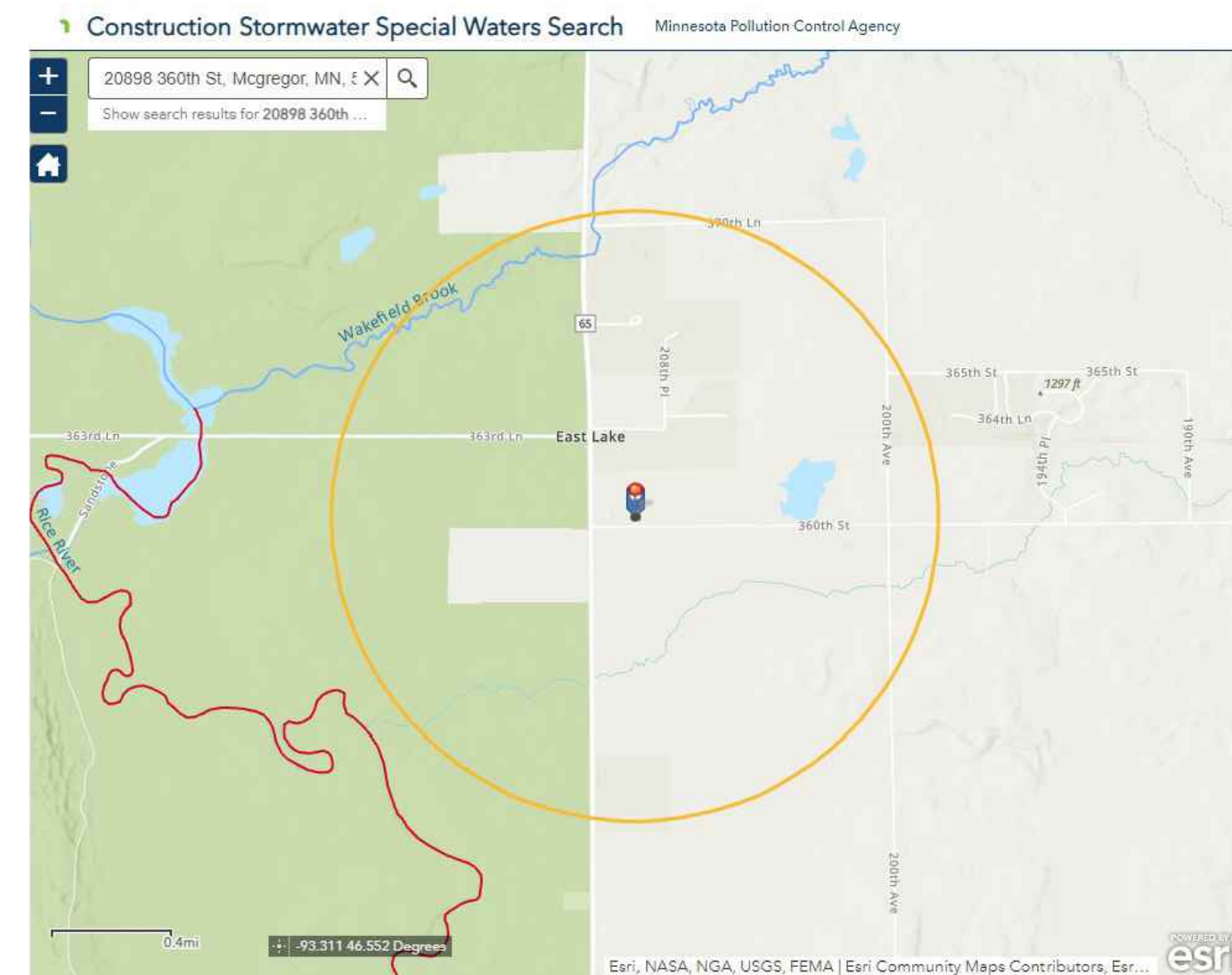
IDENTIFY WETLAND IMPACTS:

- Will construction result in any potential adverse impacts to wetlands, including excavation, degradation of water quality, draining, filling, permanent inundation or flooding, conversion to a stormwater pond?
No.
If yes, describe impacts and mitigation measures that were taken to address the impacts and include copies of permits or approvals from an official state wide wetland program issued specifically for this project or site:
N/A

ENVIRONMENTALLY SENSITIVE AREAS:

- Identify adjacent public waters where the MN DNR has declared "work in water restrictions" during fish spawning timeframes:
None identified.
- Describe any stormwater mitigation measures that will be implemented, as a result of an environmental review, endangered or threatened species review or archeological site review:
N/A

PROJECT LOCATION AND RECEIVING WATERS MAP:



III. PROJECT PLANS AND SPECIFICATIONS

Refer to the project plans, specifications, geotechnical report, and stormwater calculations which depict various features that are relevant to this project. Such features may include, but are not limited to, the following:

- Project location and construction limits.
- Existing and final grades, including dividing lines and direction of flow for all pre and post-construction stormwater runoff drainage areas located within the project limits.
- Soil types at the site.
- Locations of impervious surfaces.
- Locations of areas not to be disturbed (e.g., buffer zones, wetlands, etc.)
- Steep slope locations.
- Locations of areas where construction will be phased to minimize duration of exposed soils.
- Locations of all temporary and permanent erosion control and sediment control best management practices (BMP's).
- Buffer zones as required in item 9.17 and 23.11 of the permit.
- Locations of potential pollution-generating activities identified in Section 12 of the permit.
- Standard details for erosion and sediment control BMP's to be installed at the site.

The anticipated erosion prevention and sediment control BMP quantities needed for the life of this project include the following. These quantities are estimated only and shall be verified by the Contractor.

BMP	Bidding Quantity	Final Quantity
Rock Construction Entrance	1 EA	_____
Silt Fence	1,200 LF	_____
Concrete Washout	1 EA	_____
Turf Seeding/Sodding	0.4 ACRE	_____

TEMPORARY SEDIMENT CONTROL (SITE SPECIFIC ITEMS)

- Is the project required to install a temporary sediment basin due to 10 or more acres draining to a common location, or 5 acres or more if the site is located within 1 mile of a special or impaired water?
No.
If yes, describe (or attach plans) showing how the basin will be designed and constructed in accordance with Section 14.
It is anticipated grading and paving operations will be phased throughout the project such that permanent cover is established in one phase prior to beginning the next phase. This will minimize potential for erosion and the need for temporary sediment basins.
- Will the project include dewatering, basin draining?
No.
If yes, describe measures to be used to treat/dispose of turbid or sediment-laden water and method to prevent erosion or scour of discharge points:
N/A. Based on soil boring results, dewatering is not anticipated.
- Will the project include use of filters for backwash water?
No.
If yes, describe how filter backwash water will be managed on the site or properly disposed of:
N/A

PERMANENT STORMWATER MANAGEMENT (SITE SPECIFIC ITEMS)

- Will the project result in one acre or more of new impervious surface or result in one acre or more of new impervious in total if the project is part of a larger plan of development?
No.
If yes, a water quality volume of one inch of runoff from the cumulative new impervious surfaces must be retained on site (Section 15) through infiltration unless prohibited due to one of the reasons in item 16.14 through 16.21. If infiltration is prohibited, identify other methods of stormwater treatment used (e.g. filtration, wet sedimentation basin, regional ponding, or equivalent method):
N/A.
- Attach design parameters for the planned permanent stormwater management system, including volume calculations, discharge rate calculations, construction details including basin depth, outlet configurations, location, design of pre-treatment devices, and timing for installation.
N/A.
- For infiltration systems, provide at least one soil boring, test pit, or infiltrometer test in the location of the infiltration practice for determining infiltration rates.
N/A.
- For projects that discharge to trout streams, including tributaries to trout streams, identify method of incorporating temperature controls into the permanent stormwater management system.
N/A

SEQUENCE OF CONSTRUCTION ACTIVITIES

- Install stabilized rock construction entrances.
- Install perimeter erosion control BMP's (silt fence, bio-logs, etc.)
- Install temporary construction fencing at infiltration areas and other areas not be disturbed.
- Install inlet protection throughout project area and downstream inlets.
- Construct temporary sediment basins/traps as necessary.
- Strip and stockpile topsoil.
- Complete rough grading of site.
- Stabilize denuded areas and stockpiles.
- Install site utilities.
- Install pavement sections.
- Place topsoil and final grading of areas to be vegetated.
- Remove accumulated sediments.
- Complete permanent stabilization including plantings, seeding, and mulch.
- Upon completion of construction activity and satisfactory vegetation establishment, remove remaining temporary erosion and sediment control BMP's.
- Reseed / restore any areas disturbed during BMP removal.

SEEDING NOTES AND REQUIREMENTS:

- The Contractor is responsible to salvage and preserve existing topsoil as necessary for final stabilization. All topsoil to be salvaged and re-used shall be processed as necessary to meet project specifications.
- Prior to final seeding, all areas to be vegetated shall be scarified/decompacted and amended as specified in the plans and specifications.
- Unless otherwise noted, all seed mixes and applications shall be in accordance with MNDOT Seeding Manual, latest edition.
- See the project plans and specifications for seed mixtures, mulch, slope stabilization, and all other landscaping requirements.

FINAL STABILIZATION:

Ensure Final Stabilization of the site. Final Stabilization is not complete until all of the following requirements are complete:

- All soil disturbing activities at the site have been completed and soils are stabilized by a uniform perennial vegetative cover with a density of 70 percent of its expected final growth over the entire pervious surface area, or other equivalent means necessary to prevent soil erosion under erosive conditions.
- The permanent stormwater management system is constructed and operating as designed. Temporary or permanent sedimentation basins that are to be used as permanent water quality management basins have been cleaned of any accumulated sediment. All sediment has been removed from conveyance systems and ditches are stabilized with permanent cover.
- All temporary synthetic and structural erosion prevention and sediment control BMP's (such as silt fence, bio-logs, etc.) have been removed from the site. BMP's designed to decompose on site may be left in place.
- Upon correction of all erosion and sediment items and achieving vegetative cover, temporary erosion prevention and sediment control BMP's will be removed and properly disposed/recycled.
- Within 30 days of final stabilization, a notice of termination shall be submitted to the EPA (see Permit Termination Req's) .

GENERAL SWPPP NOTES:

- The Contractor and all Subcontractors involved with construction activity that disturbs soil, or implements a pollution control measure as part of the Storm Water Pollution Prevention Plan (SWPPP) for this project, must comply with the requirements of the National Pollution Discharge Elimination System (NPDES) Construction General Permit (CGP), effective February 17, 2022.
- The Contractor and all Subcontractors shall be responsible for reviewing the NPDES Permit in its entirety, to ensure that all SWPPP measures are in place and permit requirements fulfilled throughout the duration of the project.

SWPPP TRAINING:

SWPPP PREPARER: COMPANY: LARSON ENGINEERING, INC.
CONTACT: ERIC MEYER, 651-481-9120,
EMEYER@LARSONENGR.COM

TRAINING CLASS: DESIGN OF SWPPP
TRAINING ENTITY: UNIVERSITY OF MINNESOTA
EXPIRATION: MAY 31, 2027

SWPPP CONTACT: CONTRACTOR: (TBD)
CONTACT: NAME, PHONE, EMAIL
COURSE, INSTRUCTOR:
TRAINING ENTITY:
EXPIRATION:

This SWPPP was prepared by personnel certified in design of construction SWPPP's as listed above. Copies of respective certifications are available upon request. In accordance with Section 21 of the permit, the following individuals must receive training, and the content and extent of the training is commensurate with the individual's job duties and responsibilities with regard to activities covered under the permit:
a. Individuals preparing the SWPPP for the project.
b. Individuals overseeing implementation of, revising and/or amending the SWPPP, and individuals performing inspections for the project.
c. Individuals performing or supervising the installation, maintenance and repair of BMP's.

Individuals must receive training from local, state, federal agencies, professional organizations, or other entities with expertise in erosion prevention, sediment control, permanent stormwater treatment and the EPA NPDES/CGP Stormwater permit. Individuals shall attend a refresher-training course every three (3) years.

SWPPP IMPLEMENTATION RESPONSIBILITIES:

- The Owner and Contractor are Permittee(s) as identified by the NPDES permit.
- The Contractor shall be responsible for all on-site implementation of the SWPPP, including all Subcontractor activities.
- The Contractor shall provide knowledgeable and experienced person(s) in the application, installation, and maintenance of Erosion and Sediment Control BMP's throughout the project.
- The Contractor shall provide person(s) meeting the training requirements of the NPDES permit to conduct inspection and maintenance of all erosion prevention and sediment control BMP's in accordance with permit requirements. One of these individuals must be available for an on-site inspection within 72 hours upon request by the EPA.
- The Contractor shall provide training documentation for all individual(s) required by the permit. This training documentation shall be recorded in the SWPPP prior to construction, or as soon as personnel for the project have been determined. Documentation shall include:
a. Names of personnel associated with the project required to be trained (as listed above and under Section 21 of the permit).
b. Dates of training, name of instructor, and entity providing training.
c. Content of training course or workshop including number of hours of training.

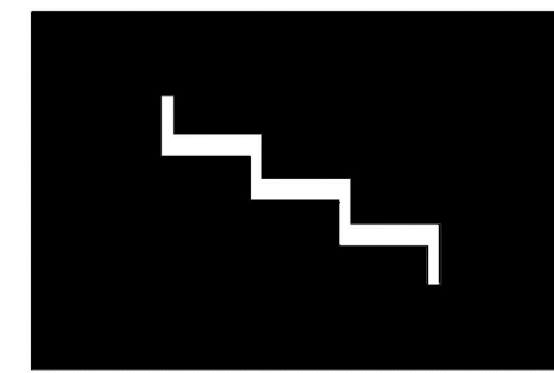
INSPECTIONS AND MAINTENANCE:

- The Contractor shall provide person(s) meeting the training requirements to conduct inspection and maintenance of all erosion prevention and sediment control BMP's under this project in accordance with permit requirements.

RECORDS RETENTION:

The SWPPP, including all changes/amendments, and inspections and maintenance records shall be kept on site during normal working hours by individuals who have operational control of that portion of the site.

- All Owner(s) shall keep the SWPPP, along with the following additional records, on file for three (3) years after submittal of the NOT as outlined in Section 4:
- The Final SWPPP;
 - Any other stormwater related permits required for the project;
 - Records of all inspection and maintenance conducted during construction;
 - All permanent operation and maintenance agreements that have been implemented, including all Right-Of-Way, Contracts, Covenants, and other binding requirements regarding perpetual maintenance; and
 - All required calculations for design of the temporary and permanent stormwater management systems.



BUSCH
ARCHITECTS, INC.

310 FOURTH AVENUE SOUTH
SUITE 1000
MINNEAPOLIS, MINNESOTA 55415

TEL: 612.333.2279

A.MALDO@BUSCH-ARCHITECTS.COM

CONSULTANT

Larson
Engineering, Inc.
3524 Labore Road
White Bear Lake, MN 55110
651.481.9120 (f) 651.481.9201
www.larsonengr.com

© 2024 Larson Engineering, Inc. All rights reserved.

CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Eric Meyer
DATE: 06.17.2024 REG. NO. 44592
PRINTED NAME: ERIC G. MEYER

COMMISSION NO.: 12236150

DRAWN BY: KBK

CHECKED BY: EGM

DATE: 06/17/2024

BID ISSUE DATE:

REVISION DATES:

PROJECT TITLE

DII WAREHOUSE REMODEL
MCGREGOR, MN

20898 360TH STREET
MCGREGOR, MN 55760

OWNER

MILLE LACS OF OJIBWE

43408 OODENA DRIVE
ONAMIA, MN 56359

SHEET TITLE

SWPPP

C400

GENERAL SWPPP REQUIREMENTS AND NOTES:

SWPPP AMENDMENTS:

- One of the individuals identified in the permit or another qualified individual must complete all SWPPP changes. Changes involving the use of less stringent BMPs must include a justification describing how the replacement BMP is effective for the site characteristics.
- The SWPPP shall be amended to include additional or modified BMPs as necessary to correct problems identified or address situations whenever there is a change in design, construction, operation, maintenance, weather or seasonal conditions having a significant effect on the discharge of pollutants to surface waters or groundwater.
- The SWPPP shall be amended to include additional or modified BMPs as necessary to correct problems identified or address situations whenever inspections or investigations by the site owner, operator, or EPA officials indicate the SWPPP is not effective in eliminating or significantly minimizing the discharge of pollutants to surface waters or groundwater or the discharges are exceed water quality standards (e.g., nuisance conditions as defined in Minn. R. 7050.0210, subp. 2) or the SWPPP is not consistent with the objectives of the EPA approved TMDL.

BMP SELECTION AND INSTALLATION:

- All BMPs identified in the SWPPP document and construction plans shall be selected, installed, and maintained in an appropriate and functional manner in accordance with relevant manufacturer specifications and accepted engineering practices.

TEMPORARY EROSION PREVENTION PRACTICES:

- Prior to beginning any construction work at the site, locations of areas not to be disturbed must be delineated (e.g., with flags, stakes, signs, silt fence, snow fence, etc.) throughout the project site.
- Minimize the need for disturbance of portions of the project with steep slopes. For those sloped areas which must be disturbed, use techniques such as phasing and stabilization practices designed for steep slopes (e.g., slope draining and terracing).
- Stabilize all exposed soil areas (including stockpiles). Stabilization must be initiated immediately to limit soil erosion whenever any construction activity has permanently or temporarily ceased on any portion of the site and will not resume for a period exceeding 7 calendar days. Stabilization must be completed no later than 7 calendar days after the construction activity has ceased.
- Stabilization is not required on constructed base components of roads, parking lots, and similar surfaces. Stabilization is not required on temporary stockpiles without significant silt, clay or organic components (e.g., clean aggregate stockpiles, demolition concrete stockpiles, sand stockpiles) but sediment controls must be placed at the base of the stockpile.
- For Public Waters that the Minnesota Department of Natural Resources has promulgated "work in water restrictions" during specified fish spawning time frames, all exposed soil areas that are within 200 feet of the water's edge, and drain to these waters must complete the stabilization activities within 24 hours during the restriction period.
- Stabilize the normal wetted perimeter of the last 200 linear feet of temporary or permanent drainage ditches or swales that drain water from the site within 24 hours after connecting to a surface water or property edge. Stabilize remaining portions of temporary or permanent ditches or swales within 14 calendar days (or 7 days if within one mile of an identified impaired water) after connecting to a surface water or property edge and construction in that portion of the ditch temporarily or permanently ceases.
- Temporary or permanent ditches or swales being used as sediment containment systems during construction (with properly designed rock-ditch checks, bio rolls, silt dikes, etc.) do not need to be stabilized during the temporary period of use as a sediment containment system. These areas must be stabilized within 24 hours after no longer being used for as a sediment containment system.
- Applying mulch, hydromulch, tackifier, polyacrylamide or similar erosion prevention practices is not acceptable within any portion of the normal wetted perimeter of a temporary or permanent drainage ditch or swale section with a continuous slope of greater than 2 percent.
- Pipe outlets must be provided with temporary or permanent energy dissipation within 24 hours after connection to a surface water or permanent stormwater treatment system.
- Route water around unstabilized areas on the site and to reduce erosion, unless infeasible. Use erosion controls and velocity dissipation devices such as check dams, sediment traps, riprap, or grouted riprap at outlets within and along the length of any constructed stormwater conveyance channel, and at any outlet, to provide a non-erosive flow velocity, to minimize erosion of channels and their embankments, outlets, adjacent stream banks, slopes, and downstream waters during discharge conditions.
- Unless infeasible due to lack of pervious or vegetated areas, direct discharges from BMPs to vegetated areas of the site (including any natural buffers) in order to increase sediment removal and maximize stormwater infiltration. Use velocity dissipation devices if necessary to prevent erosion when directing stormwater to vegetated areas.
- Infiltration areas shall not be excavated until all upstream areas have been stabilized and/or upstream BMPs are in place to properly prevent sediment deposition. Only low impact equipment shall be allowed in infiltration areas which shall be clearly identified, staked, and marked/fenced off.
- Project phasing shall be implemented to ensure land disturbance and temporary erosion control measures can be effectively inspected and maintained throughout the duration of the project in accordance with the Inspection and Maintenance requirements.

TEMPORARY SEDIMENT CONTROL PRACTICES:

- Sediment control practices must be established on all down gradient perimeters and be located upgradient of any buffer zones. The perimeter sediment control practices must be in place before any upgradient land-disturbing activities begin. These practices shall remain in place until Final Stabilization has been established.
- If downgradient sediment controls become overloaded, based on frequent failure or excessive maintenance requirements, additional upgradient sediment control practices or redundant BMPs shall be installed to eliminate the overloading concerns. All changes shall be recorded in the SWPPP.
- Temporary or permanent drainage ditches and sediment basins designed as part of a sediment containment system (e.g., ditches with rock-check dams) require sediment control practices only as appropriate for site conditions.
- A floating silt curtain placed in the water is not an acceptable sediment control BMP except when working on a shoreline or below the waterline. Immediately after the short term construction activity (e.g., installation of rip rap along the shoreline) in that area is complete, upland perimeter control practices shall be installed if exposed soils still drain to a surface water.
- Re-install all sediment control practices that have been adjusted or removed to accommodate short-term activities such as clearing or grubbing, or passage of vehicles, immediately after the short-term activity has been completed. Complete any short-term activity that requires removal of sediment control practices as quickly as possible and re-install sediment control practices before the next precipitation event even if the short-term activity is not complete.
- All storm drain inlets must be protected by appropriate BMPs during construction until all sources with potential for discharging to the inlet have been stabilized. Inlet protection may be removed for a particular inlet if a specific safety concern (street flooding/freezing) has been identified by the Permittee(s) or the jurisdictional authority. The Permittee(s) must document the need for removal in the SWPPP.
- Temporary soil stockpiles must have silt fence or other effective sediment controls, and cannot be placed in any natural buffers or surface waters, including stormwater conveyances such as curb and gutter systems, or conduits and ditches unless there is a bypass in place for the stormwater.
- Where vehicle traffic leaves any part of the site (or onto paved roads within the site) install a vehicle tracking BMP to minimize the track out of sediment from the construction site. Examples of vehicle tracking BMPs include (but are not limited to) rock pads, mud mats, slash mulch, concrete or steel wash racks, or equivalent systems. Use street sweeping if such vehicle tracking BMPs are not adequate to prevent sediment from being tracked onto the street.
- The Permittee(s) must install temporary sedimentation basins as required in accordance with permit requirements.
- Minimize soil compaction by restricting vehicle access in areas where final vegetative stabilization will occur, unless otherwise infeasible.
- Discharges from BMPs shall be directed to vegetated areas unless infeasible.
- Preserve a 50 foot natural buffer or (if a buffer is infeasible on the site) provide redundant (double) perimeter sediment controls when a surface water is located within 50 feet of the project's earth disturbances and stormwater flows to the surface water.
- Perimeter sediment controls shall be installed at least 5 feet apart unless limited by lack of available space. Natural buffers are not required adjacent to road ditches, judicial ditches, county ditches, stormwater conveyance channels, storm drain inlets, and sediment basins. If preserving the buffer is infeasible, the reasons for which shall be recorded in the SWPPP.
- The use of polymers, flocculants, or other sedimentation treatment chemicals, if used on the project, shall be used in accordance with accepted engineering practices, dosing specifications, and sediment removal design specifications provided by the product manufacturer or supplier. Use conventional erosion and sediment controls prior to the chemical addition to ensure effective treatment. Chemicals may only be applied where treated stormwater is directed to a sediment control system which allows or filtration of settlement of the floc prior to discharge.
- If the proposed project as shown on the plans has 10 or more acres draining to a common location or 5 acres or more if the site is within one mile of a special or impaired water (as identified in Section II - Receiving Waters and Environmentally Sensitive Areas), then a temporary sediment basin must be constructed as shown on the plans. Temporary sediment basins will have a minimum of 3,600 cubic feet of storage per acre draining to the basin. The basin outlet shall provide for discharging water from the surface to minimize discharging of pollutants. A stabilized emergency overflow shall be constructed.

DEWATERING AND BASIN DRAINING:

- Discharge turbid or sediment-laden waters related to dewatering or basin draining (e.g., pumped discharges, trench/ditch cuts for drainage) to a temporary or permanent sediment basin on the project site unless infeasible. Discharge from the temporary or permanent sedimentation basins to surface waters if the basin water has been visually checked to ensure adequate treatment has been obtained in the basin and that nuisance conditions will not result from the discharge. If the water cannot be discharged to a sedimentation basin prior to entering the surface water, it must be treated with the appropriate BMPs, such that the discharge does not adversely affect the receiving water or downstream properties.
- Discharge water that contains oil or grease, must use an oil-water separator or suitable filtration device (e.g. cartridge filters, absorbents pads) prior to discharging the water.
- All water from dewatering or basin-draining activities must be discharged in a manner that does not cause nuisance conditions, erosion in receiving channels or downslope properties, erosion or scour in the immediate vicinity of discharge points, or inundation in wetlands causing significant adverse impact to the wetland.
- The use of filters with backwash water, haul the backwash water away for disposal, return the backwash water to the beginning of the treatment process, or incorporate the backwash water into the site in a manner that does not cause erosion. Discharge backwash water to the sanitary sewer if permission is granted by the sanitary sewer authority. Replace and clean the filter media used in dewatering devices when required to retain adequate function.

INSPECTIONS AND MAINTENANCE:

- Owner and Contractor shall ensure that a trained person of the permit will inspect the entire construction site at a minimum:
 - Once every seven (7) days during active construction, and
 - Within 24 hours after a rainfall event greater than 1/2 inch in 24 hours
- Inspect all erosion prevention and sediment control BMPs and Pollution Prevention Management Measures to ensure integrity and effectiveness during all routine and post-rainfall event inspections. All nonfunctional BMPs must be repaired, replaced, or supplemented with functional BMPs by the end of the next business day after discovery, or as soon as field conditions allow access unless another time frame is specified below. Investigate and comply with the following Inspection and Maintenance requirements:
 - All perimeter control devices must be repaired, replaced, or supplemented when they become nonfunctional or the sediment reaches one-half (1/2) of the height of the device. These repairs must be made by the end of the next business day after discovery, or thereafter as soon as field conditions allow access.
 - Temporary and permanent sedimentation basins must be drained and the sediment removed when the depth of sediment collected in the basin reaches one-half (1/2) the storage volume. Drainage and removal must be completed within 72 hours of discovery, or as soon as field conditions allow access.
 - Surface waters, including drainage ditches and conveyance systems, must be inspected for evidence of erosion and sediment deposition during each inspection. Remove all deltas and sediment deposited in surface waters, including drainage ways, catch basins, and other drainage systems, and restabilize the areas where sediment removal results in exposed soil. The removal and stabilization must take place within seven (7) days of discovery unless precluded by legal, regulatory, or physical access constraints. Use all reasonable efforts to obtain access. If precluded, removal and stabilization must take place within seven (7) calendar days of obtaining access. Contact all local, regional, state and federal authorities and receiving any applicable permits, prior to conducting any work in surface waters.
 - Construction site vehicle exit locations must be inspected for evidence of off-site sediment tracking onto paved surfaces. Tracked sediment must be removed from all paved surfaces both on and off site within 24 hours of discovery, or if applicable, within a shorter time.
 - Streets and other areas adjacent to the project must be inspected for evidence of off-site accumulations of sediment. If sediment is present, it must be removed in a manner and at a frequency sufficient to minimize off-site impacts (e.g., fugitive sediment in streets could be washed into storm sewers by the next rain and/or pose a safety hazard to users of public streets).
- Inspection frequency adjustment:
 - Inspections of areas with permanent cover can be reduced to once per month, even if construction activity continues on other portions of the site, or
 - where sites have permanent cover on all exposed soil and no construction activity is occurring anywhere on the site, inspections can be reduced to once per month and, after 12 months, may be suspended completely until construction activity resumes. The MPCA may require inspections to resume if conditions warrant; or
 - where construction activity has been suspended due to frozen ground conditions, inspections may be suspended. Inspections must resume within 24 hours of runoff occurring, or upon resuming construction, whichever comes first.
- All inspections and maintenance activities within 24 hours of being conducted must be recorded and retained in the SWPPP. These records must include:
 - Date and time of inspections
 - Name of person(s) conducting inspections
 - Findings of inspections, including the specific location where corrective actions are needed
 - Corrective actions taken (including dates, times, and party completing maintenance activities)
 - Date and amount of all rainfall events greater than 1/2 inch (0.5 inches) in 24 hours. Rainfall amounts must be obtained by a properly maintained rain gauge installed onsite, a weather station that is within 1 mile of your location or a weather reporting system that provides site specific rainfall data from radar summaries.
 - If any discharge is observed to be occurring during the inspection, a record of all points of the property from which there is a discharge must be made, and the discharge should be described (i.e., color, odor, floating, settled, or suspended solids, foam, oil sheen, and other obvious indicators of pollutants) and photographed.
 - Any amendments to the SWPPP proposed as a result of the inspection must be documented within seven (7) calendar days.
- All infiltration areas must be inspected to ensure that no sediment from ongoing construction activity is reaching the infiltration area. All infiltration areas must be inspected to ensure that equipment is not being driven across the infiltration area.

POLLUTION PREVENTION MANAGEMENT MEASURES:

Implement the following pollution prevention management measures on the site:

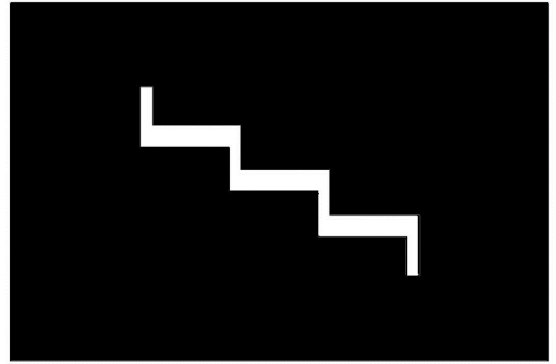
- Storage, Handling, and Disposal of Construction Products, Materials, and Wastes shall comply with the following to minimize the exposure to stormwater of any of the products, materials, or wastes. Products or wastes which are either not a source of contamination to stormwater or are designed to be exposed to stormwater are not held to this requirement:
 - Building products that have the potential to leach pollutants must be under cover (e.g., plastic sheeting or temporary roofs) to prevent the discharge of pollutants or protected by a similarly effective means designed to minimize contact with stormwater.
 - Pesticides, herbicides, insecticides, fertilizers, treatment chemicals, and landscape materials must be under cover (e.g., plastic sheeting or temporary roofs) to prevent the discharge of pollutants or protected by similarly effective means designed to minimize contact with stormwater.
 - Hazardous materials, toxic waste, (including oil, diesel fuel, gasoline, hydraulic fluids, paint solvents, petroleum-based products, wood preservatives, additives, curing compounds, and acids) must be properly stored in sealed containers to prevent spills, leaks or other discharge. Restricted access storage areas must be provided to prevent vandalism. Storage and disposal of hazardous waste or hazardous materials must be in compliance with Minn. R. ch. 7045 including secondary containment as applicable.
 - Solid waste must be stored, collected and disposed of properly in compliance with Minn. R. ch. 7035.
 - Portable toilets must be positioned so that they are secure and will not be tipped or knocked over. Sanitary waste must be disposed of properly in accordance with Minn. R. ch. 7041.
- Fueling and Maintenance of Equipment or Vehicles; Spill Prevention and Response. Take reasonable steps to prevent the discharge of spilled or leaked chemicals, including fuel, from any area where chemicals or fuel will be loaded or unloaded including the use of drip pans or absorbents unless infeasible. Conduct fueling in a contained area unless infeasible. Ensure adequate supplies are available at all times to clean up discharged materials and that an appropriate disposal method is available for recovered spilled materials. Report and clean up spills immediately as required by Minn. Stat. § 115.061, using dry clean up measures where possible.
- Vehicle and equipment washing: Wash the exterior of vehicles or equipment on the project site, washing must be limited to a defined area of the site. Runoff from the washing area must be contained in a sediment basin or other similarly effective controls and waste from the washing activity must be properly disposed of. Properly use and store soaps, detergents, or solvents. No engine degreasing is allowed on site.
- Concrete and other washouts waste: Provide effective containment for all liquid and solid wastes generated by washout operations (concrete, stucco, paint, form release oils, curing compounds and other construction materials) related to the construction activity. The liquid and solid washout wastes must not contact the ground, and the containment must be designed so that it does not result in runoff from the washout operations or areas. Liquid and solid wastes must be disposed of properly and in compliance with MPCA rules. A sign must be installed adjacent to each washout facility that requires site personnel to utilize the proper facilities for disposal of concrete and other washout wastes.

PERMIT TERMINATION:

- Permittees must submit a NOT within 30 days after all termination conditions are complete.
 - Permittees must submit a NOT within 30 days after selling or otherwise legally transferring the entire site, including permit responsibility for roads (e.g., street sweeping) and stormwater infrastructure final clean out, or transferring portions of a site to another party. The permittees' coverage under the permit terminates at midnight on the submission date of the NOT.
 - Permittees may terminate permit coverage prior to completion of all construction activity if they meet all of the following conditions:
 - Construction activity has ceased for at least 90 days; and
 - at least 90 percent (by area) of all originally proposed construction activity has been completed and permanent cover has been established on those areas; and
 - on areas where construction activity is not complete, permanent cover has been established; and
- After permit coverage is terminated under this item, any subsequent development on the remaining portions of the site will require permit coverage if the subsequent development itself or as part of the remaining common plan of development or sale will result in land disturbing activity of one (1) or more acres in size.
- Permittees may terminate coverage upon EPA approval after submitting information documenting the owner canceled the project.
 - Permittees must complete all construction activity and must install permanent cover over all areas prior to submitting the NOT. Vegetative cover must consist of a uniform perennial vegetation with a density of 70 percent of its expected final growth. Vegetation is not required where the function of a specific area dictates no vegetation, such as impervious surfaces or the base of a sand filter.
 - Permittees must clean the permanent stormwater system of any accumulated sediment and must ensure the system meets all applicable requirements of the permit and is operating as designed.
 - Permittees must remove all sediment from conveyance systems prior to submitting the NOT.
 - Permittees must remove all temporary synthetic erosion prevention and sediment control BMPs prior to submitting the NOT. BMPs designed to decompose on-site may be left in place.
 - When submitting the NOT, permittees must include either ground or aerial photographs showing vegetative cover requirements have been met as listed above. All submitted photographs shall include the date and specific site location.

LONG TERM OPERATION AND MAINTENANCE:

- Upon the completion of construction activity and NPDES permit termination, the Property Owner shall become the responsible party for long term operation and maintenance (O&M) of all permanent stormwater management features under this project.
- All associated operations, inspections, maintenance, and record keeping shall be performed by trained individual(s) familiar with the site stormwater management system.
- Record keeping of inspections and maintenance items shall be maintained by the Owner in accordance with applicable Maintenance Agreements/Declarations as required by local jurisdictional authorities.



BUSCH
ARCHITECTS, INC.

310 FOURTH AVENUE SOUTH
SUITE 1000
MINNEAPOLIS, MINNESOTA 55415

TEL: 612.333.2279

A.MALDO@BUSCH-ARCHITECTS.COM

CONSULTANT



Larson
Engineering, Inc.

3524 Labore Road
White Bear Lake, MN 55110
651.481.9120 (f) 651.481.9201
www.larsonenr.com

© 2024 Larson Engineering, Inc. All rights reserved.

CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Eric G. Meyer

DATE: 06/17/2024 REG. NO. 44592
PRINTED NAME: ERIC G. MEYER

COMMISSION NO.: 12236150

DRAWN BY: KBK

CHECKED BY: EGM

DATE: 06/17/2024

BID ISSUE DATE:

REVISION DATES:

PROJECT TITLE

DII WAREHOUSE REMODEL
McGREGOR, MN

20898 360TH STREET
MCGREGOR, MN 55760

OWNER

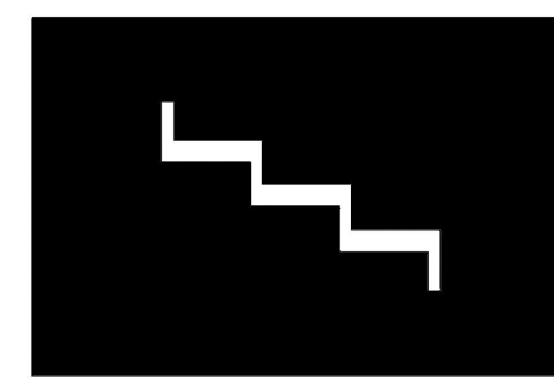
MILLE LACS OF OJIBWE

43408 OODENA DRIVE
ONAMIA, MN 56359

SHEET TITLE

SWPPP

C401



BUSCH
ARCHITECTS, INC.

310 FOURTH AVENUE SOUTH
SUITE 1000
MINNEAPOLIS, MINNESOTA 55415

TEL: 612.333.2279
A.MALDO@BUSCH-ARCHITECTS.COM

CONSULTANT

BID ISSUE SET

CERTIFICATION
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: JUNE 17, 2024 REG. NO. 58977
PRINTED NAME: AMANDA MALDONADO

COMMISSION NO.: 23-11

DRAWN BY: CAB/AM

CHECKED BY: AM

DATE: JUNE 17, 2024

BID ISSUE DATE: JUNE 18, 2024

REVISION DATES: JUNE 24, 2024

PROJECT TITLE

DIJ WAREHOUSE REMODEL
McGREGOR, MN

20898 360TH STREET
McGREGOR, MN 55760

OWNER

MILLE LACS BAND OF OJIBWE

43408 OODENA DRIVE
ONAMIA, MN 56359

SHEET TITLE

LIFE SAFETY PLAN

AX.0

SHEET NO.
SHEET 2 OF 12

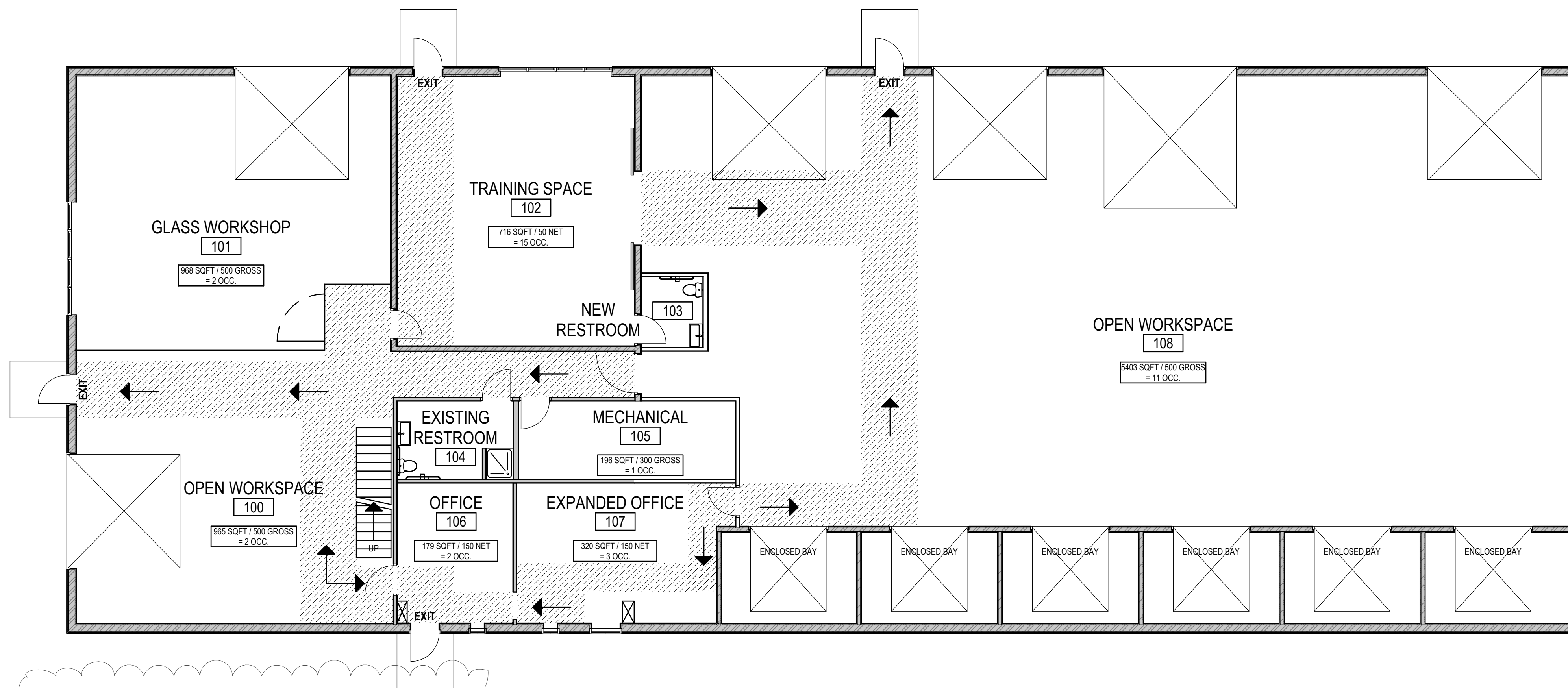
CODE DATA

REQUIRED EXITS: 2
EXITS PROVIDED: 4

SPRINKLERED: NO
REQUIRED FIRE RATING: NONE (TYPE 2B)

OCCUPANCY TYPES:
STORAGE
VOCATIONAL TRAINING
OFFICE
MECHANICAL

ACCESSIBILITY: ADA-COMPLIANT PASSAGES AND RESTROOMS
CONSERVATION CODE CATEGORY: ALTERATION LEVEL 2
ENERGY CODE CLIMATE DESIGNATION: ZONE 7



LIFE SAFETY PLAN KEY

MEZZANINE
2 OCCUPANTS

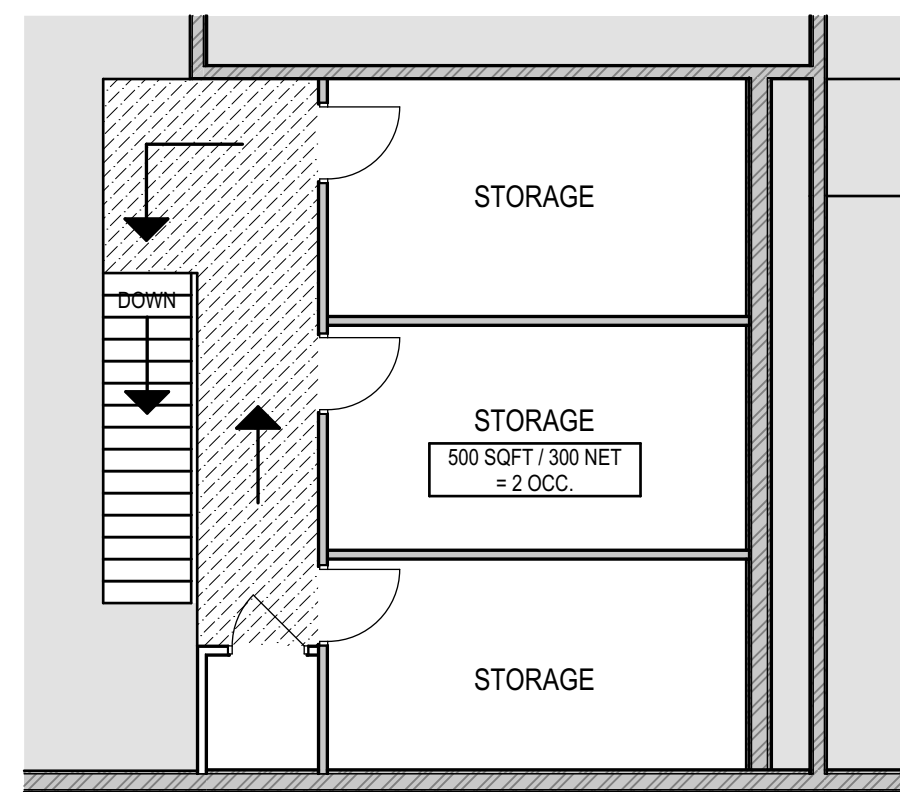
GROUND FLOOR
35 OCCUPANTS

SQFT / LOAD = # OCC. OCCUPANT LOAD

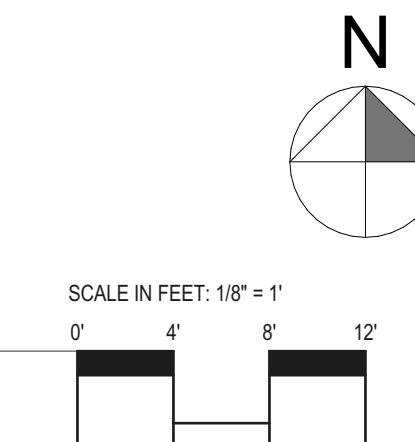
PATH OF EGRESS

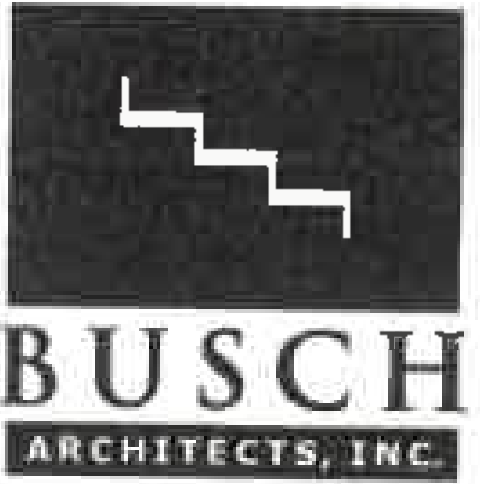
DIRECTION OF TRAVEL

1 LIFE SAFETY PLAN - GROUND FLOOR
AX.0 / SCALE: 1/8" = 1'



2 LIFE SAFETY PLAN - MEZZANINE
AX.0 / SCALE: 1/8" = 1'





310 FOURTH AVENUE SOUTH
SUITE 1000
MINNEAPOLIS, MINNESOTA 55415

TEL: 612.333.2279
AMALDO@BUSCH-ARCHITECTS.COM

CONSULTANT

BID ISSUE SET

CERTIFICATION
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: JUNE 17, 2024 REG. NO. 58977
PRINTED NAME: AMANDA MALDONADO

COMMISSION NO.: 23-11
DRAWN BY: CAB/AM
CHECKED BY: AM
DATE: JUNE 17, 2024
BID ISSUE DATE: JUNE 18, 2024
REVISION DATES: JUNE 24, 2024

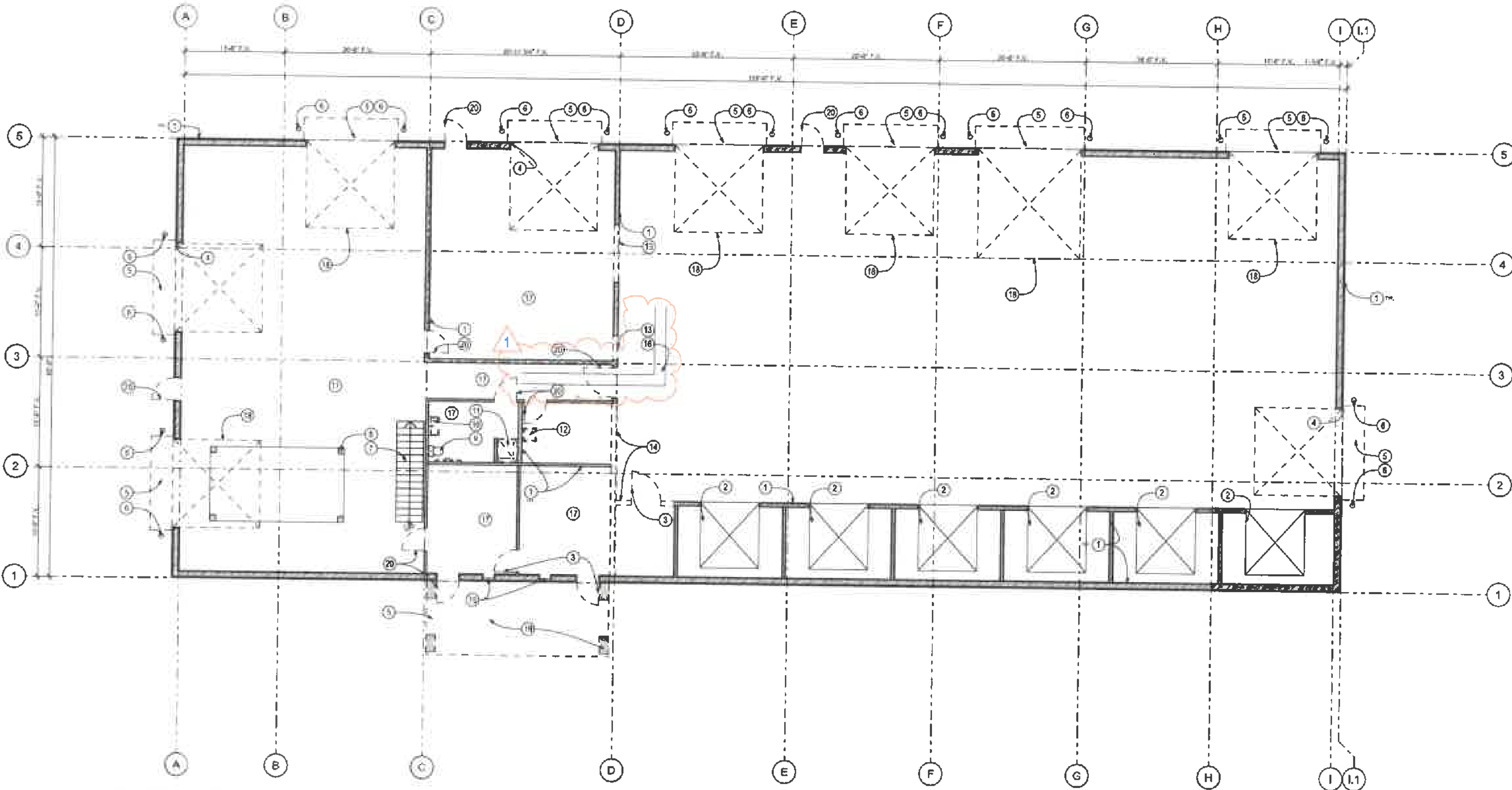
PROJECT TITLE
DII WAREHOUSE REMODEL
McGREGOR, MN
20898 360TH STREET
McGREGOR, MN 55760

OWNER
MILLE LACS BAND OF OJIBWE
43408 OODENA DRIVE
ONAMIA, MN 56359

SHEET TITLE
DEMOLITION PLAN

D1.0

SHEET NO.
SHEET 3 OF 12



DEMO PLAN KEYNOTES

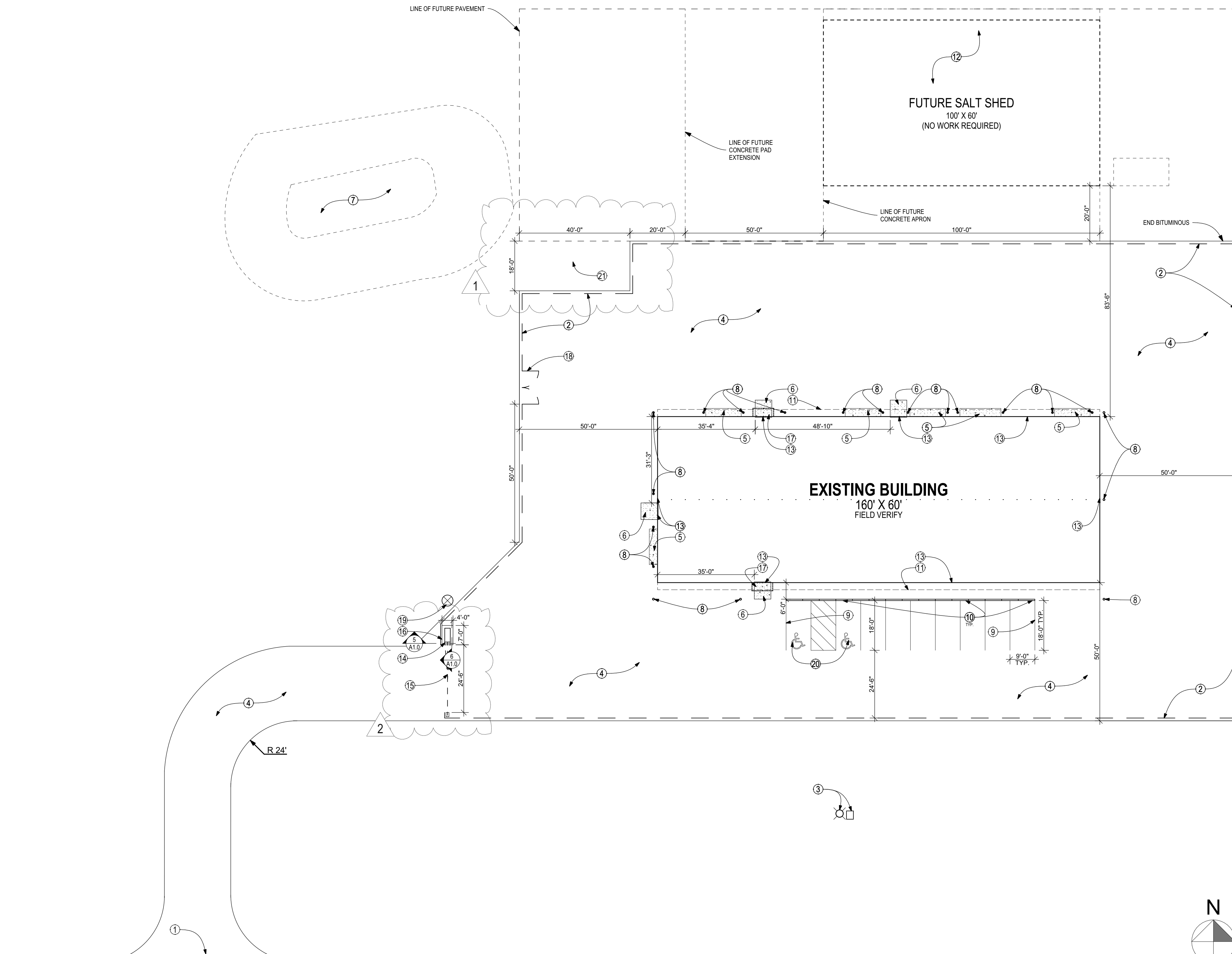
- EXISTING WALL TO REMAIN (SHOWN SHADED).
- EXISTING DOOR TO REMAIN.
- REMOVE EXISTING DOOR AND FRAME.
- REMOVE EXISTING OVERHEAD DOOR AND ASSOCIATED TRACK/EQUIPMENT.
- REMOVE EXISTING STOOP/APRON. SEE A1.0
- REMOVE EXISTING ROLLUP DOOR.
- EXISTING STAIRS TO REMAIN.
- EXISTING CAR LIFT TO REMAIN.
- REMOVE EXISTING TOILET. SEE MECH.
- REMOVE EXISTING SINK. SEE MECH.
- EXISTING SHOWER TO REMAIN.
- REMOVE EXISTING MOP SINK. SEE MECH.
- REMOVE PORTION OF EXISTING WALL IN PREPARATION FOR NEW DOOR (SEE ELEVATION 4/A&G).
- REMOVE WALL TO EXTENT SHOWN (SHOWN DASHED). SEE INT. ELEVATIONS.
- EXISTING WINDOW TO REMAIN.
- REMOVE SLAB TO EXTENT REQUIRED. LOCATION SHOWN IS APPROXIMATE. SEE MECH.
- REMOVE EXISTING FLOOR COATING AND PREP FOR NEW EPOXY COATING.
- REMOVE AND REPLACE EXISTING OVERHEAD DOOR IN PLACE.
- REMOVE EXISTING WOOD CANOPY AND COLUMNS.
- REMOVE AND REPLACE EXISTING DOOR IN PLACE.

GENERAL DEMO NOTES

- FIELD VERIFY ALL CONDITIONS AND DIMENSIONS AND REPORT DISCREPANCIES BETWEEN FOUND CONDITIONS AND CONSTRUCTION PLANS TO THE ARCHITECT IMMEDIATELY.
- SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR MECHANICAL AND ELECTRICAL DEMOLITION.
- REMOVE ALL SMALL AND MINOR ITEMS NOT REMAINING IN THE FINISHED WORK: HANGERS, NAILS, PROTRUSIONS, ETC.
- COORDINATE WITH NEW CONSTRUCTION.
- PROTECT EXISTING FINISHES TO REMAIN FROM DAMAGE. RETURN TO ORIGINAL CONDITION IF DAMAGE OCCURS DURING CONSTRUCTION ACTIVITIES.
- ENSURE CONDITION OF REMOVAL/PREPARATIONS ACCEPTABLE FOR INSTALL AND OTHER SUBCONTRACTOR WORK.
- PROVIDE NECESSARY SHORING AND BRACING @ REMOVAL TO ENSURE NO STRUCTURAL DAMAGE TO EXISTING CONDITIONS TO REMAIN.



1 DEMOLITION FLOOR PLAN
D1.0 SCALE: 1/8" = 1'

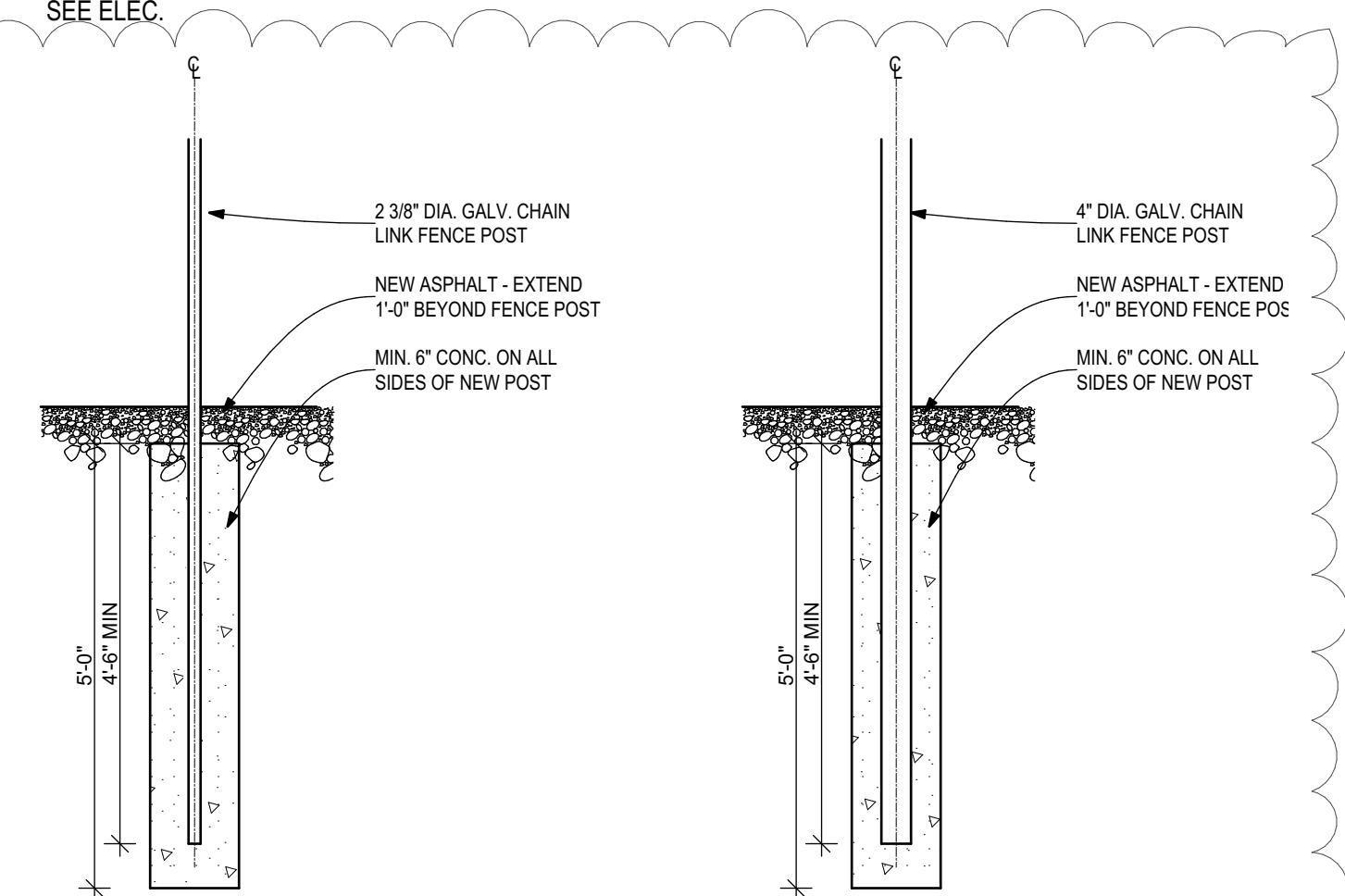


FLOOR PLAN KEYNOTES

1. MODIFY CURB CUT - SEE CIVIL.
2. CHAIN LINK FENCE 8'-0" HIGH. INSTALL POSTS 10'-0" O.C. SEE 2/A1.0
3. EXISTING POWER POLE AND TRANSFORMER
4. BITUMINOUS PAVEMENT - EXTEND 1'-0" PAST FENCE (TYP.). SEE CIVIL.
5. CONCRETE APRON. SEE 8/A3.0
6. CONCRETE STOOP. SEE 5/A3.0
7. SEPTIC MOUND/DRAIN FIELD. SEE CIVIL.
8. BOLLARDS W/ PLASTIC COVERS. SEE 7/A3.0
9. 4" REFLECTIVE PARKING STRIPES.
10. TIRE STOPS.
11. ROOF OVERHANG ABOVE. SHOWN DASHED.
12. FUTURE SALT SHED AND CONCRETE APRON. PHASE 2.
13. EXTERIOR BUILDING MOUNTED LIGHT FIXTURE - SEE ELEC.
14. PIVOT GATE OPERATOR - SEE ELEC.
15. PIVOT GATE. SEE ALTERNATE #1.
16. CONCRETE PAD. SEE 5/A3.0 (SIM.)
17. ICE SHIELD CANOPY. SEE 9/A3.0
18. CHAIN LINK SWING GATE IN CHAIN LINK FENCE. SEE 3/A1.0
19. NEW EXTERIOR LIGHT POLE - SEE ELEC.
20. HANDICAP LABEL AND ACCESSIBLE AISLE.
21. SEPTIC EQUIPMENT. VERIFY LOCATION. PROTECT FROM DAMAGE.

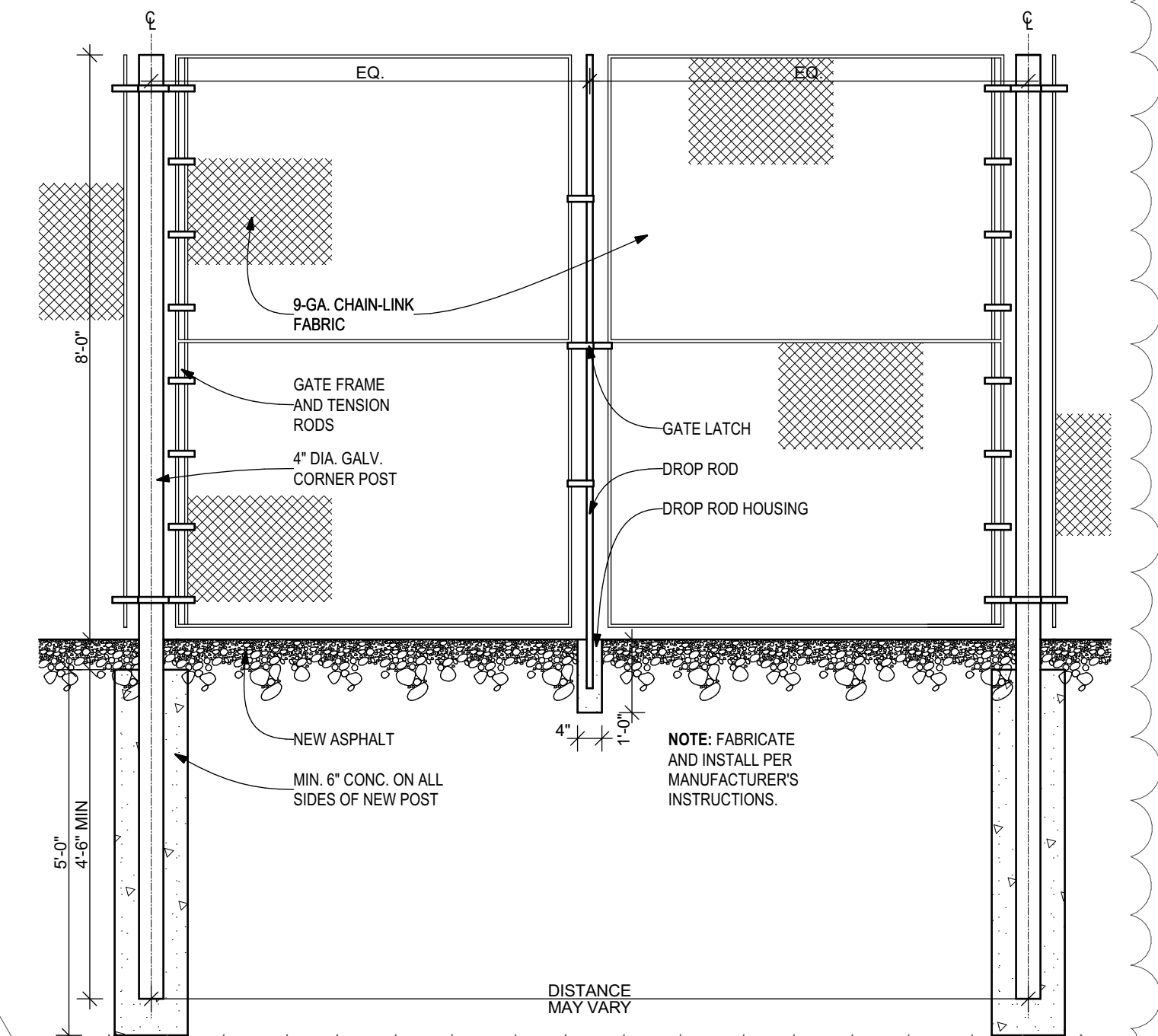
GENERAL SITE PLAN NOTES

- A. SEE A2.0 FOR INTERIOR FLOOR PLAN LAYOUT.
- B. SEE CIVIL FOR ADDITIONAL NOTES.
- C. SEE CIVIL FOR SITE DEMOLITION.
- D. FIELD VERIFY ALL BUILDING CONDITIONS AND DIMENSIONS. REPORT DISCREPANCIES BETWEEN FOUND CONDITIONS AND CONSTRUCTION PLANS TO THE ARCHITECT IMMEDIATELY.
- E. PROTECT EXISTING FINISHES TO REMAIN FROM DAMAGE. RETURN TO ORIGINAL CONDITION IF DAMAGE OCCURS DURING CONSTRUCTION ACTIVITIES.
- F. PROVIDE 360-DEGREE SECURITY CAMERA COVERAGE AT EXTERIOR BUILDING PERIMETER - SEE ELEC.

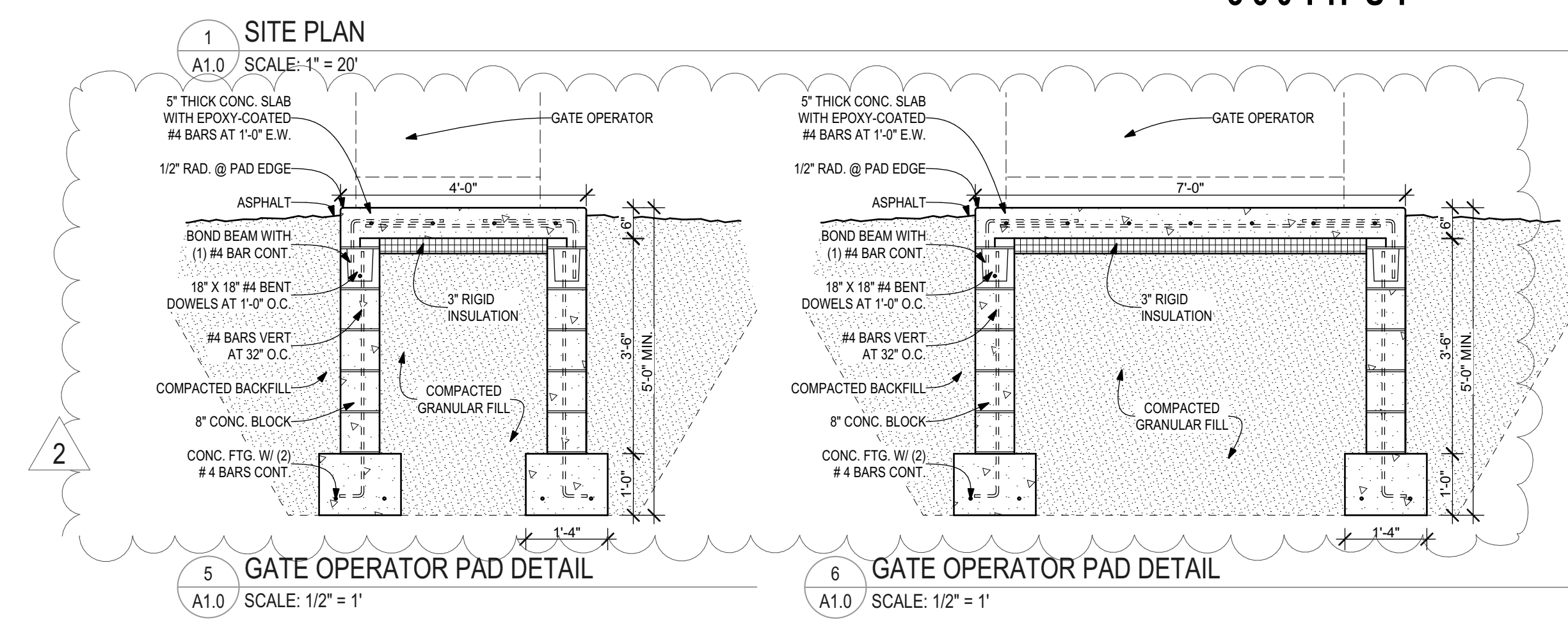


2 FENCE POST DETAIL (TYP.)
A1.0 SCALE: 1/2" = 1'

3 FENCE CORNER POST DETAIL
A1.0 SCALE: 1/2" = 1'



4 FENCE GATE DETAIL
A1.0 SCALE: 1/2" = 1'



5 GATE OPERATOR PAD DETAIL
A1.0 SCALE: 1/2" = 1'

6 GATE OPERATOR PAD DETAIL
A1.0 SCALE: 1/2" = 1'

2 FENCE POST DETAIL (TYP.)
A1.0 SCALE: 1/2" = 1'

3 FENCE CORNER POST DETAIL
A1.0 SCALE: 1/2" = 1'

4 FENCE GATE DETAIL
A1.0 SCALE: 1/2" = 1'

5 GATE OPERATOR PAD DETAIL
A1.0 SCALE: 1/2" = 1'

6 GATE OPERATOR PAD DETAIL
A1.0 SCALE: 1/2" = 1'



310 FOURTH AVENUE SOUTH
SUITE 1000
MINNEAPOLIS, MINNESOTA 55415
TEL: 612.333.2279
A.MALDO@BUSCH-ARCHITECTS.COM

CONSULTANT

BID ISSUE SET

CERTIFICATION
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: JUNE 17, 2024 REG. NO. 58977
PRINTED NAME: AMANDA MALDONADO

COMMISSION NO.: 23-11
DRAWN BY: CAB/AM
CHECKED BY: AM
DATE: JUNE 17, 2024
BID ISSUE DATE: JUNE 18, 2024
REVISION DATES: JUNE 24, 2024

PROJECT TITLE

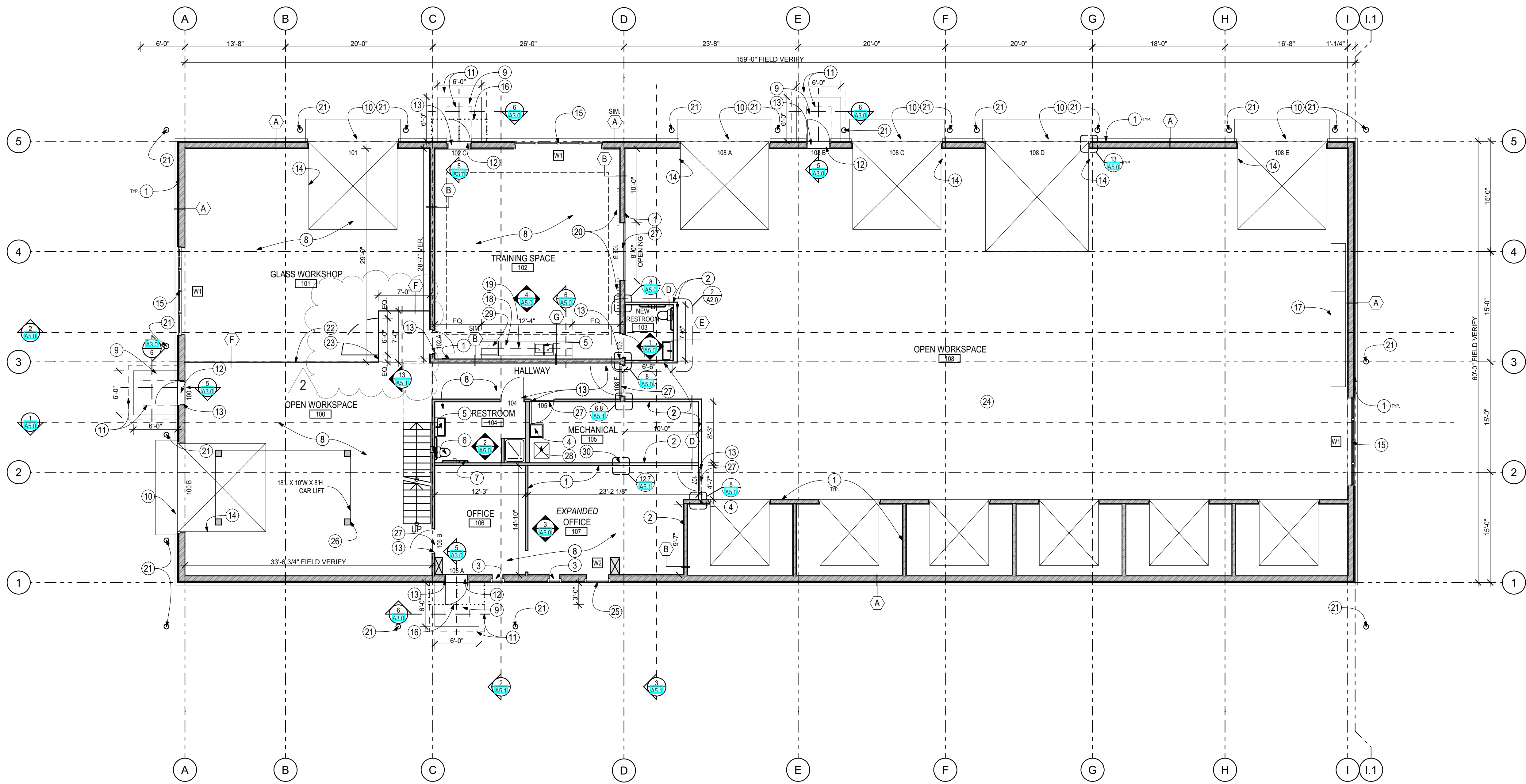
DII WAREHOUSE REMODEL
McGREGOR, MN

OWNER
MILLE LACS BAND OF OJIBWE
43408 OODENA DRIVE
ONAMIA, MN 56359

SHEET TITLE

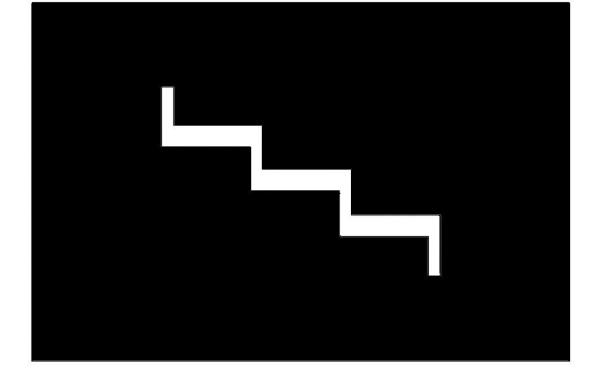
SITE PLAN
A1.0

SHEET NO.
SHEET 4 OF 12



- FLOOR PLAN KEYNOTES**
- EXISTING WALL SHOWN SHADED. PROTECT FROM DAMAGE.
 - NEW WALL. SEE WALL TYPES 3/A2.0
 - EXISTING WINDOW. PROTECT FROM DAMAGE.
 - EYEWASH. SEE MECH.
 - SINK. SEE MECH.
 - ADA TOILET. SEE MECH.
 - ADA GRAB BARS.
 - EPOXY FLOORING. PREPARE SURFACE PER MANUFACTURER INSTRUCTIONS.
 - CONCRETE STOOP. SEE 5.6/A3.0
 - NEW CONCRETE APRON. SEE 8/A3.0 FOR DETAIL.
 - LINE OF FOOTING BELOW.
 - METAL EXTERIOR THRESHOLD.
 - H.M. FRAME AND DOOR. SEE 4.5/A7.0
 - NEW OVERHEAD DOOR AND TRACK/OPENER.
 - ALUMINUM STOREFRONT. SEE 3/A5.1
 - MPRO ICE SHIELD CANOPY ABOVE. SEE 9/A3.0
 - WORKBENCH.
 - LOWER CASEWORK.
 - UPPER CASEWORK.
 - SLIDING DOOR. SEE 4.5/A7.0
 - BOLLARD. SEE 7/A3.0 FOR DETAIL.
 - CHAIN LINK FENCE.
 - CHAIN LINK GATE. SEE 13/A5.1
 - EXISTING CONCRETE FLOOR.
 - ALUMINUM WINDOW.
 - EXISTING CAR LIFT.
 - TRANSITION STRIP.
 - MOP SINK. SEE MECH.
 - APPLIANCE - G.C. TO PROVIDE AND INSTALL.
 - PROVIDE WELDED CONNECTION TO PRIMARY BUILDING FRAME. F.V. CONDITION PRIOR TO FABRICATOR.
 - HSS STRUCTURAL MEMBER. SEE 7/A5.1

- PLAN GENERAL NOTES**
- FIELD VERIFY ALL BUILDING CONDITIONS AND DIMENSIONS. REPORT DISCREPANCIES BETWEEN FOUND CONDITIONS AND CONSTRUCTION PLANS TO THE ARCHITECT IMMEDIATELY.
 - PROTECT ALL ADJACENT EXISTING MATERIALS TO REMAIN FROM DAMAGE. RETURN TO ORIGINAL CONDITION IF DAMAGED.
 - EXIST. CONCRETE SLAB TO REMAIN. PATCH AND FILL WHERE NECESSARY.
 - VERIFY WORK COMPLETED IS ACCEPTABLE TO OTHER TRADES.
 - SEE MECH/ELEC FOR ADDITIONAL INFORMATION RELATED TO MEP EQUIPMENT AND SYSTEMS.



**BUSCH
ARCHITECTS, INC.**

310 FOURTH AVENUE SOUTH
SUITE 1000
MINNEAPOLIS, MINNESOTA 55415
TEL: 612.333.2279
A.MALDO@BUSCH-ARCHITECTS.COM

CONSULTANT

BID ISSUE SET

CERTIFICATION
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: JUNE 17, 2024 REG. NO. 58977
PRINTED NAME: AMANDA MALDONADO

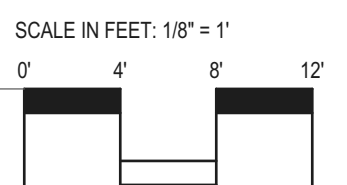
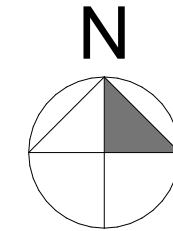
COMMISSION NO.: 23-11
DRAWN BY: CAB/AM
CHECKED BY: AM
DATE: JUNE 17, 2024
BID ISSUE DATE: JUNE 18, 2024
REVISION DATES: JUNE 24, 2024

PROJECT TITLE
DII WAREHOUSE REMODEL
McGREGOR, MN

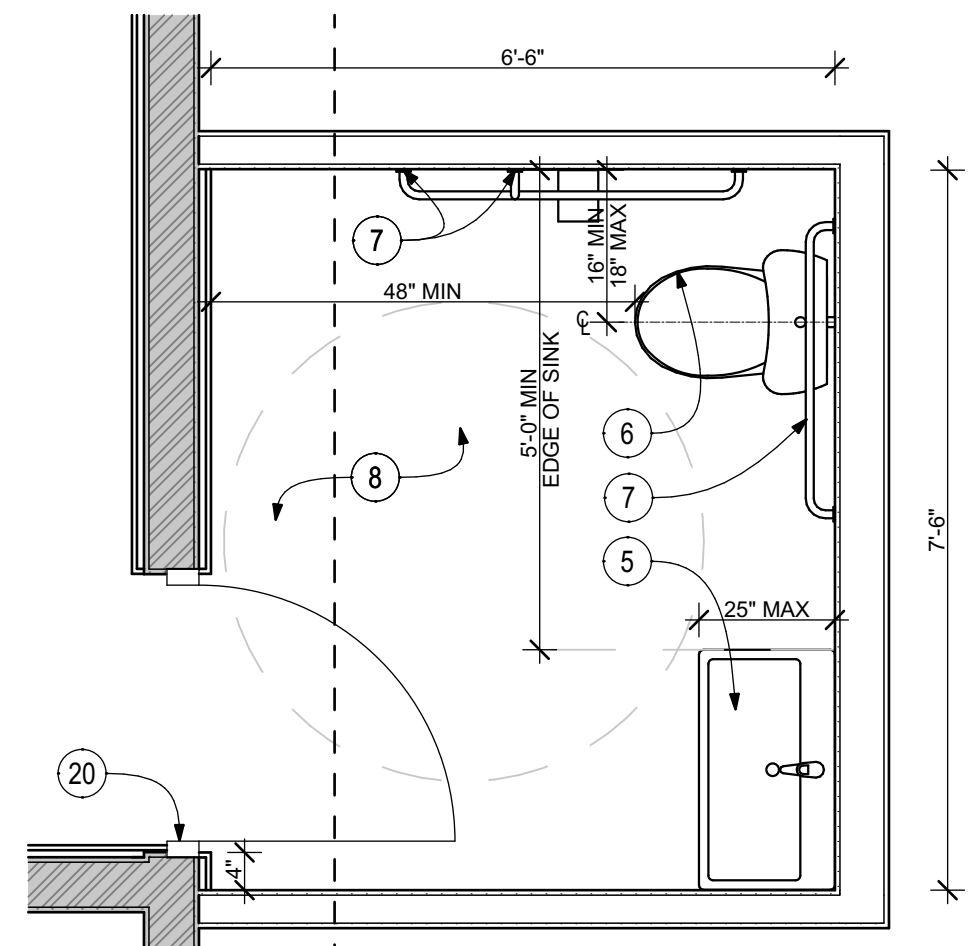
20898 360TH STREET
McGREGOR, MN 55760

OWNER
MILLE LACS BAND OF OJIBWE
43408 OODENA DRIVE
ONAMIA, MN 56359

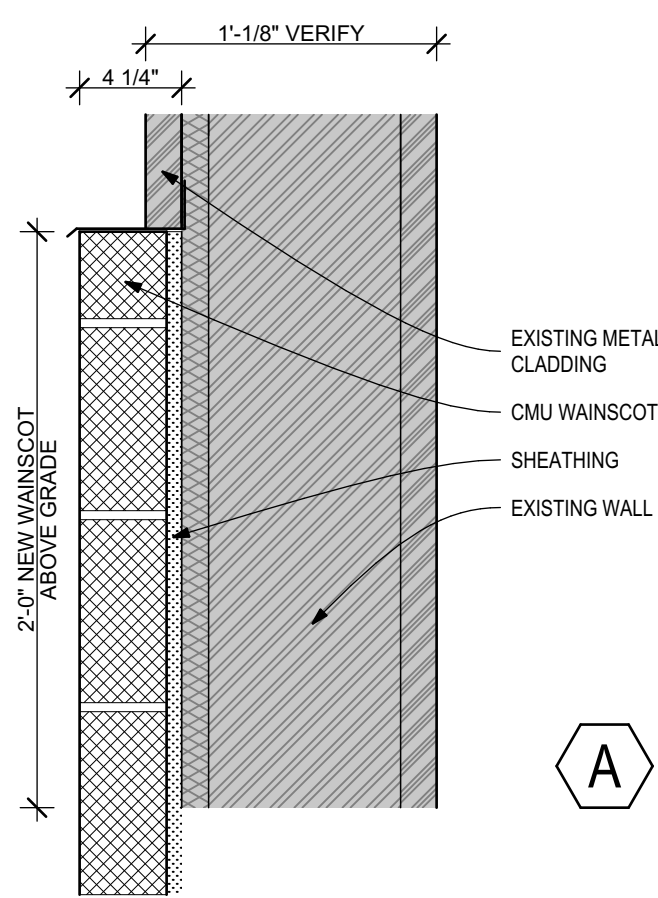
SHEET TITLE
FLOOR PLANS



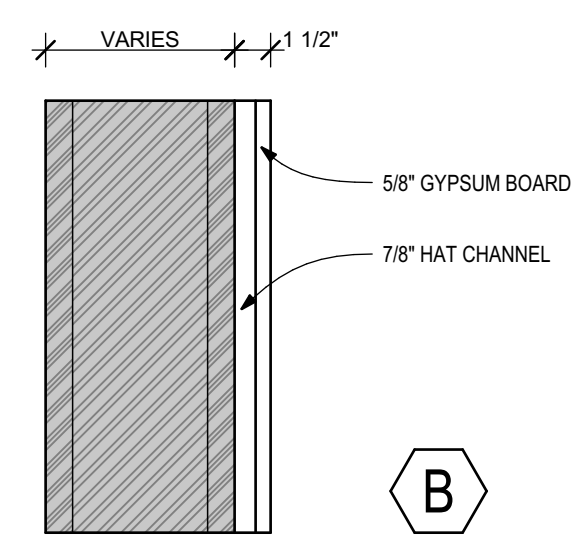
1 FLOOR PLAN
A2.0 SCALE: 1/8" = 1'



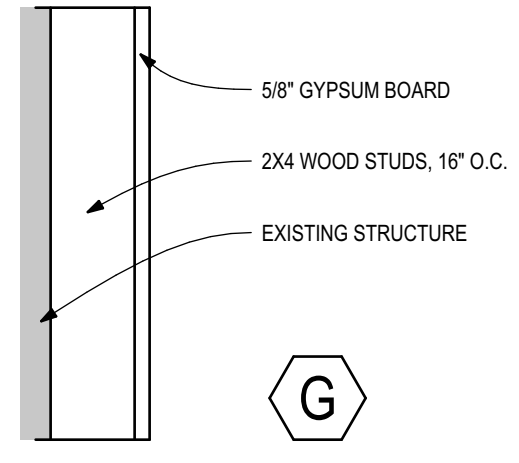
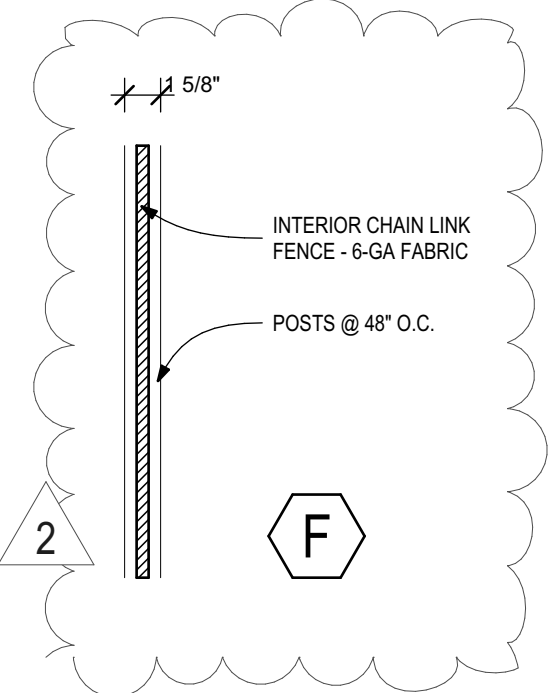
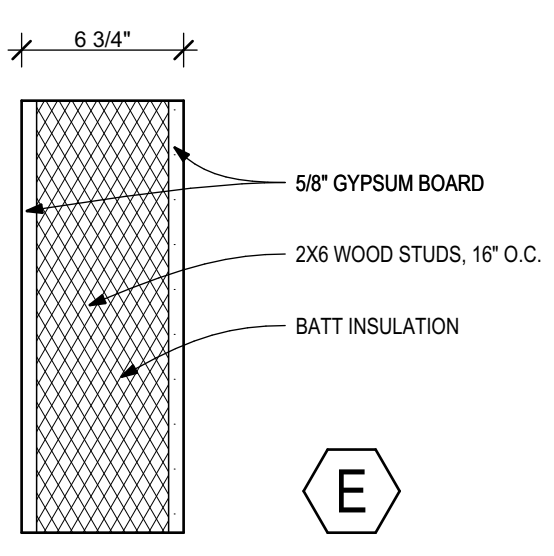
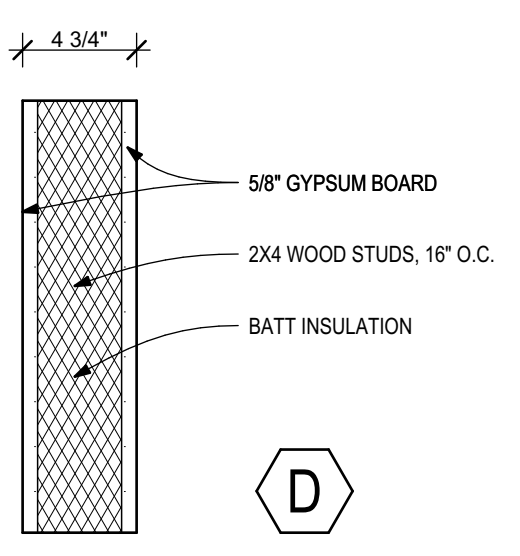
2 ENLARGED ADA RESTROOM PLAN
A2.0 SCALE: 1/2" = 1'



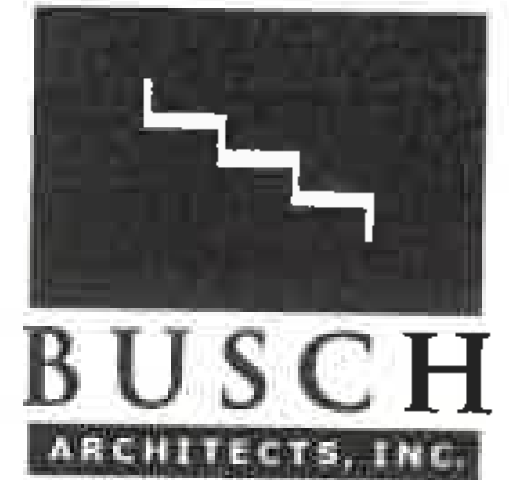
3 WALL TYPES
A2.0 SCALE: 1/2" = 1'



NOT USED

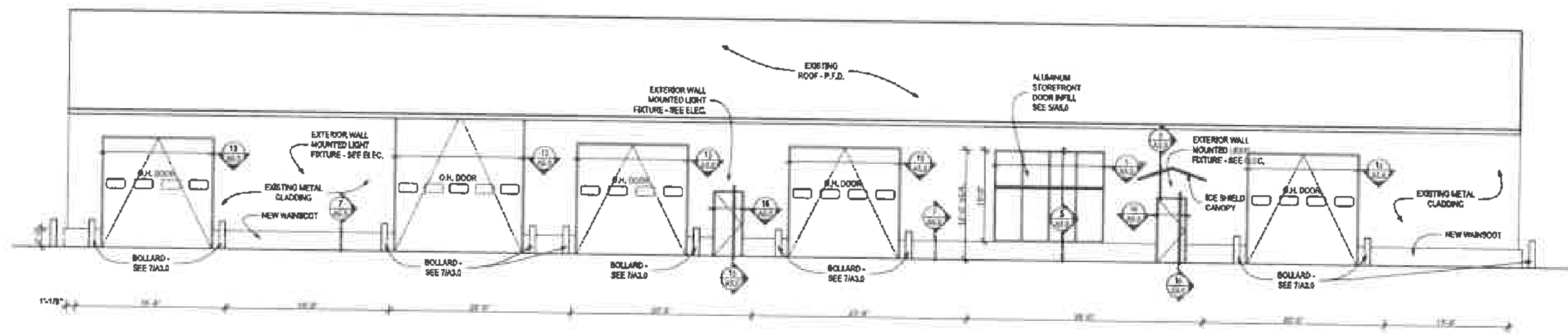


A2.0

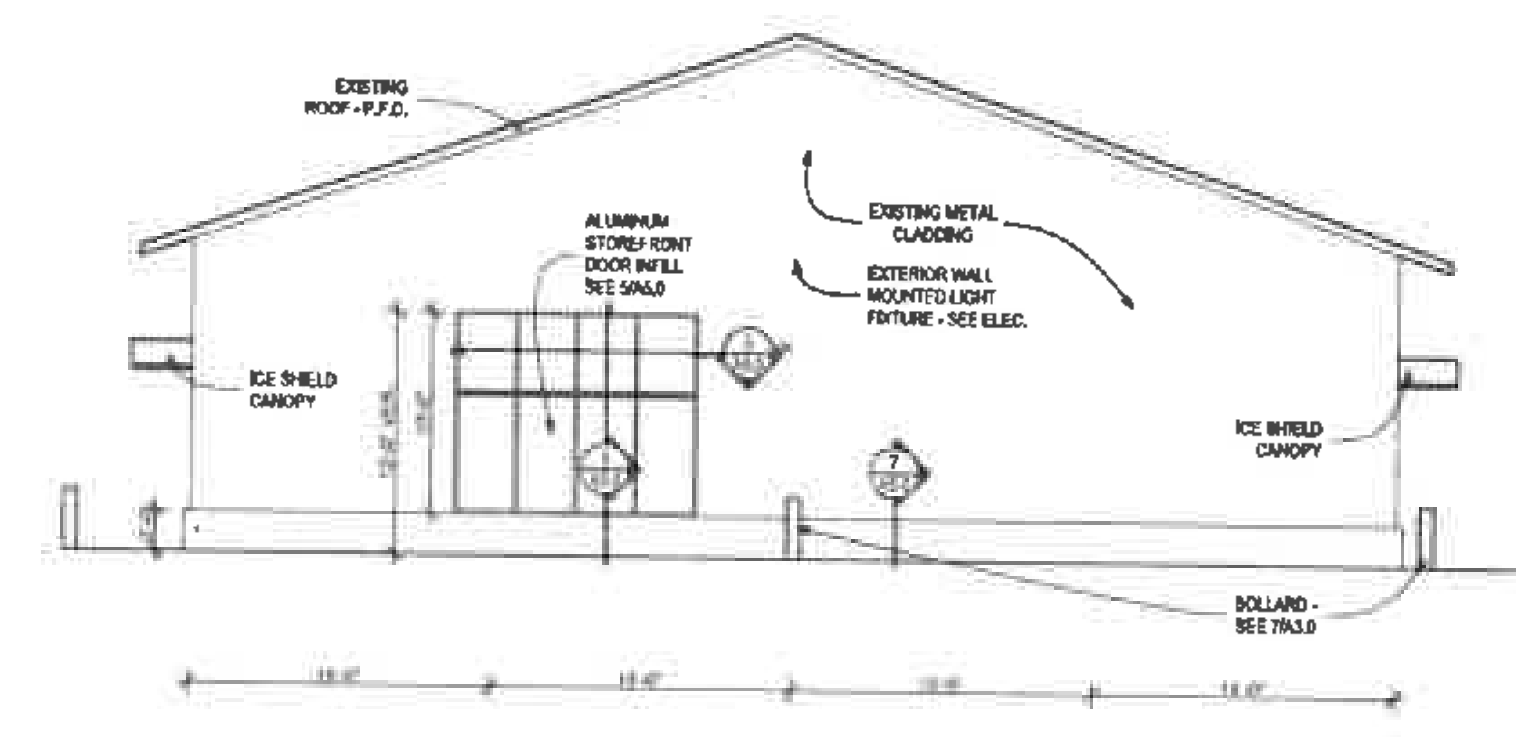


310 FOURTH AVENUE SOUTH
SUITE 1000
MINNEAPOLIS, MINNESOTA 55415
TEL: 612.333.2279
A.MALDO@BUSCH-ARCHITECTS.COM

CONSULTANT

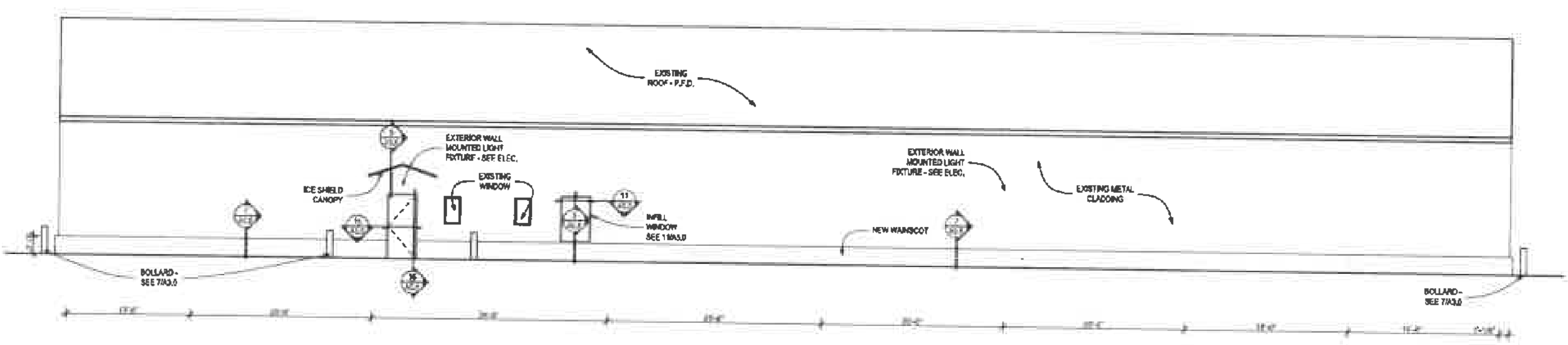


1 NORTH ELEVATION
A3.0 SCALE: 1/8" = 1'

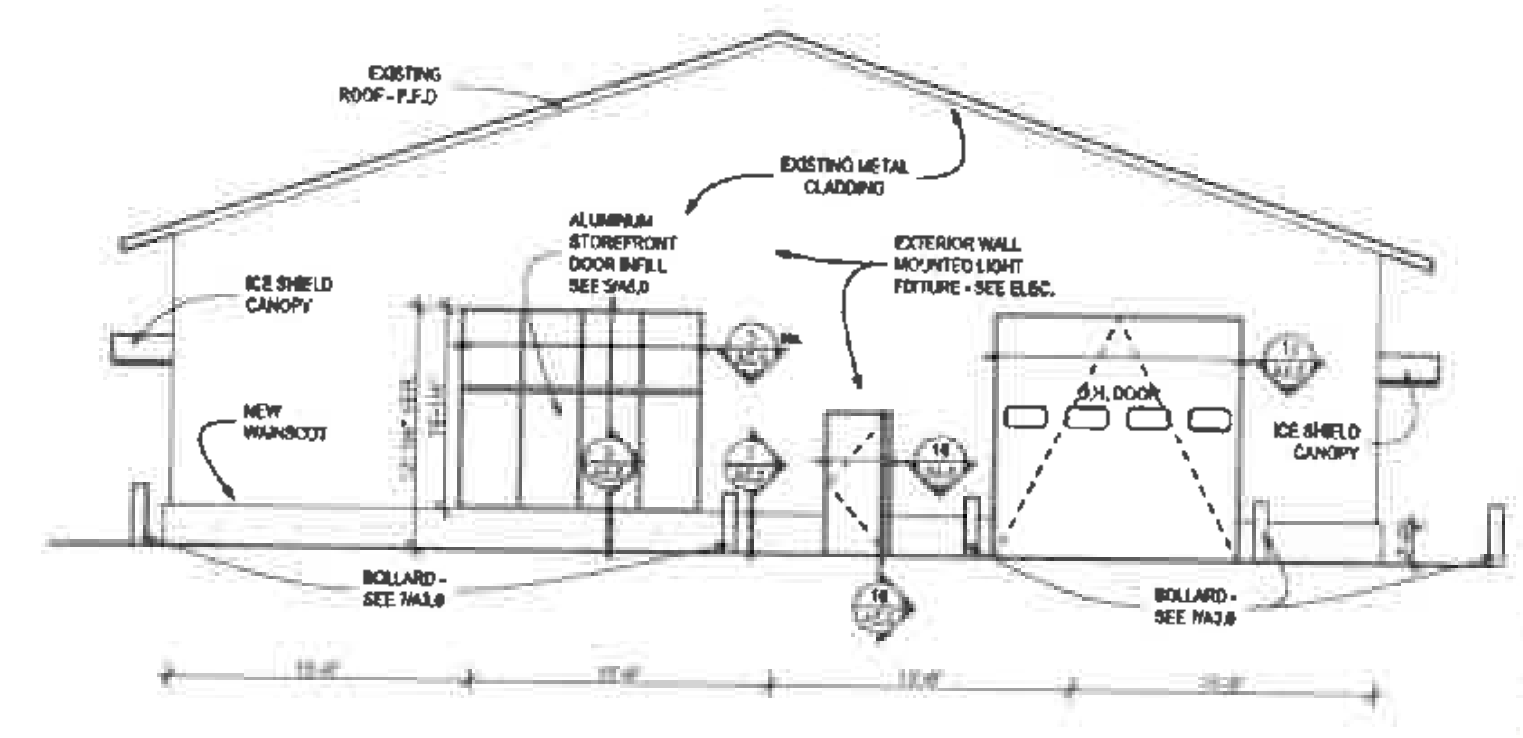


2 EAST ELEVATION
A3.0 SCALE: 1/8" = 1'

ELEVATION GENERAL NOTES
A. PROTECT ALL EXISTING U.N.O.
B. SEE MECH. AND ELEC.
C. FOLLOW MANUFACTURER'S
GUIDELINES/DETAILS FOR ICE
SHIELD CANOPY.



3 SOUTH ELEVATION
A3.0 SCALE: 1/8" = 1'



4 WEST ELEVATION
A3.0 SCALE: 1/8" = 1'

BID ISSUE SET
CERTIFICATION
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR
REPORT WAS PREPARED BY ME OR UNDER MY DIRECT
SUPERVISION AND THAT I AM A DULY REGISTERED
ARCHITECT UNDER THE LAWS OF THE STATE OF
MINNESOTA.

DATE: JUNE 17, 2024 REG. NO. 56877
PRINTED NAME: AMANDA MALDONADO

COMMISSION NO.: 23-11
DRAWN BY: CASJAM
CHECKED BY: AM
DATE: JUNE 17, 2024
BD ISSUE DATE: JUNE 18, 2024
REVISION DATES: JUNE 24, 2024

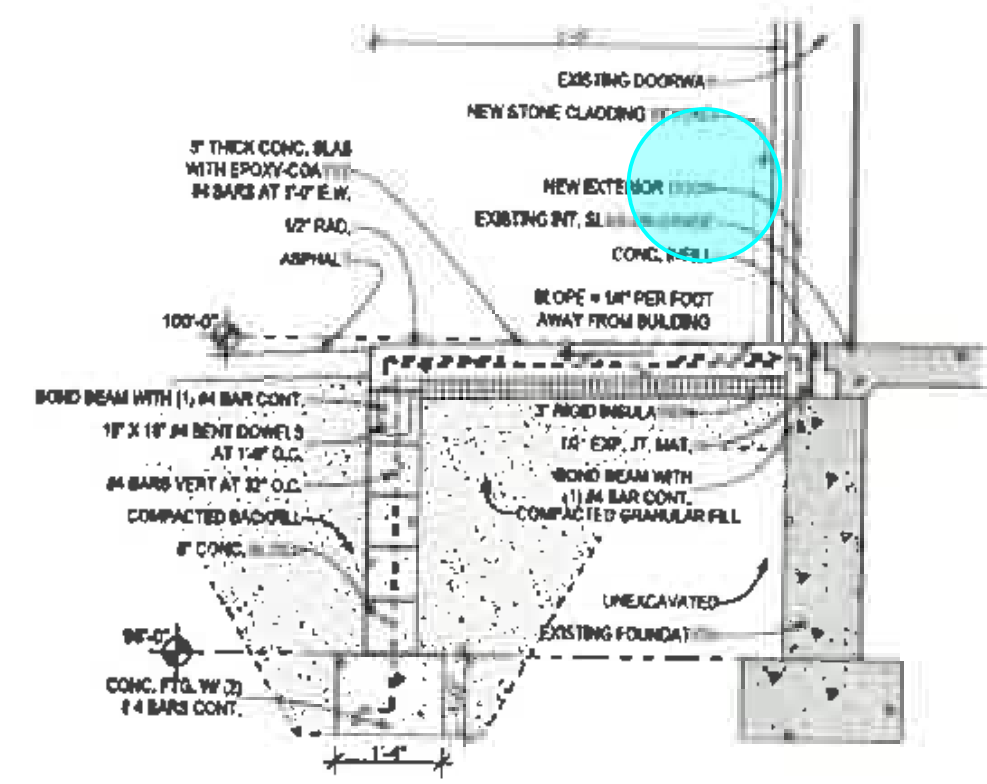
PROJECT TITLE
DI WAREHOUSE REMODEL
MCGREGOR, MN
20898 380TH STREET
MCGREGOR, MN 55760

OWNER
MILLE LACS BAND OF OJIBWE
43408 OODENA DRIVE
ONAMA, MN 56358

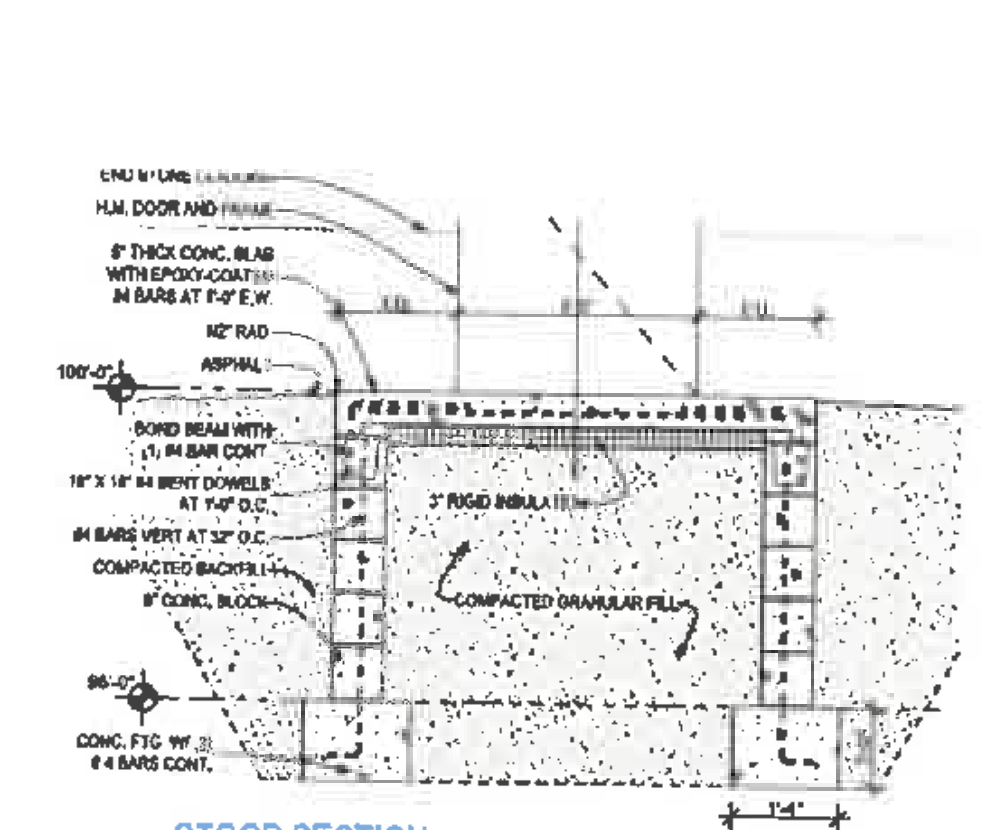
SHEET TITLE
EXTERIOR ELEVATIONS AND
DETAILS

A3.0

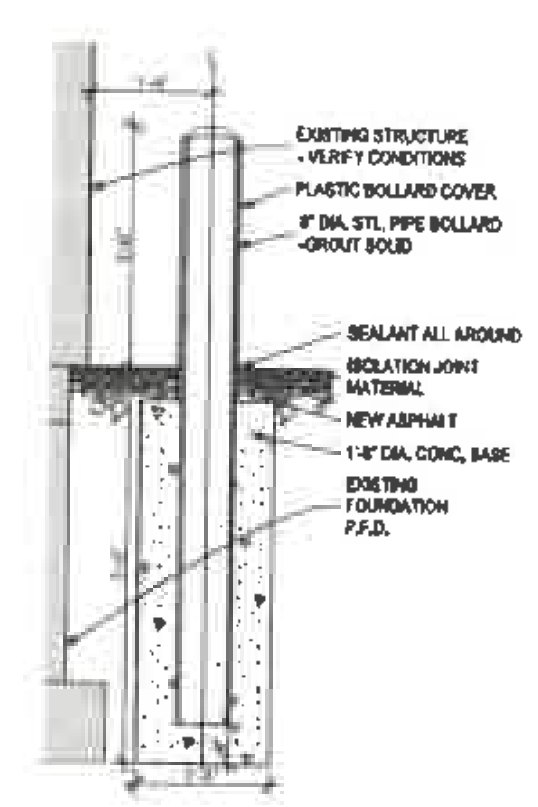
SHEET NO.
SHEET 6 OF 12



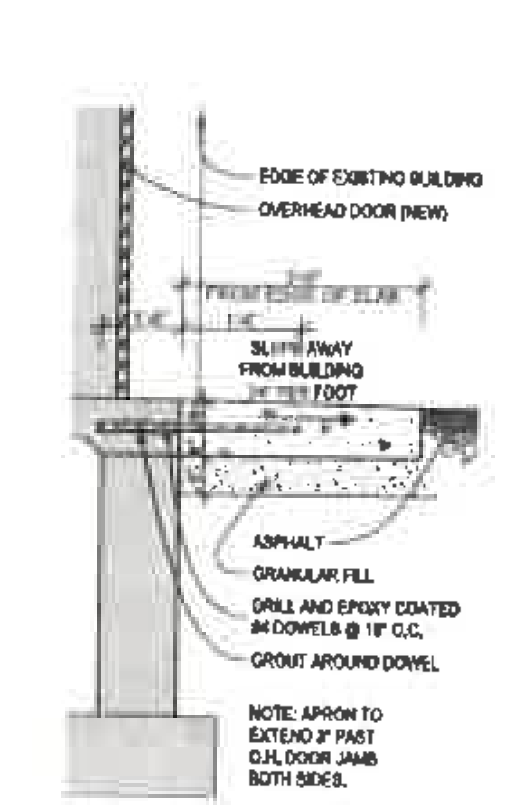
5 STOOP TO BUILDING CONNECTING SECTION
A3.0 SCALE: 1/2" = 1'



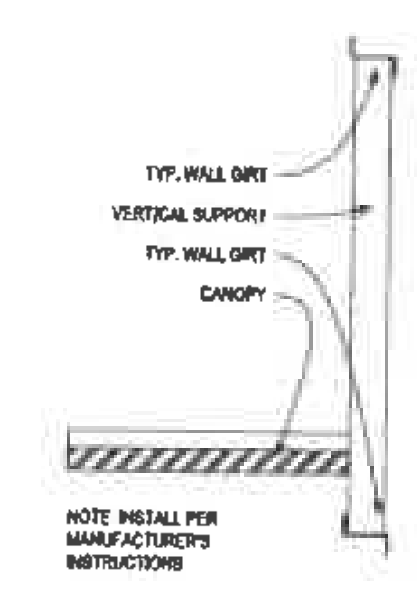
6 STOOP SECTION
A3.0 SCALE: 1/2" = 1'



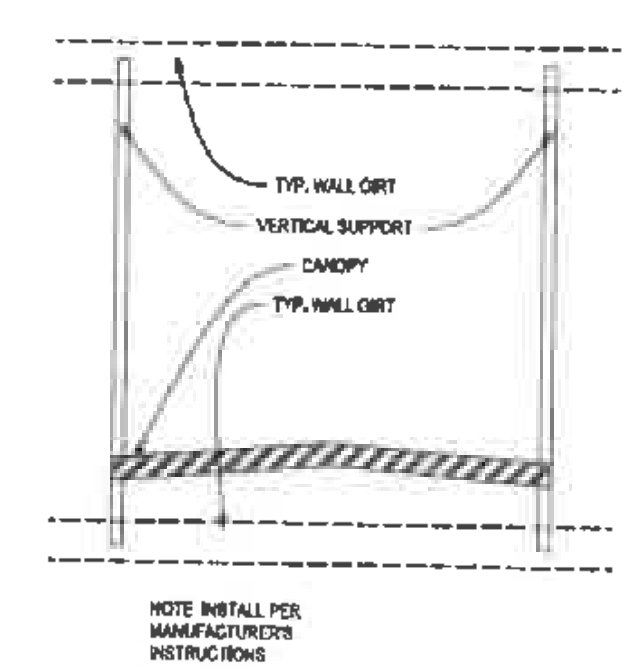
7 BOLLARD SECTION
A3.0 SCALE: 1/2" = 1'



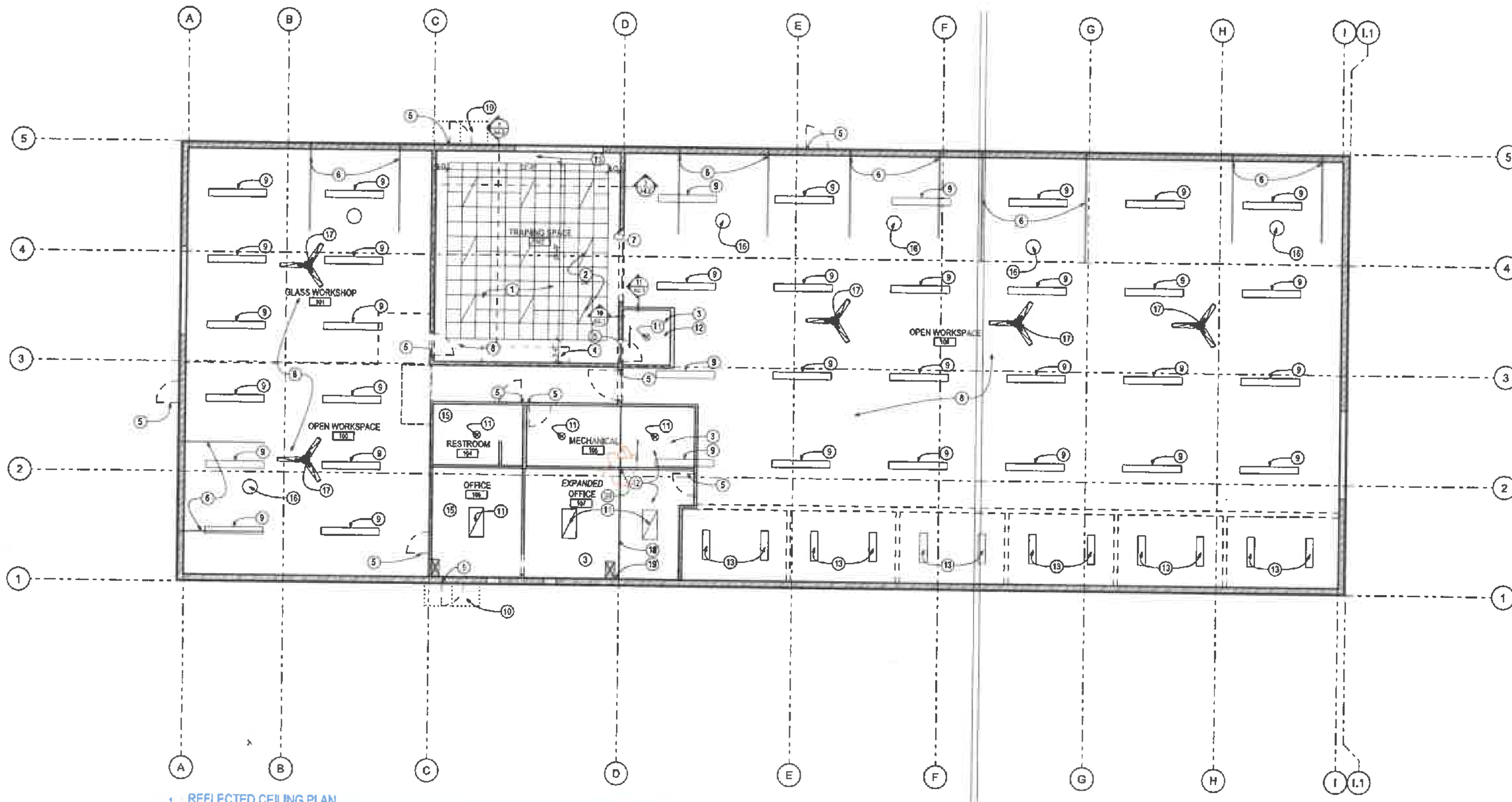
8 APRON SECTION
A3.0 SCALE: 1/2" = 1'



9 ICE SHIELD CANOPY SECTION
A3.0 SCALE: 1" = 1'



10 ICE SHIELD CANOPY ELEVATION
A3.0 SCALE: 1" = 1'



- REFLECTED CEILING PLAN KEYNOTES**
- 2'X2' A.C.T. CLOUD.
 - 2'X4' LIGHT FIXTURE, SEE ELEC.
 - DRYWALL CEILING @ 8'-0" AFF. VERIFY.
 - CASEWORK BELOW.
 - DOOR BELOW.
 - OVERHEAD DOOR TRACK.
 - NOT USED.
 - EXISTING EXPOSED CEILING TO REMAIN.
 - 8' LED PENDANT LIGHT FIXTURE, SEE ELEC.
 - ICE SHIELD CANOPY.
 - SURFACE MOUNTED LIGHT FIXTURE - SEE ELEC.
 - GYP. BOARD CEILING, MATCH EXISTING.
 - EXISTING METAL PANEL CEILING.
 - 4' LED LIGHT FIXTURE - SEE ELEC.
 - EXISTING DRYWALL, CEILING TO REMAIN.
 - DOOR OPERATOR - SEE ELEC.
 - CEILING FAN - SEE ELEC.
 - NEW STRUCTURAL BEAM.
 - PROVIDE WELDED CONNECTION FROM NEW STEEL BEAM TO EX. PRIMARY BUILDING FRAME, F.V. CONDITION PRIOR TO FABRICATION.
 - PROVIDE 3/8" STEEL COLUMN CAP PLATE WITH (4) 3/4" BOLTS TO BOTTOM FLANGE OF BEAM.
- REFLECTED CEILING PLAN GENERAL NOTES**
- FIELD VERIFY ALL BUILDING CONDITIONS AND DIMENSIONS, REPORT DISCREPANCIES BETWEEN FOUND CONDITIONS AND CONSTRUCTION PLANS TO THE ARCHITECT IMMEDIATELY.
 - SEE ELEVATIONS FOR CEILING HEIGHTS.
 - SEE MECH. AND ELEC. FOR MORE INFORMATION.
 - SEE ELEC FOR LIGHTING PLAN DEMOLITION.

BUSCH ARCHITECTS, INC.

310 FOURTH AVENUE SOUTH
SUITE 1000
MINNEAPOLIS, MINNESOTA 55415

TEL: 612.333.2279
A.MALDO@BUSCH-ARCHITECTS.COM

CONSULTANT

BID ISSUE SET

CERTIFICATION
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: JUNE 17, 2024 REG. NO. 58877
PRINTED NAME: AMANDA MALDONADO

COMMISSION NO.: 23-11
DRAWN BY: CAB/AM
CHECKED BY: AM
DATE: JUNE 17, 2024
BID ISSUE DATE: JUNE 18, 2024
REVISION DATES: JUNE 24, 2024

PROJECT TITLE

DII WAREHOUSE REMODEL
MCGREGOR, MN

20898 360TH STREET
MCGREGOR, MN 55760

OWNER

MILLE LACS BAND OF OJIBWE

43408 CODENA DRIVE
ONAMIA, MN 56359

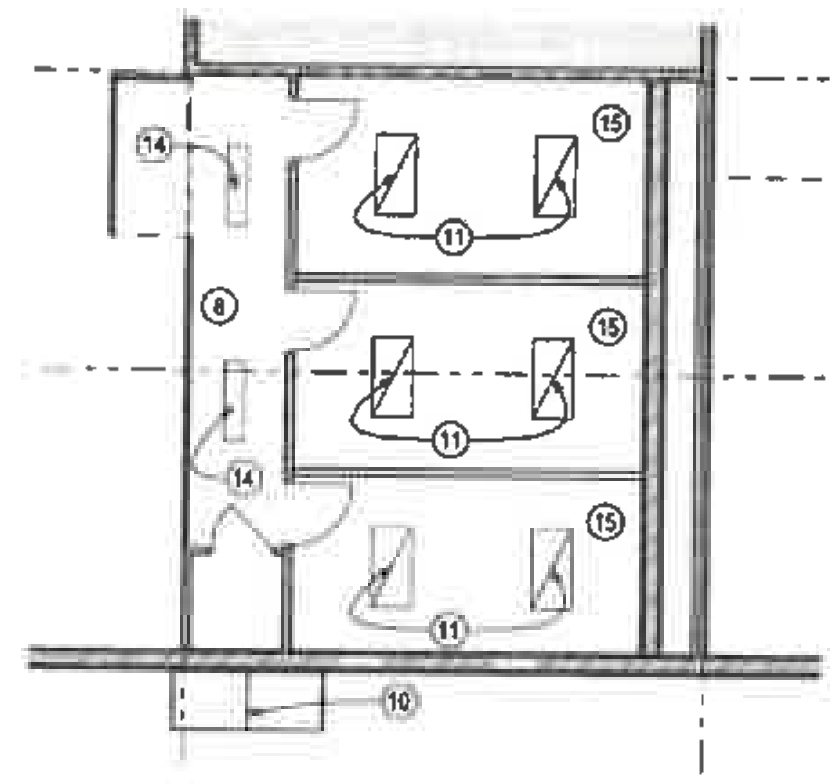
SHEET TITLE

REFLECTED CEILING PLANS

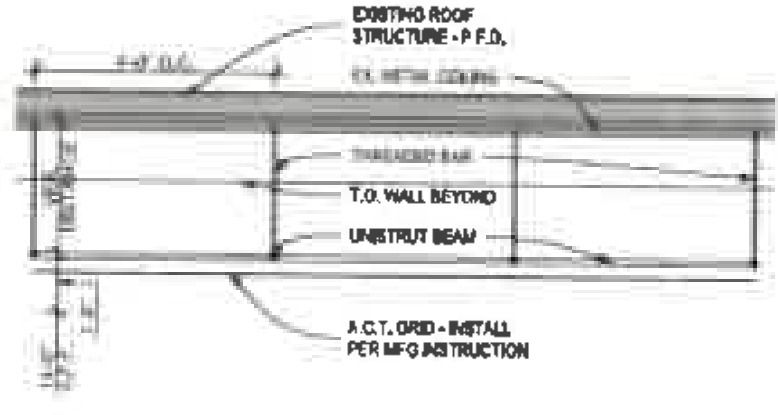
A4.0

SHEET NO.
SHEET 7 OF 12

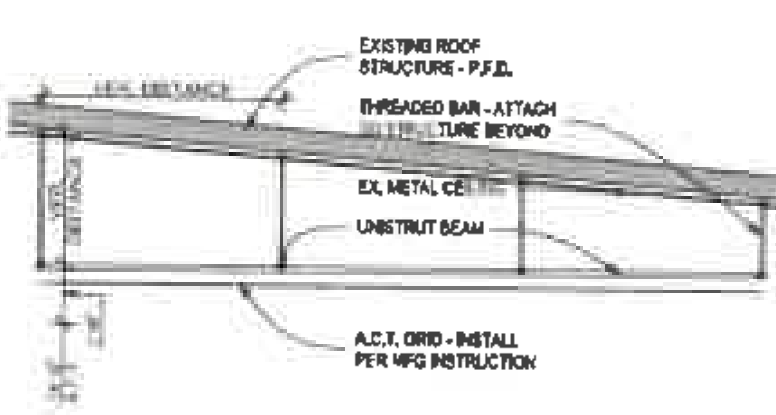
1 REFLECTED CEILING PLAN
A4.0 SCALE 1/8" = 1'



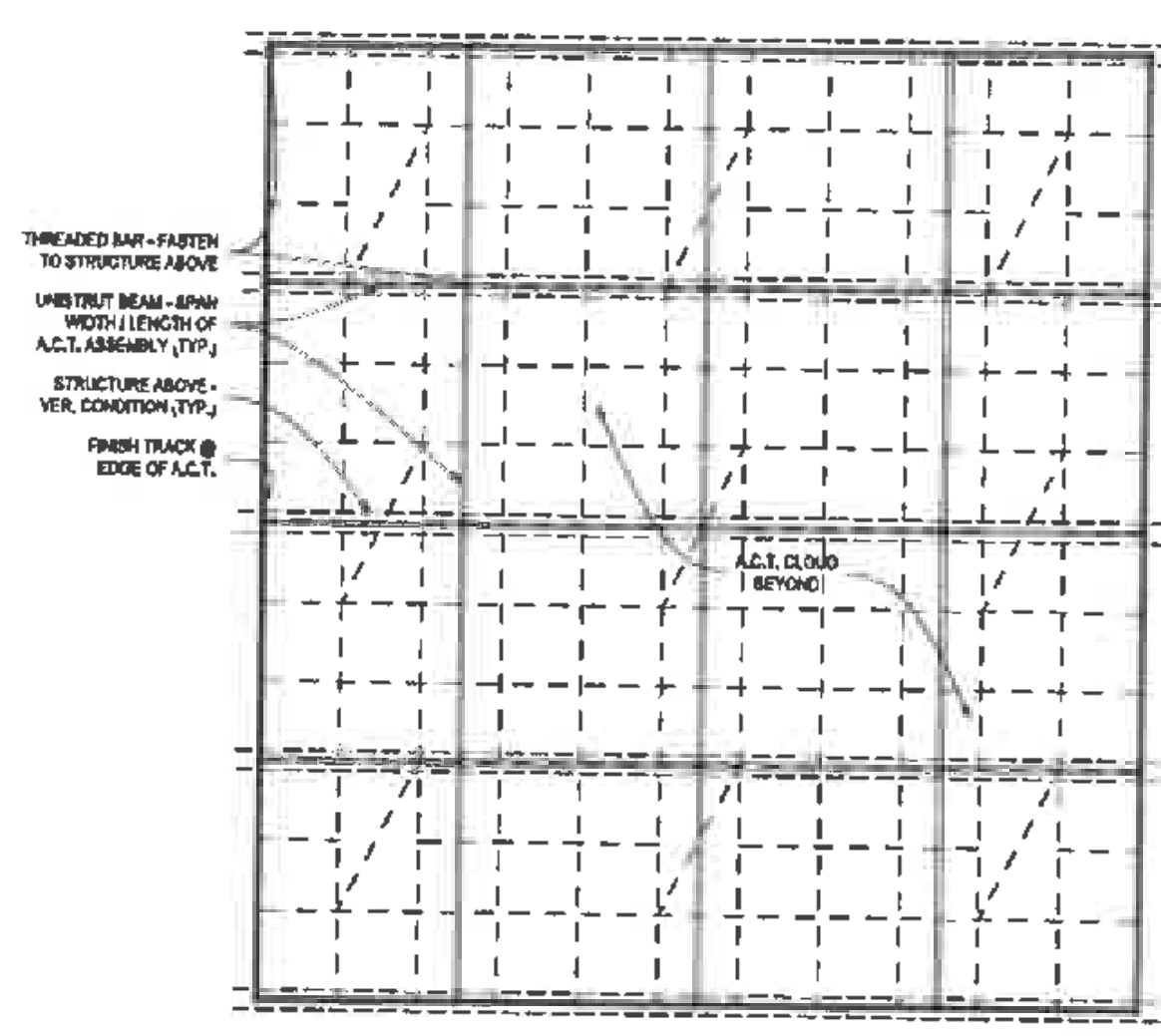
2 MEZZANINE REFLECTED CEILING PLAN
A4.0 SCALE 1/8" = 1'



3 A.C.T. CLOUD DETAIL (TYP.)
A4.0 SCALE 1/4" = 1'

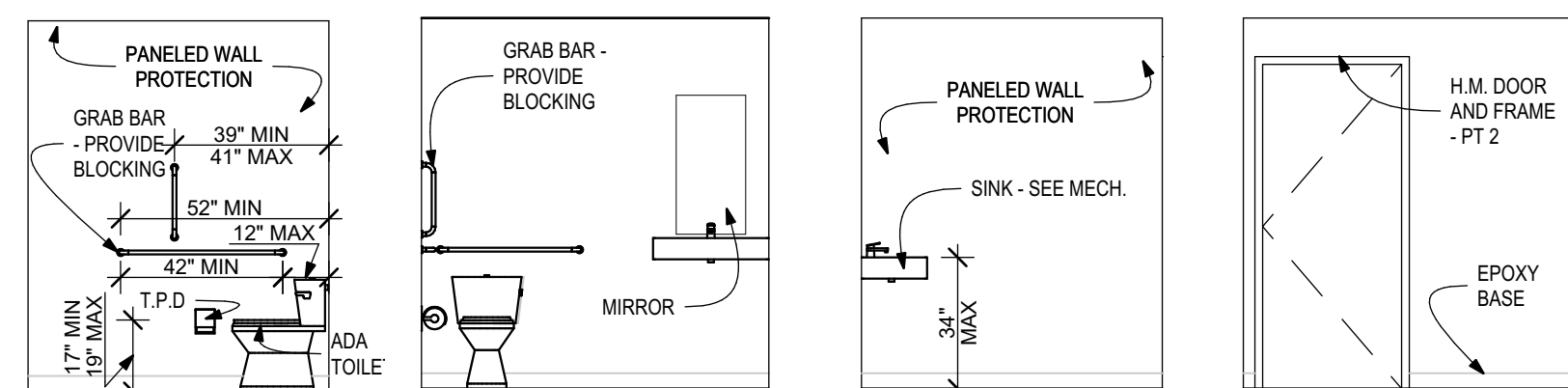


4 A.C.T. CLOUD DETAIL (TYP.)
A4.0 SCALE 1/4" = 1'

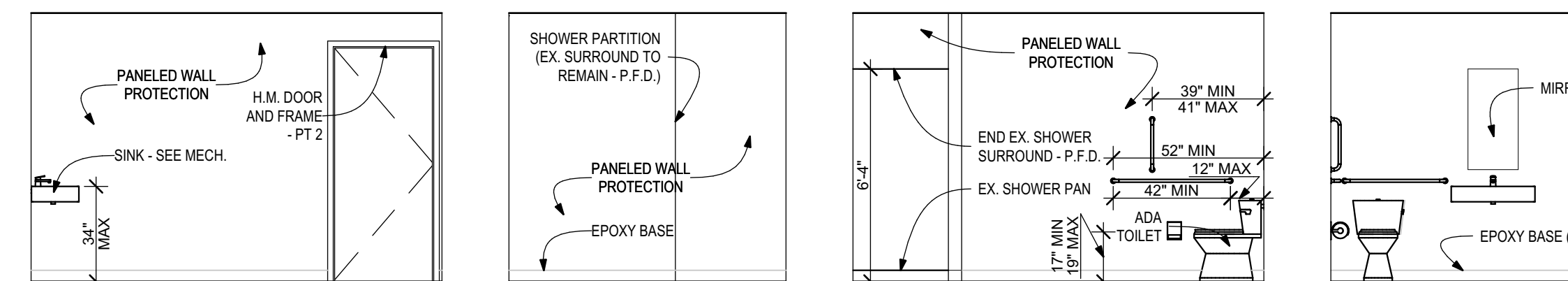


5 A.C.T. STRUCTURE PLAN
A4.0 SCALE 1/4" = 1'

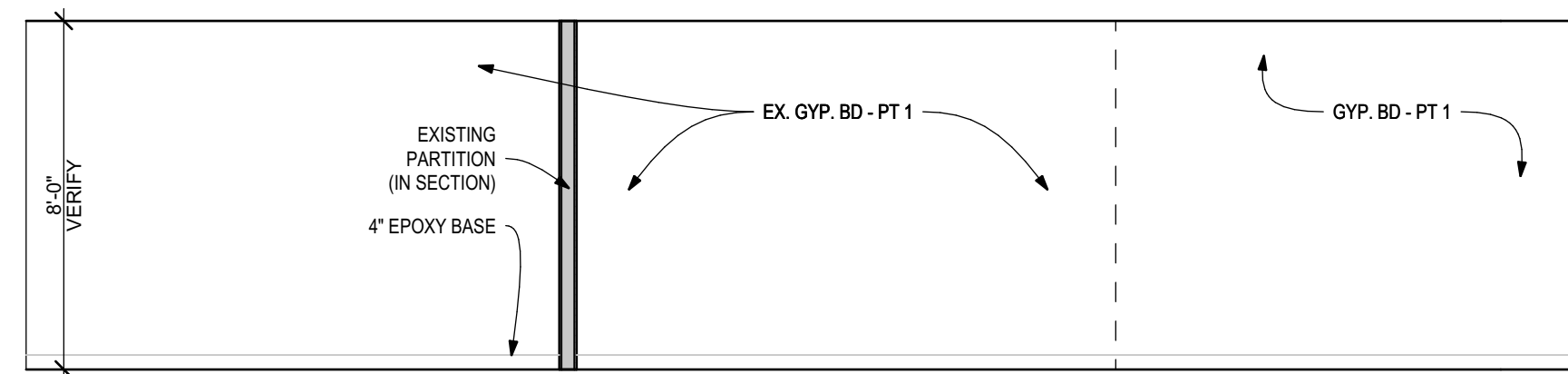




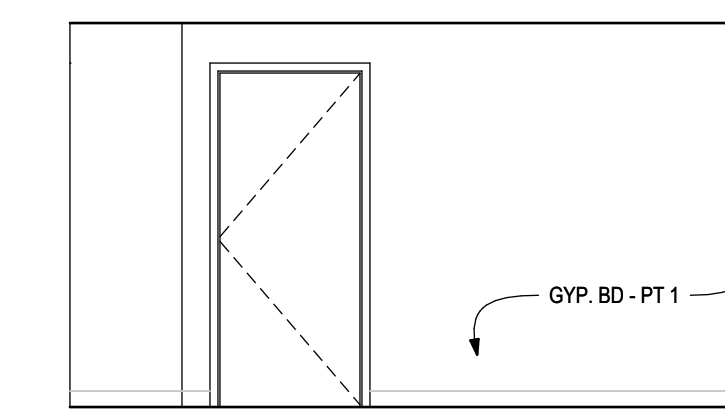
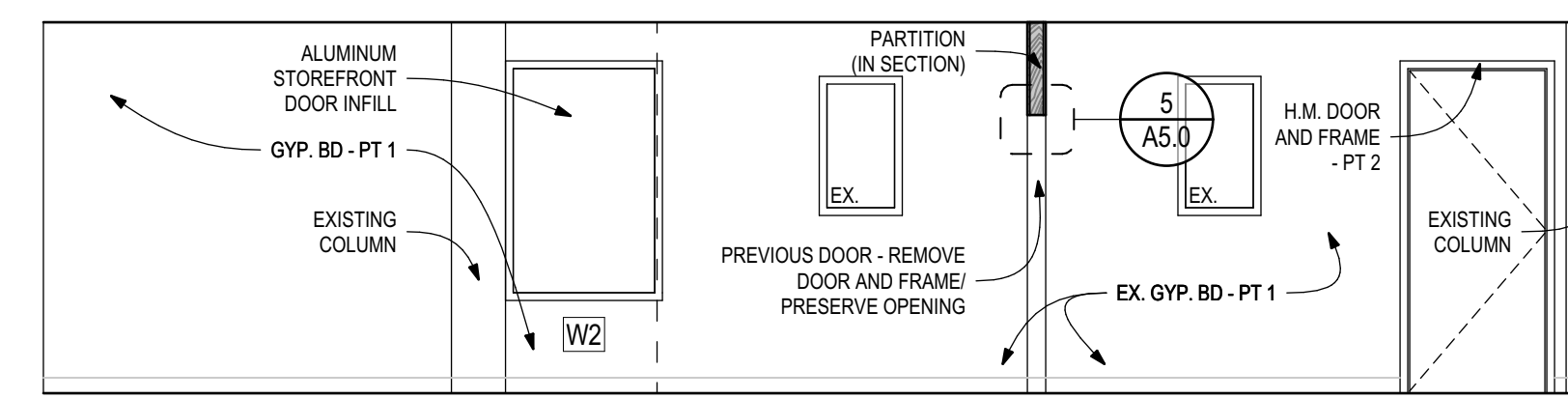
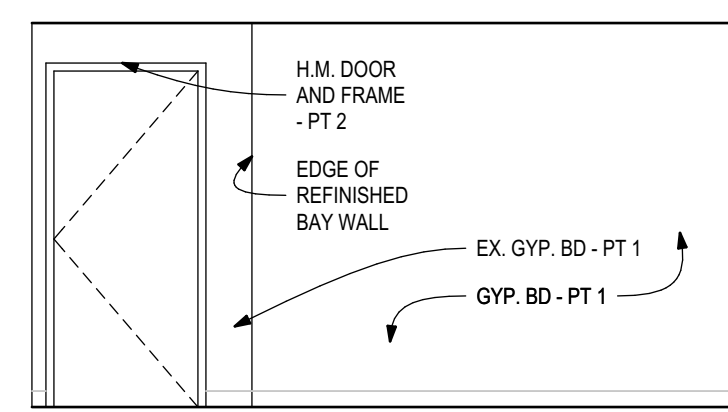
1 NEW RESTROOM ELEVATIONS
A5.0 SCALE: 1/4" = 1'



2 EXISTING RESTROOM ELEVATIONS
A5.0 SCALE: 1/4" = 1'

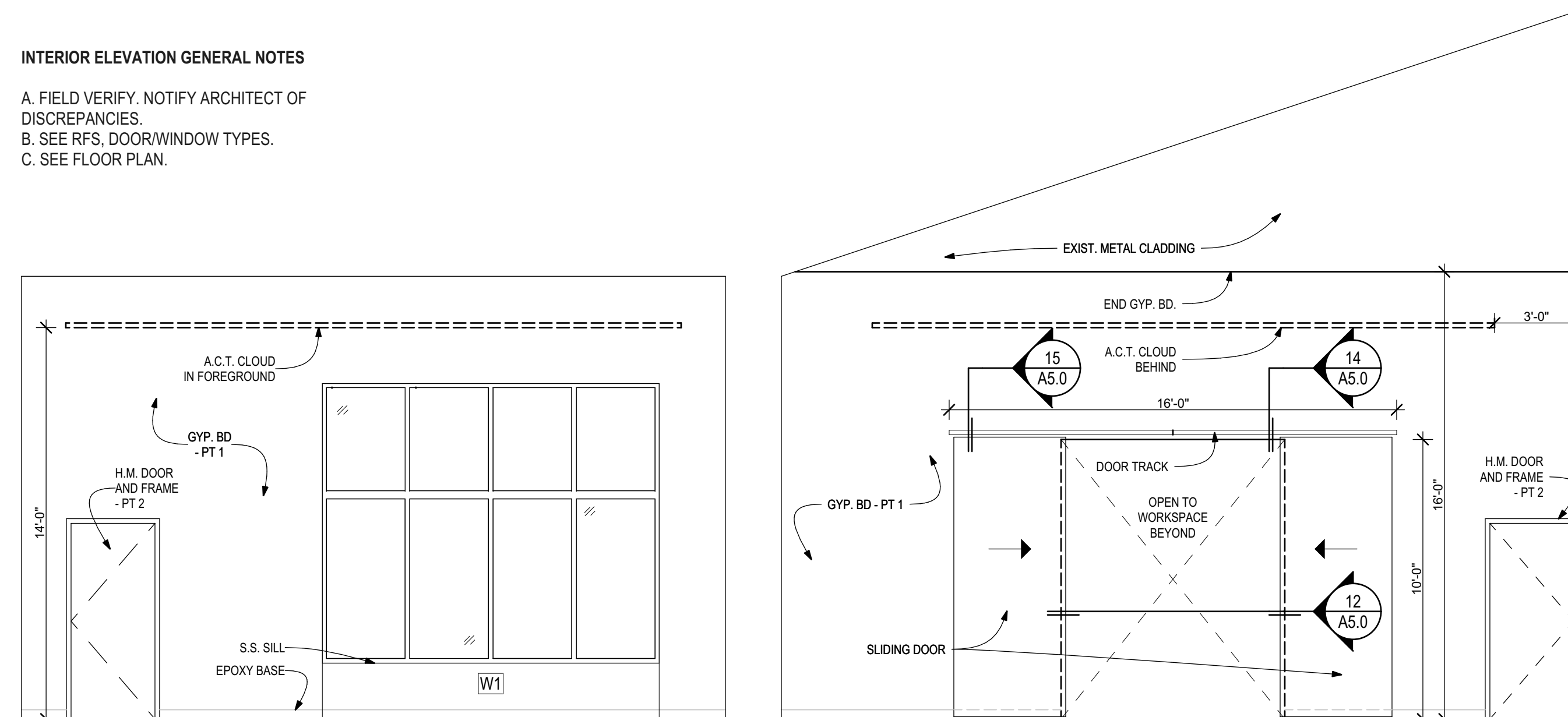


3 OFFICE ELEVATIONS
A5.0 SCALE: 1/4" = 1'

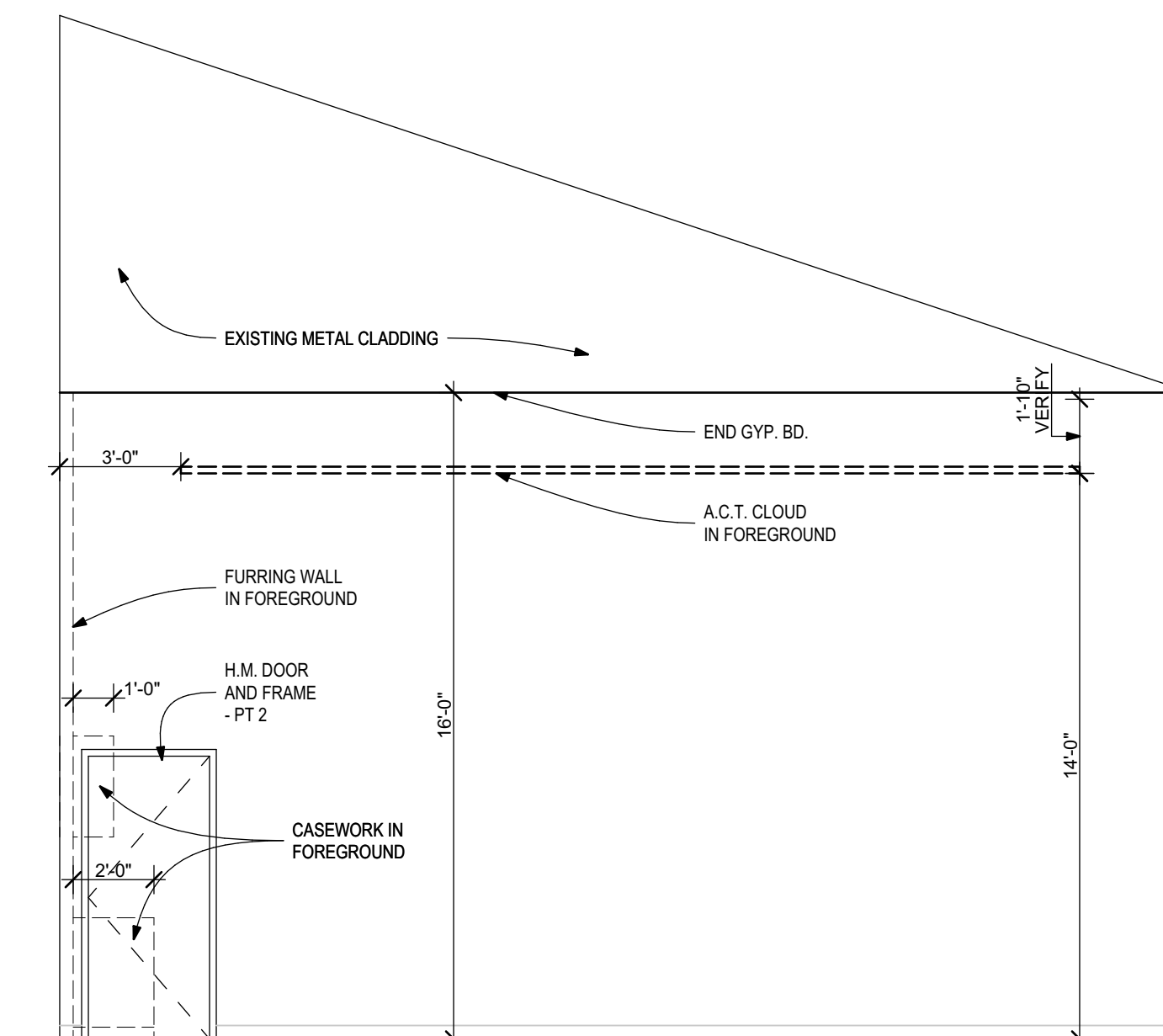
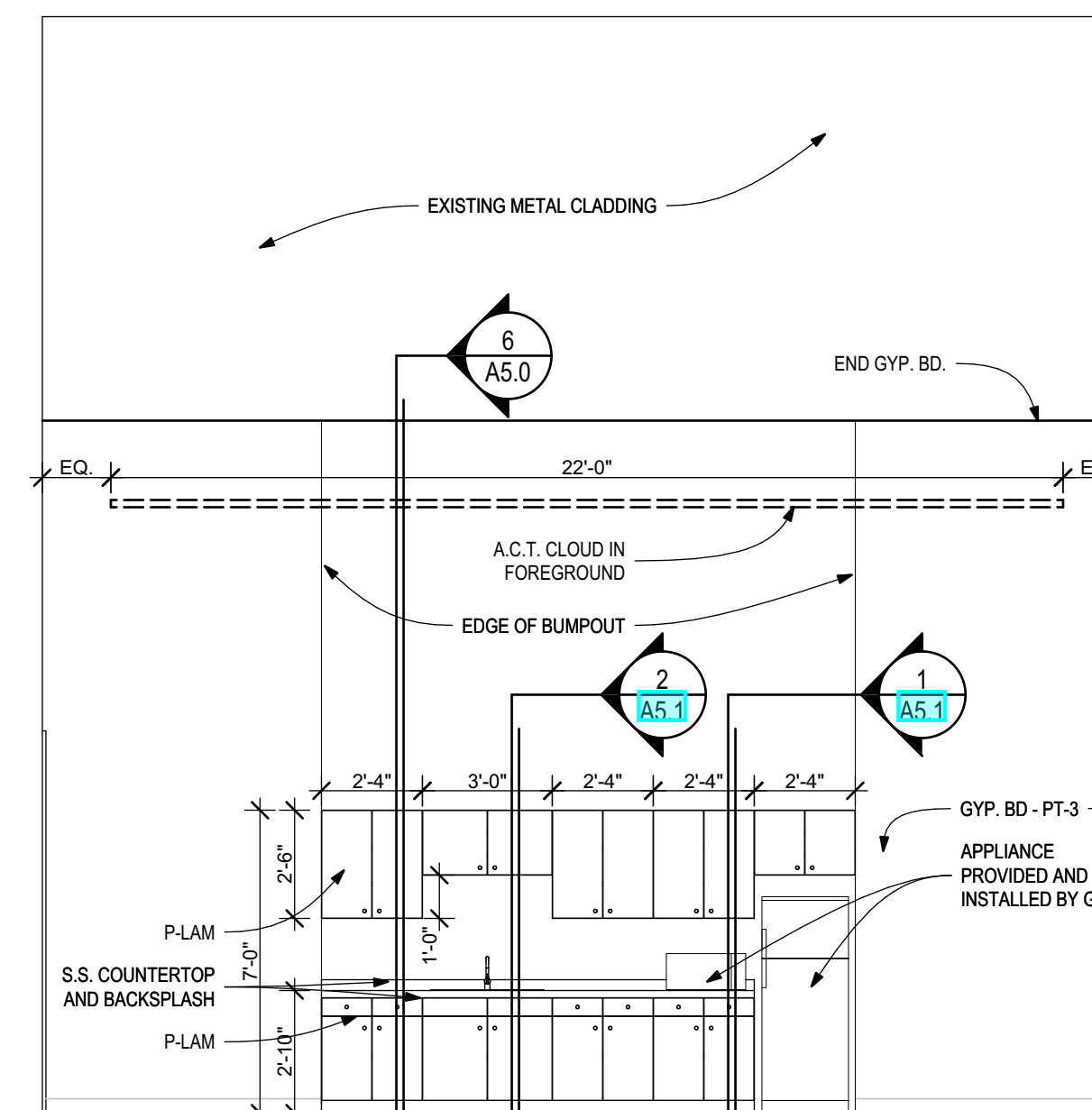


INTERIOR ELEVATION GENERAL NOTES

- A. FIELD VERIFY. NOTIFY ARCHITECT OF DISCREPANCIES.
- B. SEE RFS. DOOR/WINDOW TYPES.
- C. SEE FLOOR PLAN.



4 TRAINING SPACE ELEVATIONS
A5.0 SCALE: 1/4" = 1'



BID ISSUE SET

CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: JUNE 17, 2024 REG. NO. 58977
PRINTED NAME: AMANDA MALDONADO

COMMISSION NO.: 23-11
DRAWN BY: CAB/AM
CHECKED BY: AM
DATE: JUNE 17, 2024
BID ISSUE DATE: JUNE 18, 2024
REVISION DATES: JUNE 24, 2024

PROJECT TITLE

DIJ WAREHOUSE REMODEL
McGREGOR, MN

20898 360TH STREET
McGREGOR, MN 55760

OWNER

MILLE LACS BAND OF OJIBWE

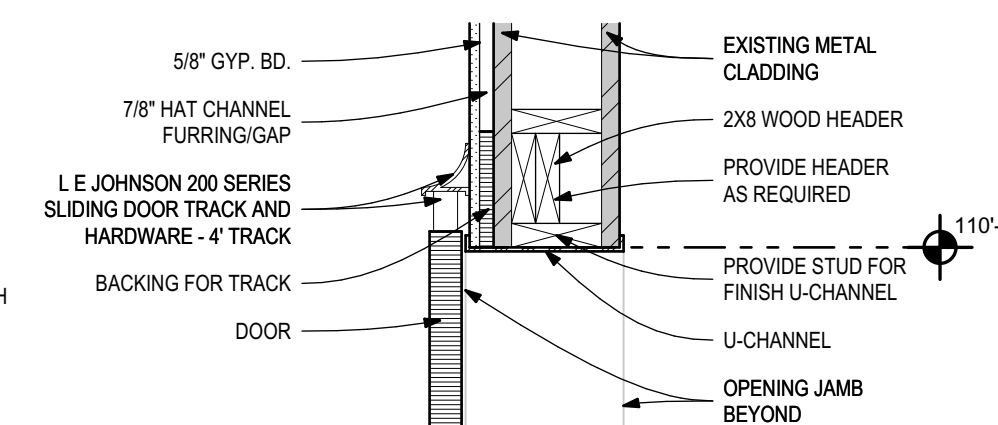
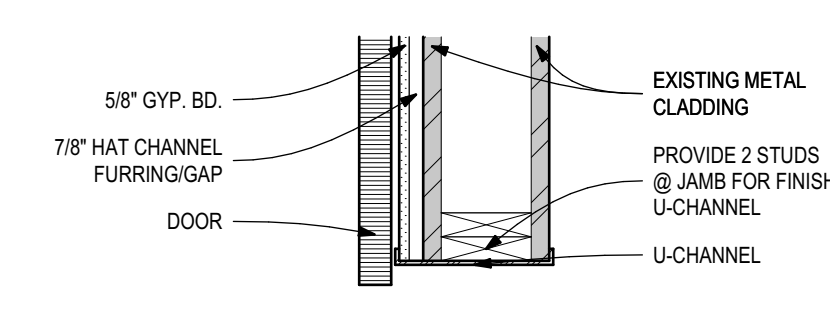
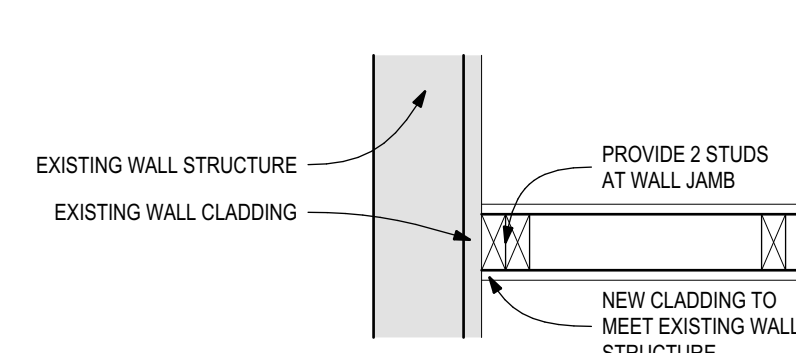
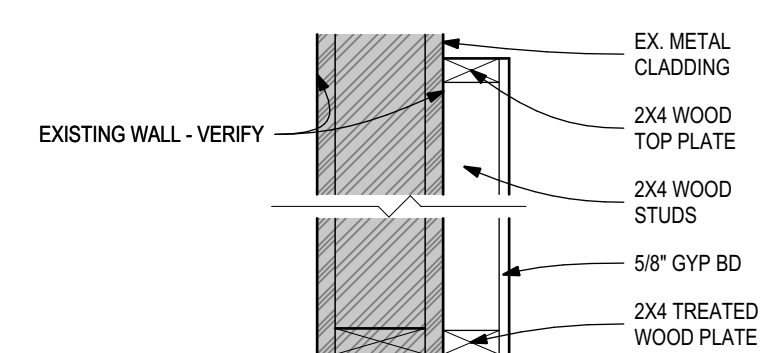
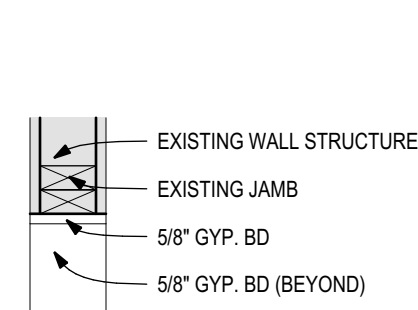
43408 OODENA DRIVE
ONAMIA, MN 56359

SHEET TITLE

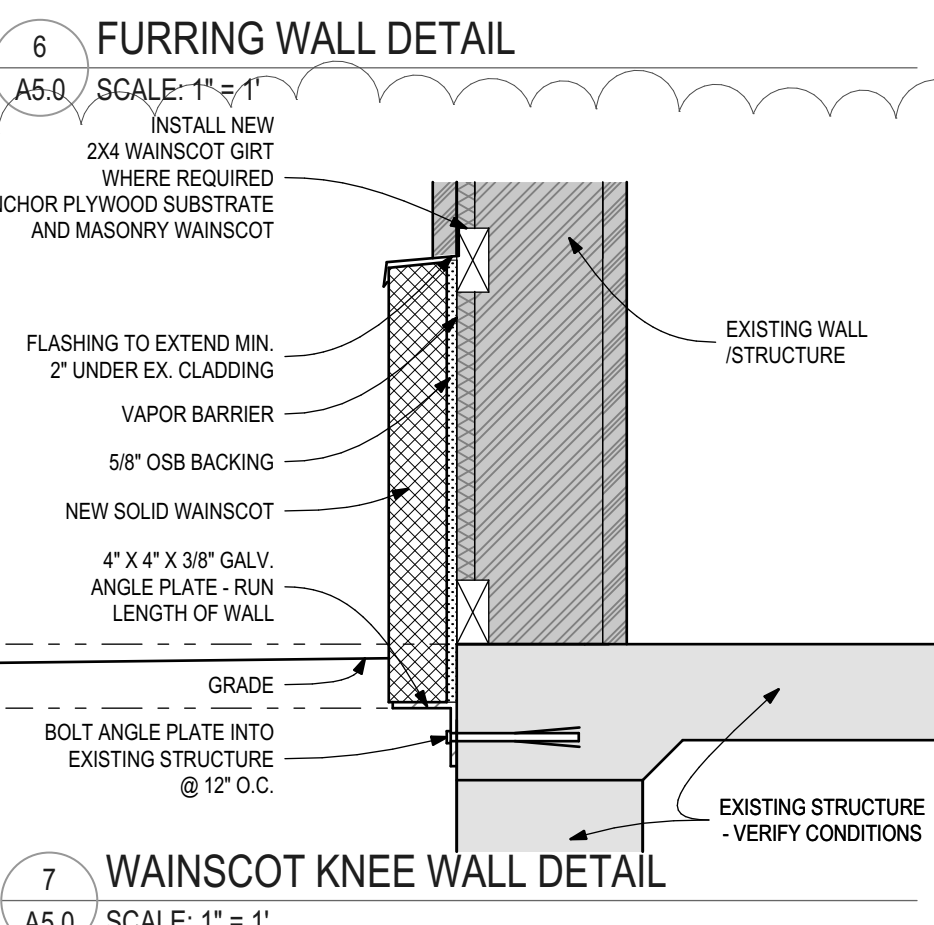
INTERIOR ELEVATIONS AND DETAILS

A5.0

SHEET NO.
SHEET 8 OF 12

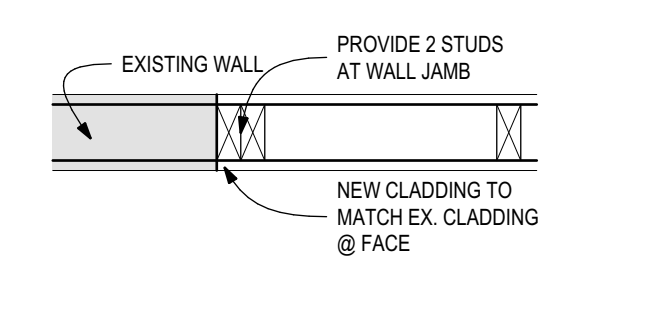


5 MODIFIED OPENING HEADER (JAMB SIM.)
A5.0 NO SCALE



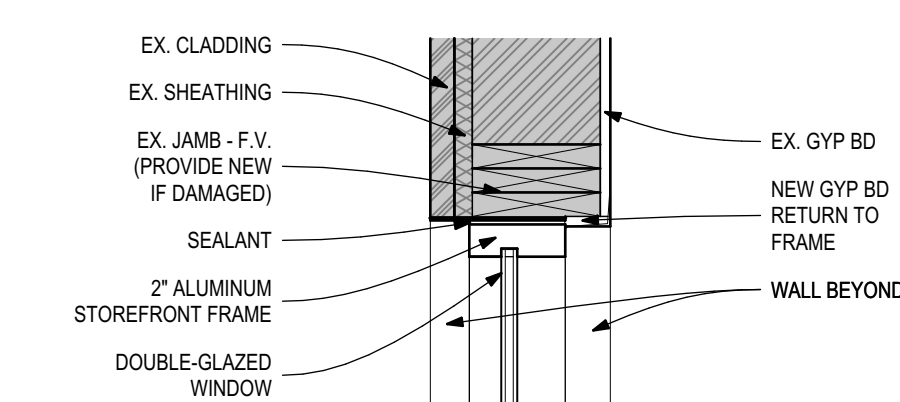
7 WAINSCOT KNEE WALL DETAIL
A5.0 SCALE: 1" = 1'

8 90 DEGREE WALL INTERSECTION
A5.0 SCALE: 1" = 1'



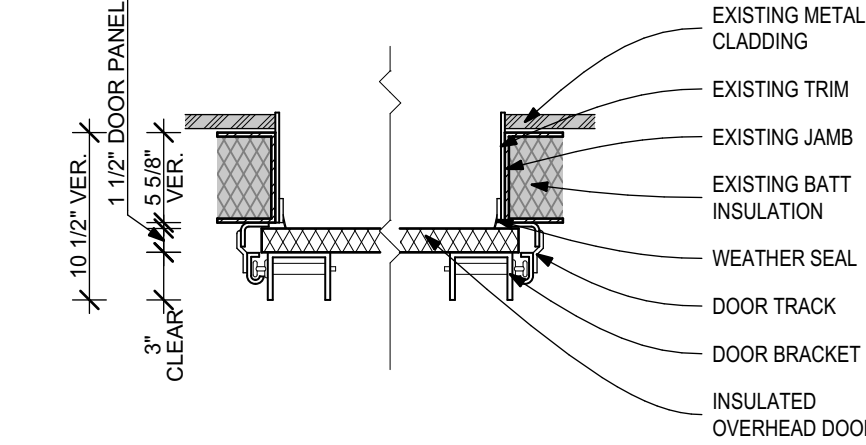
9 WALL END INTERSECTION
A5.0 SCALE: 1" = 1'

10 NOT USED
A5.0 SCALE: 1" = 1'



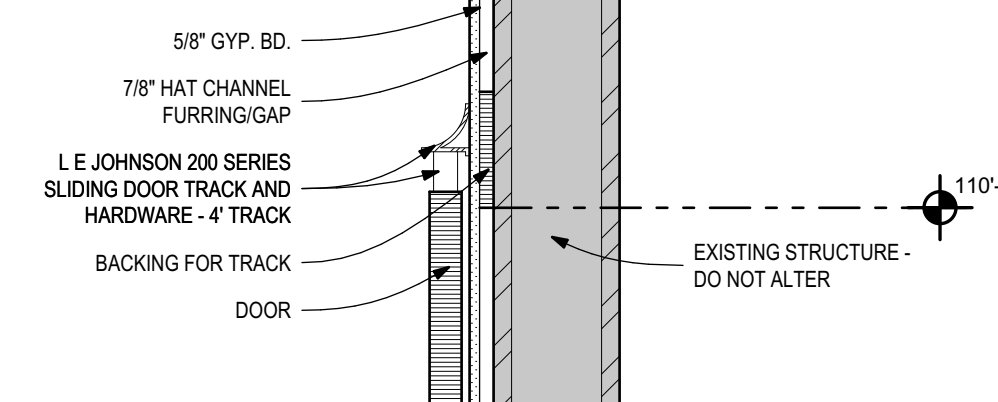
11 SWING DOOR INFILL JAMB (HEAD SIM.)
A5.0 SCALE: 1" = 1'

12 SLIDING DOOR JAMB
A5.0 SCALE: 1" = 1'

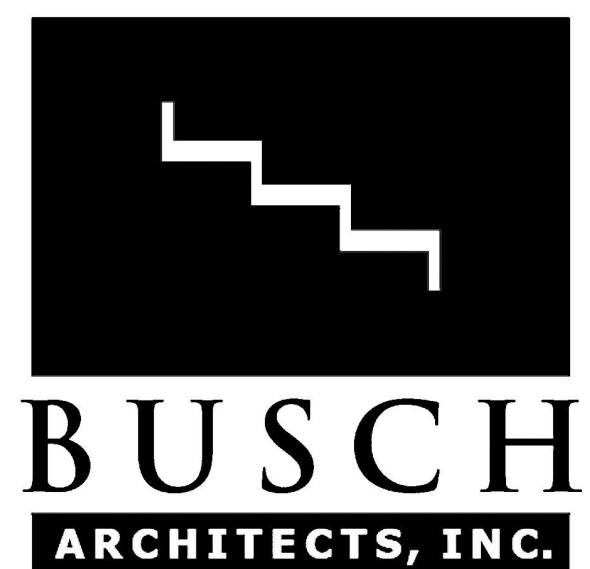
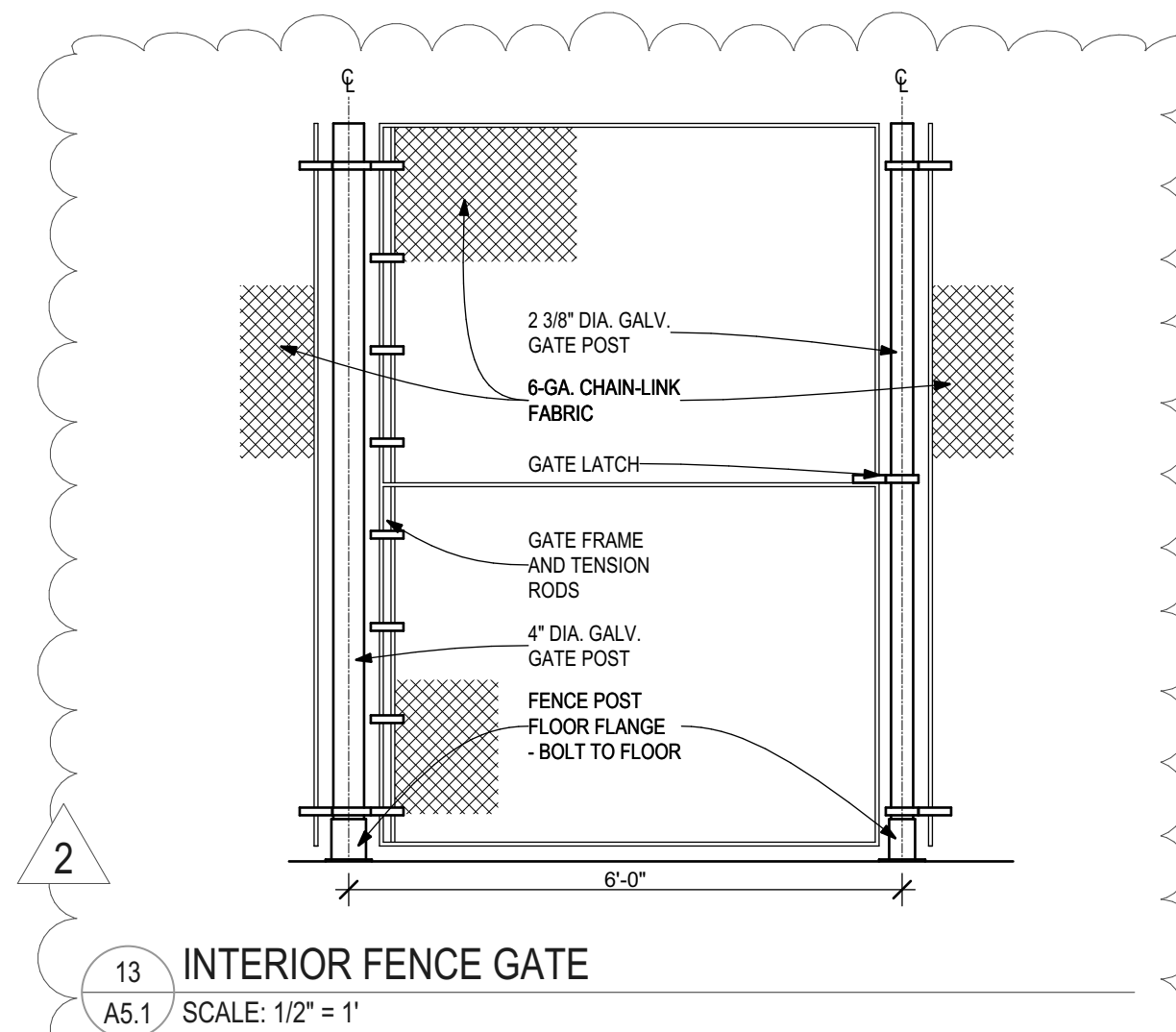
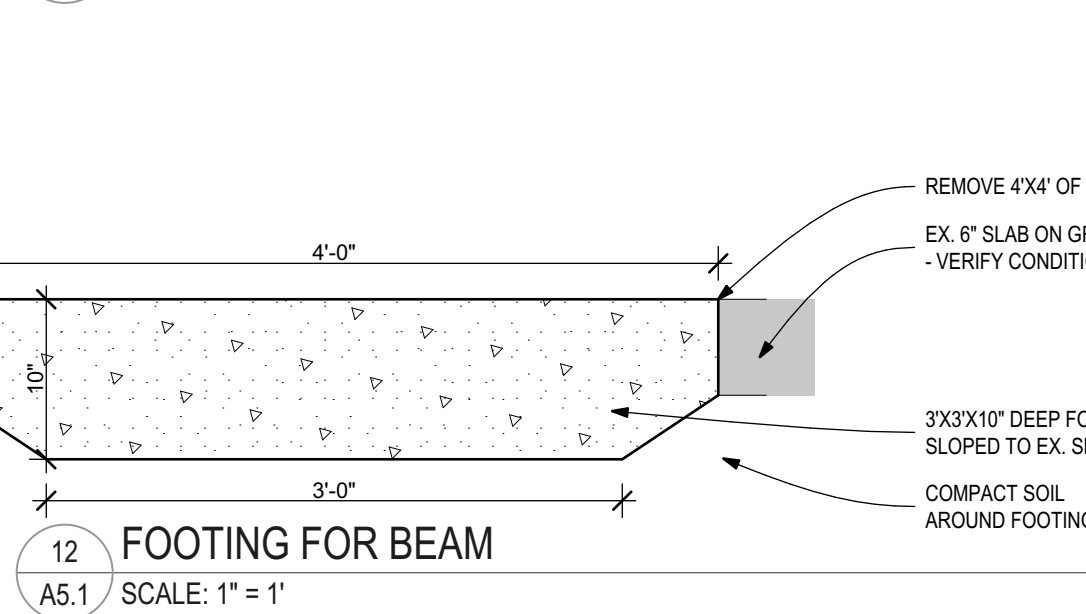
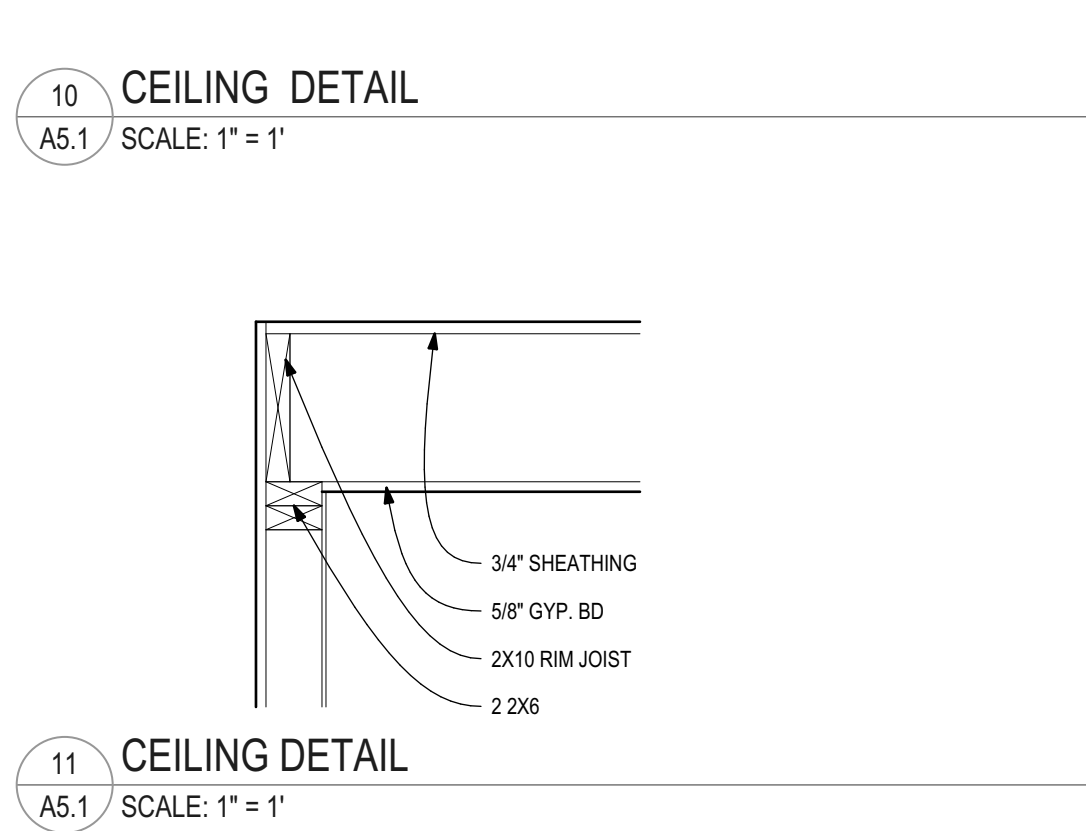
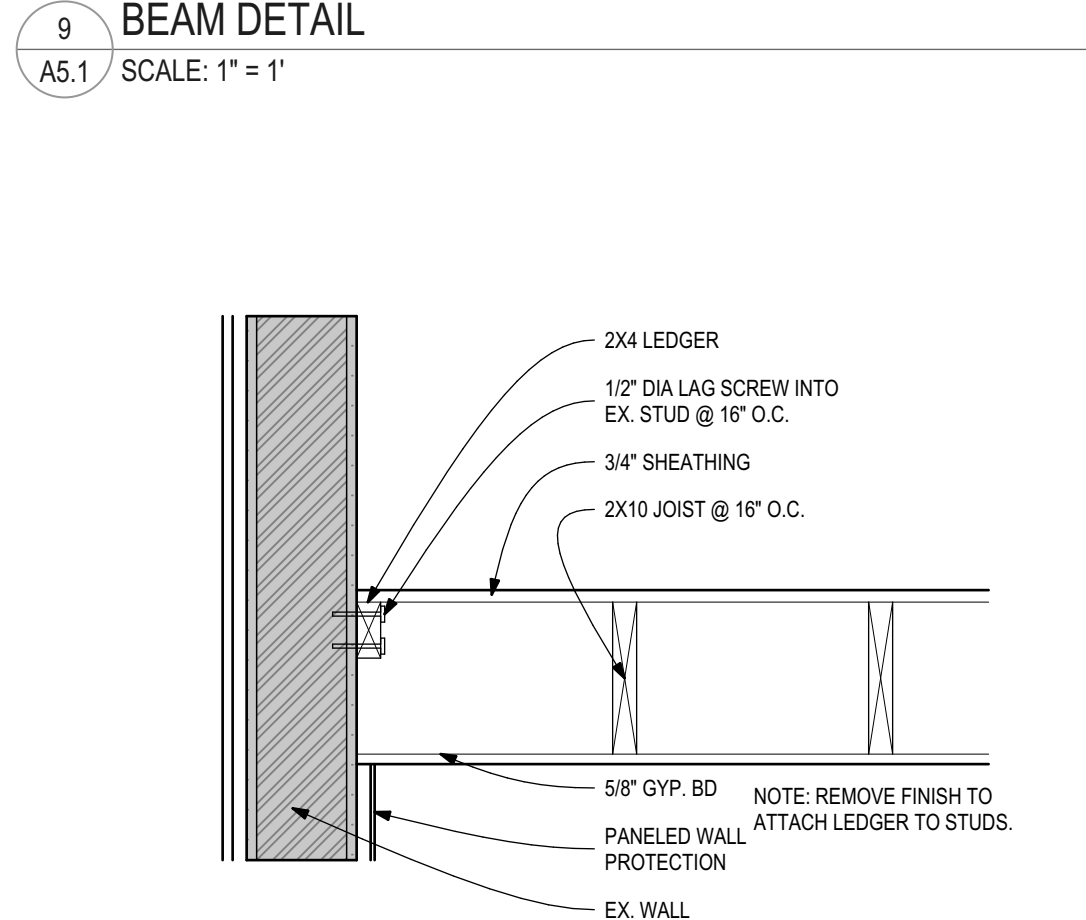
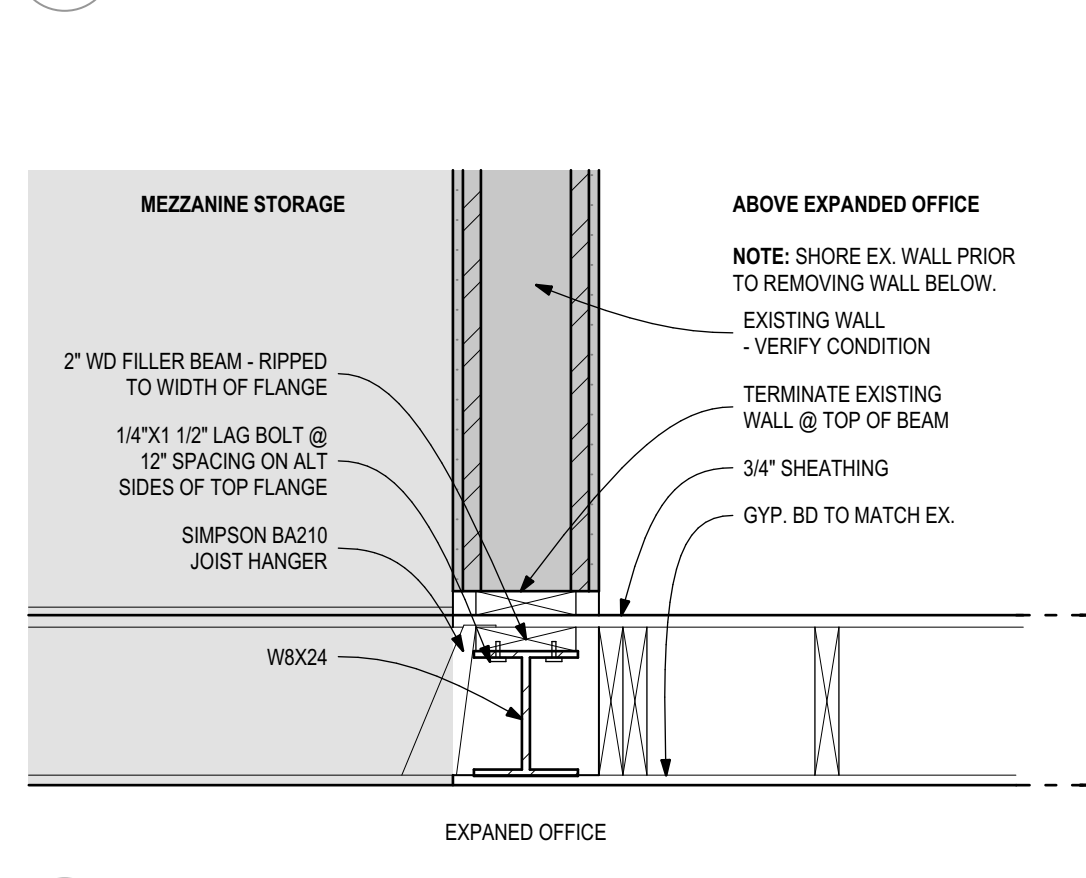
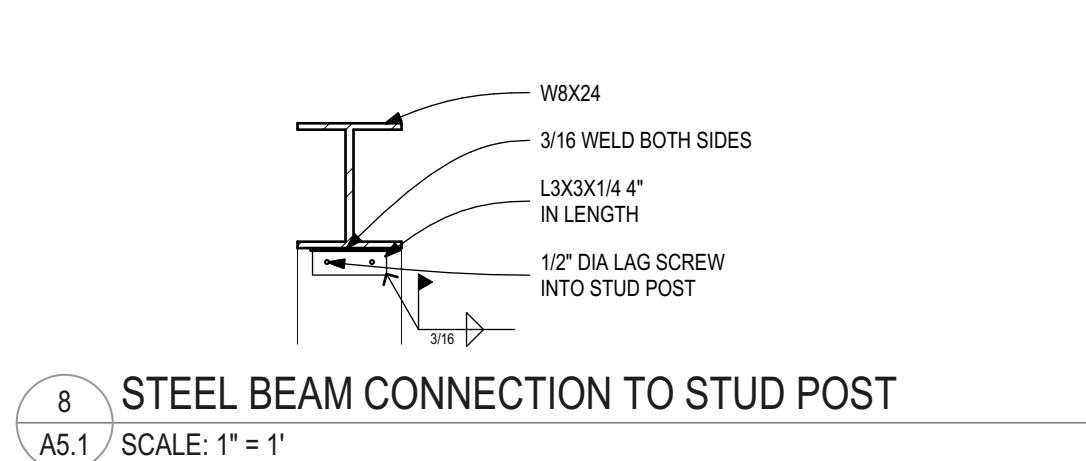
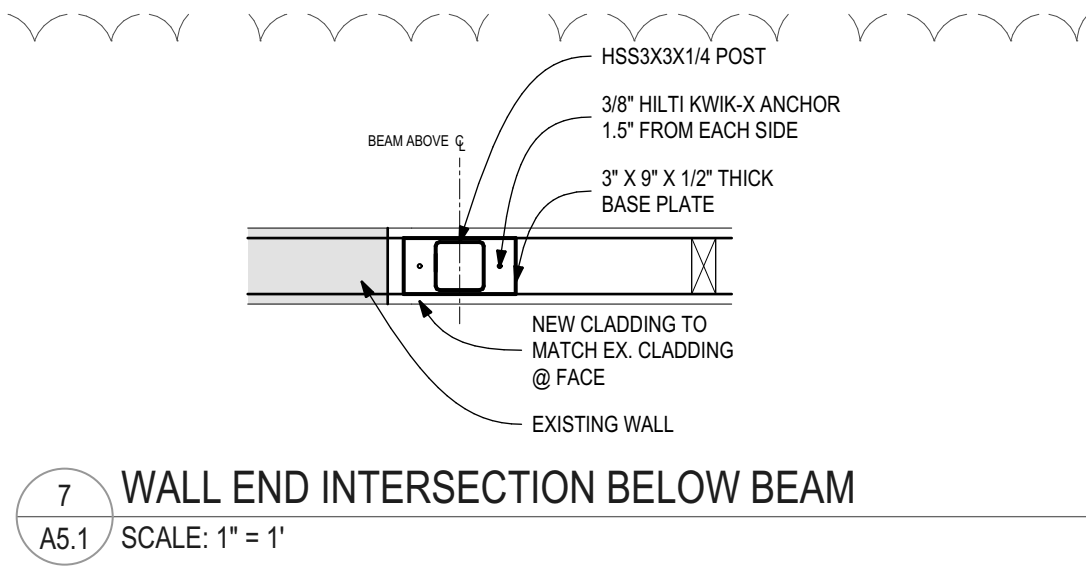
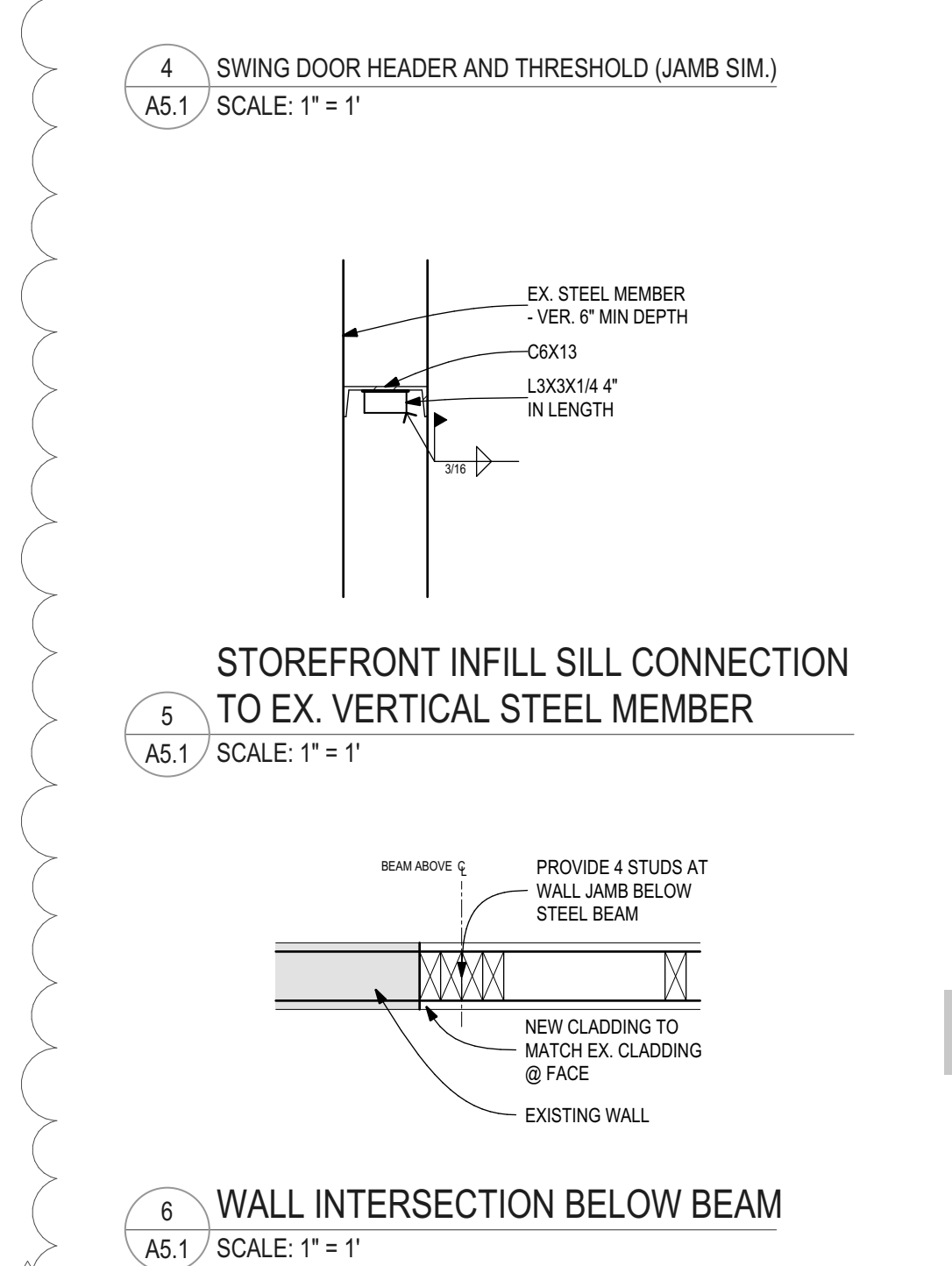
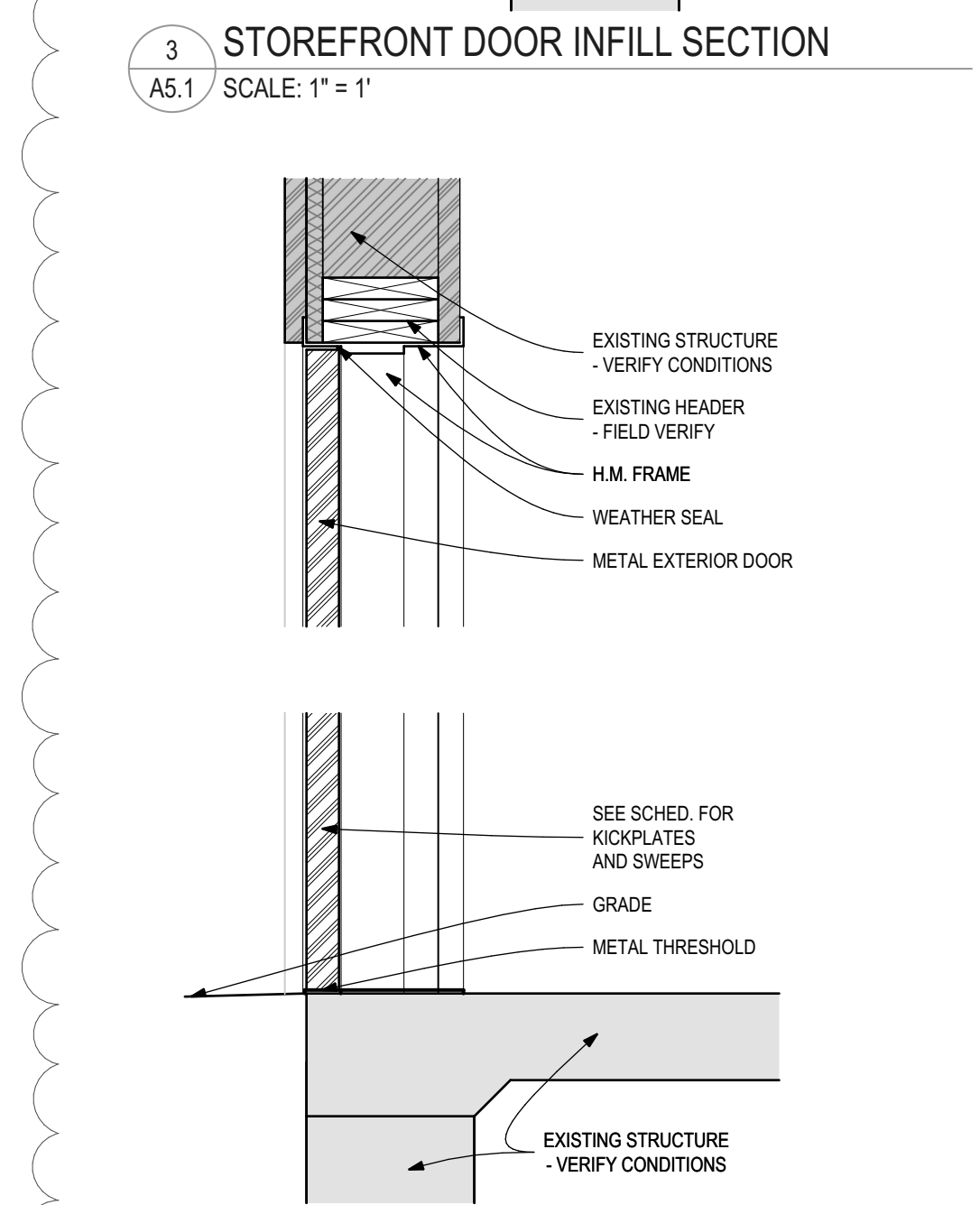
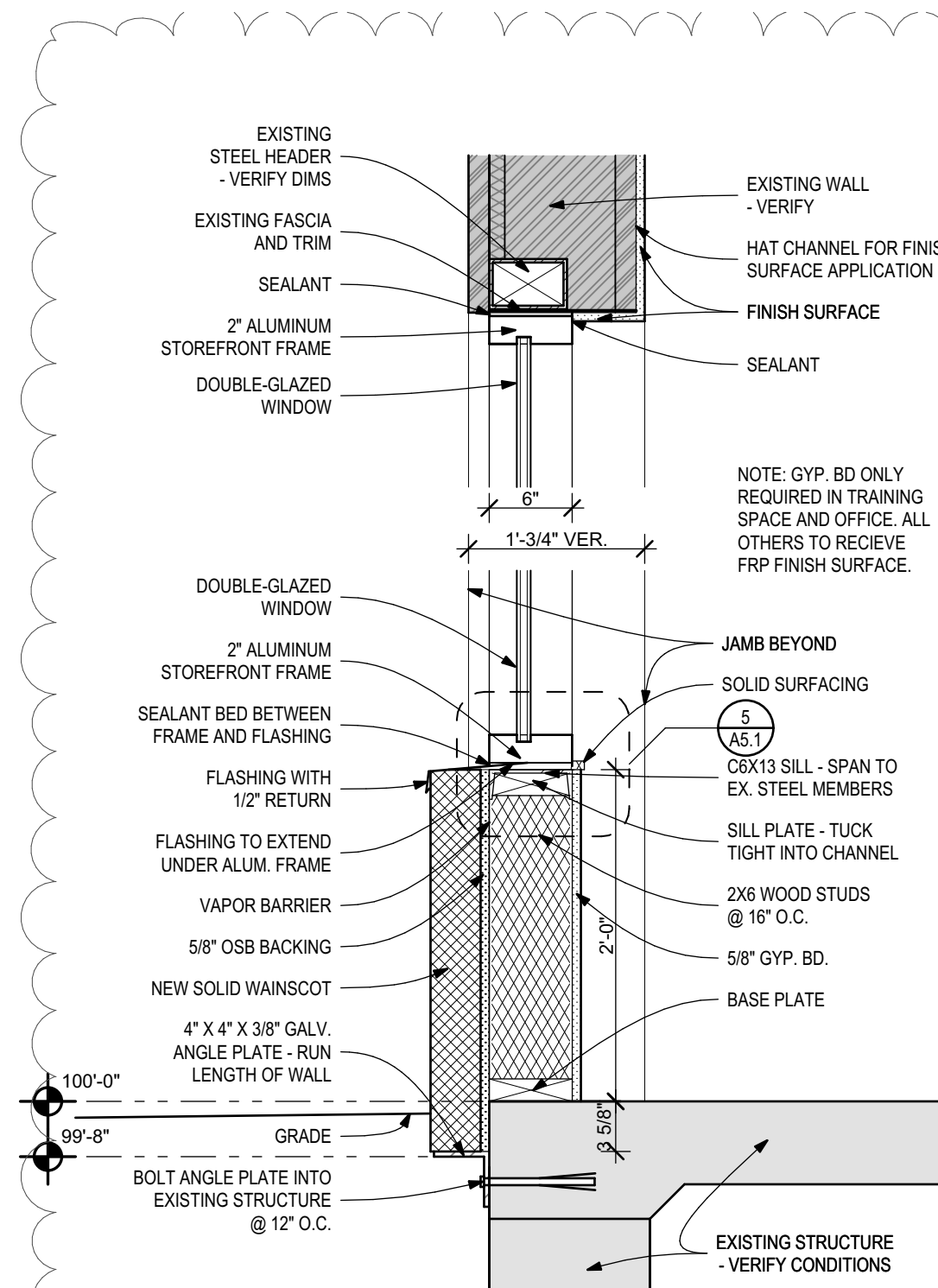
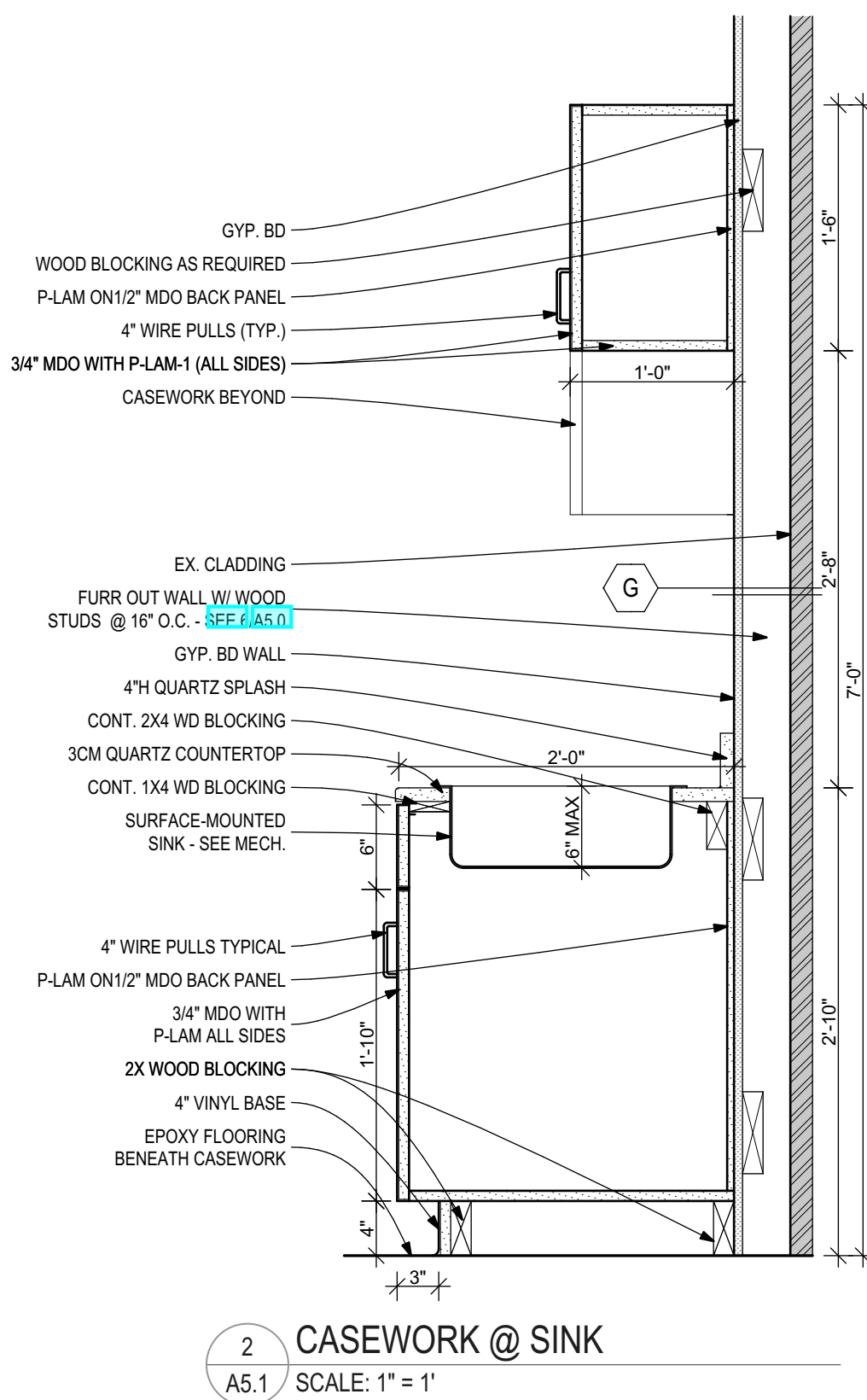
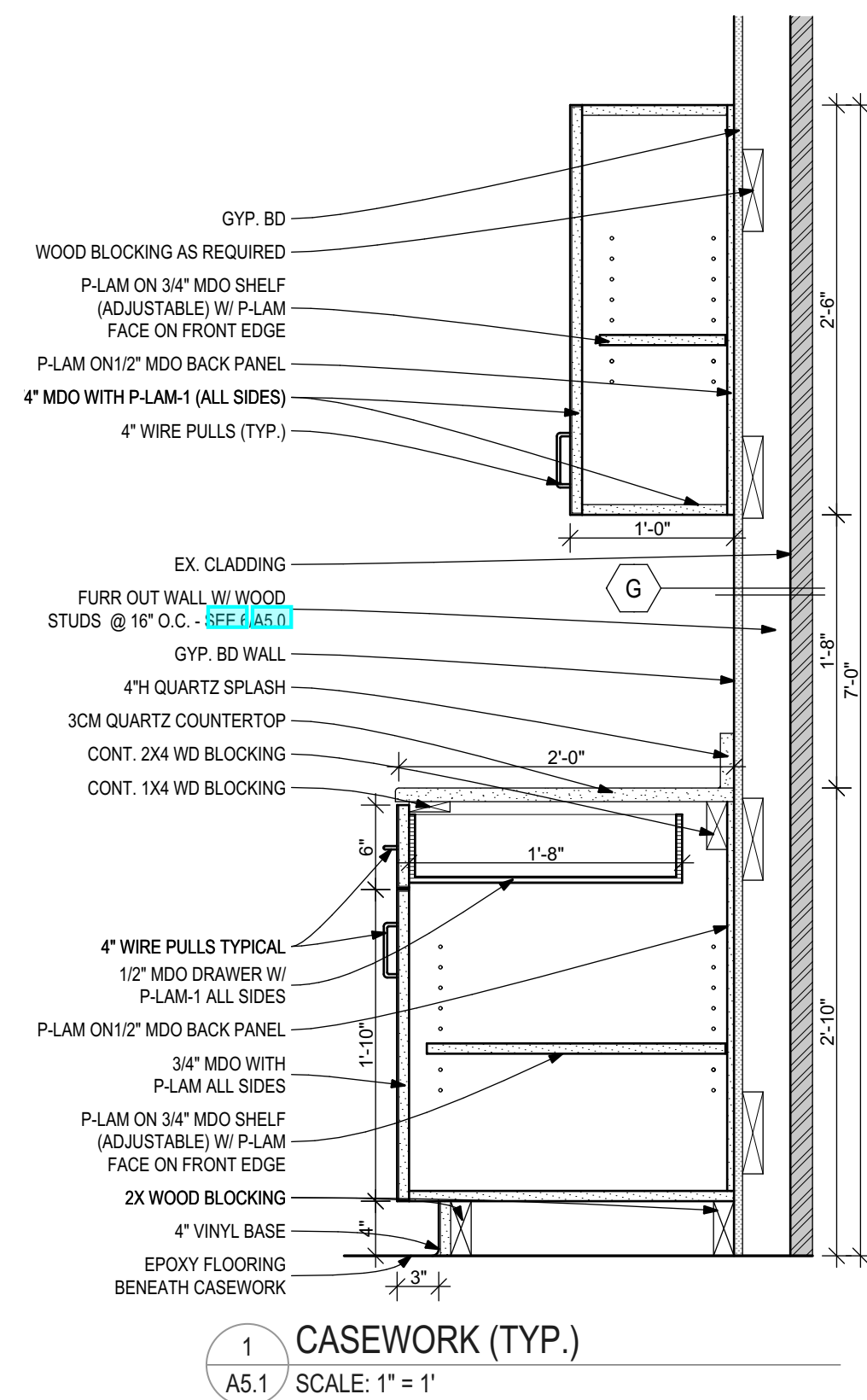


13 O.H. DOOR JAMB
A5.0 SCALE: 1" = 1'

14 SLIDING DOOR OPENING HEADER
A5.0 SCALE: 1" = 1'



15 SLIDING DOOR TRACK
A5.0



310 FOURTH AVENUE SOUTH
SUITE 1000
MINNEAPOLIS, MINNESOTA 55415
TEL: 612.333.2279
A.MALDO@BUSCH-ARCHITECTS.COM

CONSULTANT

BID ISSUE SET
CERTIFICATION
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: JUNE 17, 2024 REG. NO. 58977
PRINTED NAME: AMANDA MALDONADO

COMMISSION NO.: 23-11
DRAWN BY: CAB/AM
CHECKED BY: AM
DATE: JUNE 17, 2024
BID ISSUE DATE: JUNE 18, 2024
REVISION DATES: JUNE 24, 2024

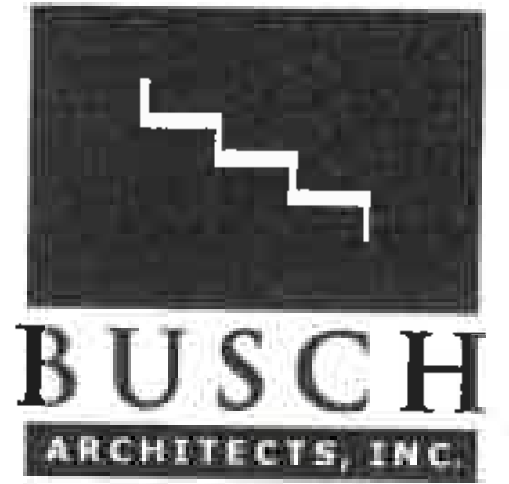
PROJECT TITLE
DI WAREHOUSE REMODEL
McGREGOR, MN
20898 360TH STREET
McGREGOR, MN 55760

OWNER
MILLE LACS BAND OF OJIBWE
43408 OODENA DRIVE
ONAMIA, MN 56359

SHEET TITLE
INTERIOR DETAILS

A5.1

SHEET NO.
SHEET 9 OF 12



310 FOURTH AVENUE SOUTH
SUITE 1000
MINNEAPOLIS, MINNESOTA 55415
TEL: 612.333.2279
A.MALDO@BUSCH-ARCHITECTS.COM

CONSULTANT

BID ISSUE SET

CERTIFICATION
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: JUNE 17, 2024 REG. NO. 58877
PRINTED NAME: AMANDA MALDONADO

COMMISSION NO.: 23-11
DRAWN BY: CAB/AM
CHECKED BY: AM
DATE: JUNE 17, 2024
BID ISSUE DATE: JUNE 18, 2024
REVISION DATES: JUNE 24, 2024

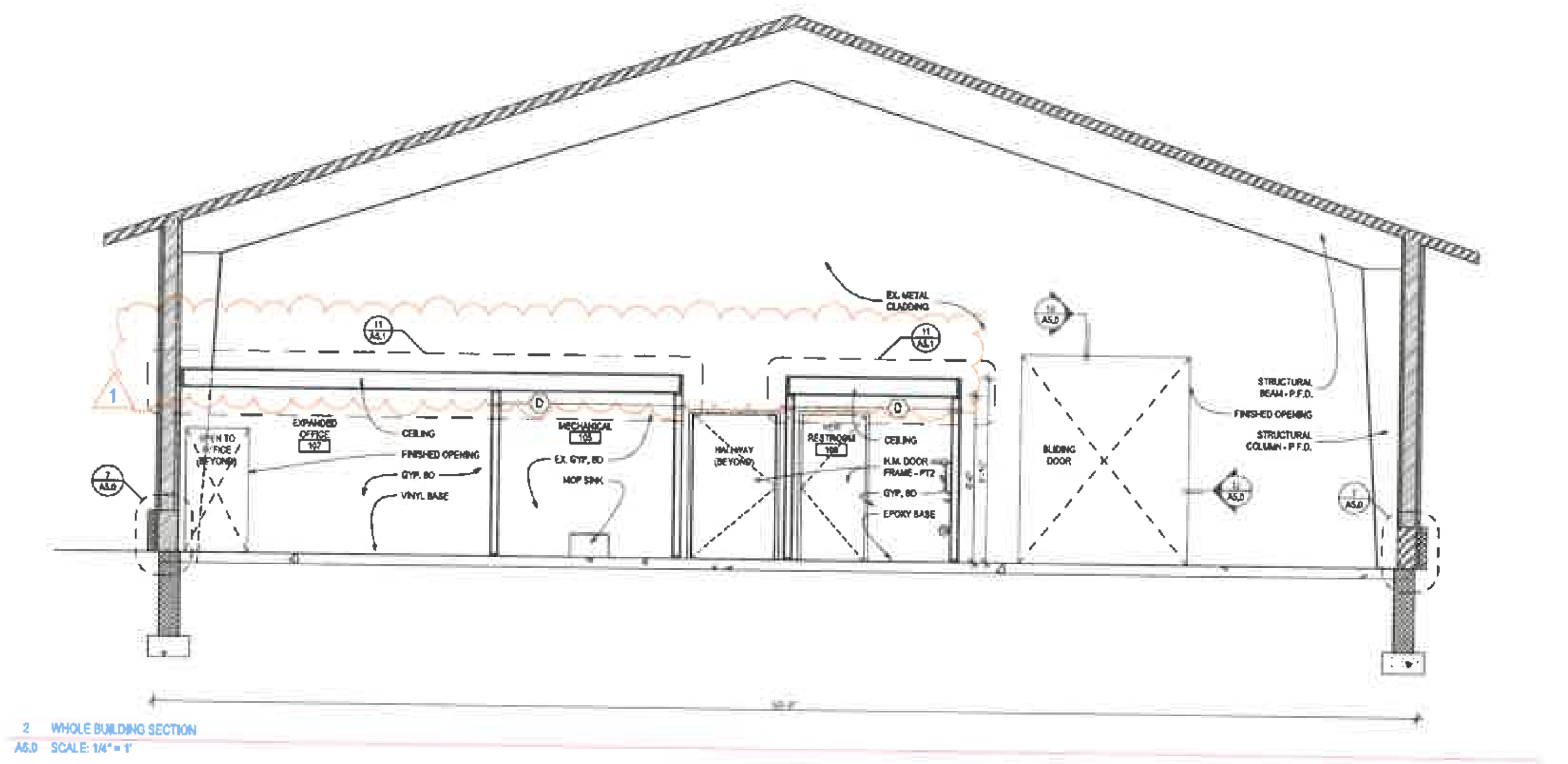
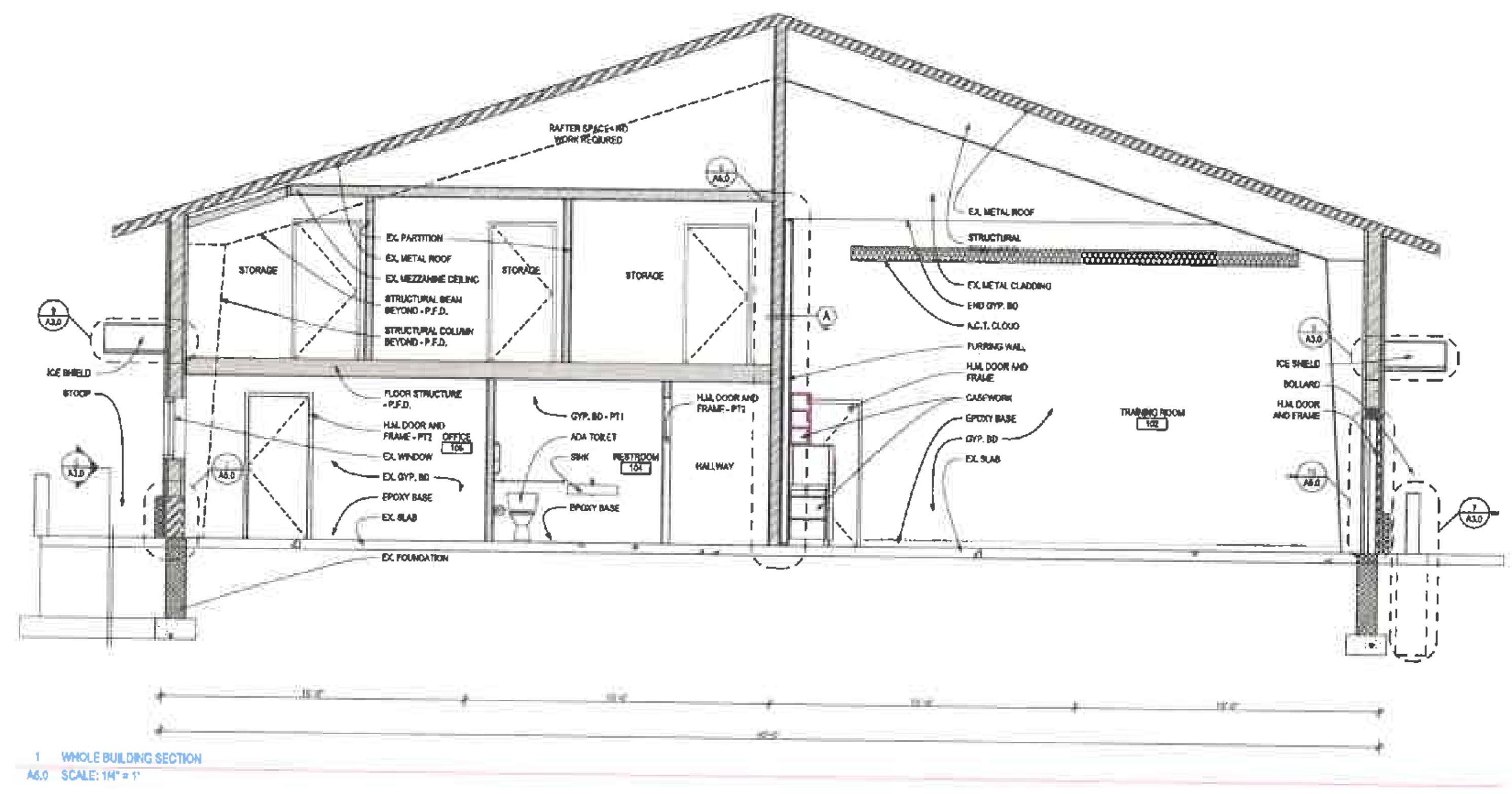
PROJECT TITLE
DI WAREHOUSE REMODEL
McGREGOR, MN
20898 380TH STREET
McGREGOR, MN 55760

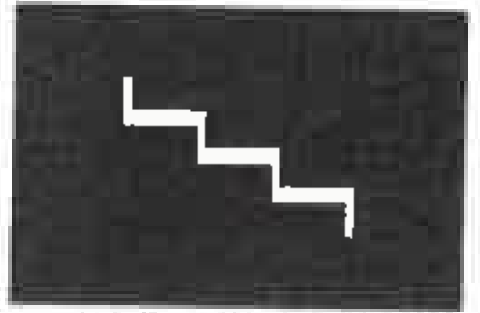
OWNER
MILLE LACS BAND OF OJIBWE
43408 CODENA DRIVE
ONAMIA, MN 56358

SHEET TITLE
BUILDING SECTIONS

A6.0

SHEET NO.
SHEET 10 OF 12





BUSCH
ARCHITECTS, INC.

310 FOURTH AVENUE SOUTH
SUITE 1000
MINNEAPOLIS, MINNESOTA 55415

TEL: 612.333.2279
A.MALDO@BUSCH-ARCHITECTS.COM

CONSULTANT

BID ISSUE SET

CERTIFICATION
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: JUNE 17, 2024 REG. NO. 58977
PRINTED NAME: AMANDA MALDONADO

COMMISSION NO.: 23-11
DRAWN BY: CAB/AM
CHECKED BY: AM
DATE: JUNE 17, 2024
BID ISSUE DATE: JUNE 16, 2024
REVISION DATES: JUNE 24, 2024

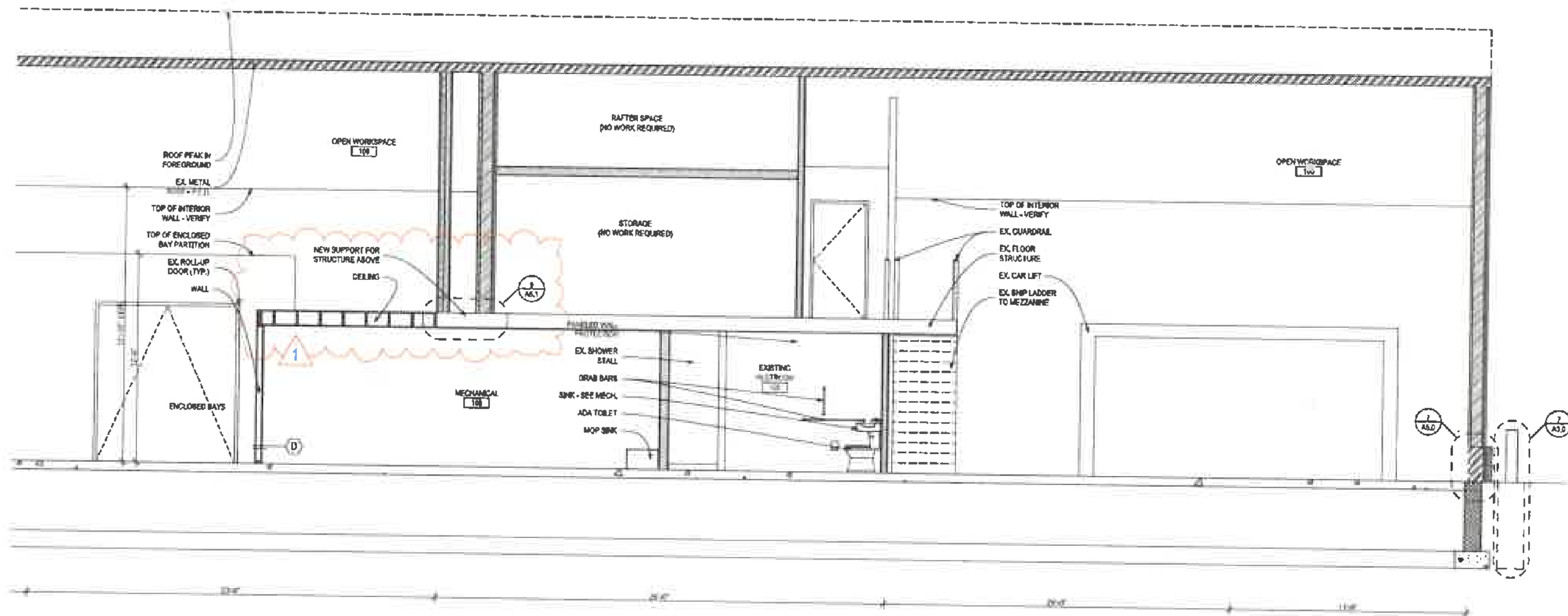
PROJECT TITLE
DIJ WAREHOUSE REMODEL
McGREGOR, MN
20608 380TH STREET
McGREGOR, MN 55760

OWNER
MILLE LACS BAND OF OJIBWE
43408 OODENA DRIVE
ONAMIA, MN 56359

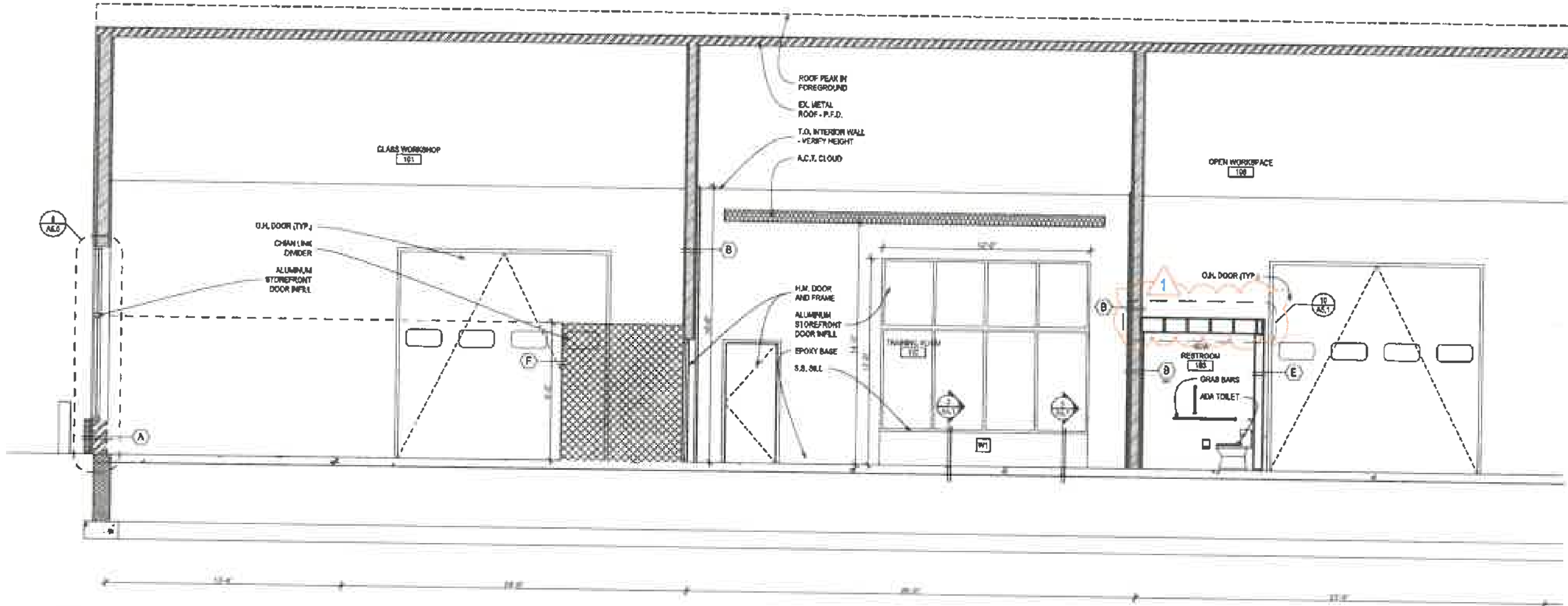
SHEET TITLE
BUILDING SECTIONS

A6.1

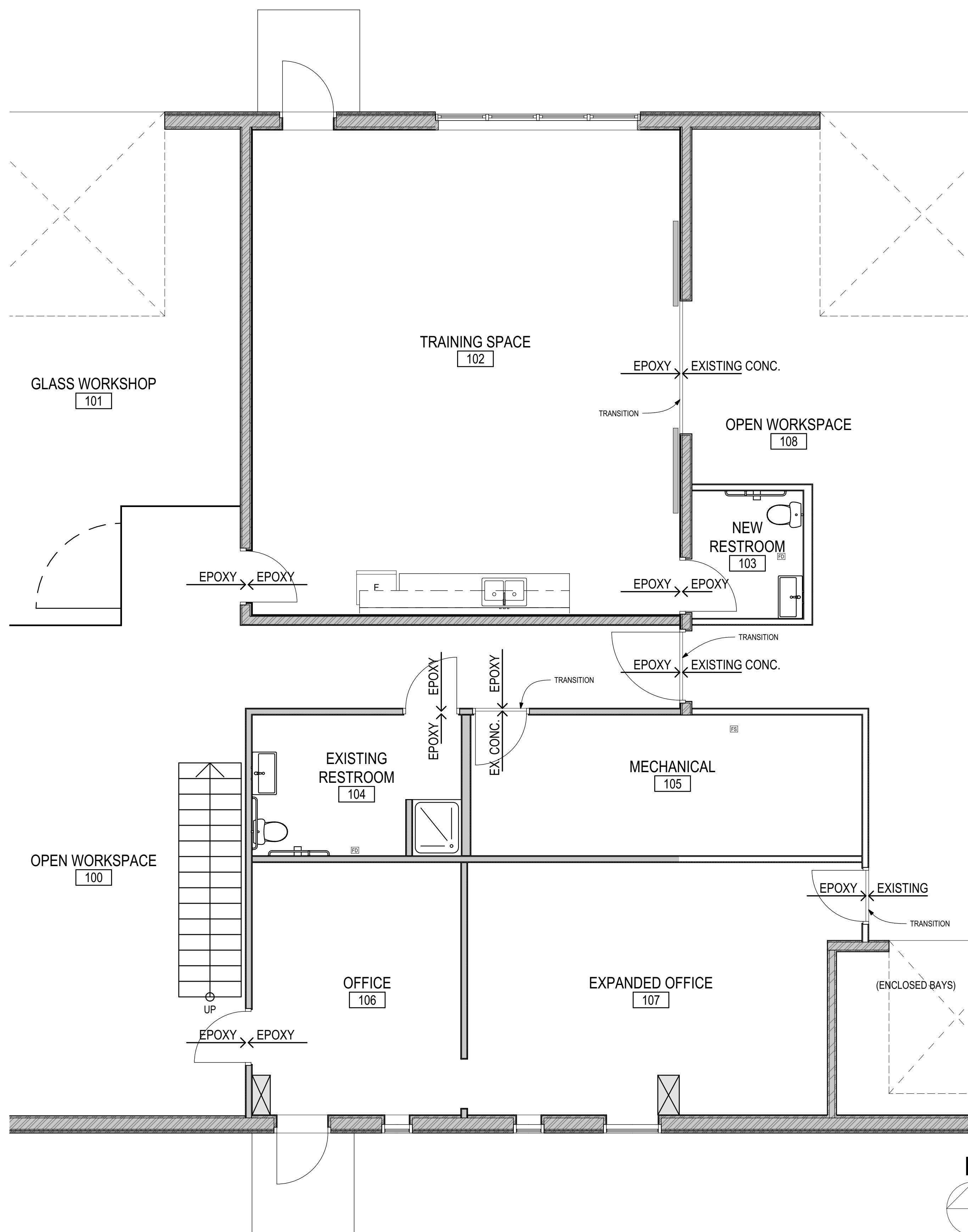
SHEET NO.
SHEET 11 OF 12



1 PARTIAL BUILDING SECTION - EASTWEST
A6.1 SCALE: 1/4" = 1'



2 PARTIAL BUILDING SECTION - EASTWEST
A6.1 SCALE: 1/4" = 1'

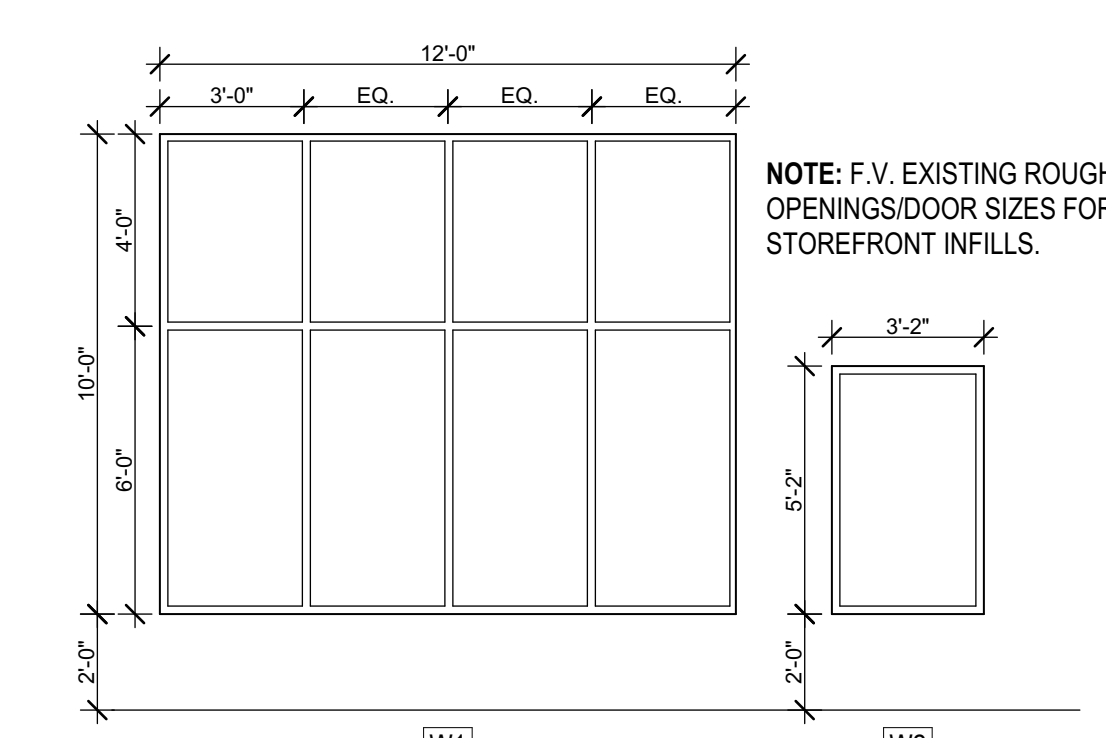


1 FINISH PLAN
A7.0 SCALE: 1/4" = 1'

NO.	NAME	FLOOR	BASE	WALLS				CEILING	CEILING HEIGHT	REMARKS
				NORTH	EAST	SOUTH	WEST			
100	OPEN WORKSPACE	EPOXY	--	--	--	--	--	--		
101	GLASS WORKSHOP	EPOXY	--	--	--	--	--	--		
102	TRAINING SPACE	EPOXY	EPOXY	GYP BD - PT 1	GYP BD - PT 1	GYP BD - PT 3	GYP BD - PT 1	A.C.T. CLOUD	14'-0" // --	
103	NEW RESTROOM	EPOXY	EPOXY	PANELED WALL PROTECTION	PANELED WALL PROTECTION	PANELED WALL PROTECTION	PANELED WALL PROTECTION	GYP BD - P1	8'-0"	
104	RESTROOM (EXIST.)	EPOXY	EPOXY	PANELED WALL PROTECTION	PANELED WALL PROTECTION	PANELED WALL PROTECTION	PANELED WALL PROTECTION	EX GYP BD - P1	8'-0"	
105	MECHANICAL	EX. CONCRETE	--	EX/NEW GYP BD	EX GYP BD	EX/NEW GYP BD	GYP BD	EX GYP BD	8'-0"	PATCH GYP. WHERE NECESSARY
106	OFFICE	EPOXY	EPOXY	EX GYP BD - PT 3	EX GYP BD - PT 1	EX GYP BD - PT 1	EX GYP BD - PT 1	EX GYP BD - P1	8'-0"	PATCH GYP. WHERE NECESSARY
107	EXPANDED OFFICE	EPOXY	EPOXY	EX GYP / GYP BD - PT 1	GYP BD - PT 3	EX GYP / GYP BD - PT 1	EX GYP BD - PT 1	GYP BD - P1	8'-0"	PATCH GYP. WHERE NECESSARY
108	OPEN WORKSPACE	EX. CONCRETE	--	--	--	--	--	--	--	

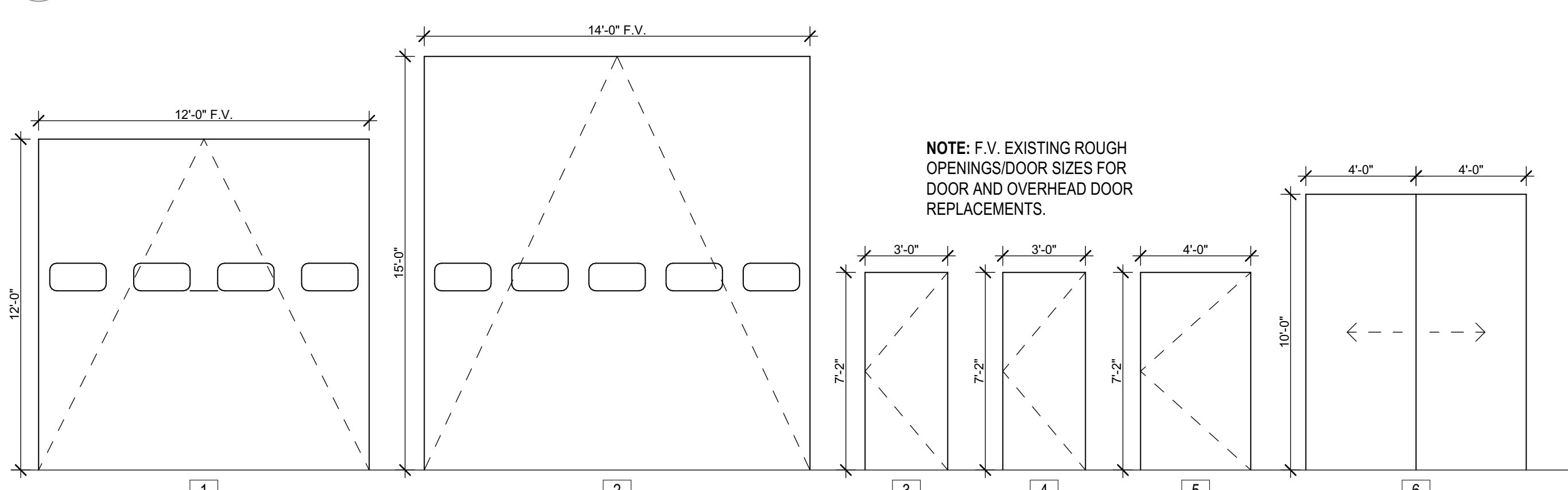
2 ROOM SCHEDULE
A7.0 NO SCALE

DOOR NO.	QUANTITY	SIZE	DOOR TYPE	FRAME	HWDR GROUP	REMARKS
100 A	1	3'-0" X 7'-0" X 2 1/4"	3	H.M. EXT.	1	
100 B	1	12'-0" X 12'-0" X 2 1/2"	1	O.H. TRACK	5	
101	1	12'-0" X 12'-0" X 2 1/2"	1	O.H. TRACK	5	
102 A	1	3'-0" X 7'-0" X 1 3/4"	4	H.M.	2	
102 B	2	4'-0" X 10'-0" X 1 1/2"	6	OPNG.	4	PROVIDE (2) 2X8 HEADER
102 C	1	3'-0" X 7'-0" X 2 1/4"	3	H.M. EXT.	2	
103	1	3'-0" X 7'-0" X 1 3/4"	4	H.M.	3	PROVIDE (2) 2X6 HEADER
104	1	3'-0" X 7'-0" X 1 3/4"	4	H.M.	3	
105	1	3'-0" X 7'-0" X 1 3/4"	4	H.M.	2	
106 A	1	3'-0" X 7'-0" X 2 1/4"	3	H.M. EXT.	2	
106 B	1	3'-0" X 7'-0" X 1 3/4"	4	H.M.	2	
107	1	3'-0" X 7'-0" X 1 3/4"	4	H.M.	2	PROVIDE (2) 2X6 HEADER
108 A	1	12'-0" X 12'-0" X 2 1/2"	1	O.H. TRACK	5	
108 B	1	3'-0" X 7'-0" X 2 1/4"	3	H.M. EXT.	1	
108 C	1	12'-0" X 12'-0" X 2 1/2"	1	O.H. TRACK	5	
108 D	1	14'-0" X 14'-0" X 2 1/2"	2	O.H. TRACK	5	
108 E	1	12'-0" X 12'-0" X 2 1/2"	1	O.H. TRACK	5	
108 F	1	4'-0" X 7'-0" X 1 3/4"	5	H.M.	2	
WINDOW NO.	QUANTITY	SIZE	FRAME TYPE	WINDOW DESCRIPTION		
W1	3	12'-0"W X 12'-0"H	ALUMINUM	ALUMINUM STOREFRONT W/ 2" FRAME		
W2	1	12'-0"W X 12'-0"H	ALUMINUM	ALUMINUM STOREFRONT W/ 2" FRAME		



3 WINDOW TYPES
A7.0 NO SCALE

4 OPENING SCHEDULE
A7.0 NO SCALE



5 DOOR TYPES
A7.0 NO SCALE

MATERIAL	DESCRIPTION
EPOXY	TORGINOL - "DOLERITE"
S.S.	HANSTONE - 3CM "FUSION"
PT-1	SHERWIN WILLIAMS - "NEUTRAL"
PT-2	SHERWIN WILLIAMS - ARCHITECT TO CHOOSE
PT-3	SHERWIN WILLIAMS - ARCHITECT TO CHOOSE
P-LAM	AVONITE - "SERENE OAK"
PANELED WALL PROTECTION	ACROVYN - "BLUE SILK"

6 MATERIALS SCHEDULE
A7.0 NO SCALE

BID ISSUE SET

CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: JUNE 17, 2024 REG. NO. 58977
PRINTED NAME: AMANDA MALDONADO

COMMISSION NO.: 23-11

DRAWN BY: CAB/AM

CHECKED BY: AM

DATE: JUNE 17, 2024

BID ISSUE DATE: JUNE 18, 2024

REVISION DATES: JUNE 24, 2024

PROJECT TITLE

DIJ WAREHOUSE REMODEL
McGREGOR, MN

20898 360TH STREET
McGREGOR, MN 55760

OWNER

MILLE LACS BAND OF OJIBWE

43408 OODENA DRIVE
ONAMIA, MN 56359

SHEET TITLE

FINISH PLAN, SCHEDULES

A7.0



CONSULTANT



Emanuelson-Podas, Inc. 7705 Bush Lake Road, Edina, MN 55439 (952) 930-0050 | www.epinc.com

CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: 06-18-2024 REG. NO. 40918 PRINTED NAME: SCOTT A. VANDER HEIDEN

COMMISSION NO.: EP# 4898.0000

DRAWN BY: PHL CHECKED BY: BJR

DATE: JUNE 18, 2024

BID ISSUE DATE:

REVISION DATES:

PROJECT TITLE

DII WAREHOUSE REMODEL MCGREGOR, MN

20898 360th St, McGregor, MN 55760

OWNER

MILLE LACS BAND OF OJIBWE

SHEET TITLE

MECHANICAL TITLE SHEET

MO.0

SHEET NO. PLOT DATE: 6/17/2024 9:31:46 AM

MECHANICAL ABBREVIATIONS

Table of mechanical abbreviations including AD (AREA DRAIN), AEF (ABOVE FINISHED FLOOR), AFMS (AIRFLOW MEASURING STATION), AHU (AIR HANDLING UNIT), ALT (ALTERNATE), AP (ACCESS PANEL(S)), APD (AIR PRESSURE DROP), ARCH (ARCHITECT(U)RAL), AS (AIR SEPARATOR), BHP (BRAKE HORSEPOWER), BLDG (BUILDING), BLR (BOILER), BOD (BOTTOM OF DUCT), BTUH (BRITISH THERMAL UNIT PER HOUR), BWV (BACK WATER VALVE), CA (COMBUSTION AIR), CD (CONDENSATE DRAIN), CFH (CUBIC FEET PER HOUR), CFM (CUBIC FEET PER MINUTE), CHW (CIRCULATING HOT WATER), CLG (CEILING), CLR (CORE LOOP WATER RETURN), CLS (CORE LOOP WATER SUPPLY), CO (CLEAN OUT), COND (CONDENSATE) (ER), CONN (CONNECTION), CONT (CONTINUE) (OUS) (UED) (ATION), CONTR (CONTRACTOR), CP (CIRCULATING PUMP), CR (CONDENSER RETURN), CRU (COMPUTER ROOM UNIT), CS (CONDENSER SUPPLY), CTE (CONNECT TO EXISTING), CU (CONDENSING UNIT), CUH (CABINET UNIT HEATER), CW (COLD WATER), CWR (CHILLER WATER RETURN), CWS (CHILLED WATER SUPPLY), DEG (DEGREE(S)), DH (DUCT HEATER), DRF (DIFFUSER), DN (DOWN), DT (DRAIN TILE), DWG (DRAWING), EA (EXHAUST AIR), EAT (ENTERING AIR TEMPERATURE), EC (ELECTRICAL CONTRACTOR), EF (EXHAUST FAN), EHC (ELECTRIC HEATING COIL), EL (ELEVATION), ERU (ENERGY RECOVERY UNIT), ESP (EXTERNAL STATIC PRESSURE), ET (EXPANSION TANK), EUH (ELECTRIC UNIT HEATER), EWC (ELECTRIC WATER COOLER), EWH (ELECTRIC WATER HEATER), EWT (ENTERING WATER TEMPERATURE), EXH (EXHAUST), EXIST (EXISTING), F (FAHRENHEIT), FBO (FURNISHED BY OTHERS), FCO (FLOOR CLEAN OUT), FCU (FAN COIL UNIT), FD (FLOOR DRAIN), FD (FIRE DAMPER), FDC (FIRE DEPARTMENT CONNECTION), FDV (FIRE DEPARTMENT VALVE), FFD (FUNNEL FLOOR DRAIN), FFE (FINISHED FLOOR ELEVATION), FLR (FLOOR), FPM (FEET PER MINUTE), FS (FLOOR SINK), FT (FOOT, FEET), FTR (FINNED TUBE RADIATION), G (GAS), GA (GAUGE), GAL (GALLON), GC (GENERAL CONTRACTOR), GI (GREASE INTERCEPTOR), GPH (GALLONS PER HOUR), GPM (GALLONS) PER MINUTE, GR (GRILLE), GW (GREASE WASTE (SANITARY)), H (HARD WATER), H-STAT (HUMIDISTAT), HB (HOSE BIBB), HOA (HAND-OFF-AUTO SWITCH), HP (HORSEPOWER, heat), HP (HEAT PUMP), HTG (HEATING), HVAC (HEATING, VENTILATING, AND AIR CONDITIONING), HW (HOT WATER), HWR (HOT WATER RETURN), HWS (HOT WATER SUPPLY), ID (INDIRECT DRAIN), IE (INVERT ELEVATION), IN (INCHES), INSUL (INSULATION), INV (INVERT), INV EL (INVERT ELEVATION), IRR (IRRIGATION WATER), L (LIQUID), LAT (LEAVING AIR TEMPERATURE), LAV (LAVATORY), LBS/HR (POUNDS PER HOUR), LF (LINEAL FOOT, FEET), LTA (LINED TRANSFER AIR), LV (LOWV), LWT (LEAVING WATER TEMPERATURE), MAU (MAKEUP AIR UNIT), MAX (MAXIMUM), MB (MOP BASIN), MBH (1,000 BTUH), MC (MECHANICAL CONTRACTOR), MCC (MOTOR CONTROL CENTER), MEZZ (MEZZANINE), MIN (MINIMUM), MISC (MISCELLANEOUS), # (NUMBER), N/A (NOT APPLICABLE), NC (NORMALLY CLOSED), NIC (NOT IN CONTRACT), NO (NORMALLY OPEN), NTS (NOT TO SCALE), OA (OUTSIDE AIR), OC (ON CENTER), ORD (OVERFLOW ROOF DRAIN), OSD (OVERFLOW STORM DRAIN), PC (PLUMBING CONTRACTOR), PD (PRESSURE DROP), PG (PRESSURE GAUGE), PLBG (PLUMBING), PRV (POWER ROOF VENTILATOR), PRV (PRESSURE REDUCING VALVE), PRV (PRESSURE REGULATING VALVE), PSI (POUNDS PER SQUARE INCH), PT (PRESSURE AND TEMPERATURE FITTING), RA (RETURN AIR), RA (REFLECTED CEILING PLAN), RD (ROOF DRAIN), REG (REGISTER), REQ (REQUIRED), RF (RETURN FAN), RH (RELATIVE HUMIDITY), RHC (REHEAT COIL), RL (REFRIGERANT LIQUID), RM (ROOM), RO (REVERSE OSMOSIS), RP (RADIANT PANEL), RPM (REVOLUTIONS PER MINUTE), RPZ (REDUCED PRESSURE BACKFLOW PREVENTER), RS (REFRIGERANT SUCTION), RTU (ROOFTOP UNIT), RWL (RAIN WATER LEADER), S (SUCTION), SA (SUPPLY AIR), SAN (SANITARY), SCOR (SHORT CIRCUIT CURRENT RATING), SCU (SELF CONTAINED UNIT), SCW (SOFTENED COLD WATER), SD (STORM DRAIN), SE (SEWAGE EJECTOR), SF (SUPPLY FAN, SQUARE FEET), SH (SHOWER), SP (STATIC PRESSURE, SUMP PUMP), SR (SUCTION RISER), SS (STAINLESS STEEL), ST (STORM), STM (STEAM), STP (STANDPIPE), SU (SUPPLY UNIT), T (THERMOSTAT, TEMPERED), T-STAT (THERMOSTAT), TA (TRANSFER AIR), TC (TEMPERATURE CONTROL(S)), TCC (TEMPERATURE CONTROL(S) CONTRACTOR), TD (TEMPERATURE DIFFERENTIAL), TMV (THERMOSTATIC MIXING VALVE), TSP (TOTAL STATIC PRESSURE), TYP (TYPICAL), UG (UNDERGROUND), UH (UNIT HEATER), UNO (UNLESS NOTED OTHERWISE), UR (URNAL), V (VENT), VAV (VARIABLE AIR VOLUME), VD (VOLUME DAMPER), VDF (VARIABLE FREQUENCY DRIVE), VSD (VARIABLE SPEED DRIVE (MOTOR CONTROLLER)), VTR (VENT THROUGH ROOF), W (WASTE), WC (WATER CLOSET), WCO (WALL CLEAN OUT), WH (WATER HEATER), WH (WALL HYDRANT), WP (WATERPROOF), WPD (WATER PRESSURE DROP), WS (WATER SOFTENER)

MECHANICAL ABBREVIATIONS

Table of mechanical abbreviations including L (LIQUID), LAT (LEAVING AIR TEMPERATURE), LAV (LAVATORY), LBS/HR (POUNDS PER HOUR), LF (LINEAL FOOT, FEET), LTA (LINED TRANSFER AIR), LV (LOWV), LWT (LEAVING WATER TEMPERATURE), MAU (MAKEUP AIR UNIT), MAX (MAXIMUM), MB (MOP BASIN), MBH (1,000 BTUH), MC (MECHANICAL CONTRACTOR), MCC (MOTOR CONTROL CENTER), MEZZ (MEZZANINE), MIN (MINIMUM), MISC (MISCELLANEOUS), # (NUMBER), N/A (NOT APPLICABLE), NC (NORMALLY CLOSED), NIC (NOT IN CONTRACT), NO (NORMALLY OPEN), NTS (NOT TO SCALE), OA (OUTSIDE AIR), OC (ON CENTER), ORD (OVERFLOW ROOF DRAIN), OSD (OVERFLOW STORM DRAIN), PC (PLUMBING CONTRACTOR), PD (PRESSURE DROP), PG (PRESSURE GAUGE), PLBG (PLUMBING), PRV (POWER ROOF VENTILATOR), PRV (PRESSURE REDUCING VALVE), PRV (PRESSURE REGULATING VALVE), PSI (POUNDS PER SQUARE INCH), PT (PRESSURE AND TEMPERATURE FITTING), RA (RETURN AIR), RA (REFLECTED CEILING PLAN), RD (ROOF DRAIN), REG (REGISTER), REQ (REQUIRED), RF (RETURN FAN), RH (RELATIVE HUMIDITY), RHC (REHEAT COIL), RL (REFRIGERANT LIQUID), RM (ROOM), RO (REVERSE OSMOSIS), RP (RADIANT PANEL), RPM (REVOLUTIONS PER MINUTE), RPZ (REDUCED PRESSURE BACKFLOW PREVENTER), RS (REFRIGERANT SUCTION), RTU (ROOFTOP UNIT), RWL (RAIN WATER LEADER), S (SUCTION), SA (SUPPLY AIR), SAN (SANITARY), SCOR (SHORT CIRCUIT CURRENT RATING), SCU (SELF CONTAINED UNIT), SCW (SOFTENED COLD WATER), SD (STORM DRAIN), SE (SEWAGE EJECTOR), SF (SUPPLY FAN, SQUARE FEET), SH (SHOWER), SP (STATIC PRESSURE, SUMP PUMP), SR (SUCTION RISER), SS (STAINLESS STEEL), ST (STORM), STM (STEAM), STP (STANDPIPE), SU (SUPPLY UNIT), T (THERMOSTAT, TEMPERED), T-STAT (THERMOSTAT), TA (TRANSFER AIR), TC (TEMPERATURE CONTROL(S)), TCC (TEMPERATURE CONTROL(S) CONTRACTOR), TD (TEMPERATURE DIFFERENTIAL), TMV (THERMOSTATIC MIXING VALVE), TSP (TOTAL STATIC PRESSURE), TYP (TYPICAL), UG (UNDERGROUND), UH (UNIT HEATER), UNO (UNLESS NOTED OTHERWISE), UR (URNAL), V (VENT), VAV (VARIABLE AIR VOLUME), VD (VOLUME DAMPER), VDF (VARIABLE FREQUENCY DRIVE), VSD (VARIABLE SPEED DRIVE (MOTOR CONTROLLER)), VTR (VENT THROUGH ROOF), W (WASTE), WC (WATER CLOSET), WCO (WALL CLEAN OUT), WH (WATER HEATER), WH (WALL HYDRANT), WP (WATERPROOF), WPD (WATER PRESSURE DROP), WS (WATER SOFTENER)

MECHANICAL SYMBOL LEGEND

MECHANICAL SYMBOL LEGEND table with columns for PLUMBING, HVAC, HEATING & COOLING, FIRE PROTECTION, SPRINKLER HEADS, MISC. FIRE PROTECTION, MEDICAL GAS, REFRIGERATION, MISC. REFRIGERATION, and MISC. GRAPHICS. Includes symbols for pipes, valves, registers, diffusers, and various mechanical components.

MECHANICAL SHEET INDEX

MECHANICAL SHEET INDEX table listing sheet numbers (MO.0 to MO.4) and their corresponding titles (MECHANICAL TITLE SHEET, MECHANICAL GENERAL NOTES, etc.).

MECHANICAL PROJECT GENERAL NOTES

(NOTES APPLY TO ALL SHEETS)

- WORK TO BE ACCOMPLISHED ON THESE DRAWINGS AND THE ACCOMPANYING SPECIFICATIONS INCLUDES THE FURNISHING OF ALL LABOR, MATERIALS, EQUIPMENT, AND SERVICES NECESSARY FOR THE PROPER COMPLETION OF ALL MECHANICAL WORK.
- EXISTENCE OF ANY WIRES, CONDUITS, PIPES, DUCTS, OR OTHER FACILITIES ARE SHOWN IN A GENERAL WAY ONLY. IT WILL BE THE DUTY OF THE CONTRACTOR TO VISIT THE SITE AND MAKE EXACT DETERMINATION OF THE EXISTENCE OF ANY SUCH FACILITIES PRIOR TO THE SUBMISSION OF HIS BID. IT IS UNDERSTOOD THAT HE WILL BE RESPONSIBLE FOR MAKING THE EXACT DETERMINATION OF THE LOCATION AND CONDITION OF SUCH FACILITIES.
- ALL REQUIRED FEES, PERMITS, AND INSPECTIONS SHALL BE OBTAINED AND/OR ARRANGED FOR BY THE CONTRACTOR UNDER THE SECTION OF THE SPECIFICATIONS FOR WHICH THEY ARE REQUIRED.
- REGULAR INSPECTIONS SHALL BE ARRANGED BY THE CONTRACTOR AS REQUIRED BY ANY AND ALL REGULATIONS. ALL CHARGES FROM REGULATING AGENCIES FOR INSPECTIONS OF INSTALLATIONS OR REVIEW OF PLANS AND SPECIFICATIONS SHALL BE PAID BY THE CONTRACTOR.
- CERTIFICATE OF FINAL INSPECTION. UNDER EACH APPLICABLE SECTION OF THE SPECIFICATIONS, CONTRACTOR SHALL, UPON COMPLETION OF THE WORK UNDER THAT SECTION, FURNISH A CERTIFICATE OF FINAL INSPECTION TO THE ENGINEER FROM THE INSPECTION DEPARTMENT HAVING JURISDICTION.
- ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH ALL CURRENT AND APPLICABLE CODES, SPECIFICATIONS, ORDINANCES, LAWS, REGULATIONS, INDUSTRY STANDARDS, AND UTILITY COMPANY REGULATIONS.
- IN CASE OF DIFFERENCE AMONG BUILDING CODES, SPECIFICATIONS, STATE LAWS, LOCAL ORDINANCES, INDUSTRY STANDARDS, AND UTILITY COMPANY REGULATIONS AND THE CONTRACT DOCUMENTS, THE MOST STRINGENT SHALL GOVERN. CONTRACTOR SHALL PROMPTLY NOTIFY THE ENGINEER IN WRITING OF ANY SUCH DIFFERENCE.
- ALL APPLICABLE FEDERAL, STATE, LOCAL LAWS, ORDINANCES, AND LOCAL CODE AMENDMENTS SHALL BE ADHERED TO THROUGHOUT THE CONSTRUCTION PROJECT. THE TOTAL INSTALLATION SHALL COMPLY WITH ANY AND ALL REQUIREMENTS OF THE LEGALLY CONSTITUTED AUTHORITIES HAVING JURISDICTION INCLUDING THE APPLICABLE BUILDING CODE, THE APPLICABLE MECHANICAL CODE, AND THE APPLICABLE PLUMBING CODE.
- NON-COMPLIANCE. SHOULD THE CONTRACTOR PERFORM ANY WORK THAT DOES NOT COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE BUILDING CODES, STATE LAWS, LOCAL ORDINANCES, INDUSTRY STANDARDS, AND UTILITY COMPANY REGULATIONS, HE SHALL BEAR ALL COSTS ARISING TO CORRECT THE DEFICIENCIES.
- CONTRACTOR SHALL INITIATE, MAINTAIN, AND SUPERVISE ALL SAFETY PRECAUTIONS REQUIRED FOR HIS WORK, INCLUDING REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
- DRAWINGS ARE TO SCALE AS NOTED, BUT THE CONTRACTOR SHALL REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR EXACT LOCATION OF PARTITIONS, WALLS, BEAMS, SHAFTS, EQUIPMENT, ETC.
- EACH TRADE SHALL OBTAIN DRAWINGS AND SPECIFICATIONS OF ALL OTHER TRADES AND COORDINATE HIS WORK WITH ALL OTHER TRADES.
- DRAWINGS SHOW THE GENERAL ARRANGEMENT OF DUCTWORK, PIPING, EQUIPMENT, AND APPURTENANCES AND SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND WORK OF OTHER TRADES WILL PERMIT. MECHANICAL WORK SHALL CONFORM TO THE REQUIREMENTS SHOWN ON ALL OF THE DRAWINGS. ARCHITECTURAL AND STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER MECHANICAL DRAWINGS. BECAUSE OF THE SMALL SCALE OF THE MECHANICAL DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, AND ACCESSORIES THAT MAY BE REQUIRED.
- DISCREPANCIES DISCOVERED BEFORE OR AFTER WORK HAS STARTED SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY, AND THE ENGINEER RESERVES THE RIGHT TO REQUIRE MINOR CHANGES IN THE WORK OF ANY CONTRACTOR TO ELIMINATE SUCH DISCREPANCIES WITH NO CHANGE IN CONTRACT COST.
- PLANS AND SPECIFICATIONS ARE COMPLEMENTARY, AND WHAT IS CALLED FOR IN EITHER ONE SHALL BE AS BINDING AS IF CALLED FOR IN BOTH.
- WHERE A DISAGREEMENT EXISTS BETWEEN THE PLANS AND SPECIFICATIONS, THE ITEM OR ARRANGEMENT OF BETTER QUALITY, GREATER QUANTITY, OR HIGHER COST SHALL BE INCLUDED IN THE BID.
- ALL MATERIALS AND EQUIPMENT SHALL BE STORED IN SUCH A PLACE AND IN SUCH A MANNER THAT A MINIMUM OF CONGESTION WILL RESULT. THE PLACING OF SUCH MATERIALS AND EQUIPMENT SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER.
- EACH CONTRACTOR SHALL COORDINATE WORK WITH OTHER TRADES IN THE INSTALLATION OF EQUIPMENT, PIPING, CONDUIT, AND DUCTWORK.
- CONTRACTORS SHALL SOLVE ALL COORDINATION CONFLICTS AMONG THEMSELVES WHEN POSSIBLE. ENGINEER WILL ARBITRATE WHEN NECESSARY, AND HIS JUDGMENT WILL STAND, WITH NO ADDITIONAL COST TO THE OWNER.
- ACCESS PANELS SHALL BE FURNISHED BY THE TRADE REQUIRING THEM AND DELIVERED TO THE GENERAL CONTRACTOR FOR INSTALLATION.
- EACH TRADE SHALL PERFORM ALL REMOVING, CUTTING, PATCHING, AND REPLACEMENT OF ALL BUILDING STRUCTURE, SURFACES, AND FINISHES NECESSARY IN ORDER TO PERFORM THE WORK, UNLESS SUCH WORK HAS BEEN DELEGATED TO THE GENERAL CONTRACTOR/ANOTHER TRADE. HOWEVER, SPECIAL PERMISSION SHALL BE OBTAINED FROM THE ENGINEER BEFORE CUTTING STRUCTURAL MEMBERS OR FINISHED MATERIALS. ALL PATCHING SHALL BE PERFORMED IN SUCH MANNER AS TO LEAVE NO VISIBLE TRACE AND TO RETURN THE PART AFFECTED TO THE CONDITION OF UNDISTURBED WORK. PATCHING WORK SHALL BE PERFORMED BY PERSONS EXPERIENCED, SKILLED, AND LICENSED FOR THE PARTICULAR TYPE OF WORK INVOLVED. INFERIOR WORK WILL NOT BE ACCEPTED. ALL HOLES IN MASONRY SHALL BE DRILLED WITH ROTARY DRILLS. IMPACT TOOLS SHALL NOT BE USED.
- EACH TRADE SHALL BEAR THE EXPENSE OF ALL CUTTING, PATCHING, REPAIRING, OR REPLACING OF THE WORK OF OTHER TRADES REQUIRED BECAUSE OF HIS FAULT, ERROR, OR TARDINESS OF BECAUSE OF ANY DAMAGE DONE BY HIM.
- EACH TRADE SHALL PROVIDE ALL HOLES AND OPENINGS REQUIRED FOR HIS WORK UNLESS SUCH HOLES AND OPENINGS ARE SHOWN TO BE PROVIDED ON THE ARCHITECTURAL OR STRUCTURAL DRAWINGS.
- EACH TRADE SHALL PERIODICALLY CLEAR AWAY ALL DEBRIS, SURPLUS MATERIALS, ETC., RESULTING FROM HIS WORK OR OPERATIONS, LEAVING THE JOB AND THE EQUIPMENT FURNISHED UNDER ANY OR ALL CONTRACTS IN A CLEAN CONDITION.
- EACH TRADE SHALL TEST THE EQUIPMENT PROVIDED AND/OR INSTALLED UNDER THE SPECIFICATION AND SHALL DEMONSTRATE ITS PROPER OPERATION TO THE OWNER'S OPERATING ENGINEER.
- EACH TRADE SHALL FURNISH, WITHOUT ADDITIONAL EXPENSE TO THE OWNER, THE SERVICES OF COMPETENT INSTRUCTORS, WHO WILL GIVE FULL INSTRUCTION IN THE CARE, ADJUSTMENT, AND OPERATION AND MAINTENANCE OF ALL PARTS OF THE EQUIPMENT TO THE OWNER'S PERMANENT EMPLOYEES WHO ARE TO HAVE CHARGE OF THE EQUIPMENT.
- ALL WOOD NAILERS AND OTHER LUMBER WHICH IS INSTALLED IN CONTACT WITH METAL, CONCRETE, OR MASONRY SHALL BE PRESSURE TREATED AGAINST DECAY (UNLESS OTHERWISE NOTED).
- MATERIAL EXPOSED WITHIN RETURN AIR PLENUM CEILINGS SHALL COMPLY WITH APPLICABLE CODE.
- PLANS DO NOT INCLUDE ALL OFFSETS FOR COORDINATION WITH DUCT, PIPING, LIGHTING, AND STRUCTURAL SYSTEMS. PROVIDE ALLOWANCES FOR REQUIRED OFFSETS. PROVIDE OFFSETS AS REQUIRED.
- BEFORE SUBMITTING A PROPOSAL ON THE WORK SHOWN ON THESE DRAWINGS AND ACCOMPANYING SPECIFICATIONS, EACH BIDDER SHALL EXAMINE THE SITE, CHECK AS TO THE MEANS OF MAKING CONNECTIONS TO SERVICES, AND SHALL BECOME FAMILIAR WITH ALL THE EXISTING CONDITIONS AND LIMITATIONS. NO EXTRAS WILL BE ALLOWED BECAUSE OF THE CONTRACTORS MISUNDERSTANDING AS TO THE AMOUNT OF WORK INVOLVED OR HIS LACK OF KNOWLEDGE OF ANY SITE CONDITIONS WHICH MAY AFFECT HIS WORK. ANY APPARENT VARIANCE OF THE PLAN OR SPECIFICATION FROM EXISTING CONDITIONS AT THE SITE SHALL BE CALLED TO THE ATTENTION OF THE ENGINEER DURING THE BID PERIOD SO CLARIFICATION CAN BE MADE BY ADDENDUM.
- NORMAL USE OF THE FACILITY SHALL NOT BE DISTURBED, EXCEPT WITHIN THE IMMEDIATE CONSTRUCTION AREA. ALL WALKS, DRIVEWAYS, AND ENTRANCES SHALL BE KEPT CLEAR AND FREE OF ALL CONTRACTOR'S EQUIPMENT, MATERIAL, AND DEBRIS AT ALL TIMES.
- CONTRACTOR SHALL THOROUGHLY EXAMINE THE EXISTING BUILDING WITH REGARD TO WHAT TEMPORARY MEASURES HE MUST TAKE IN ORDER TO PERMIT THE OWNER TO OCCUPY SPECIFIC AREAS OF THE BUILDING DURING THE VARIOUS CONSTRUCTION PHASES. REFER TO DIVISION 1, SECTION 1010, "SUMMARY OF WORK" FOR CONSTRUCTION SEQUENCING SCHEDULE. IN GENERAL, SYSTEMS MUST REMAIN IN USE IN THOSE DESIGNATED AREAS TO PERMIT THE OWNER TO FUNCTION IN A PRE-CONSTRUCTION MANNER.
- EACH TRADE SHALL REMOVE EXISTING WORK THAT IS SHOWN, SPECIFIED, OR OBVIOUSLY NECESSARY FOR COMPLETION OF HIS WORK. OWNER SHALL HAVE THE OPTION OF RETAINING ANY ITEM OR MATERIAL REMOVED UNDER THIS CONTRACT ITEMS OR MATERIALS NOT RETAINED BY OWNER SHALL BECOME THE PROPERTY OF THE TRADE AND SHALL BE REMOVED FROM THE PREMISES.

PLUMBING CODE NOTES:

- ALL PLUMBING MUST BE INSTALLED IN ACCORDANCE WITH CODE (MN 4714)
- THE HORIZONTAL DRAINAGE PIPING MUST BE INSTALLED WITH A UNIFORM SLOPE OF AT LEAST 1/4" PER FOOT (MN 4714, 708.1)
- ALL SINKS EXCEPT LAVATORIES AND PRIVATE USE BAR SINKS MUST BE PROVIDED WITH A 2" MINIMUM VERTICAL FIXTURE DRAIN (MN 4714, 702.1 & 703.2)
- A COMMON VENT MAY SERVE TWO FIXTURES IF EACH FIXTURE DRAIN CONNECTS INDEPENDENTLY TO A VERTICAL DRAIN THROUGH APPROVED DOUBLY FIXTURE FITTING. DOUBLE SANITARY TEES ARE NOT PERMITTED (MN 4714, 704.2 & 905.6)
- VENT PIPE SIZES SHALL BE PER CODE (MN 4714, 703.2)
- DOMESTIC DISHWASHER MUST DISCHARGE INDIRECTLY THROUGH A ASSE 1020 OR IAPMO PS23-2206a LISTED AIR GAP FITTING (MN 4714, 414.3 & 907.4)
- ABOVE GRADE HORIZONTAL PLUMBING PIPING MUST BE SUPPORTED PER CODE (MN 4714, 313.1)
- HOT WATER DELIVERED FROM PUBLIC USE LAVATORIES MUST BE LIMITED TO A MAXIMUM TEMPERATURE OF 110 DEGREE F BY A DEVICE THAT IS IN ACCORDANCE WITH 1070 OR CSA B125.3 (MN 4714, 407.3)
- WATER HEATERS MUST BE ACCESSIBLE WITH SUFFICIENT CLEARANCE FOR MAINTENANCE AND REPAIR. UNLISTED WATER HEATERS MUST HAVE 12" MINIMUM CLEARANCE ON ALL SIDES (MN 4714 507.26 & 504.3.2)
- WALL HYDRANTS MUST MEET ASSE STANDARD 1019, OR ASSE 1052 OR ASSE 1011 WHERE PERMITTED BY THE ADMINISTRATIVE AUTHORITY.
- INSTALLATION OF BACKFLOW PREVENTERS SHALL BE INSTALLED AND SET UP WITH A TESTING AND INSPECTIONS PROGRAM ACCEPTABLE TO THE ADMINISTRATIVE AUTHORITY (MN 4714, 603.5.23)
- CLEANOUT OPENING MAY NOT BE SMALLER THAN THE PIPE SIZE CONNECTED TO OR SIZE PER CODE (MN 4714, 707.10)
- CLEANOUT TO BE PROVIDED AT THE CONNECTION BETWEEN THE BUILDING DRAIN AND BUILDING SEWER (MN 4714, 719.1)
- IN NO CASE SHALL WATER FROM ROOF BE ALLOWED TO FLOW UPON A PUBLIC SIDEWALK (MN 4714, 1101.2)
- PLUMBING SYSTEMS MUST BE TESTED IN ACCORDANCE WITH CODE (MN 4714, 609.4, 712.0, 1107.1)
- WATER SUPPLY CONNECTIONS TO FIXTURES OR EQUIPMENT WITH OR HAVING INLETS BELOW THE SPILL LINE MUST BE PROVIDED WITH AN AIR GAP OR APPROVED BACKFLOW PREVENTER (MN 4714, 603.2)
- MATERIALS USED FOR THE PLUMBING SYSTEM SHALL COMPLY WITH THE STANDARDS SET FORTH IN THE CODE (MN 4714, 301.1)
- PROVIDE ADDITIONAL AIR GAP ARRANGEMENT OR APPROVED BACKFLOW PREVENTER ON DISHWASHER, CLOTHES WASHER, COFFEE MAKERS, REFRIGERATORS, AND/OR ICE MAKERS WHEN NOT PROVIDED WITH THE EQUIPMENT.
- CPVC WATER SERVICE OR DISTRIBUTION SYSTEMS MATERIAL AND INSTALLATION MUST MEET CODE (MN 4714, 605.2 & TABLE 604.1).
- PLASTIC PIPE MATERIAL AND INSTALLATION USED FOR INTERIOR STORM PIPING, DRAIN, WASTE, AND/OR VENT MUST MEET CODE (MN 4714, 605.2 & TABLE 604.1).
- HUBLESS CAST IRON DRAIN, WASTE AND VENT PIPING MUST COMPLY WITH CODE (MN 4714, 701.2 AND TABLE 701.2 AND INSTALLATION STANDARD 6).
- UNIONS SHALL BE INSTALLED IN WATER SUPPLIES ON FLOOR HEATING OR REGULATING EQUIPMENT, WATER CONDITIONING, ETC... (MN 4714, 609.5)
- EACH HORIZONTAL DRAIN BRANCH, INCLUDING FLOOR DRAIN BRANCHES, SHALL BE PROVIDED WITH A CLEANOUT AT ITS UPPER TERMINAL UNLESS BRANCH LINE IS LESS THAN 5 FEET (EXCEPT URINALS AND SINKS) OR 72 DEGREES OR LESS FROM VERTICAL (MN 4714, 707.4)
- PROVIDE ADDITIONAL CLEANOUTS AS REQUIRED TO TEST NEW WASTE AND VENT SYSTEMS OR REQUIRED BY CODE.
- DOUBLE WYES MAY NOT BE USED FOR DRAINAGE FITTINGS IN THE HORIZONTAL POSITION.
- FAUCETS WITH HOSE THREADED OUTLETS MUST BE PROVIDED WITH APPROVED BACKFLOW PREVENTERS. FIELD VACUUM BREAKERS MUST MEET ASSE 1052.
- PIPING SHALL BE INSTALLED PER CODE. CHANGE IN DIRECTION IN DRAINAGE PIPING MUST BE MADE WITH USE OF WYES AND BENDS. SANITARY TEES ARE NOT ALLOWED WHERE DIRECTION OF FLOW CHANGES.
- ALL SANITARY PIPING UNDERGROUND SHALL BE A MINIMUM 2" DIAMETER.
- ALL SOIL, WASTE, DRAIN, AND VENT PIPING ABOVE GROUND WITHIN A PLENUM RETURN CEILING SHALL BE STANDARD CAST IRON PIPE. NO-HUB NEOPRENE SLEEVE BANDED GASKETS. INSTALLATION AND MATERIAL OF PIPING SHALL BE IN ACCORDANCE WITH CODE.
- INSTALL VALVES ON EACH ROOM OR INDIVIDUAL FIXTURE PER CODE.
- MATERIALS USED FOR PLUMBING SYSTEMS MUST COMPLY WITH STANDARDS SET PER CODE.
- A CLEANOUT SHALL BE PROVIDED ON A COMMON VERTICAL FIXTURE DRAIN OR COMMON VENT SERVING TWO FIXTURES TRAPS THAT CONNECT TO A VERTICAL DRAIN AT THE SAME LEVEL. WHERE THE VERTICAL FIXTURE DRAIN IS ACCESSIBLE THROUGH THE TRAP OPENING, THE CLEANOUT MAY BE ELIMINATED.

PLUMBING GENERAL NOTES

- COORDINATE UNDERGROUND PIPING WITH GENERAL CONTRACTOR TO ENSURE PROPER FOOTING DEPTH CLEARANCE.
- PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE PLUMBING SYSTEM AS INDICATED ON THE DRAWINGS, AS SPECIFIED, AND AS REQUIRED BY CODE.
- RUN STORM DRAIN AND ALL VENT PIPING AT 1/8" PER FOOT SLOPE UNLESS NOTED OTHERWISE; AND WASTE PIPING AT 1/4" PER FOOT SLOPE UNLESS NOTED OTHERWISE.
- ELEVATIONS SHOWN ARE TO THE INVERT OF ALL PIPING BASED ON ARCHITECTURAL FINISHED FLOOR ELEVATION (FFE) OF 100'-0", UNLESS NOTED OTHERWISE.
- ADJUST SEWER INVERTS TO KEEP BOTTOM OF PIPES IN LINE WHERE PIPE SIZES CHANGE.
- PROVIDE SHUTOFF VALVES IN ALL WATER PIPING SYSTEM BRANCHES IN WHICH BRANCH PIPING SERVES TWO OR MORE FIXTURES (NOT SHOWN FOR CLARITY) AND WHERE SHOWN ON PLAN AND RISERS.
- INSTALL PIPING SO THAT ALL VALVES, STRAINERS, UNIONS, TRAPS, FLANGES, AND OTHER ACCESSORIES REQUIRING ACCESS ARE ACCESSIBLE.
- UNIONS AND/OR FLANGES SHALL BE INSTALLED AT EACH PIECE OF EQUIPMENT, IN BYPASSES, AND IN LONG RUNS (OVER 100') TO PERMIT DISASSEMBLY FOR ALTERATION AND REPAIRS.
- ALL VALVES SHALL BE ADJUSTED FOR SMOOTH AND EASY OPERATION.
- ALL VALVES (EXCEPT CONTROL VALVES) AND STRAINERS SHALL BE FULL SIZE OF PIPE BEFORE REDUCING SIZE TO MAKE CONNECTIONS TO EQUIPMENT AND CONTROLS.
- PROVIDE CLEANOUTS IN SANITARY AND STORM DRAINAGE SYSTEMS AT THE ENDS OF RUNS, AT CHANGES IN DIRECTION, NEAR THE BASE OF STACKS, EVERY 100' IN 4" AND LARGER HORIZONTAL RUNS, EVERY 50' IN 3" AND SMALLER HORIZONTAL RUNS, WHERE NOTED ON PLANS, AND WHERE REQUIRED BY CODE.
- ALL VALVES SHALL BE INSTALLED SO THAT THE VALVE REMAINS IN SERVICE WHEN EQUIPMENT OR PIPING ON EQUIPMENT SIDE OF VALVE IS REMOVED.
- SEE PLUMBING RISERS FOR SIZING NOT SHOWN ON PLAN SHEETS (FOR CLARITY) AND SEE PLUMBING FIXTURE SCHEDULE FOR FIXTURE CONNECTIONS AND RUNOUT SIZES.
- CONTRACTOR TO ENSURE THAT CLEANOUTS (FCO, WCO, CO) LOCATIONS DO NOT REST BELOW OR BEHIND CASEWORK.
- PLUMBING CONTRACTOR IS RESPONSIBLE FOR ALL REMOVING, CUTTING, PATCHING, AND REPLACEMENT OF ALL BUILDING STRUCTURE, SURFACES, AND FINISHES REQUIRED TO COMPLETE WORK STATED IN THE CONTRACT DOCUMENTS.
- PLUMBING CONTRACTOR TO COORDINATE COUNTER OPENINGS FOR NEW SINKS/LAVS WITH GENERAL CONTRACTOR PRIOR TO ORDERING MATERIALS.
- PIPES SHOWN SPREAD APART ON PLANS FOR CLARITY. CONTRACTOR TO INSTALL PIPES TIGHT TOGETHER.
- ALL UNDERGROUND DOMESTIC WATER PIPING SHALL BE SEAMLESS TYPE "X" COPPER PIPING WITH NO JOINTS. SEE SPECIFICATIONS.
- GAS PIPING SUPPORTS TO BE EVERY 5 FEET.
- SEE ARCHITECTURAL ROOF PLAN FOR ROOF SLOPE AND SCUPPER SIZES/LOCATIONS.
- REDUCED PRESSURE ZONE BACKFLOW PREVENTER (RPZ) SHALL BE INSTALLED AT AN ELEVATION BETWEEN 3'-0" AFF AND 6'-0" AFF AND LABELED INDICATING EQUIPMENT SERVED. RPZ'S SHALL BE INSPECTED AND TESTED ANNUALLY OR AT A RATE PER LOCAL CODES.
- PIPING MATERIAL FOR SANITARY WASTE, PLUMBING VENTS, AND STORM SEWER SHALL BE CAST IRON WHERE PIPING RUNS THROUGH A RETURN-AIR PLENUM. REFERENCE APPLICABLE MECHANICAL CODE, WITH LOCAL AMENDMENTS. WHERE PIPING MATERIAL MUST BE PVC THE PIPE SHALL BE WRAPPED WITH 3M FIRE BARRIER WRAP AS DESCRIBED IN MECHANICAL SPECIFICATION.
- FIRE CAULK ALL FLOOR PENETRATIONS AND WHERE PIPING PENETRATES RATED WALLS.
- ALL PLUMBING INSTALLATION SHALL CONFORM TO STATE PLUMBING CODE WITH LOCAL AMENDMENTS.
- WHERE NOT SPECIFICALLY INDICATED OTHERWISE, ALL GAS PIPING AND EQUIPMENT SHALL BE SUPPORTED PER THE SMACNA GUIDELINES FOR SEISMIC RESTRAINT AND CURRENT APPLICABLE STATE BUILDING CODE.
- THE TOTAL INSTALLATION SHALL COMPLY WITH ANY AND ALL REQUIREMENTS OF THE LEGALLY CONSTITUTED AUTHORITIES HAVING JURISDICTION INCLUDING STATE BUILDING CODE, THE STATE MECHANICAL CODE, AND THE STATE PLUMBING CODE.
- ALL EQUIPMENT AND FIXTURES INSTALLED UNDER THIS CONTRACT SHALL BE HUNG OR ANCHORED IN ACCORDANCE WITH TITLE 24, TABLE NO. 16 A-0.
- PLUMBING CONTRACTOR IS RESPONSIBLE TO REMOVE ALL SHAVINGS IN PVC/CPVC/ABS PIPING IN DOMESTIC WATER, SANITARY SEWER, AND STORM SEWER PIPING PRIOR TO LEAVING SITE.
- PLUMBING CONTRACTOR IS RESPONSIBLE TO PURGE DOMESTIC WATER SYSTEM, INCLUDING BUT NOT LIMITING, ALL CWM/HCMW PIPING, WATER HEATERS, VALVING, AND PLUMBING FIXTURES, OF ALL DELETERIOUS MATTER AND DISINFECT ENTIRE SYSTEM PRIOR TO UTILIZATION, AS DEFINED AND DESCRIBED IN STATE PLUMBING CODE.

HVAC GENERAL NOTES

- HVAC SHEET METAL CONTRACTOR SHALL INITIATE THE COORDINATION PROCESS BY PROVIDING REPRODUCIBLE PLAN DRAWINGS SHOWING DUCTWORK AND EQUIPMENT. DRAWINGS WILL BE FORWARDED TO THE PIPING CONTRACTOR AND ELECTRICAL CONTRACTOR FOR INCLUSION OF THEIR SYSTEMS WORK.
- ALL FLEX DUCT MUST BE INSTALLED PER THE A/C IAR DIFFUSION COUNCIL INSTALLATION STANDARDS (MOST CURRENT EDITION), INCLUDING A BEND RADIUS OF ONE DUCT DIAMETER OR GREATER, PROPERLY SEALED AND SECURED WITH 2 INCH BEADED COLLARS, PROPERLY SUPPORTED AND FULLY EXTENDED DUCT. FAN CALCULATIONS FOR THIS PROJECT WERE SIZED FOR 4 FOOT MAXIMUM FLEX DUCT INSTALLED PER THE A/C INSTALLATION STANDARDS. FLEX DUCT SHOWN ON PLANS IS FOR SCHEMATIC PURPOSES ONLY AND SHALL IN NO INSTANCE EXCEED 4 FOOT.
- HVAC CONTRACTOR SHALL LINE THE INSIDE OF ALL RETURN/RELIEF/EXHAUST PLENUM BOXES PER SPECIFICATIONS. IF NO LINING IS REQUIRED, HVAC CONTRACTOR SHALL PAINT THE INSIDE FLAT BLACK.
- HVAC CONTRACTOR SHALL BE RESPONSIBLE FOR TESTED AND RATED FIRE STOP SYSTEMS FOR ALL THRU PENETRATIONS OF THE WALLS, FLOORS, AND ROOF ASSEMBLIES RESULTING FROM PIPING AND OTHER WORK UNDER HIS CONTRACT. REFER TO SPECIFICATION SECTION 07841 - FIRE STOPPING FOR REQUIREMENTS.
- ALL DUCT SIZES ARE INTERNAL DIMENSIONS. CONTRACTOR SHALL INCREASE SHEET METAL SIZE IF DUCT RECEIVES INTERNAL LINER. SEE SPECIFICATIONS FOR INSULATION REQUIREMENTS.
- DUCT ROOF PENETRATION SIZES TO ROOFTOP UNITS ARE SAME AS DUCT MAIN, UNLESS NOTED OTHERWISE. TRANSITION TO UNIT CONNECTION SIZES WITHIN ROOF CURBS.
- LOCATIONS OF ORIFICES/VENTS FOR FABRIC DUCTS ARE ORIENTED WHEN FACING THE DIRECTION OF AIRFLOW.
- MAINTAIN A MINIMUM OF 10'-0" HORIZONTAL DISTANCE FROM ANY INTAKE TO EXHAUST OUTLET.
- HVAC CONTRACTOR SHALL CLOSELY COORDINATE WITH GENERAL CONTRACTOR FOR EXACT FIRE AND FIRE/SMOKE DAMPER PENETRATION SIZES IN WALLS AND FLOORING. FLOOR OPENINGS PROVIDED BY PRECAST MANUFACTURER ARE OVERSIZED AND M.C. MUST RELAY EXACT (NOT NOMINAL) OPENING SIZE MEETING UL LISTING TO CONCRETE INSTALLER FOR FRAMING OUT FLOOR OPENING. FLOOR OPENING SHALL HAVE 0.5" FREE SPACE AROUND ALL FOUR SIDES OF DAMPER AT ANY TIME TO ALLOW FOR EXPANSION. NO EXCEPTIONS. INSTALL MOUNTING ANGLE ON ALL FOUR SIDES OF FIRE DAMPERS. ANGLES SHALL NOT BE SECURED TO FLOOR OR WALL. FIRE CAULKING AROUND DAMPERS IS STRICTLY PROHIBITED. REFER TO STANDARDS UL555 & UL555S AND DAMPER MANUFACTURER'S INSTALLATION INSTRUCTIONS.



CONSULTANT



Emanuelson-Podas, Inc.
7705 Bush Lake Road
Edina, MN 55439
952) 930-0050 | www.epnic.com

CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Scott A. Vander Heiden
DATE: 06-18-2024 REG. NO. 40918
PRINTED NAME: SCOTT A. VANDER HEIDEN

COMMISSION NO.: EP# 4698.0000

DRAWN BY: PHL

CHECKED BY: BJR

DATE: JUNE 18, 2024

BID ISSUE DATE:

REVISION DATES:

PROJECT TITLE

DII WAREHOUSE REMODEL
McGREGOR, MN

20898 360th St, McGregor, MN
55760

OWNER

MILLE LACS BAND OF OJIBWE

SHEET TITLE

MECHANICAL GENERAL NOTES

M0.1

SHEET NO.
PLOT DATE: 6/17/2024 9:31:46 AM

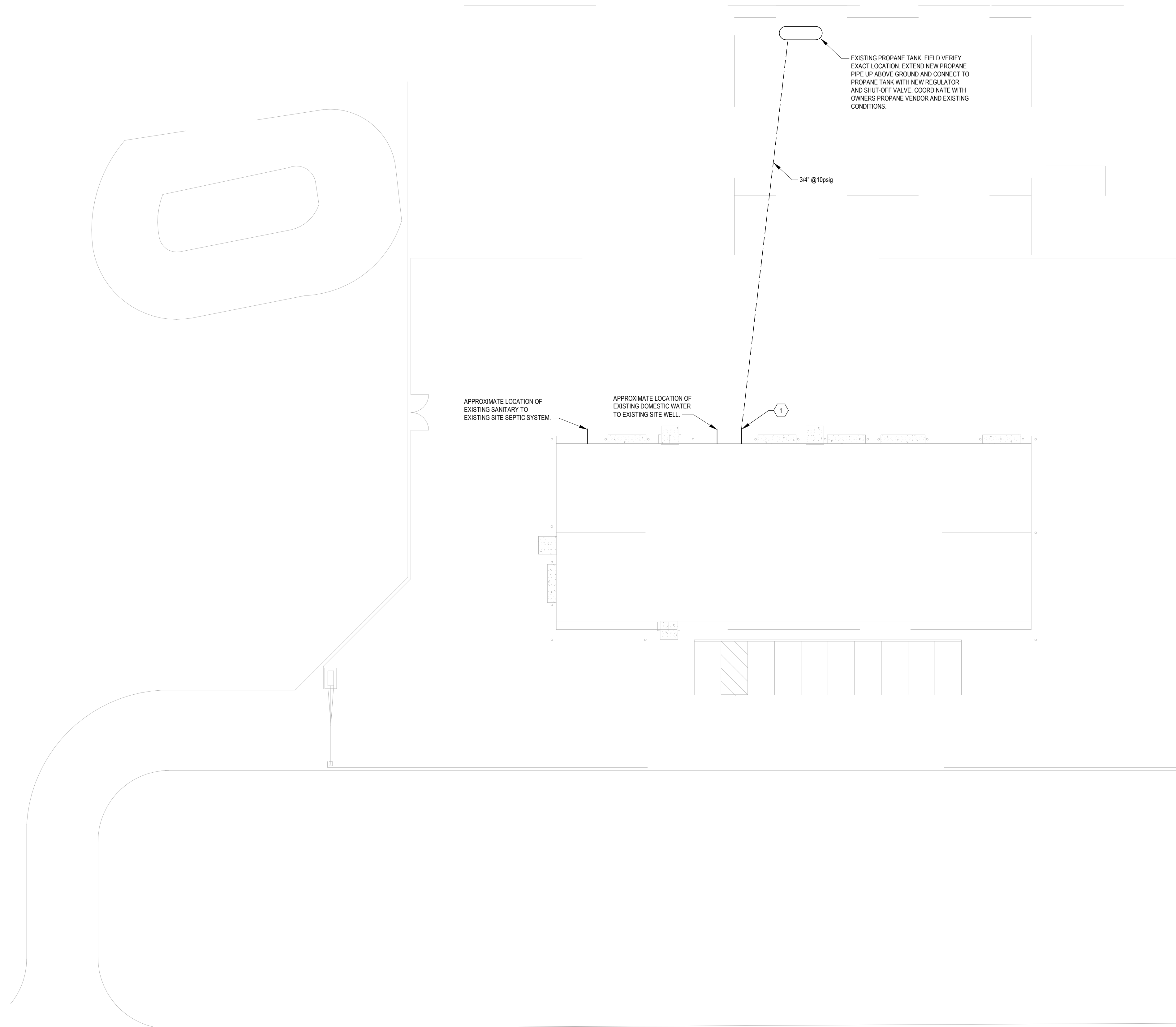


GENERAL NOTES:

- A. MECHANICAL CONTRACTORS ARE RESPONSIBLE FOR ALL REMOVING CUTTING, REINSTALLING, PATCHING AND REPLACEMENT OF ALL EXISTING BUILDING STRUCTURE, SURFACES AND FINISHES (THAT ARE TO REMAIN) REQUIRED TO COMPLETE WORK STATED IN CONTRACT DOCUMENTS.
- B. NOT ALL EXISTING EQUIPMENT, PIPING, DUCTWORK, ETC. IS SHOWN ON THE PLANS. ALL EXISTING EQUIPMENT AND PIPING SHOWN DOES NOT REFLECT ALL OFFSETS, LENGTHS AND LOCATIONS. CONTRACTOR SHALL FIELD VERIFY ALL EQUIPMENT AND PIPING TO BE REMOVED AND/OR CONNECTED TO PRIOR TO BID.
- C. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO BID. SEE ARCHITECTURAL PLANS FOR ADDITIONAL DEMOLITION AND NEW CONSTRUCTION NOTES.

KEY NOTES: ○

- 1. EXTEND 3/4" @10 PSIG PROPANE UP FROM BELOW GRADE, WITH 2 PSI REGULATOR AT 36" ABOVE GRADE. EXTEND 3/4" @2 PSIG INTO BUILDING WITH SHUT-OFF VALVE.



CONSULTANT



Emanuelson-Podas, Inc.
 7705 Bush Lake Road
 Edina, MN 55439
 (952) 930-0050 | www.epinc.com

CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Scott A. Vander Heiden

DATE: 06-18-2024 REG. NO. 40918
 PRINTED NAME: SCOTT A. VANDER HEIDEN

COMMISSION NO.: EP# 4898.0000

DRAWN BY: PHL

CHECKED BY: BJR

DATE: JUNE 18, 2024

BID ISSUE DATE:

REVISION DATES:

PROJECT TITLE

DII WAREHOUSE REMODEL
 MCGREGOR, MN

20898 360th St, McGregor, MN
 55760

OWNER

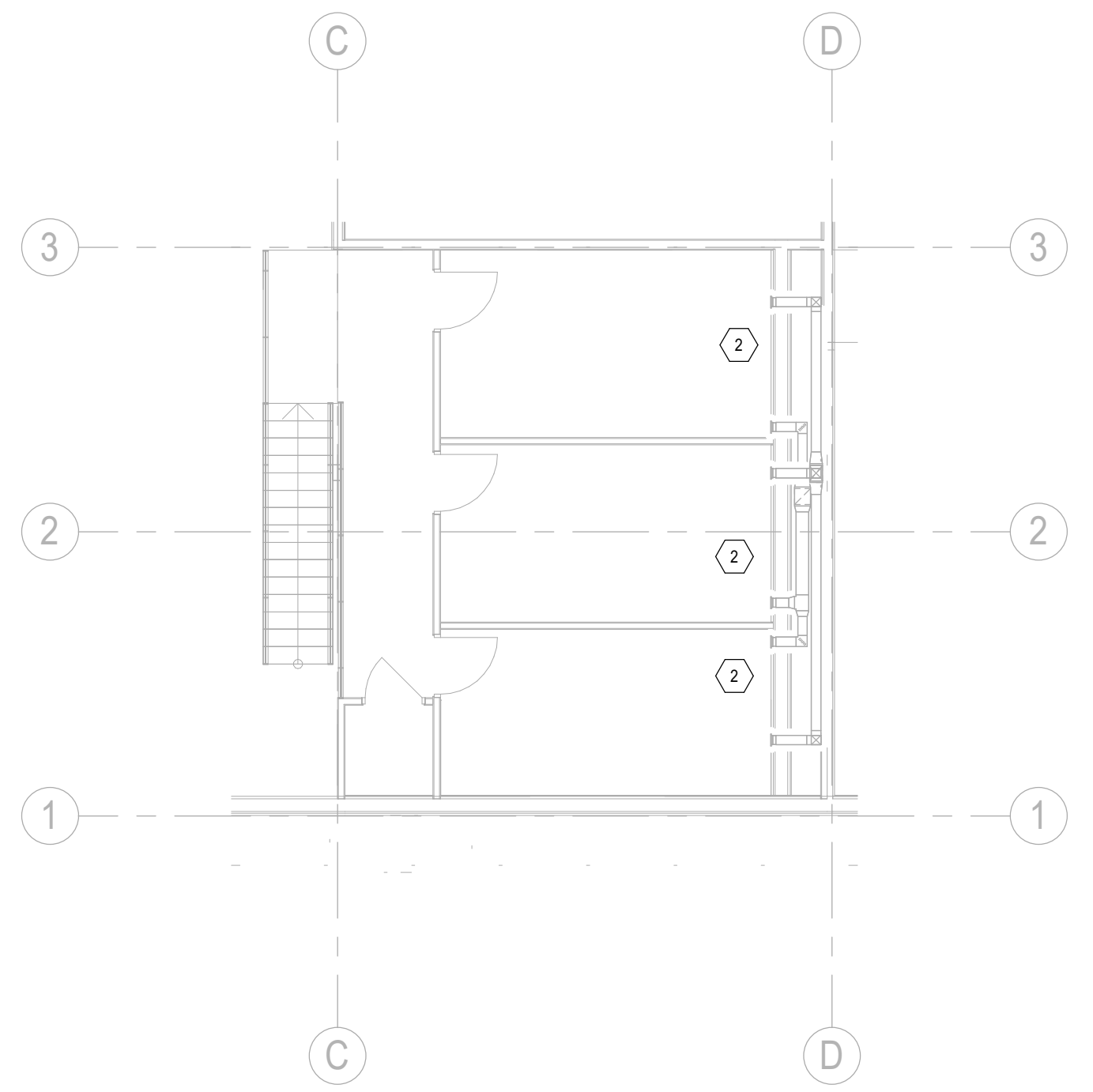
MILLE LACS BAND OF OJIBWE

SHEET TITLE

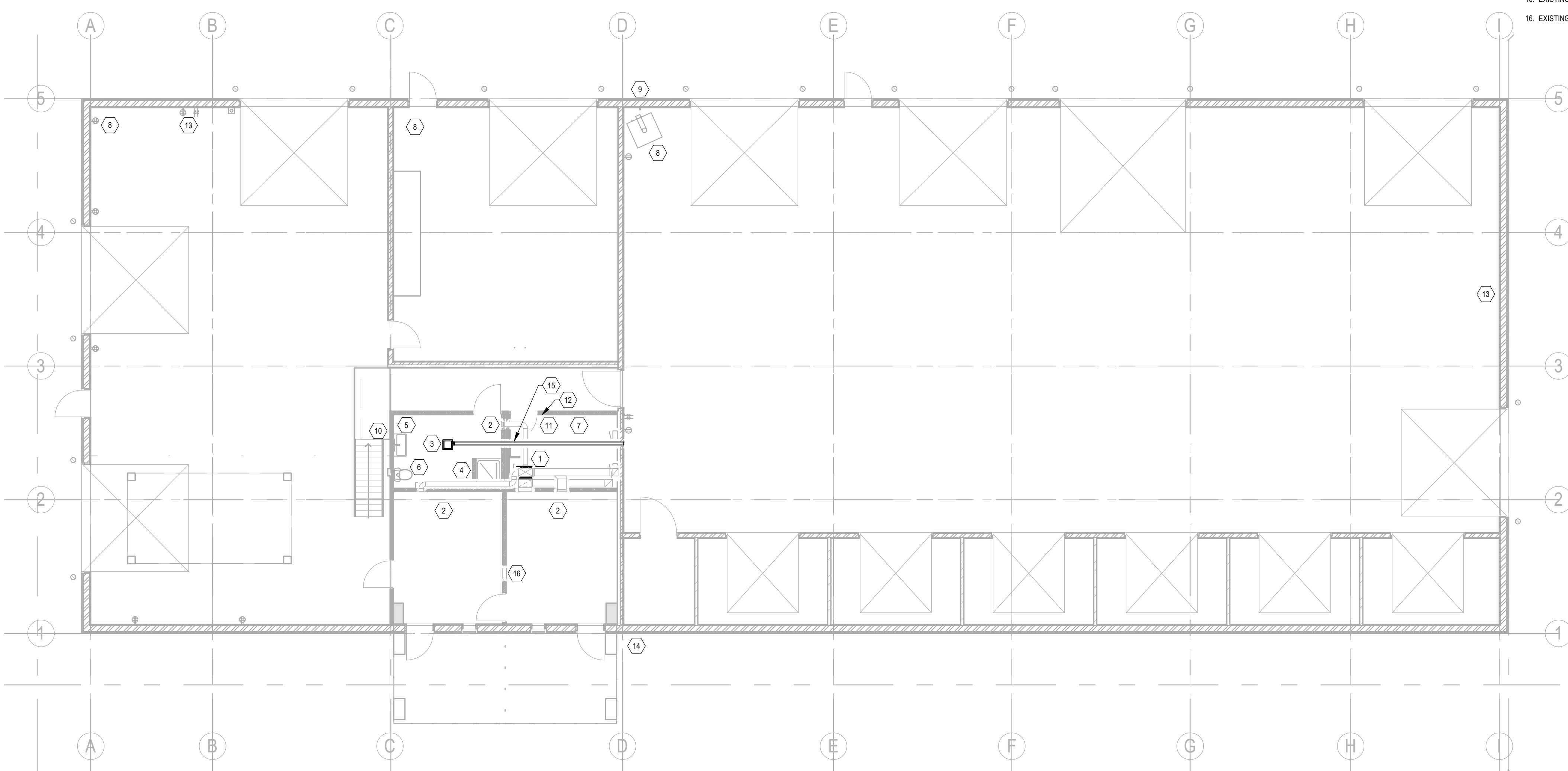
SITE PLAN -
 MECHANICAL

M0.2

SHEET NO.
 PLOT DATE: 6/17/2024 9:31:46 AM



2 MEZZANINE LEVEL PLAN - MECHANICAL DEMOLITION
SCALE: 1/8" = 1'-0"



1 MAIN LEVEL PLAN - MECHANICAL DEMOLITION
SCALE: 1/8" = 1'-0"

GENERAL NOTES:

- A. MECHANICAL CONTRACTORS ARE RESPONSIBLE FOR ALL REMOVING CUTTING, REINSTALLING, PATCHING AND REPLACEMENT OF ALL EXISTING BUILDING STRUCTURE, SURFACES AND FINISHES (THAT ARE TO REMAIN) REQUIRED TO COMPLETE WORK STATED IN CONTRACT DOCUMENTS.
- B. NOT ALL EXISTING EQUIPMENT, PIPING, DUCTWORK, ETC. IS SHOWN ON THE PLANS. ALL EXISTING EQUIPMENT AND PIPING SHOWN DOES NOT REFLECT ALL OFFSETS, LENGTHS AND LOCATIONS. CONTRACTOR SHALL FIELD VERIFY ALL EQUIPMENT AND PIPING TO BE REMOVED AND/OR CONNECTED TO PRIOR TO BID.
- C. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO BID. SEE ARCHITECTURAL PLANS FOR ADDITIONAL DEMOLITION AND NEW CONSTRUCTION NOTES.

KEY NOTES: ◻

- 1. REMOVE EXISTING FURNACE, FLUE/COMBUSTION AIR AND CONTROLS FOR NEW FURNACE IN SAME LOCATION. EXISTING SUPPLY AND RETURN DUCTWORK TO REMAIN UNLESS NOTED OTHERWISE.
- 2. EXISTING SUPPLY AND RETURN GRILLES IN THIS ROOM TO REMAIN.
- 3. REMOVE EXISTING CEILING EXHAUST FAN AND DUCTWORK.
- 4. EXISTING SHOWER SURROUND AND DRAIN TO REMAIN. REMOVE VALVE AND SHOWER HEAD FOR NEW IN SAME LOCATION.
- 5. REMOVE SINK FOR NEW IN SAME LOCATION. EXISTING HW, CW, WASTE AND VENT IN WALL TO REMAIN FOR CONNECTION TO NEW SINK.
- 6. REMOVE WATER CLOSET FOR NEW IN SAME LOCATION. EXISTING CW AND VENT IN WALL TO REMAIN FOR NEW WATER CLOSET.
- 7. REMOVE EXISTING WATER HEATER FOR NEW IN SAME LOCATION.
- 8. REMOVE EXISTING PROPANE GAS UNIT HEATER, FLUE PIPING THROUGH EXTERIOR WALL, AND CONTROLS.
- 9. EXISTING PROPANE TANK LOCATED 100' NORTH TO REMAIN. REMOVE PROPANE PIPING BETWEEN TANK AND BUILDING. REMOVE PROPANE PIPING INTO BUILDING AND TO EACH GAS UNIT HEATER AND TO FURNACE. FIELD VERIFY EXISTING ROUTING.
- 10. EXISTING HOSE BIBBS TO REMAIN.
- 11. EXISTING WATER FROM WELL UP THROUGH FLOOR AND PRESSURE TANK TO REMAIN.
- 12. EXISTING EMERGENCY EYE WASH TO REMAIN. DISCONNECT COLD WATER FOR INSTALLATION OF NEW THERMOSTATIC MIXING VALVE.
- 13. EXISTING WALL FAN, DUCT, EXTERIOR HOOD AND CONTROLS TO BE REMOVED.
- 14. REMOVE GRAD MOUNTED CONDENSING UNIT AND REFRIGERANT PIPING BACK TO FURNACE.
- 15. EXISTING UTILITY TUB TO REMAIN.
- 16. EXISTING TRANSFER GRILLE TO REMAIN.

CONSULTANT



CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Scott A. Vander Heiden
DATE: 06-18-2024 REG. NO. 40918
PRINTED NAME: SCOTT A. VANDER HEIDEN

COMMISSION NO.: EP# 4898.0000

DRAWN BY: PHL

CHECKED BY: BJR

DATE: JUNE 18, 2024

BID ISSUE DATE:

REVISION DATES:

PROJECT TITLE

DII WAREHOUSE REMODEL
McGREGOR, MN

20898 360th St, McGregor, MN
55760

OWNER

MILLE LACS BAND OF OJIBWE

SHEET TITLE

MAIN LEVEL PLAN -
MECHANICAL
DEMOLITION

MD0.1

GENERAL NOTES:

- A. MECHANICAL CONTRACTORS ARE RESPONSIBLE FOR ALL REMOVING CUTTING, REINSTALLING, PATCHING AND REPLACEMENT OF ALL EXISTING BUILDING STRUCTURE, SURFACES AND FINISHES (THAT ARE TO REMAIN) REQUIRED TO COMPLETE WORK STATED IN CONTRACT DOCUMENTS.
- B. NOT ALL EXISTING EQUIPMENT, PIPING, DUCTWORK, ETC. IS SHOWN ON THE PLANS. ALL EXISTING EQUIPMENT AND PIPING SHOWN DOES NOT REFLECT ALL OFFSETS, LENGTHS AND LOCATIONS. CONTRACTOR SHALL FIELD VERIFY ALL EQUIPMENT AND PIPING TO BE REMOVED AND/OR CONNECTED TO PRIOR TO BID.
- C. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO BID. SEE ARCHITECTURAL PLANS FOR ADDITIONAL DEMOLITION AND NEW CONSTRUCTION NOTES.
- D. SEE PLUMBING FIXTURE SCHEDULE, AND PLUMBING RISER DIAGRAMS FOR DOMESTIC WATER, WASTE AND VENT PIPE SIZING.

KEY NOTES: 

- 1. EXISTING PLUMBING FIXTURE TO REMAIN.
- 2. EXISTING FLOOR DRAIN TO REMAIN.
- 3. NEW PLUMBING FIXTURE TO BE INSTALLED IN SAME LOCATION AS REMOVED.
- 4. EXISTING WATER SERVICE UP THROUGH FLOOR TO REMAIN.
- 5. CONNECT NEW WASTE TO EXISTING MAIN. EXISTING SIZE AND LOCATION UNKNOWN. FIELD VERIFY.
- 6. EXTEND 3/4" 10 PSIG FROM BUILDING AND EXTEND TO EXISTING PROPANE TANK.
- 7. EXISTING 4" SANITARY TO DRAIN FIELD TO REMAIN. EXACT ROUTING UNKNOWN. FIELD VERIFY EXISTING LOCATION.
- 8. EXISTING WATER FROM WELL TO REMAIN. EXACT ROUTING UNKNOWN. FIELD VERIFY EXISTING LOCATION.

CONSULTANT



CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Scott A. Vander Heiden
 DATE: 06-18-2024 REG. NO. 40918
 PRINTED NAME: SCOTT A. VANDER HEIDEN

COMMISSION NO.: EP# 4898.0000

DRAWN BY: PHL

CHECKED BY: BJR

DATE: JUNE 18, 2024

BID ISSUE DATE:

REVISION DATES:

PROJECT TITLE

DII WAREHOUSE REMODEL
 MCGREGOR, MN

20898 360th St, McGregor, MN
 55760

OWNER

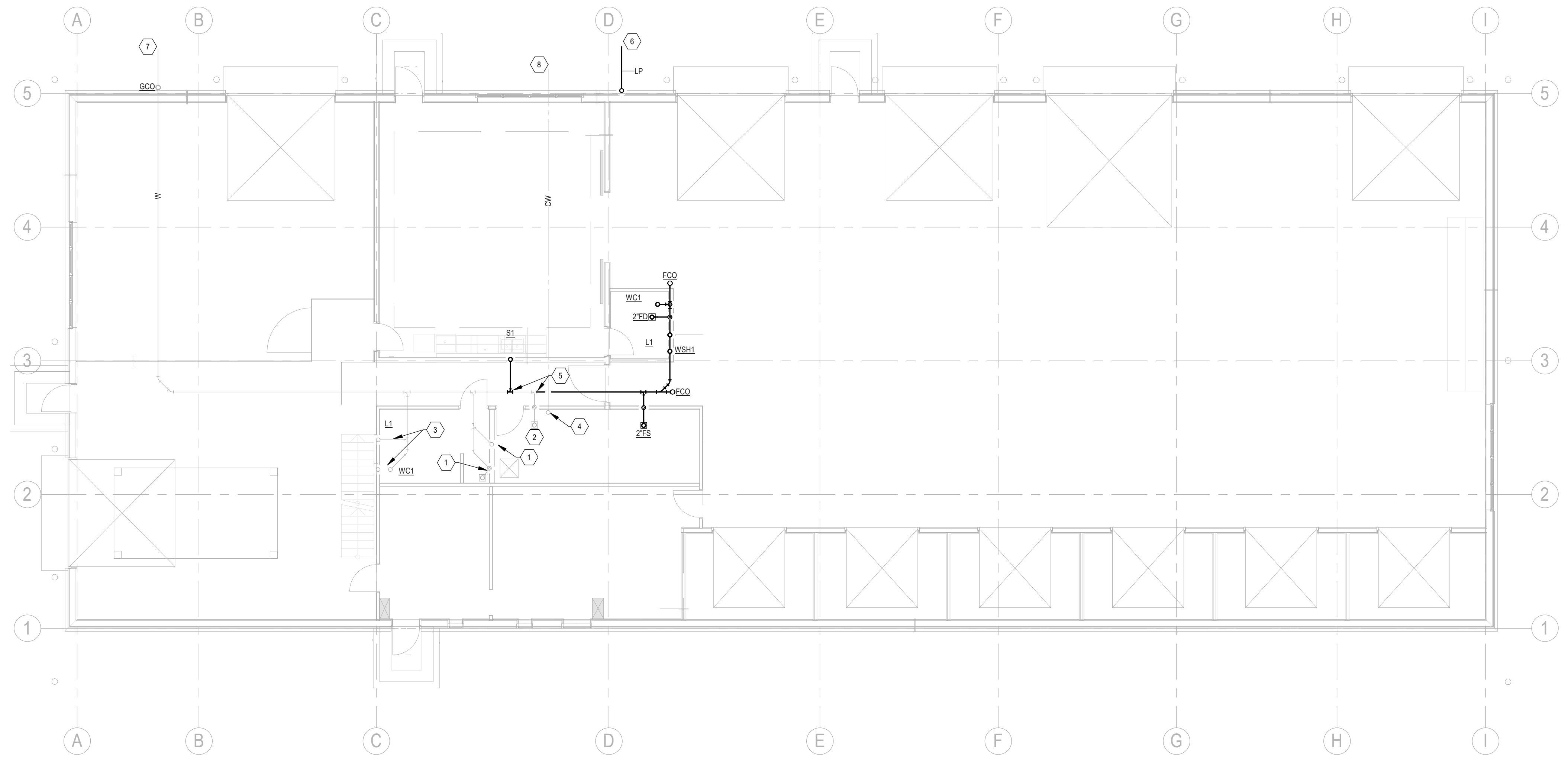
MILLE LACS BAND OF OJIBWE

SHEET TITLE

BELOW FLOOR
 PLAN - PLUMBING

M1.0

SHEET NO.
 PLOT DATE: 6/17/2024 9:31:48 AM



GENERAL NOTES:

- A. MECHANICAL CONTRACTORS ARE RESPONSIBLE FOR ALL REMOVING CUTTING, REINSTALLING, PATCHING AND REPLACEMENT OF ALL EXISTING BUILDING STRUCTURE, SURFACES AND FINISHES (THAT ARE TO REMAIN) REQUIRED TO COMPLETE WORK STATED IN CONTRACT DOCUMENTS.
- B. NOT ALL EXISTING EQUIPMENT, PIPING, DUCTWORK, ETC. IS SHOWN ON THE PLANS. ALL EXISTING EQUIPMENT AND PIPING SHOWN DOES NOT REFLECT ALL OFFSETS, LENGTHS AND LOCATIONS. CONTRACTOR SHALL FIELD VERIFY ALL EQUIPMENT AND PIPING TO BE REMOVED AND/OR CONNECTED TO PRIOR TO BID.
- C. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO BID. SEE ARCHITECTURAL PLANS FOR ADDITIONAL DEMOLITION AND NEW CONSTRUCTION NOTES.
- D. SEE PLUMBING FIXTURE SCHEDULE, AND PLUMBING RISER DIAGRAMS FOR DOMESTIC WATER, WASTE AND VENT PIPE SIZING.
- E. SEE GAS RISER DIAGRAM FOR PIPE SIZING AND ADDITIONAL INFORMATION.

KEY NOTES: ◻

1. EXTEND 3/4" 10 PSIG PROPANE UP FROM BELOW GRADE, WITH 2 PSI REGULATOR AT 3' ABOVE GRADE. EXTEND 3/4" 2 PSIG INTO BUILDING WITH SHUT-OFF VALVE AND EXTEND UP WALL TO BOTTOM OF STRUCTURE.
2. INSTALL NEW PLUMBING FIXTURE IN SAME LOCATION AS REMOVED. MODIFY WATER, WASTE AND VENT AS REQUIRED. PROVIDE NEW WALL VALVE STOPS AND TRAPS.
3. EXISTING WATER SERVICE FROM WELL UP THROUGH FLOOR AND PRESSURE TANK TO REMAIN.
4. INSTALL NEW WATER HEATER IN SAME LOCATION AS REMOVED AND RECONNECT TO EXISTING 3/4" HW & CW. WITH NEW RECIRC PUMP AND EXPANSION TANK. SEE DETAIL **M5.1**
5. EXISTING HW & CW HOSE BIBB TO REMAIN.
6. EXISTING EMERGENCY EYE WASH TO REMAIN. PROVIDE LAWLER R911EF (OR EQUAL) EMERGENCY THERMOSTATIC MIXING VALVE. RECONNECT EXISTING CW, CONNECT NEW HW AND EXTEND NEW 1/2" TEMPERED WATER TO EXISTING EYE WASH.
7. INSTALL NEW SHOWER VALVE AND SHOWER HEAD IN SAME LOCATION AS REMOVED. UTILIZE BACK WALL WHILE FURNACE IS REMOVED. FIELD COORDINATE.
8. EXISTING UTILITY TUB TO REMAIN.
9. DROP HW RECIRC DOWN IN WALL AND CONNECT TO EXISTING HW 1/2" ABOVE VALVE STOP.
10. CONNECT LP TO UNIT HEATER WITH SHUT-OFF VALVE, DIRT LEG, REGULATOR AND UNION.
11. CONNECT LP TO FURNACE WITH SHUT-OFF VALVE, DIRT LEG, REGULATOR AND UNION.
12. PROVIDE GUY GRAY BIM875 ICE MAKER WALL BOX, EXTEND 1/2" CW DOWN IN WALL TO BOX AND EXTEND 1/4" FROM BOX TO REFRIGERATOR.
13. EXTEND CONDENSATE FROM FURNACE AND EXTEND TO FLOOR SINK. SIZE AND INSTALL PER MANUFACTURERS INSTRUCTIONS.
14. EXISTING VENT THROUGH ROOF TO REMAIN.
15. EXTEND NEW 4" VENT UP THROUGH EXISTING ROOF. FIELD COORDINATE LOCATION.

CONSULTANT

emanuelson-podas
consulting engineers

Emanuelson-Podas, Inc.
7705 Bush Lake Road
Edina, MN 55439
(952) 930-0050 | www.epinc.com

CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Scott A. Vander Heiden
DATE: 06-18-2024 REG. NO. 40918
PRINTED NAME: SCOTT A. VANDER HEIDEN

COMMISSION NO.: EP# 4898.0000

DRAWN BY: PHL

CHECKED BY: BJR

DATE: JUNE 18, 2024

BID ISSUE DATE:

REVISION DATES:

PROJECT TITLE

DII WAREHOUSE REMODEL
MCGREGOR, MN

20898 360th St, McGregor, MN
55760

OWNER

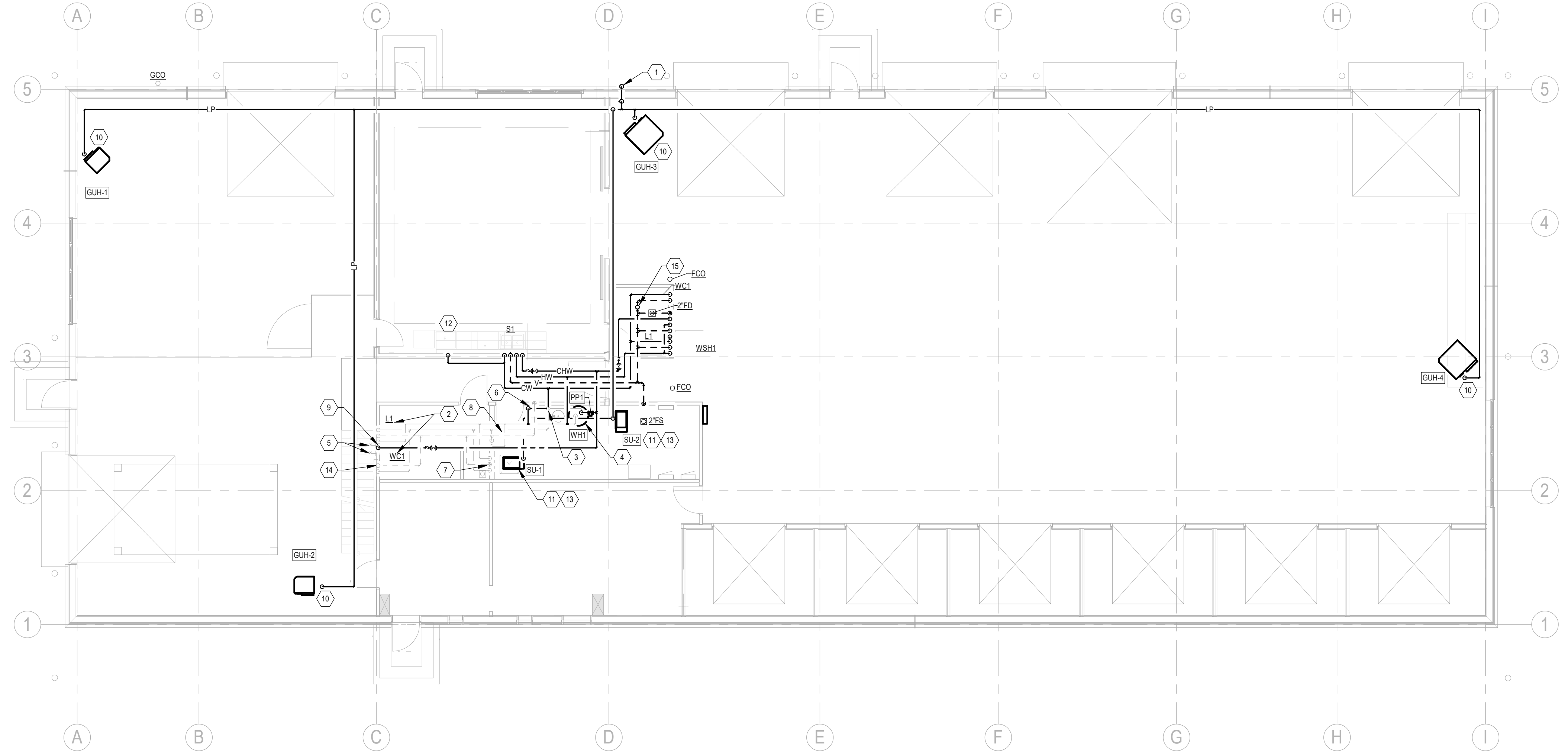
MILLE LACS BAND OF OJIBWE

SHEET TITLE

MAIN LEVEL PLAN -
PLUMBING

M1.1

SHEET NO.
PLOT DATE: 6/17/2024 9:31:48 AM



1 MAIN LEVEL PLAN - PLUMBING
SCALE: 1/8" = 1'-0"

GENERAL NOTES:

- A. MECHANICAL CONTRACTORS ARE RESPONSIBLE FOR ALL REMOVING CUTTING, REINSTALLING, PATCHING AND REPLACEMENT OF ALL EXISTING BUILDING STRUCTURE, SURFACES AND FINISHES (THAT ARE TO REMAIN) REQUIRED TO COMPLETE WORK STATED IN CONTRACT DOCUMENTS.
- B. NOT ALL EXISTING EQUIPMENT, PIPING, DUCTWORK, ETC. IS SHOWN ON THE PLANS. ALL EXISTING EQUIPMENT AND PIPING SHOWN DOES NOT REFLECT ALL OFFSETS, LENGTHS AND LOCATIONS. CONTRACTOR SHALL FIELD VERIFY ALL EQUIPMENT AND PIPING TO BE REMOVED AND/OR CONNECTED TO PRIOR TO BID.
- C. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO BID. SEE ARCHITECTURAL PLANS FOR ADDITIONAL DEMOLITION AND NEW CONSTRUCTION NOTES.

KEY NOTES:

- 1. INSTALL NEW FURNACE IN SAME LOCATION AS REMOVED. ON 1" VIBRATION CORK PADS. RECONNECT TO EXISTING SUPPLY AND RETURN DUCTWORK. SEE DETAIL 4MS.1.
- 2. EXISTING SUPPLY AND RETURN GRILLES IN THIS ROOM TO REMAIN. REBALANCE TO CFM NOTED.
- 3. INSTALL NEW CEILING EXHAUST FAN IN SAME LOCATION AS REMOVED. EXTEND 8" EXHAUST DUCT TO EXTERIOR WALL WITH WALL CAP. MAINTAIN MINIMUM 10" FROM OUTSIDE AIR INTAKE.
- 4. EXTEND 4" DRYER EXHAUST UP AND EXTEND TO EXTERIOR WALL WITH WALL CAP.
- 5. MACURCO CO2 SENSORS ON WALL AT 60" ABOVE FLOOR.
- 6. INSTALL NEW FURNACE ON 1" VIBRATION CORK PADS. EXTEND SUPPLY AND RETURN DUCTS UP HIGH NEAR BOTTOM OF STRUCTURE AND EXTEND INTO TRAINING ROOM. SEE DETAIL 4MS.1.
- 7. EXTEND FURNACE FLUE AND COMBUSTION AIR PIPING FROM FURNACE. EXTEND SOUTH AND DISCHARGE THROUGH WALL. MAINTAIN MINIMUM 10" FROM OUTSIDE AIR INTAKE.
- 8. EXTEND OUTSIDE AIR DUCT FROM WALL CAP. ABOVE OFFICE CEILING AND CONNECT TO RETURN DUCT AT FURNACE WITH DAMPER. SEE DETAIL 5MS.1.
- 9. INSTALL EXHAUST FAN IN CEILING. EXTEND 8" DUCT TO EXTERIOR WALL WITH WALL CAP.
- 10. MOUNT LOUVER WITH BOTTOM AT 48" ABOVE FLOOR WITH 120V MOTORIZED DAMPER AND 1" BIRDSCREEN OVER OPENING. BOTTOM OF LOUVER TO BE ABOVE EXISTING BUILDING HORIZONTAL STRUCTURAL SUPPORT. FIELD VERIFY.
- 11. MOUNT LOUVER WITH BOTTOM AT 107" ABOVE FLOOR. BOTTOM OF LOUVER TO BE ABOVE EXISTING BUILDING HORIZONTAL STRUCTURAL SUPPORT. FIELD VERIFY.
- 12. HANG IN-LINE EXHAUST FAN HIGH NEAR BOTTOM OF STRUCTURE WITH VIBRATION ISOLATION. MAINTAIN MANUFACTURERS CLEARANCE REQUIREMENTS. EXTEND OUTLET DUCT AND CONNECT TO LOUVER PLENUM. SLOPE LOUVER PLENUM TOWARD LOUVER AND SEAL WATER TIGHT. SEE DETAIL 5MS.1.
- 13. DROP EXHAUST DUCT DOWN NEXT TO WALL WITH BOTTOM AT 18" ABOVE FLOOR AND 1" BIRD SCREEN OVER OPENING. TYPICAL.
- 14. EXISTING WALL UP TO 12' ABOVE FLOOR. OPEN ABOVE FOR AIR TRANSFER.
- 15. HANG UNIT HEATER FROM STRUCTURE WITH BOTTOM AT 10' ABOVE FLOOR. EXTEND FLUE AND COMBUSTION AIR PIPING THROUGH SIDE WALL WITH MANUFACTURERS VENT KIT. INSTALL PER MANUFACTURERS INSTRUCTIONS.
- 16. ROUTE EXHAUST DUCT HORIZONTAL. HIGH NEAR BOTTOM OF STRUCTURE (TYPICAL).
- 17. VENTILATION FUME CONTROL PANEL WITH REMOTE SENSORS. MOUNT AT 60" ABOVE FLOOR.

CONSULTANT



Emanuelson-Podas, Inc.
7705 Bush Lake Road
Edina, MN 55439
(952) 930-0050 | www.epinc.com

CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Scott A. Vander Heiden
DATE: 06-18-2024 REG. NO. 40918
PRINTED NAME: SCOTT A. VANDER HEIDEN

COMMISSION NO.: EP# 4898.0000

DRAWN BY: PHL

CHECKED BY: BJR

DATE: JUNE 18, 2024

BID ISSUE DATE:

REVISION DATES:

PROJECT TITLE

DII WAREHOUSE REMODEL
MCGREGOR, MN

20898 360th St, McGregor, MN
55760

OWNER

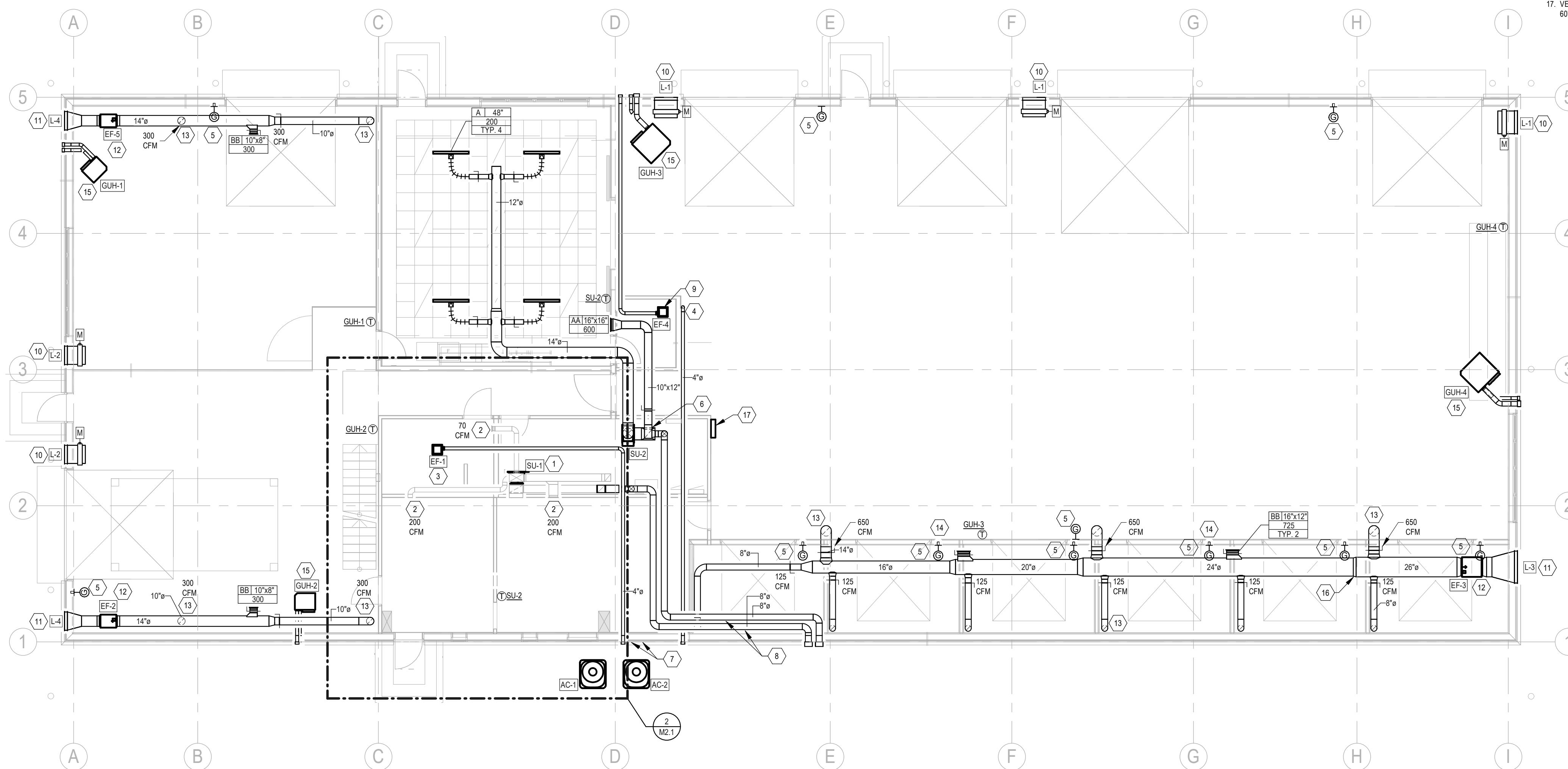
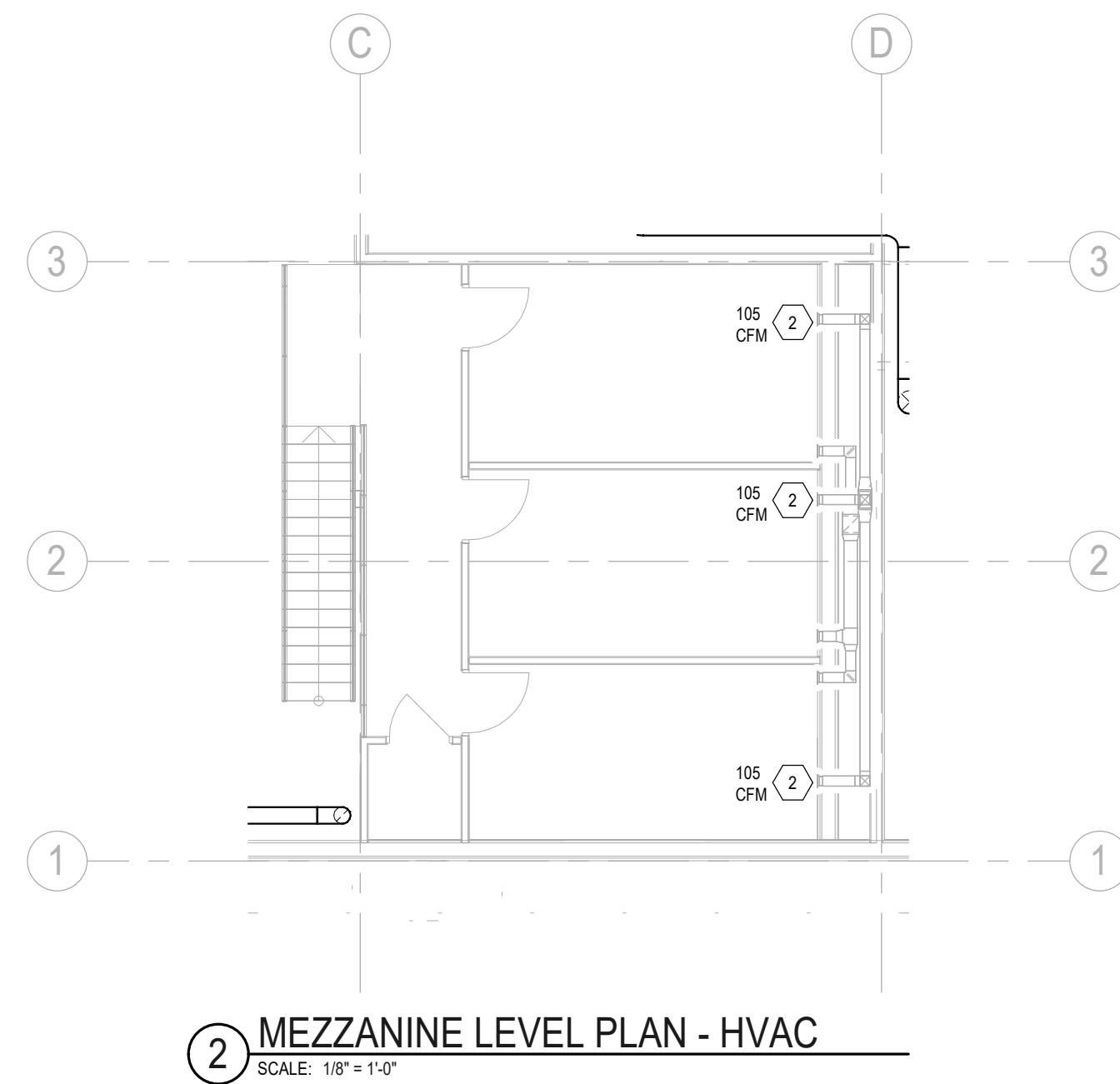
MILLE LACS BAND OF OJIBWE

SHEET TITLE

MAIN LEVEL PLAN - HVAC

M2.1

SHEET NO.
PLOT DATE: 6/17/2024 9:31:50 AM



1 MAIN LEVEL PLAN - HVAC
SCALE: 1/8" = 1'-0"

CONSULTANT

emanuelson-podas
consulting engineers
Emanuelson-Podas, Inc.
7705 Bush Lake Road
Edina, MN 55439
(952) 930-0050 | www.epinc.com

CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Scott A. Vander Heiden
DATE: 06-18-2024 REG. NO. 40918
PRINTED NAME: SCOTT A. VANDER HEIDEN

COMMISSION NO.: EP# 4898.0000

DRAWN BY: PHL

CHECKED BY: BJR

DATE: JUNE 18, 2024

BID ISSUE DATE:

REVISION DATES:

PROJECT TITLE

**DII WAREHOUSE REMODEL
McGREGOR, MN**

**20898 360th St, McGregor, MN
55760**

OWNER

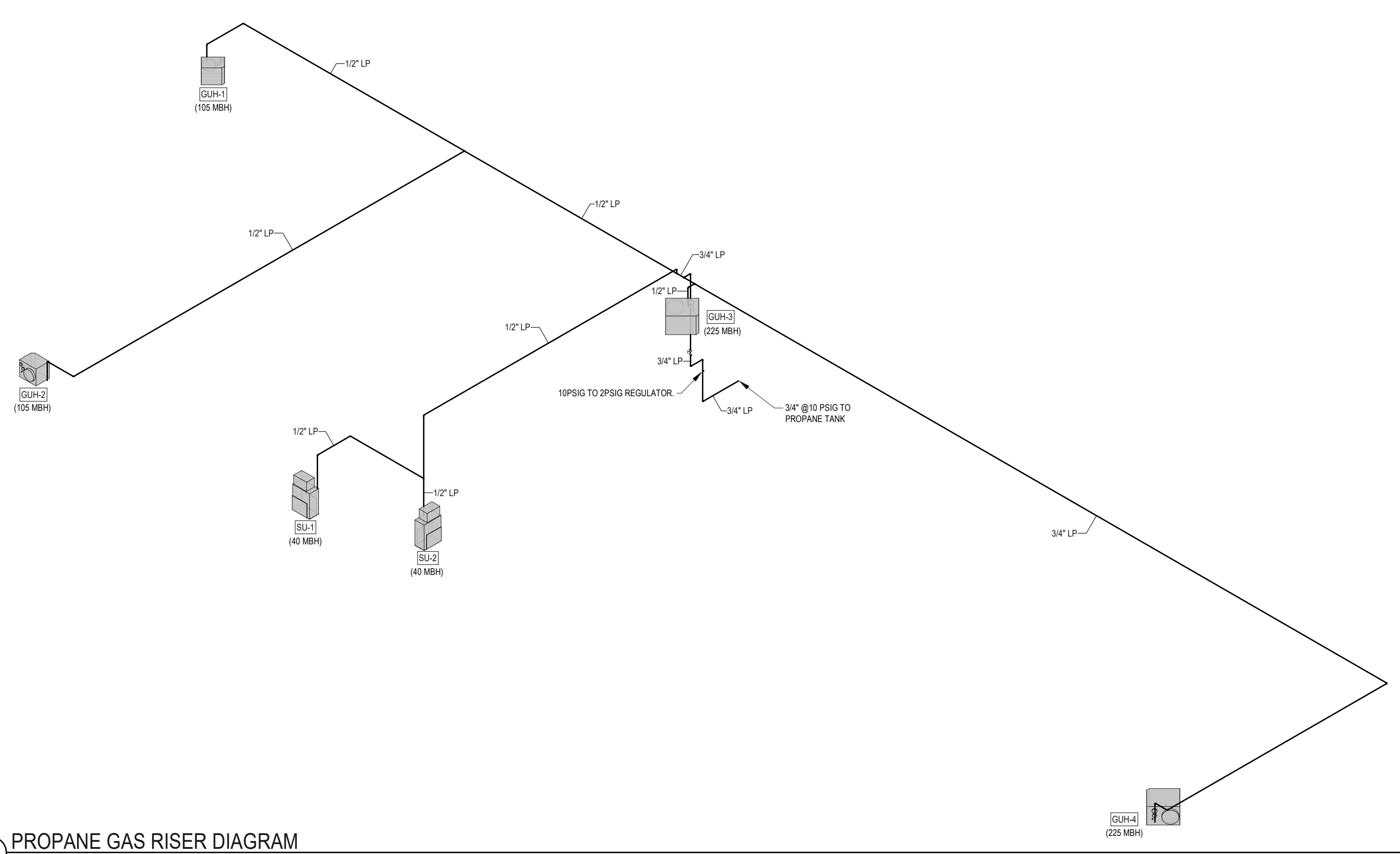
MILLE LACS BAND OF OJIBWE

SHEET TITLE

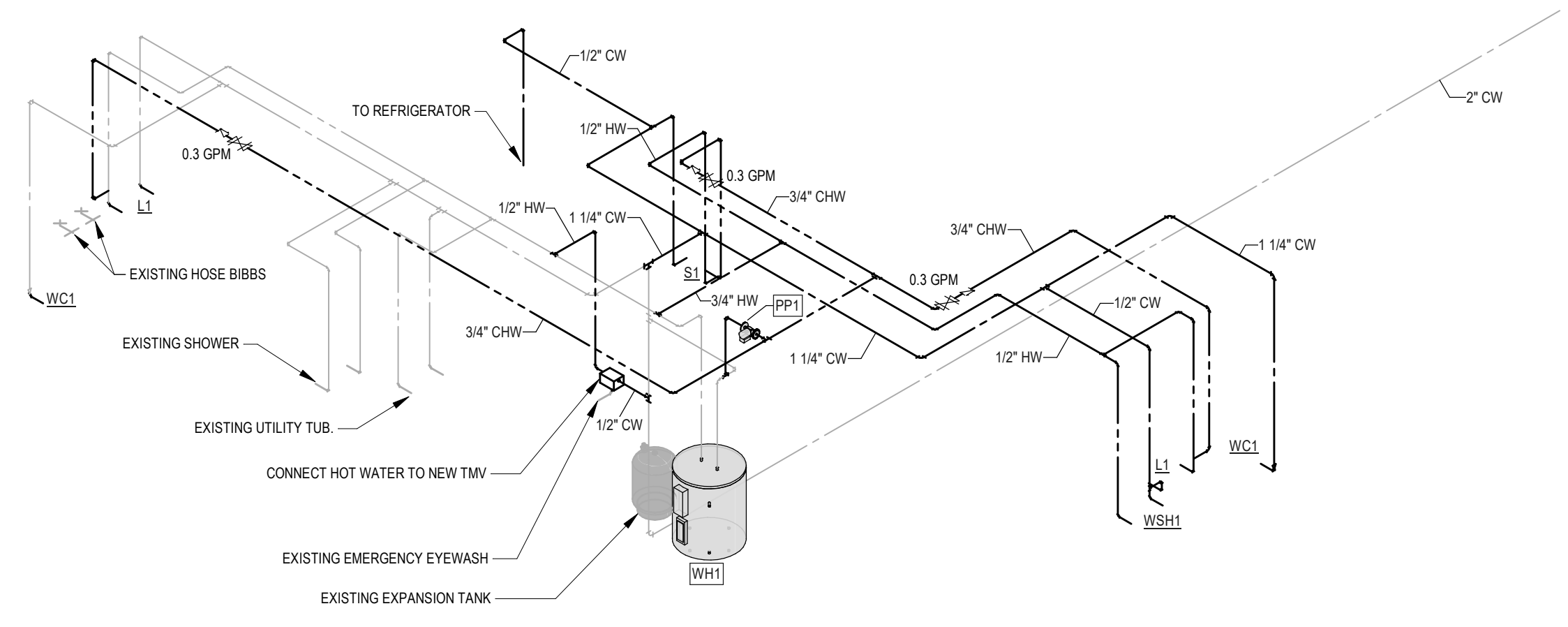
PLUMBING RISER DIAGRAMS

M4.1

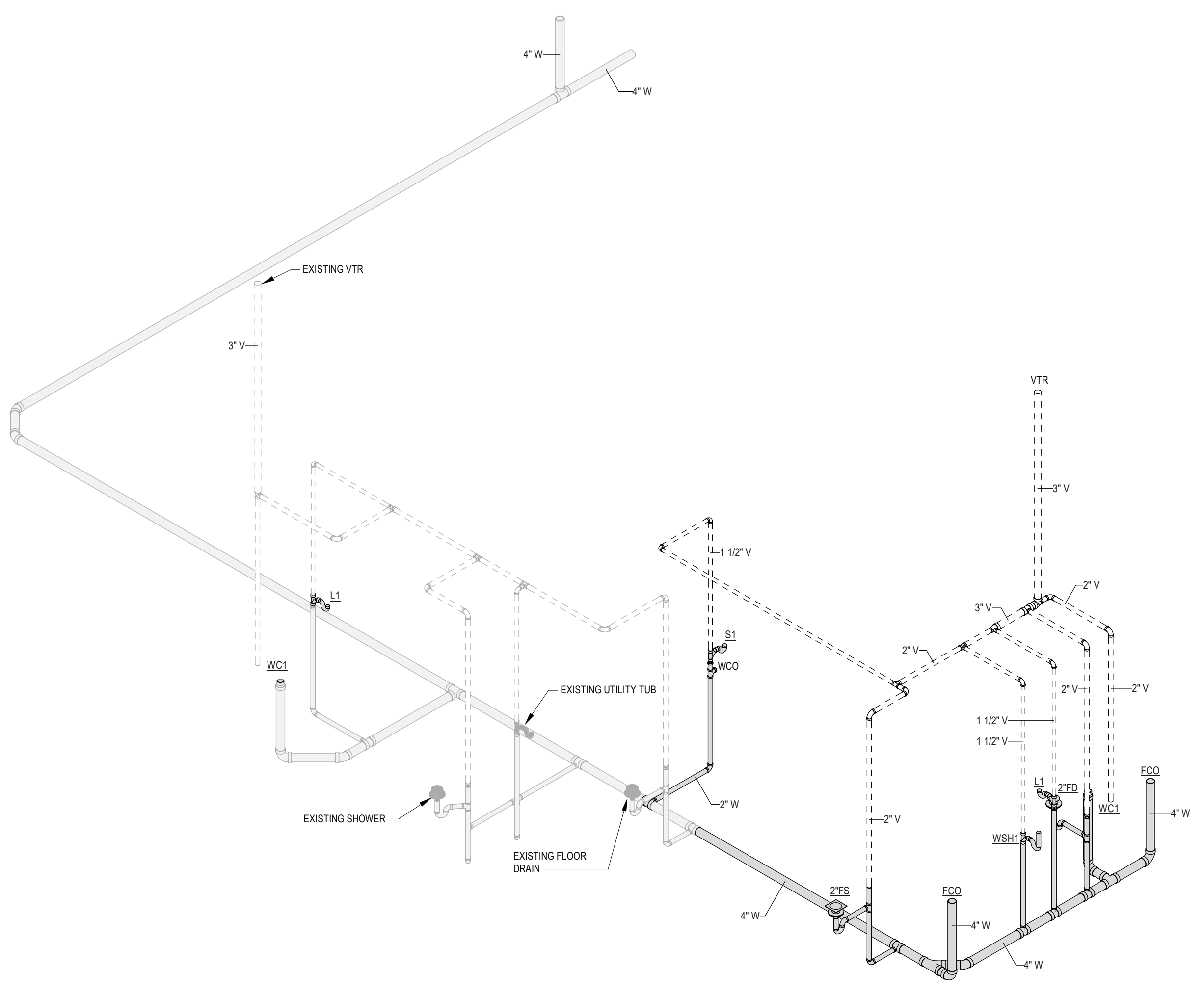
SHEET NO.
PLOT DATE: 6/17/2024 9:31:51 AM



3 PROPANE GAS RISER DIAGRAM
SCALE:

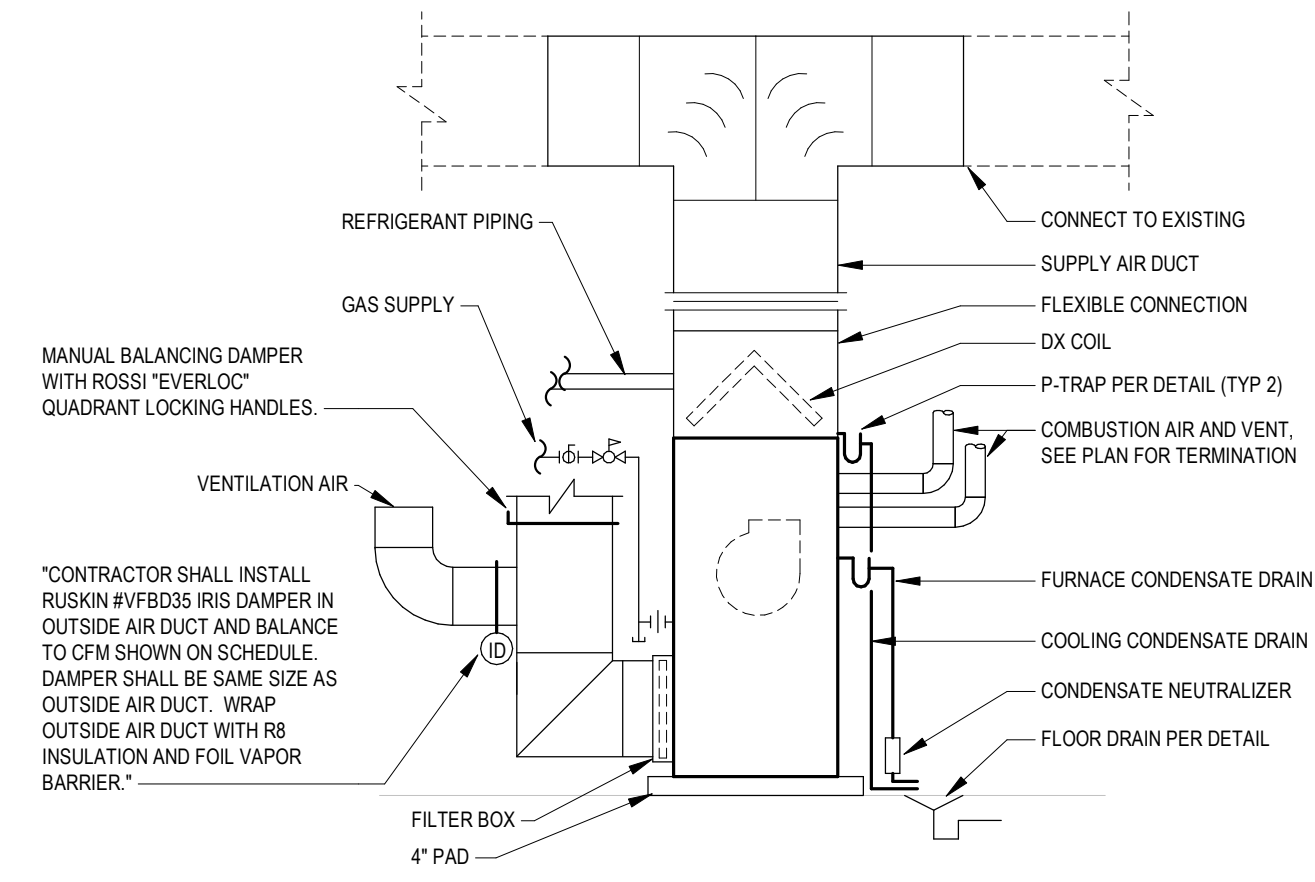


1 DOMESTIC RISER DIAGRAM
SCALE:

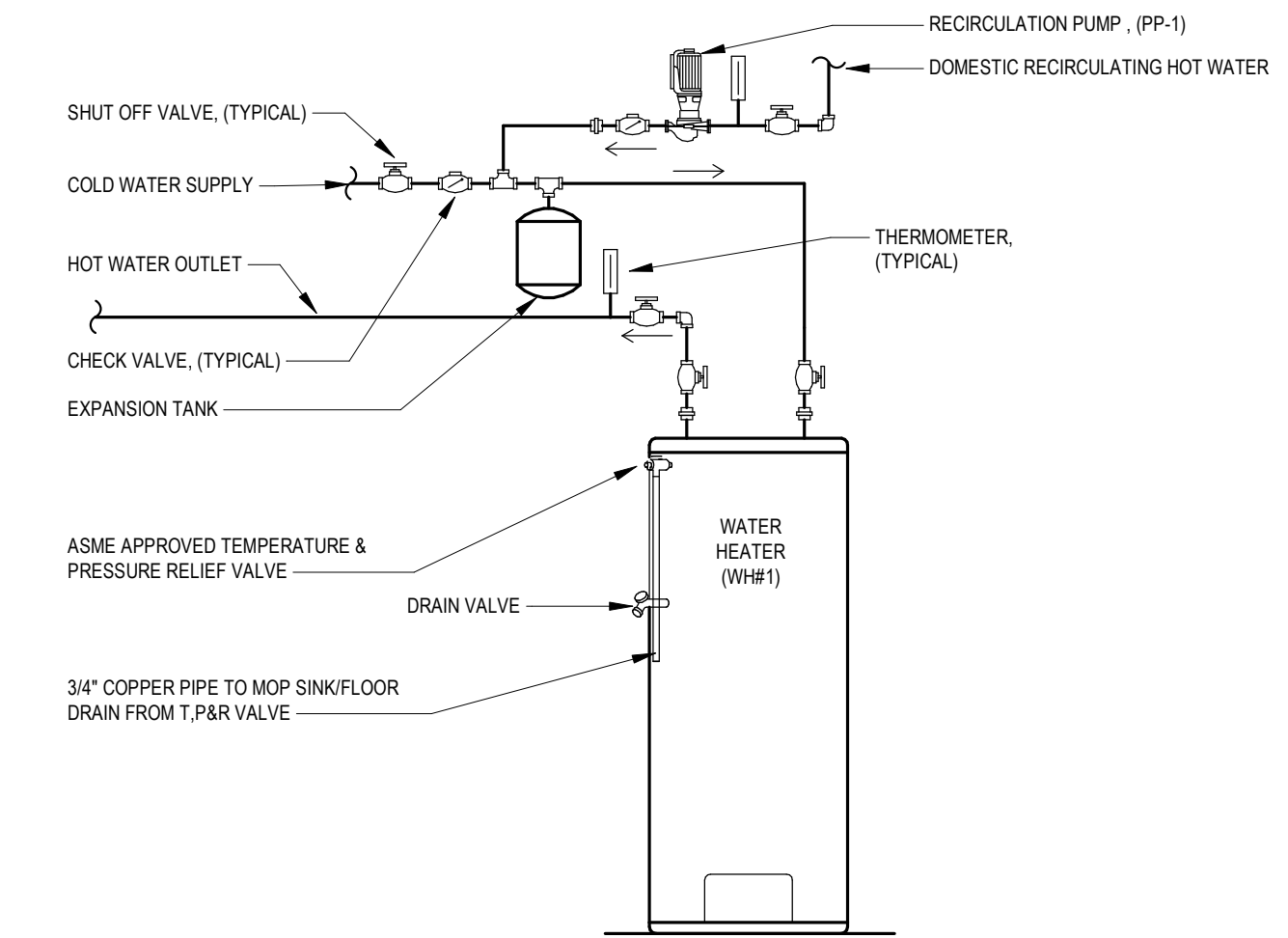


2 SANITARY RISER DIAGRAM
SCALE:

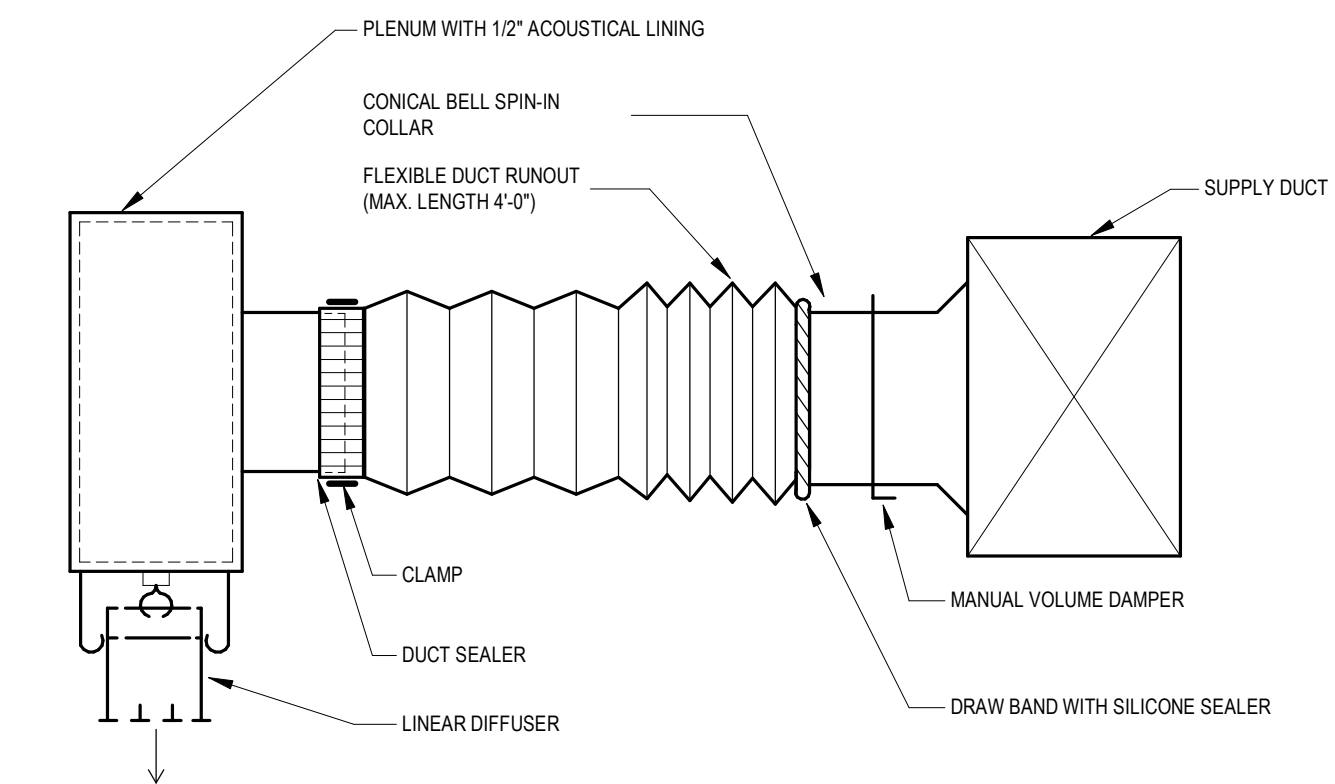
SEE PLUMBING FIXTURE SCHEDULE FOR ADDITIONAL PIPE AND FIXTURE CONNECTION SIZES.
PLUMBING RISER DIAGRAMS FOR REFERENCE OF GENERAL PIPE ROUTING AND PIPE SIZES AND ARE NOT FOR ACTUAL PIPING INSTALLATION. ALL PIPING SHALL BE INSTALLED PER CODE.



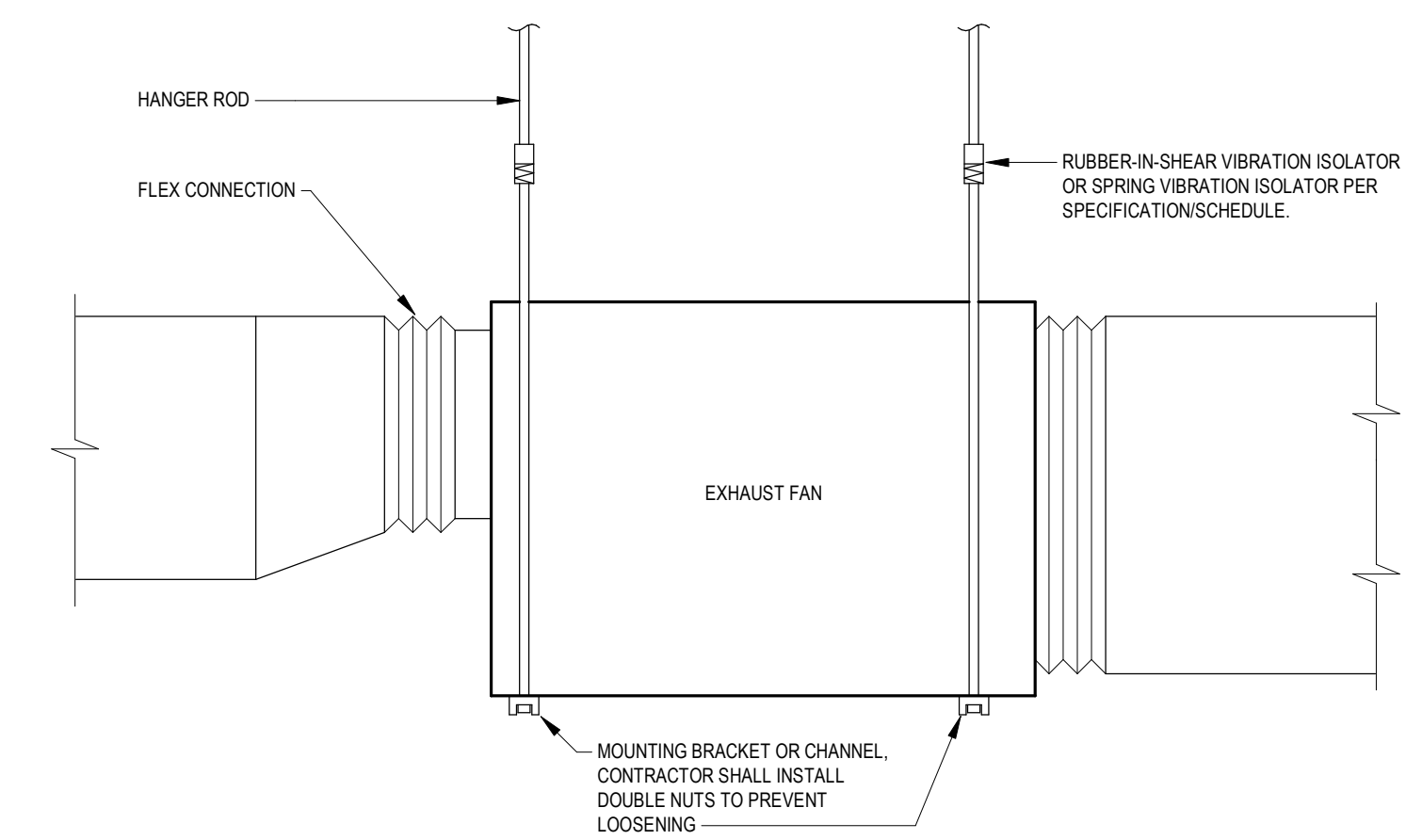
4 FURNACE (UPFLOW) DETAIL
NO SCALE



1 ELECTRIC WATER HEATER W/CIRC PUMP DETAIL
NO SCALE



2 LINEAR DIFFUSER CONNECTION DETAIL
SCALE: 1/8" = 1'-0"



3 INLINE FAN DETAIL
SCALE: 1/8" = 1'-0"



CONSULTANT



Emanuelson-Podas, Inc.
7705 Bush Lake Road
Edina, MN 55439
(952) 930-0050 | www.epinc.com

CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Scott A. Vander Heiden

DATE: 06-18-2024 REG. NO. 40918
PRINTED NAME: SCOTT A. VANDER HEIDEN

COMMISSION NO.: EP# 4898.0000

DRAWN BY: PHL

CHECKED BY: BJR

DATE: JUNE 18, 2024

BID ISSUE DATE:

REVISION DATES:

PROJECT TITLE

DII WAREHOUSE REMODEL
MCGREGOR, MN

20898 360th St, McGregor, MN
55760

OWNER

MILLE LACS BAND OF OJIBWE

SHEET TITLE

MECHANICAL
DETAILS

M5.1

SHEET NO.
PLOT DATE: 6/17/2024 9:31:51 AM

FURNACE - GAS FIRED SCHEDULE																			
NOTES:																			
1. PROVIDE UPFLOW FURNACE WITH SIDE/BOTTOM FILTER RACK WITH HINGED ACCESS DOOR, ECONOMIZER MIXING BOX AND CONTROLS, AND ROOF TERMINATION INTAKE/VENT KIT, PROPANE.																			
2. CONTRACTOR TO ADJUST FAN SPEED FOR FIRST STAGE OF HEAT TO MAXIMUM AIRFLOW.																			
3. PROVIDE HONEYWELL VISIONPRO PROGRAMMABLE THERMOSTAT OR EQUAL.																			
MARK	ROOM NUMBER	MANUFACTURER	MODEL	SUPPLY AIRFLOW (CFM)	OUTSIDE AIR (CFM)	ESP (IN WG)	MOTOR (HP)	HEATING DATA			COOLING DATA			ELECTRICAL DATA					
								INPUT (MBH)	OUTPUT (MBH)	STAGES	EAT (deg F)	LAT (deg F)	CAPACITY (TONS)	COIL	FILTER	VOLTAGE	PHASE	MCA	NOTES
SU-1	005	LENNOX	SL29UH040NV388	800	100	0.8	1/2	4026	3925	2	7965	5555	2	CX38	MERV 13	120	1	9.625	1.2
SU-2	006	LENNOX	SL29UH040NV388	800	100	0.8	1/2	4026	3925	2	7965	5555	2	CX38	MERV 13	120	1	9.625	1.2

CONDENSING UNIT - AIR COOLED SCHEDULE																				
NOTES:																				
1. PROVIDE REFRIGERANT PIPE QUANTITIES AND TRAPS PER MANUFACTURER'S PIPING SCHEMATIC. CONTRACTOR TO VERIFY REFRIGERANT LINE LENGTHS WITH MANUFACTURER FOR LINE SIZES.																				
2. LOW AMBIENT KIT																				
MARK	SERVES	LOCATION	MANUFACTURER	MODEL	MIN SEER/EER	STAGES	COOLING CAPACITY TOTAL (TONS)	CONDENSER DATA				COMPRESSOR			ELECTRICAL DATA			WEIGHT (LBS)	NOTES	
								FAN NO	FAN FLA	COIL NO/ROWS	NO COMP	AMB TEMP (deg F)	REFRIG. TYPE	RLA	LRA	VOLTAGE	PHASE			MCA
AC-1	SU-1	OUTSIDE	LENNOX	KX21-024-230-07	19.2	2	2	1	2.0	1/1	1	90	R-410A	10.3	52	208	1	20	204	1.2
AC-2	SU-2	OUTSIDE	LENNOX	KX21-024-230-07	19.2	2	2	1	2.0	1/1	1	90	R-410A	10.3	52	208	1	20	204	1.2

FAN SCHEDULE																
NOTES:																
1. PROVIDE MOTORIZED DAMPER, DISCONNECT SWITCH, EXTERIOR FAN HOUSING MOUNTED SPEED CONTROL, VIBRATION ISOLATORS, DAMPER ACTUATOR TO BE SAME VOLTAGE AS FAN MOTOR.																
2. PROVIDE DISCONNECT SWITCH, EXTERIOR FAN HOUSING MOUNTED SPEED CONTROL, VIBRATION ISOLATORS, INLET GUARD.																
3. PROVIDE WITH PLUG DISCONNECT, BACKDRAFT DAMPER, VOLUME SPEED CONTROL SWITCH. (SPEED CONTROL SWITCH TO BE MOUNTED ABOVE CEILING AND/OR IN ACCESSIBLE LOCATION)																
MARK	LOCATION	SERVES	MANUFACTURER	MODEL	TYPE	FAN DATA				MOTOR DATA				MAX SONES	NOTES	
						CFM	ESP (IN WG)	RPM	DRIVE TYPE	WATTS	HP	VOLTAGE	PHASE			
EF-1	004	RESTROOM	GREENHECK	SP-A250	CEILING	150	0.4	1000	DIRECT	-	-	120	1	4	3	
EF-2	007	CARLIFT	GREENHECK	SQ-100-VG	INLINE	900	0.2	1219	DIRECT	-	0.25	120	1	7	2	
EF-3	018	OPEN WORKSHOP	GREENHECK	SQ-18M2-VG	INLINE	4300	0.6	1140	DIRECT	-	2	208	1	15	1	
EF-4	010	RESTROOM	GREENHECK	SP-A250	CEILING	150	0.4	1000	DIRECT	-	-	120	1	4	3	
EF-5	008	GLASS WORKSHOP	GREENHECK	SQ-100-VG	INLINE	900	0.2	1219	DIRECT	-	0.25	120	1	7	2	

LOUVER SCHEDULE																
NOTES:																
1. PROVIDE SELF DRAINING WITH WIRE MESH BIRDSCREEN.																
2. FINISH TO BE SELECTED BY ARCHITECT FROM MANUFACTURERS STANDARD COLOR CHART DURING SHOP DRAWING REVIEW. PROVIDE HARD COPY COLOR CHART WITH SUBMITTAL.																
MARK	SERVES	MANUFACTURER	MODEL	TYPE	COUNT	AIRFLOW (CFM)	FREE AREA (SQ FT)	MAX PD (IN WG)	FINISH	SIZE (INCHES)			NOTES			
										WIDTH	HEIGHT	LENGTH				
L-1	OPEN WORKSPACE	RUSKIN	ELF375DXH	INTAKE	3	1435	2.9	0.05	NOTE 2	30"	30"	4"	1			
L-2	GLASS WORKSHOP & CARLIFT	RUSKIN	ELF375DXH	INTAKE	2	900	1.8	0.05	NOTE 2	24"	24"	4"	1			
L-3	OPEN WORKSPACE	RUSKIN	ELF375DXH	EXHAUST	1	4300	6.8	0.1	NOTE 2	42"	42"	4"	1			
L-4	GLASS WORKSHOP & CARLIFT	RUSKIN	ELF375DXH	EXHAUST	2	900	1.2	0.1	NOTE 2	24"	24"	4"	1			

DIFFUSER, REGISTER, & GRILLE SCHEDULE																
NOTES:																
1. PROVIDE WITH TRM MOUNTING FRAME FOR INSTALLATION IN CENTER OF LAY-IN CEILING TILE OR GYP CEILING.																
2. PROVIDE WITH DAMPER/EXTRACTOR.																
3. PROVIDE WITH 8" HIGH INSULATED PLENUM BOX.																
MARK	MANUFACTURER	MODEL	LOCATION	AIR	TYPE	MATERIAL	FEATURES	DAMPER	MAX STATIC P.D. (IN WG)	MAX NC	FINISH	NOTES				
													LINEAR	ALUMINUM	STEEL	48" LONG, 1 1/2" SLOT, NECK SIZE ON PLAN
A	TITUS	300FL	LAY-IN CEILING	SUPPLY	GRILLE	ALUMINUM	SIZE ON PLAN	Y	0.1	30	WHITE	1.2, 3				
B	TITUS	350RL	SURFACE	SUPPLY	GRILLE	ALUMINUM	SIZE ON PLAN	Y	0.1	30	WHITE	1.2				
AA	TITUS	350RL	SURFACE	RETURN	GRILLE	ALUMINUM	SIZE ON PLAN	N	0.1	30	WHITE	1.2				
BB	TITUS	350FL	DUCT	EXHAUST	GRILLE	ALUMINUM	SIZE ON PLAN	N	0.1	30	WHITE	1.2				

UNIT HEATER - GAS FIRED SCHEDULE																	
NOTES:																	
1. PROVIDE WITH 24V CONTROL TRANSFORMER, GAS VALVE, SEALED COMBUSTION CONNECTIONS, DISCONNECT SWITCH, TERMINAL STRIP, FAN GUARD, VERTICAL LOUVERS, CEILING SUSPENSION KIT, PROPANE.																	
2. PROVIDE MANUFACTURERS ROOF VENT TERMINAL/COMBUSTION AIR INLET ASSEMBLY.																	
3. PROVIDE WITH MANUFACTURERS WALL THERMOSTAT.																	
MARK	ROOM NUMBER	MANUFACTURER	MODEL	FAN DATA			HEATER DATA				ELECTRICAL DATA						
				NOMINAL AIRFLOW (CFM)	FAN RPM	MOTOR (HP)	EAT (°F)	INPUT (MBH)	OUTPUT (MBH)	STAGES	COMBUSTION AIR SIZE (IN)	VENT SIZE (IN)	VOLTAGE	PHASE	FLA	WEIGHT (LBS)	NOTES
GUH-1	008	REZNOR	UDZ 100	1345	1050	1/30	0	105.0	87.2	1	4	4	120	1	4.3	97	1.2, 3
GUH-2	007	REZNOR	UDZ 100	1345	1050	1/30	0	105.0	87.2	1	4	4	120	1	4.3	97	1.2, 3
GUH-3		REZNOR	UDZ 225	2880	1050	1/4	0	225.0	186.8	1	6	5	120	1	7.5	204	1.2, 3
GUH-4	012	REZNOR	UDZ 225	2880	1050	1/4	0	225.0	186.8	1	6	5	120	1	7.5	204	1.2, 3

WATER HEATER - ELECTRIC SCHEDULE																
NOTES:																
1. SET TEMPERATURE TO 110°F.																
2. PROVIDE AMTROL THERM-X-TROL ST-5 EXPANSION TANK. CONNECT TO COLD WATER AT INLET TO HEATER.																
MARK	ROOM NUMBER	MANUFACTURER	MODEL	TANK CAPACITY (GALS)	EWT (°F)	LWT (°F)	HEATER DATA - NON-SIMULTANEOUS				VOLTAGE	PHASE	NOTES			
							RECOVERY (GPH)	TOTAL INPUT (KW)	ELEMENTS (NO)							
WH1	005	A.O. SMITH	DEL-50	50.0	40	120	23	4.5	2	208	1	1.2				

PLUMBING PUMP SCHEDULE																
NOTES:																
1. ALL BRONZE CONSTRUCTION.																
MARK	ROOM NUMBER	SERVES	MANUFACTURER	MODEL	PUMP TYPE	GPM	PUMP HEAD (FT WG)	MOTOR DATA				RPM	NOTES			
								WATTS	FLA UNIT	VOLTAGE	PHASE					
PP1	005	BUILDING	BELL & GOSSETT	NBF-22	IN-LINE	0.9	15	92	0.8	120	1	2940	1			

PLUMBING FIXTURE SCHEDULE									
NOTES:									
1. TRAP AND SUPPLY WRAP.									
2. COUNTER BY OTHERS - COORDINATE CLEARANCE SIZE AND ROUGH-IN ELEVATION.									
3. 48" HOSE AND MOP RACK									
4. 1070 THERMOSTATIC MIXING VALVE.									
5. PROVIDE TRAP, DRAIN, STRAINER FOR SINK PROVIDED WITH COUNTER.									
MARK	FIXTURE	LOCAL CONNECTION SIZES (INCHES)				MOUNTING HEIGHT	NOTES		
		WASTE	VENT	CW	HW				
ZFD	FLOOR DRAIN	2"	1-1/2"	---	---	FLOOR			
ZFS	FLOOR SINK	2"	1-1/2"	---	---	FLOOR			
L1	SINK	1-1/2"	1-1/2"	1/2"	1/2"	COUNTER	5		
S1	SINK	1-1/2"	1-1/2"	1/2"	1/2"	COUNTER	5		
WC1	WATER CLOSET, FLOOR-MOUNTED, FLUSH-TANK	3"	2"	1/2"	---	FLOOR			
WSH1	CLOTHES WASHER (RESIDENTIAL)	2"	1-1/2"	1/2"	1/2"	FLOOR			

PLUMBING SYSTEMS	INSULATION TYPES (1)	DENSITY (LBS./CU FT)	INSULATION THICKNESS (4) (5)	VAPOR BARRIER REQUIREMENTS (2)	JACKET TYPES (3) (6)	JACKET NOTES (2)
DOMESTIC COLD WATER, UP TO 1-1/2"	GF	4	1/2 INCH	YES	AP/PVC	a
DOMESTIC COLD WATER, 1-1/2" AND LARGER	GF	4	1 INCH	YES	AP/PVC	a
DOMESTIC COLD WATER, LOCATED IN CAVITY WALL	GF	4	1/2 INCH	YES	AP/PVC	a
DOMESTIC HOT WATER AND CIRCULATING HOT WATER UP TO 1-1/2" AND WATER TEMPERATURE BELOW 140°F. ABOVE 140°F, ADD 1/2 INCH.	GF	4	1 INCH	NONE	AP/PVC	b
DOMESTIC HOT WATER, CIRCULATING HOT WATER AND TANKS OVER 1-1/2" WATER TEMP BELOW 140°F. ABOVE 140°F ADD 1/2 INCH.	GF	4	1-1/2 INCH	NONE	AP/PVC	b

(1) KEY TO INSULATION MATERIALS:
GF = GLASS OR MINERAL FIBER
GB = GLASS BOARD
(2) KEY TO VAPOR BARRIER REQUIREMENTS:
YES = REQUIRED
NONE = NOT REQUIRED
SJ = CONTINUOUS SEALED JOINTS REQUIRED

(3) KEY TO JACKET REQUIREMENTS:
AP = ALL PURPOSE FOIL, SCIRM, KRAFT PAPER JACKET (WHITE).
PVC = PVC JACKET (6)
(4) FOR PIPING SMALLER THAN 1 1/2 INCH AND LOCATED IN PARTITIONS WITHIN CONDITIONED SPACES, REDUCTION OF THESE THICKNESSES BY 1 INCH SHALL BE PERMITTED, BUT NOT TO A THICKNESS LESS THAN 1 INCH.
(5) COMPLIANT WITH ASHRAE 90.1-2016 OR 2020 MINNESOTA ENERGY CODE.
(6) NOTES:
a. DOMESTIC COLD WATER INCLUDES: COLD WATER (CW), HARD WATER (H), SOFT WATER (SOW), FILTERED WATER (FW), NON-POTABLE WATER (NP), SOFT NON-POTABLE (S-NP)
b. DOMESTIC HOT WATER INCLUDES: HOT WATER (HW), RECIRCULATION HOT WATER (CHW), NON-POTABLE WATER (NP), 140° HOT WATER (140° HW), 140° RECIRCULATION HOT WATER (140° CHW)

HVAC SYSTEMS	INSULATION TYPES (1)	RESISTANCE	INSULATION THICKNESS (4)	VAPOR BARRIER REQUIREMENTS (2)	JACKET TYPES (3)
REFRIGERANT SUCTION PIPING	FE (CLOSED CELL)		1 INCH	NONE	AL (EXTERIOR ONLY)
REFRIGERANT HOT GAS PIPING	NONE			NONE	NONE
REFRIGERANT LIQUID PIPING	NONE			NONE	NONE
SU-1 & SU-2 SUPPLY AIR DUCTS AND RUNOUT TO DIFFUSERS.	GF DUCT WRAP	R-3.4	1-1/2 INCH	YES	FSK (4)
SU-1 & SU-2 RETURN DUCTS FIRST 10'	LINER		1 INCH	NONE	(5)
SU-1 & SU-2 OUTSIDE AIR DUCTS.	GF DUCT WRAP	R-8	2 INCH	YES	FSK (4)
EF-2, 3, 5 EXHAUST AIR DUCT - BETWEEN FAN AND WALL LOUVER	GF DUCT WRAP	1.5	1-1/2 INCH	YES	FSK
EF-1, 4 EXHAUST AIR DUCT - BETWEEN FAN AND EXTERIOR WALL CAP	GF DUCT WRAP	1.5	1-1/2 INCH	YES	FSK (4)
L-1, 2 OUTSIDE AIR DUCT BETWEEN LOUVER AND DAMPER	GF DUCT WRAP	R-8	2 INCH	YES	FSK (4)

(1) KEY TO INSULATION MATERIALS:
GF = GLASS OR MINERAL FIBER
CG = CELLULAR GLASS
FE = FLEXIBLE ELASTOMERIC FOAM
PF = CLOSED CELL PHENOLIC FOAM
CS = CALCIUM SILICATE
HTGF = HIGH TEMPERATURE GLASS FIBER
(2) KEY TO VAPOR BARRIER REQUIREMENTS:
YES = REQUIRED
NONE = NOT REQUIRED
SJ = CONTINUOUS SEALED JOINTS REQUIRED

(3) KEY TO JACKET REQUIREMENTS:
AP = ALL PURPOSE FOIL, SCIRM, KRAFT PAPER JACKET (WHITE).
JACKET (WHITE).
FSK = FOIL, SCIRM, KRAFT PAPER JACKET WITH FOIL FINISH.
PVC = PVC JACKET
AL = ALUMINUM JACKET
SS = STAINLESS STEEL JACKET
GC = CANVAS OR GLASS CLOTH
(4) GLASS CLOTH JACKET AND RIGID BOARD INSULATION REQUIRED IN MECHANICAL ROOMS AND EXPOSED DUCTWORK WITHIN 8 FEET OF FLOOR.
(5) REFER TO SECTION 23 3113 METAL DUCTS FOR DUCT LINER SPECIFICATION.



CONSULTANT



Emanuelson-Podas, Inc.
7705 Bush Lake Road
Edina, MN 55439
(952) 930-0050 | www.epinc.com

CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Scott A. Vander Heiden
DATE: 06-18-2024 REG. NO. 40918
PRINTED NAME: SCOTT A. VANDER HEIDEN

COMMISSION NO.: EP# 4898.0000

DRAWN BY: PHL

CHECKED BY: BJR

DATE: JUNE 18, 2024

BID ISSUE DATE:

REVISION DATES:

PROJECT TITLE

DII WAREHOUSE REMODEL
MCGREGOR, MN

20898 360th St, McGregor, MN
55760

OWNER

MILLE LACS BAND OF OJIBWE

SHEET TITLE

MECHANICAL SCHEDULES

M6.1

SHEET NO.
PLOT DATE: 6/17/2024 9:31:53 AM



BUSCH ARCHITECTS, INC.

CONSULTANT



Emanuelson-Podas, Inc. 7705 Bush Lake Road Edina, MN 55439 (952) 930-0050 | www.epcinc.com

CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: 06/18/2024 REG. NO. 40887 PRINTED NAME: MATTHEW W. FULTS

COMMISSION NO.: EP# 4898.0000

DRAWN BY: BG

CHECKED BY: MAB

DATE: JUNE 18, 2024

BID ISSUE DATE:

REVISION DATES:

PROJECT TITLE

DII WAREHOUSE REMODEL MCGREGOR, MN

20898 360th St, McGregor, MN 55760

OWNER

MILLE LACS BAND OF OJIBWE

SHEET TITLE

ELECTRICAL TITLE SHEET

E0.0

SHEET NO.

PLOT DATE: 6/17/2024 2:53:39 PM

PROJECT GENERAL NOTES:

- 1. COORDINATE THE INSTALLATION OF ALL BELOW-GRADE AND CAST-IN-PLACE CIRCUITRY WITH OTHER TRADES.
2. CONTRACTOR SHALL LOCATE OR SHALL HAVE THE SERVING UTILITIES LOCATE ALL UNDERGROUND CABLE, CONDUITS, PIPING, UTILITIES, ETC., PRIOR TO COMMENCING CONSTRUCTION (UNDERGROUND EDUCATION) AND SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY DAMAGES DUE TO CONSTRUCTION ACTIVITIES.
3. EXISTING AND/OR NEW UNDERGROUND CONDUITS AND OTHER CIRCUITRY SHOWN ON THE PLANS ARE INTENDED TO BE DIAGRAMMATIC IN NATURE. CONTRACTOR IS RESPONSIBLE FOR FIELD CONFIRMING ALL CIRCUITRY AND ROUTING. MODIFY ROUTING AS REQUIRED TO COORDINATE WITH OTHER PLANNED UNDERGROUND SYSTEMS AT NO ADDITIONAL COST.
4. CORE DRILL EXISTING STRUCTURES AS REQUIRED FOR NEW CONDUIT INSTALLATIONS. PATCH AROUND PENETRATIONS WITH NON-SHRINK GROUT AND PAINT TO MATCH SURROUNDING SURFACES WHERE APPLICABLE.
5. PLUG ALL UNUSED OPENINGS IN PANELS/EQUIPMENT LEFT BY REMOVALS. CUT OFF ALL ABANDONED CONDUITS FLUSH WITH SURFACES AND FILL WITH NON-SHRINK GROUT.
6. FIELD CONFIRM CONDUIT ROUTING. DO NOT ROUTE CONDUIT ON BUILDING EXTERIOR UNLESS NOTED OTHERWISE.
7. SEE ARCHITECTURAL, STRUCTURAL, AND MECHANICAL DRAWINGS FOR EXACT EQUIPMENT, PIPING AND BUILDING LAYOUTS.
8. PROVIDE AS BUILT DRAWINGS. DRAWINGS SHALL BE NEAT, LEGIBLE.
9. COORDINATE ELECTRICAL WORK WITH OTHER TRADES.
10. PROVIDE PANEL SCHEDULES FOR ALL PANELS. SCHEDULES SHALL BE TYPED.
11. ANY ELECTRICAL BOX THAT BECOMES ABANDONED DURING THE COURSE OF THE PROJECT SHALL HAVE A BLANK COVERPLATE.
12. DO NOT SCALE DRAWINGS. VERIFY DIMENSIONS IN FIELD PRIOR TO COMMENCEMENT OF WORK.
13. FINAL CONNECTIONS TO EQUIPMENT SHALL BE PER MANUFACTURERS APPROVED WIRING DIAGRAMS, DETAILS, AND INSTRUCTIONS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE MATERIALS AND EQUIPMENT COMPATIBLE WITH EQUIPMENT ACTUALLY SUPPLIED.
14. ALL EMPTY RACEWAY SYSTEMS SHALL HAVE A PULLWIRE OR EQUAL AND SHALL BE IDENTIFIED BY ALL JUNCTION PULL AND TERMINATION POINTS, USING PERMANENT METALLIC TAGS. TAG SHALL INDICATE INTENDED USE OF CONDUIT, ORIGIN AND TERMINATION POINTS OF EACH INDIVIDUAL CONDUIT.
15. IT IS THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS TO ESTABLISH A STANDARD OF QUALITY. THE ENGINEER RESERVES THE RIGHT TO APPROVE METHODS AND MATERIALS NOT REFLECTED HEREIN.
16. CONTRACTOR SHALL VISIT SITE PRIOR TO BID AND VERIFY THAT CONDITIONS ARE AS INDICATED. CONTRACTOR SHALL INCLUDE IN HIS BID, COSTS REQUIRED TO MAKE HIS WORK MEET EXISTING CONDITIONS.
17. WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER TO THE SATISFACTION OF THE ENGINEER.
18. WORK, MATERIALS AND EQUIPMENT SHALL CONFORM TO THE LATEST EDITIONS OF LOCAL, STATE, AND NATIONAL CODES AND ORDINANCES.
19. VERIFY THAT EXACT LOCATION OF EQUIPMENT TO BE FURNISHED BY OTHERS PRIOR TO ROUGH-IN.
20. SYSTEMS SHALL BE TESTED FOR PROPER OPERATION. IF TESTS SHOW THAT WORK IS DEFECTIVE, CONTRACTOR SHALL MAKE CORRECTIONS NECESSARY AT NO COST TO OWNER.
21. SYSTEMS SHALL BE COMPLETE, OPERABLE, AND READY FOR CONTINUOUS OPERATION. LIGHTS, SWITCHES, RECEPTACLES, MOTORS, ETC. SHALL BE CONNECTED AND OPERABLE.
22. UPSIZE BRANCH CIRCUIT CONDUCTORS FOR ALL 120V CIRCUITS LONGER THAN 75 FEET TO #10AWG. SIZE TO MAINTAIN LESS THAN 3% VOLTAGE DROP.
23. MAINTAIN FIRE RATING WHERE CONDUIT, FIXTURES, ETC. PENETRATE A FIRE RATED STRUCTURE. REFER TO THE ARCHITECTURAL DRAWINGS FOR LOCATION OF FIRE RATED WALLS AND CEILINGS. FIRE PROOF ALL PENETRATIONS AS REQUIRED.

ELECTRICAL SYMBOL LEGEND table with columns: POWER, LIGHTING CONTROLS, COMMUNICATIONS / DATA, FIRE ALARM, LIGHTING, SECURITY ROUGH-IN. Includes symbols and descriptions for various electrical components.

ELECTRICAL ABBREVIATIONS table listing abbreviations and their corresponding descriptions for electrical components and materials.

ELECTRICAL ABBREVIATIONS table listing abbreviations and their corresponding descriptions for electrical components and materials.

ELECTRICAL SHEET INDEX table listing sheet numbers and titles for the project.

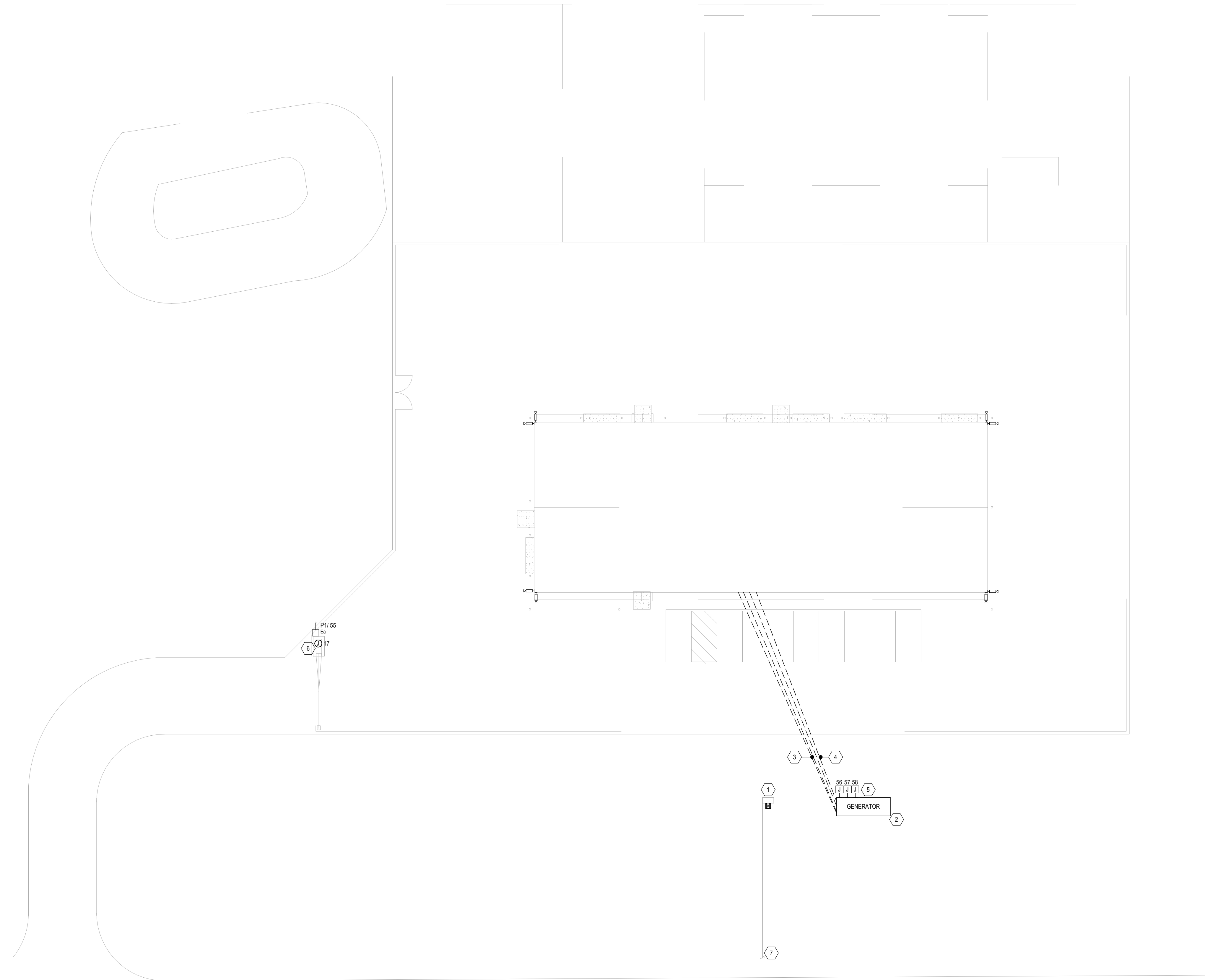
LIGHTING CONTROL SUMMARY	
GENERAL NOTES:	
1. IF NO CONTROL STRATEGY IS LISTED, LIGHTING CONTROLS SHALL BE MANUAL, LINE VOLTAGE (WITH 0-10 V DIMMING, WHERE SHOWN) AND CONTAIN NO AUTOMATIC...	
2. SEE PLANS FOR TYPE, LOCATION AND QUANTITY OF SENSORS.	
3. TIME SCHEDULES SHALL BE DEFINED BY THE OWNER. PROVIDE A COORDINATION MEETING WITH THE OWNER TO DETERMINE SCHEDULES.	
4. ALL LIGHTING CONTROLS SHALL BE COMMISSIONED. SEE THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.	
5. THE TYPICAL SPACES LISTED IN EACH SEQUENCE ARE NOT INTENDED TO BE ALL INCLUSIVE, OR EXCLUSIVE TO ANY SPACE AND ARE LISTED AS GENERAL REFERENCE ONLY.	
6. ADDITIONAL BUTTONS ARE PERMITTED TO COMPLY WITH THE CONTROL REQUIREMENTS LISTED BELOW.	
Ea	
TIME SWITCH FUNCTION:	TIME OF DAY SCHEDULE PROGRAMMED TO OWNER REQUIREMENTS
MANUAL LTG CONTROL:	NONE
DAYLIGHT RESPONSE:	BUILDING MOUNTED PHOTOSENSOR
TYPICAL SPACES:	POLE LIGHTS

GENERAL NOTES:

- A. ALL SITE LIGHTING CIRCUIT CONDUCTORS SHALL BE #10'S IN 1" PVC CONDUIT. UNLESS OTHERWISE NOTED, PROVIDE GROUND WIRE. GROUND WIRE NOT SHOWN IN WIRE COUNT.
- B. ALL CONDUCTORS AND CONDUITS SHALL BE ROUTED UNDERGROUND.
- C. LIGHT POLES INSTALLED NEAR CURBS SHALL BE SETBACK 30' FROM CURB TO FRONT EDGE OF CONCRETE BASE.
- D. ANY EXPOSED CONDUIT SHALL BE METALLIC RIGID AND PAINTED TO BLEND WITH ADJACENT SURFACE. RIGID PVC CONDUIT IS NOT ALLOWED FOR APPLICATIONS.
- E. ALL CIRCUITING SHALL BE FED FROM PANEL A UNLESS NOTED OTHERWISE.

KEY NOTES: ○

- 1. EXISTING TO REMAIN CT CABINET. UTILITY TO RE-MOUNT EXISTING CABINET UPRIGHT. UTILITY TO PROVIDE NEW METER.
- 2. PROVIDE GENERATOR. REFER TO 43.01 FOR MORE INFORMATION.
- 3. PROVIDE (2) 1" CONDUITS TO ATS-A FOR CONTROL WIRING. REFER TO E2.1 FOR ATS LOCATION.
- 4. PROVIDE (1) 1" CONDUIT TO GENERATOR ANNUNCIATOR. REFER TO E2.1 FOR ANNUNCIATOR LOCATION.
- 5. PROVIDE POWER CONNECTIONS FOR GENERATOR LIGHT, JACKET HEATER AND BATTERY CHARGER.
- 6. PROVIDE POWER CONNECTION FOR POWERED GATE OPERATOR PROVIDED BY OTHER.
- 7. EXISTING POLE MOUNTED UTILITY TRANSFORMER NOT SHOWN ON PLANS. TRANSFORMER IS LOCATED ACROSS THE STREET FROM AREA OF WORK.



1 SITE PLAN - ELECTRICAL
SCALE: 1" = 20'-0"



CONSULTANT



CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Matthew W. Fults
DATE: 06/18/2024 REG. NO. 40887
PRINTED NAME: MATTHEW W. FULTS

COMMISSION NO.: EP# 4898.0000

DRAWN BY: BG

CHECKED BY: MAB

DATE: JUNE 18, 2024

BID ISSUE DATE:

REVISION DATES:

PROJECT TITLE

DII WAREHOUSE REMODEL
McGREGOR, MN

20898 360th St, McGregor, MN
55760

OWNER

MILLE LACS BAND OF OJIBWE

SHEET TITLE

SITE PLAN - ELECTRICAL

E0.1



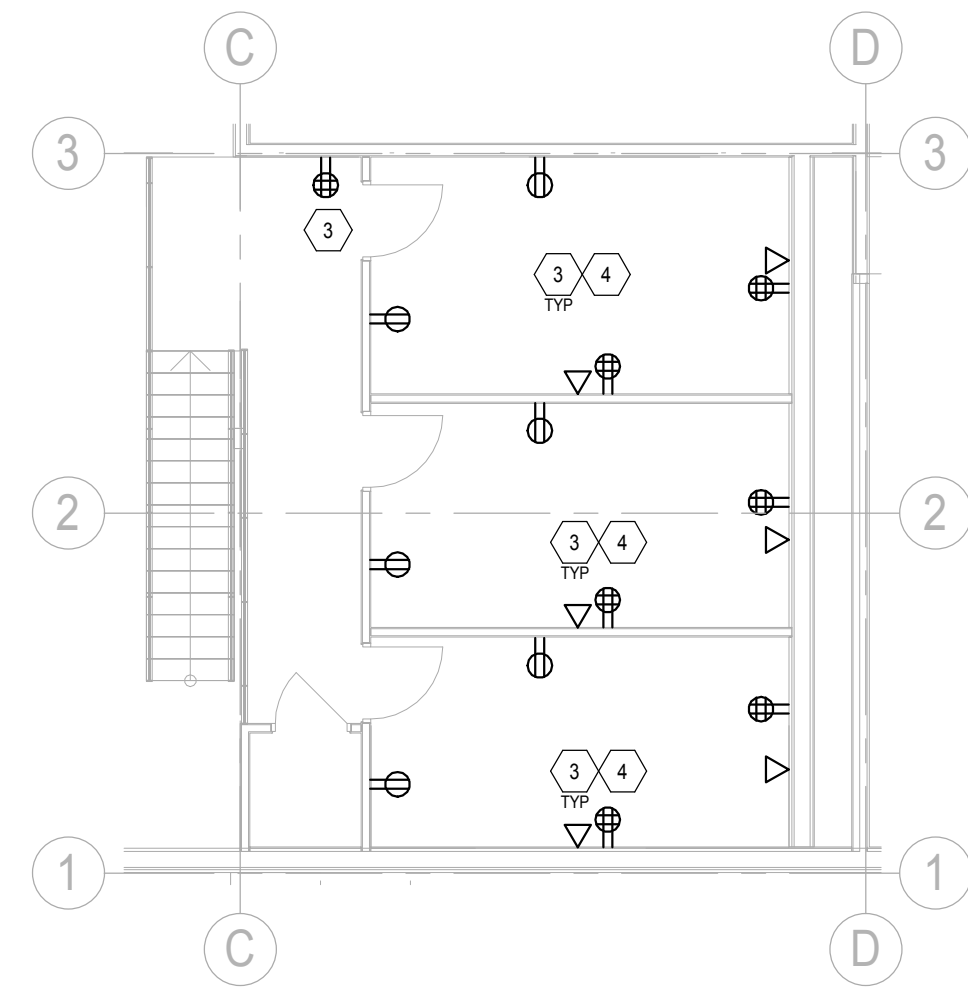
GENERAL NOTES:

- A. DEVICES, LIGHTING AND EQUIPMENT SHOWN HALF-TON (GRAY) ARE EXISTING TO REMAIN. DEVICES SHOWN FULL-TONE (BOLD) ARE PROVIDED NEW.
- B. VERIFY WITH MECHANICAL DEMOLITION PLANS WHERE MECHANICAL EQUIPMENT IS BEING REMOVED. DISCONNECT AND REMOVE FEEDERS BACK TO SOURCE.
- C. WHERE FLUORESCENT FIXTURES AND BALLASTS ARE NOTED TO BE DEMOLISHED SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL REQUIREMENTS.

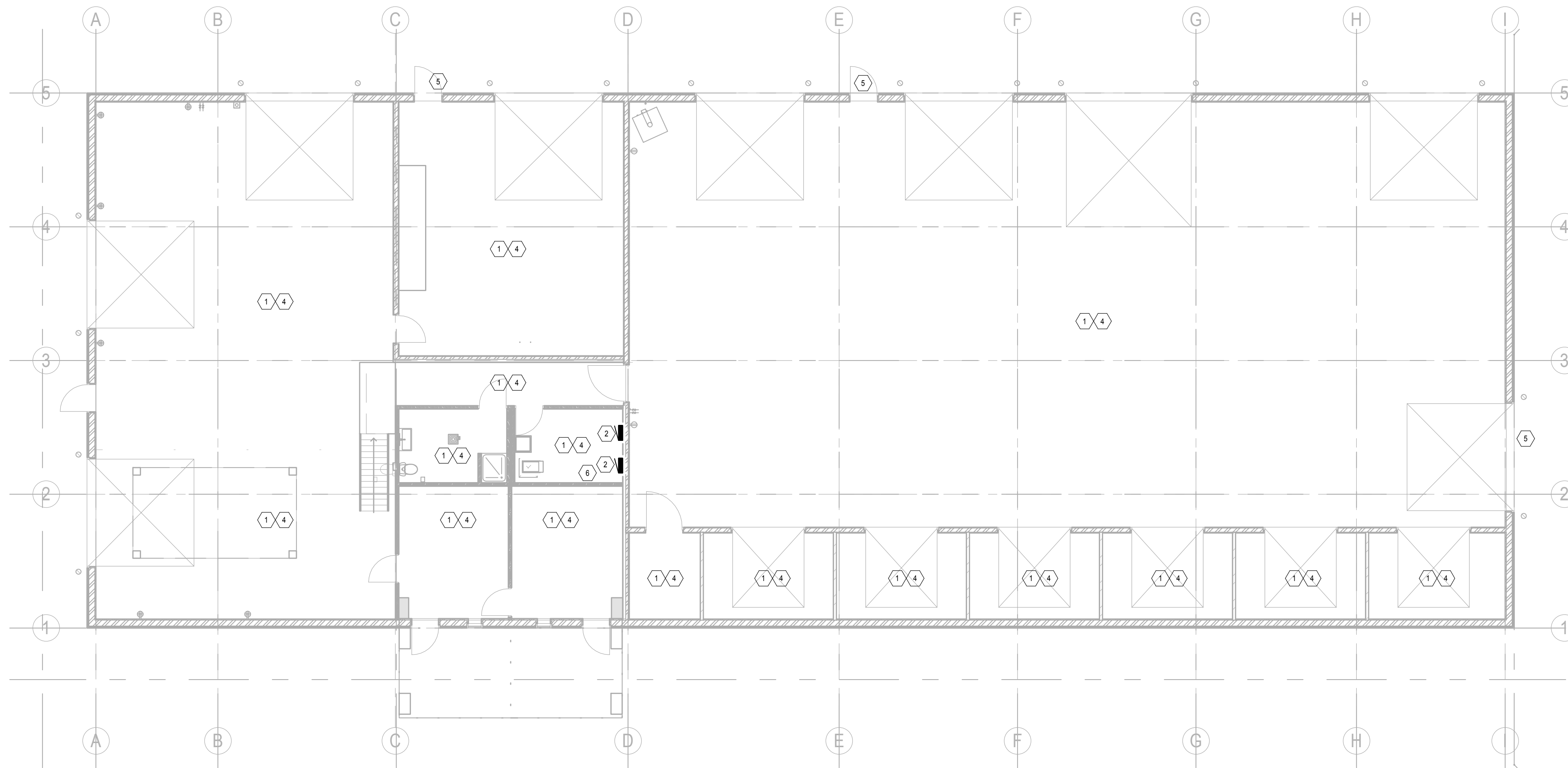
KEY NOTES: ○

(NOT ALL NOTES MAY BE USED ON THIS SHEET)

- 1. ALL ELECTRICAL DEVICES IN THIS AREA ARE TO BE DISCONNECTED, REMOVED, AND ALL FEEDER SHALL BE REMOVED BACK TO SOURCE.
- 2. EXISTING PANELS ARE TO BE REMOVED. FEEDER SHALL BE REMOVED TO BELOW GRADE AND CAPPED.
- 3. POWER AND DATA RECEPTACLE SHALL BE REMOVED AND ALL CABLING AND CONDUIT REMOVED BACK TO SOURCE. ROUGH IN SHALL BE MAINTAINED FOR INSTALLATION OF NEW DEVICES. SEE SHEET E22 FOR MORE DETAIL.
- 4. ALL LIGHTING FIXTURES AND CONTROLS IN AREA ARE TO BE DISCONNECTED AND ALL FEEDER SHALL BE REMOVED BACK TO SOURCE.
- 5. EXTERIOR LIGHTING FIXTURE SHALL BE DISCONNECTED AND ALL FEEDER SHALL BE REMOVED BACK TO SOURCE.
- 6. EXISTING TELECOMMUNICATIONS HEAD END SHALL BE MAINTAINED AND PROTECTED DURING DEMOLITION AND NEW CONSTRUCTION.



2 MEZZANINE LEVEL PLAN - ELECTRICAL DEMOLITION
SCALE: 1/8" = 1'-0"



1 MAIN LEVEL PLAN - ELECTRICAL DEMOLITION
SCALE: 1/8" = 1'-0"

CONSULTANT



Emanuelson-Podas, Inc.
7705 Bush Lake Road
Edina, MN 55439
(952) 930-0050 | www.epinc.com

CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Matthew W. Fults
DATE: 06/18/2024 REG. NO. 40887
PRINTED NAME: MATTHEW W. FULTS

COMMISSION NO.: EP# 4898.0000

DRAWN BY: BG

CHECKED BY: MAB

DATE: JUNE 18, 2024

BID ISSUE DATE:

REVISION DATES:

PROJECT TITLE

DII WAREHOUSE REMODEL
McGREGOR, MN

20898 360th St, McGregor, MN
55760

OWNER

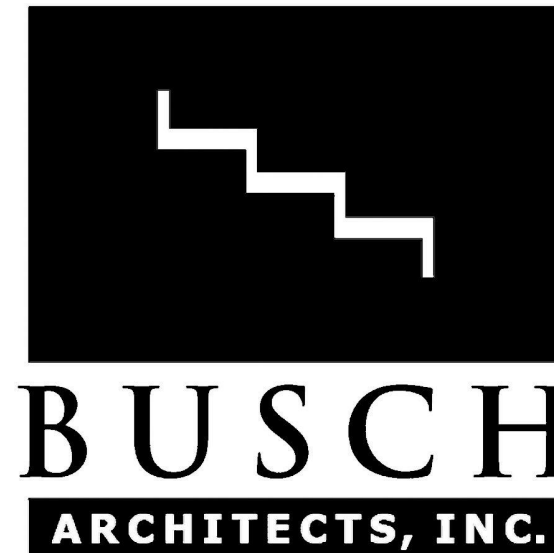
MILLE LACS BAND OF OJIBWE

SHEET TITLE

DEMOLITION PLAN -
ELECTRICAL

ED0.1

SHEET NO.
PLOT DATE: 6/17/2024 2:53:40 PM



- GENERAL NOTES:**
- CONTRACTOR SHALL COMPLETE AND SUBMIT LIGHTING UTILITY REBATE APPLICATIONS IF AVAILABLE WITH UTILITY. COORDINATE ALL LIGHTING REBATES WITH OWNER.
 - WHERE EXACT MOUNTING HEIGHTS ARE SHOWN SHALL BE VERIFIED WITH THE ARCHITECT PRIOR TO INSTALLATION.
 - ALL EXIT SIGNS SHALL BE FED FROM AN UNSWITCHED HOT CONDUCTOR.
 - ALL CIRCUITING SHALL BE FED FROM PANEL A UNLESS NOTED OTHERWISE.

KEY NOTES: ○

- PROVIDE SWITCH MOUNT OCCUPANCY SENSOR / 0-10V DIMMER COMBO. LUTRON MS201 OR EQUAL DEVICE/SYSTEM WITH SIMILAR FUNCTIONALITY. FINISH TO MATCH OTHER DEVICES. PROGRAM SO LIGHTING TURNS ON TO 50% UPON OCCUPANCY.
- NEW LIGHTING FIXTURE WIRING AND CONDUIT SHALL MOUNTED 1'-0" BELOW ROOF OVERHANG.
- NEW LIGHTING FIXTURE WIRING AND CONDUIT SHALL MOUNTED 1'-0" BELOW AWNING.
- CONNECT TO FIXTURES ON LEVEL ABOVE IN THE SAME ROOM.

CONSULTANT



CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: 06/18/2024 REG. NO. 40887
 PRINTED NAME: MATTHEW W. FULTS

COMMISSION NO.: EP# 4898.0000

DRAWN BY: BG

CHECKED BY: MAB

DATE: JUNE 18, 2024

BID ISSUE DATE:

REVISION DATES:

PROJECT TITLE

DII WAREHOUSE REMODEL
 MCGREGOR, MN

20898 360th St, McGregor, MN
 55760

OWNER

MILLE LACS BAND OF OJIBWE

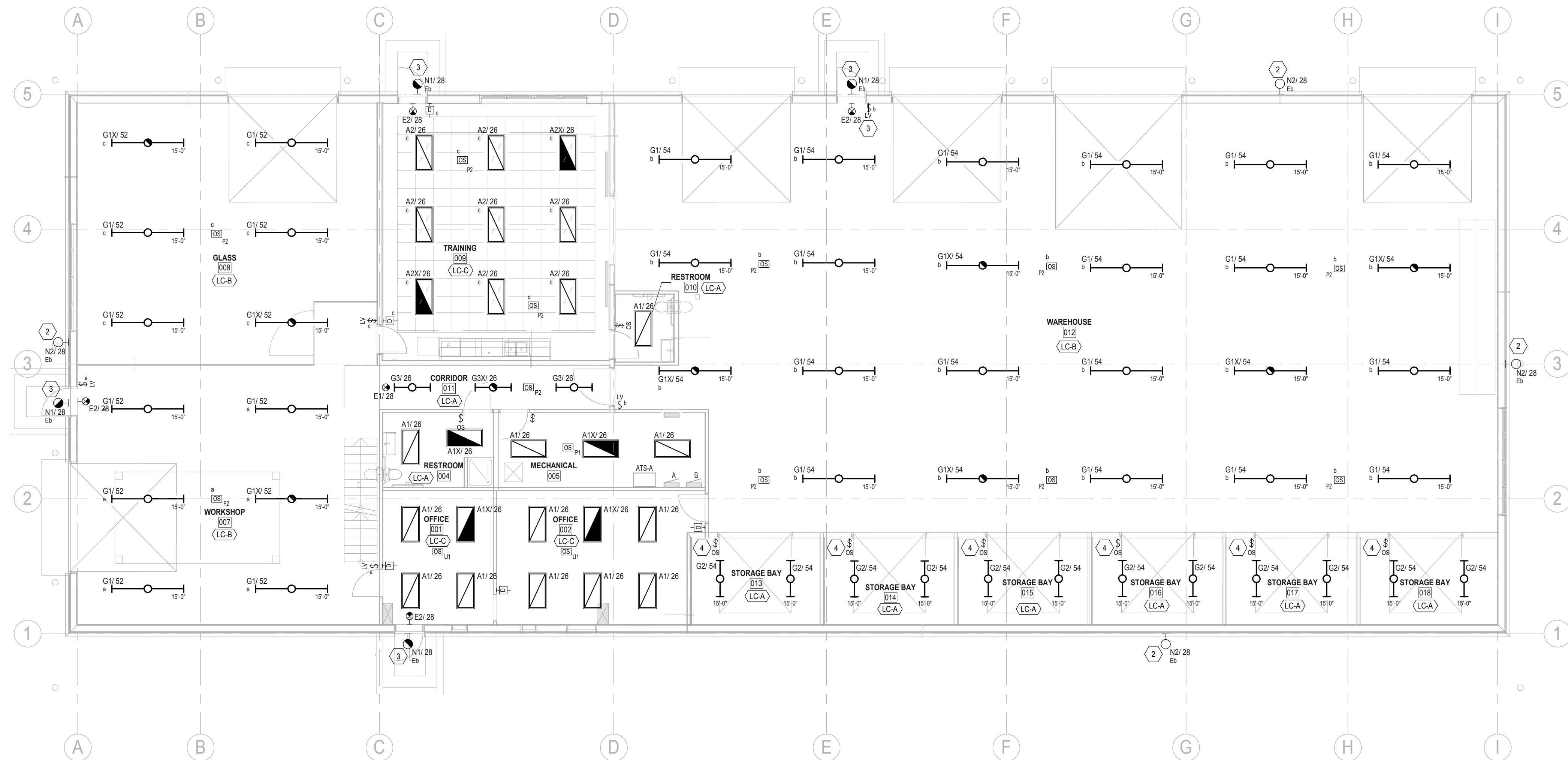
SHEET TITLE

MAIN LEVEL PLAN - LIGHTING

E1.1

SHEET NO.
 PLOT DATE: 6/17/2024 2:53:41 PM

LIGHTING CONTROL SUMMARY	
GENERAL NOTES:	
1.	IF NO CONTROL STRATEGY IS LISTED, LIGHTING CONTROLS SHALL BE MANUAL, LINE VOLTAGE (WITH 0-10 V DIMMING, WHERE SHOWN) AND CONTAIN NO AUTOMATIC...
2.	SEE PLANS FOR TYPE, LOCATION AND QUANTITY OF SENSORS.
3.	TIME SCHEDULES SHALL BE DEFINED BY THE OWNER. PROVIDE A COORDINATION MEETING WITH THE OWNER TO DETERMINE SCHEDULES.
4.	ALL LIGHTING CONTROLS SHALL BE COMMISSIONED. SEE THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
5.	THE TYPICAL SPACES LISTED IN EACH SEQUENCE ARE NOT INTENDED TO BE ALL INCLUSIVE, OR EXCLUSIVE TO ANY SPACE AND ARE LISTED AS GENERAL REFERENCE ONLY.
6.	ADDITIONAL BUTTONS ARE PERMITTED TO COMPLY WITH THE CONTROL REQUIREMENTS LISTED BELOW.
Eb	
TIME SWITCH FUNCTION:	TIME OF DAY SCHEDULE PROGRAMMED TO OWNER REQUIREMENTS
MANUAL LTG CONTROL:	NONE
DAYLIGHT RESPONSE:	BUILDING MOUNTED PHOTOSENSOR
TYPICAL SPACES:	EGRESS LIGHTING
LC-A	
OCC SENSOR FUNCTION:	OCCUPANCY, 100% ON / OFF
TIME SWITCH FUNCTION:	NONE
MANUAL LTG CONTROL:	NONE
DAYLIGHT RESPONSE:	NONE
TYPICAL SPACES:	RESTROOMS / CORRIDOR
LC-B	
OCC SENSOR FUNCTION:	OCCUPANCY, 100% ON / OFF
TIME SWITCH FUNCTION:	NONE
MANUAL LTG CONTROL:	2-BUTTON ON / OFF
DAYLIGHT RESPONSE:	NONE
TYPICAL SPACES:	WORKSHOP / GLASS / WAREHOUSE
LC-C	
OCC SENSOR FUNCTION:	OCCUPANCY, 100% ON / OFF
TIME SWITCH FUNCTION:	NONE
MANUAL LTG CONTROL:	2-BUTTON ON / OFF & RAISE / LOWER WITH 0-10V DIMMING
DAYLIGHT RESPONSE:	NONE
TYPICAL SPACES:	STORAGE / OFFICE / TRAINING



1 MAIN LEVEL PLAN - LIGHTING
 SCALE: 1/8" = 1'-0"

GENERAL NOTES:

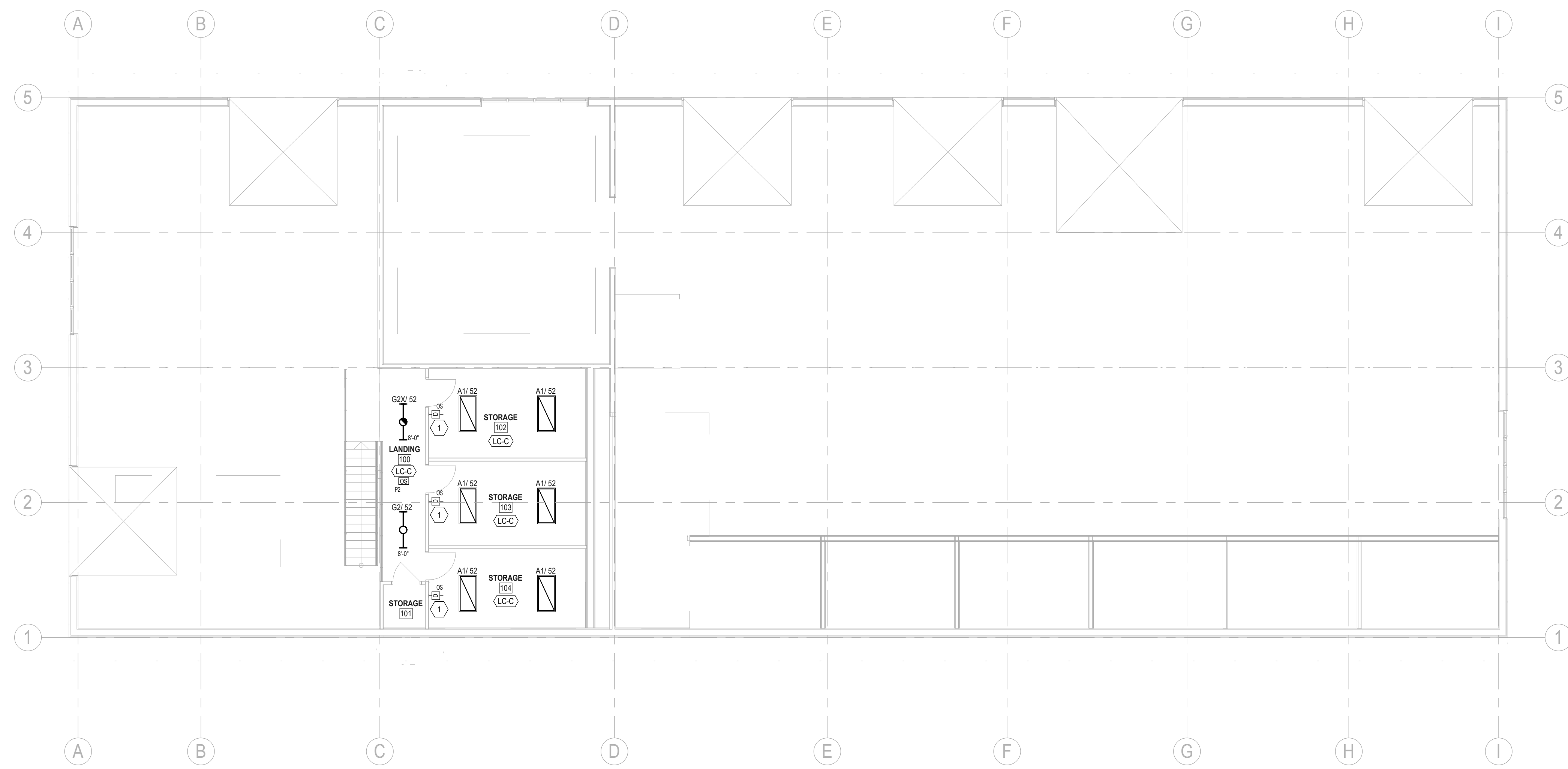
- A. CONTRACTOR SHALL COMPLETE AND SUBMIT LIGHTING UTILITY REBATE APPLICATIONS IF AVAILABLE WITH UTILITY. COORDINATE ALL LIGHTING REBATES WITH OWNER.
- B. WHERE EXACT MOUNTING HEIGHTS ARE SHOWN SHALL BE VERIFIED WITH THE ARCHITECT PRIOR TO INSTALLATION.
- C. ALL EXIT SIGNS SHALL BE FED FROM AN UNSWITCHED HOT CONDUCTOR.
- D. ALL CIRCUITING SHALL BE FED FROM PANEL A UNLESS NOTED OTHERWISE.

KEY NOTES: ☒

- 1. PROVIDE SWITCH MOUNT OCCUPANCY SENSOR / 0-10V DIMMER COMBO, LUTRON MSZ101 OR EQUAL DEVICE/SYSTEM WITH SIMILAR FUNCTIONALITY. FINISH TO MATCH OTHER DEVICES. PROGRAM SO LIGHTING TURNS ON TO 50% UPON OCCUPANCY.



LIGHTING CONTROL SUMMARY	
GENERAL NOTES:	
1. IF NO CONTROL STRATEGY IS LISTED, LIGHTING CONTROLS SHALL BE MANUAL, LINE VOLTAGE (WITH 0-10 V DIMMING, WHERE SHOWN) AND CONTAIN NO AUTOMATIC...	
2. SEE PLANS FOR TYPE, LOCATION AND QUANTITY OF SENSORS.	
3. TIME SCHEDULES SHALL BE DEFINED BY THE OWNER. PROVIDE A COORDINATION MEETING WITH THE OWNER TO DETERMINE SCHEDULES.	
4. ALL LIGHTING CONTROLS SHALL BE COMMISSIONED. SEE THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.	
5. THE TYPICAL SPACES LISTED IN EACH SEQUENCE ARE NOT INTENDED TO BE ALL INCLUSIVE, OR EXCLUSIVE TO ANY SPACE AND ARE LISTED AS GENERAL REFERENCE ONLY.	
6. ADDITIONAL BUTTONS ARE PERMITTED TO COMPLY WITH THE CONTROL REQUIREMENTS LISTED BELOW.	
EN	
TIME SWITCH FUNCTION:	TIME OF DAY SCHEDULE PROGRAMMED TO OWNER REQUIREMENTS
MANUAL LTG CONTROL:	NONE
DAYLIGHT RESPONSE:	BUILDING MOUNTED PHOTOSENSOR
TYPICAL SPACES:	EGRESS LIGHTING
LCA	
OCC SENSOR FUNCTION:	OCCUPANCY, 100% ON / OFF
TIME SWITCH FUNCTION:	NONE
MANUAL LTG CONTROL:	NONE
DAYLIGHT RESPONSE:	NONE
TYPICAL SPACES:	RESTROOMS / CORRIDOR
LC-B	
OCC SENSOR FUNCTION:	OCCUPANCY, 100% ON / OFF
TIME SWITCH FUNCTION:	NONE
MANUAL LTG CONTROL:	2-BUTTON ON / OFF
DAYLIGHT RESPONSE:	NONE
TYPICAL SPACES:	WORKSHOP / GLASS / WAREHOUSE
LC-C	
OCC SENSOR FUNCTION:	OCCUPANCY, 100% ON / OFF
TIME SWITCH FUNCTION:	NONE
MANUAL LTG CONTROL:	2-BUTTON ON / OFF & RAISE / LOWER WITH 0-10V DIMMING
DAYLIGHT RESPONSE:	NONE
TYPICAL SPACES:	STORAGE / OFFICE / TRAINING



CONSULTANT



CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Matthew W. Fults
 DATE: 06/18/2024 REG. NO. 40887
 PRINTED NAME: MATTHEW W. FULTS

COMMISSION NO.: EP# 4898.0000

DRAWN BY: BG

CHECKED BY: MAB

DATE: JUNE 18, 2024

BID ISSUE DATE:

REVISION DATES:

PROJECT TITLE

DII WAREHOUSE REMODEL
 MCGREGOR, MN

20898 360th St, McGregor, MN
 55760

OWNER

MILLE LACS BAND OF OJIBWE

SHEET TITLE

MEZZANINE LEVEL
 PLAN - LIGHTING

E1.2

SHEET NO.
 PLOT DATE: 6/17/2024 2:53:42 PM

1 MEZZANINE LEVEL PLAN - LIGHTING
 SCALE: 1/8" = 1'-0"

GENERAL NOTES:

- A. SEE MOTOR CONNECTION SCHEDULE FOR MECHANICAL CONNECTIONS. SEE MECHANICAL PLANS FOR EXACT EQUIPMENT LOCATIONS.
- B. EXACT LOCATION OF ELECTRICAL DEVICES MUST BE VERIFIED WITH FURNITURE SYSTEMS ACTUALLY BEING SUPPLIED BY THE OWNER SO AS NOT TO OCCUR BEHIND BASE UNITS. DO NOT USE ELECTRICAL PLANS FOR DIMENSIONING. FURNITURE SYSTEM SUPPLIER TO PROVIDE DIMENSIONS/LOCATIONS. TYPICAL ALL FURNITURE LOCATIONS.
- C. CONTRACTOR TO DETERMINE BEST ROUTE FOR CONDUIT AND WIRING.
- D. FROM EACH VOICE/DATA OUTLET PROVIDE TWO GANG BOX W/SINGLE GANG MUDRING AND (1) 1" CONDUIT STUBBED INTO CONCEALED ACCESSIBLE CEILING SPACE.
- E. ALL CIRCUITING SHALL BE FED FROM PANEL A UNLESS NOTED OTHERWISE.

KEY NOTES: ○

- (NOT ALL NOTES MAY BE USED ON THIS SHEET)
- 1. INSTALL NEW PANEL(S). SEE SHEET E2.1 FOR MORE INFORMATION.
 - 2. PROVIDE ADHESIVE LABEL ABOVE EACH RECEPTACLE. EACH LABEL SHALL INCLUDE VOLTAGE, PHASE AND AMPERAGE OF OCPD.
 - 3. PROVIDE SWITCHED RECEPTACLE FOR GARBAGE DISPOSAL PROVIDED BY OTHERS. LOCATE RECEPTACLE BELOW COUNTER IN ACCESSIBLE CABINET SPACE.
 - 4. ROUTE POWER THROUGH DISCONNECT AND CONNECT POWER TO UNIT. INSTALL UP/DOWNSTOP PUSHBUTTON SUPPLIED WITH DOOR AND MAKE ALL FINAL CONNECTIONS.
 - 5. PROVIDE FAN SPEED CONTROL SWITCH: ENVIROFAN #200F OR EQUAL. (1) SPEED SWITCH PER (6) FANS. SEE CORRESPONDING SWITCH LEGS AT FANS ON LEVEL ABOVE.
 - 6. PROVIDE 120V CONNECTION TO DAMPER ASSOCIATED WITH EXHAUST FAN. PROVIDE WITH 120V CONTROL COIL.
 - 7. VIDEO SURVEILLANCE SYSTEM BY OTHERS. VERIFY LOCATION AND ALL REQUIREMENTS. PROVIDE FOURPLEX RECEPTACLE AND ONE 8"x6"x4" JUNCTION BOX FOR OWNER'S VIDEO SURVEILLANCE SYSTEM. FROM JUNCTION BOX STUB (2) 1 1/2" CONDUITS UP INTO CEILING SPACE FOR CABLING BY OTHERS. VERIFY LOCATIONS WITH OWNER.
 - 8. PROVIDE 208V CONNECTION TO DAMPER ASSOCIATED WITH EXHAUST FAN. PROVIDE WITH 208V CONTROL COIL.
 - 9. MOBILE WELDING OUTLET. NEMA 14-50R. MOUNT AT +48". PROVIDE 1" (2)#6 & (1) #10 GND.
 - 10. 400A SERVICE RATED DISCONNECT FOR ATS-A. SEE SHEET E2.1 FOR MORE INFORMATION.

CONSULTANT



Emanuelson-Podas, Inc.
7705 Bush Lake Road
Edina, MN 55439
(952) 930-0050 | www.epinc.com

CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Matthew W. Fuлтs

DATE: 06/18/2024 REG. NO. 40887
PRINTED NAME: MATTHEW W. FULTS

COMMISSION NO.: EP# 4898.0000

DRAWN BY: BG

CHECKED BY: MAB

DATE: JUNE 18, 2024

BID ISSUE DATE:

REVISION DATES:

PROJECT TITLE

**DII WAREHOUSE REMODEL
McGREGOR, MN**

**20898 360th St, McGregor, MN
55760**

OWNER

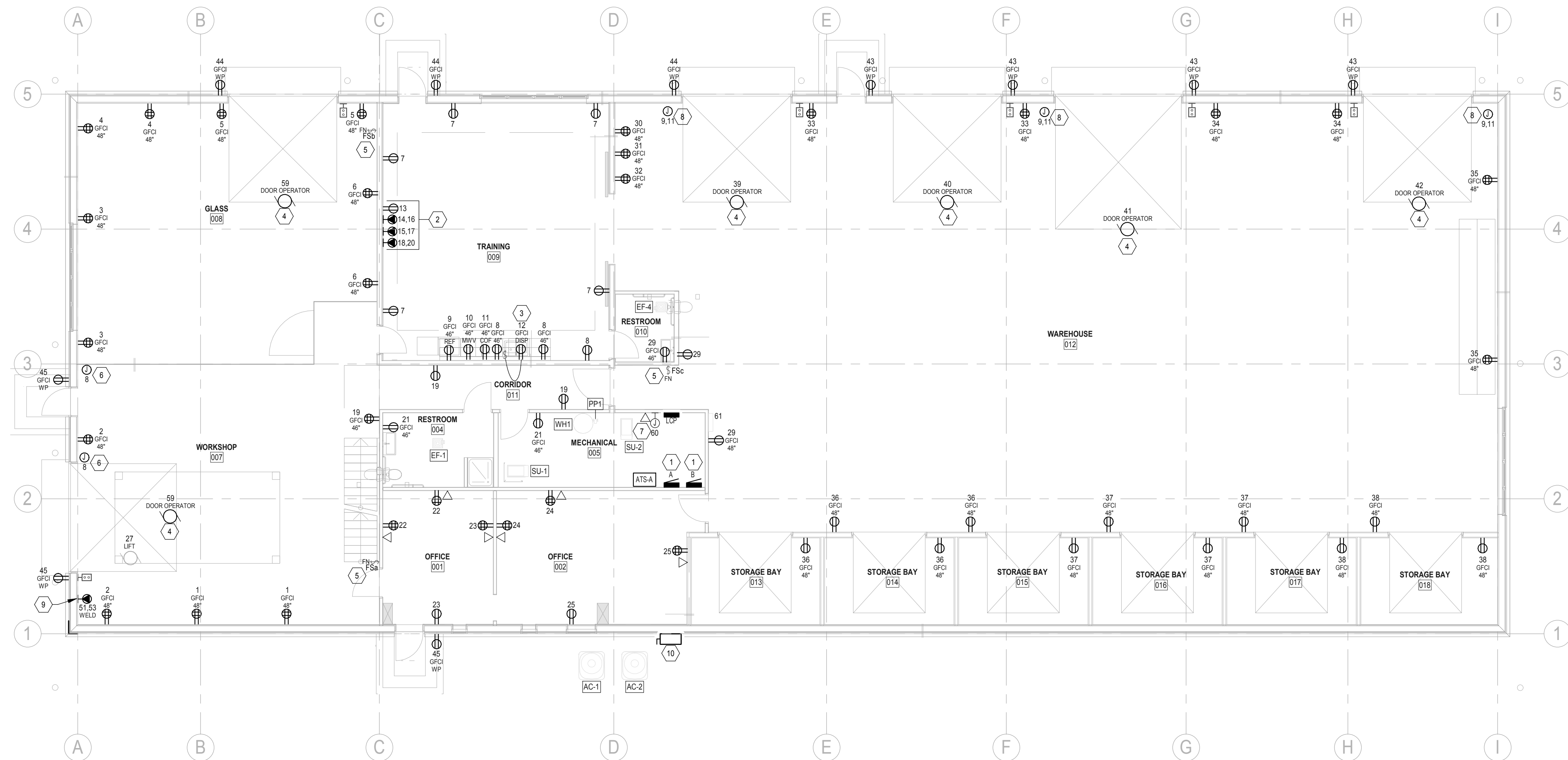
MILLE LACS BAND OF OJIBWE

SHEET TITLE

**MAIN LEVEL PLAN -
POWER**

E2.1

SHEET NO.
PLOT DATE: 6/17/2024 2:53:42 PM



1 MAIN LEVEL PLAN - POWER
SCALE: 1/8" = 1'-0"



GENERAL NOTES:

- A. SEE MOTOR CONNECTION SCHEDULE FOR MECHANICAL EQUIPMENT CONNECTIONS. SEE MECHANICAL PLANS FOR EXACT EQUIPMENT LOCATIONS.
- B. EXACT LOCATION OF ELECTRICAL DEVICES MUST BE VERIFIED WITH FURNITURE SYSTEMS ACTUALLY BEING SUPPLIED BY THE OWNER SO AS NOT TO OCCUR BEHIND BASE UNITS. DO NOT USE ELECTRICAL PLANS FOR DIMENSIONING FURNITURE SYSTEM SUPPLIER TO PROVIDE DIMENSIONS/LOCATIONS. TYPICAL ALL FURNITURE LOCATIONS.
- C. CONTRACTOR TO DETERMINE BEST ROUTE FOR CONDUIT AND WIRING.
- D. FROM EACH VOICEDATA AND TV OUTLET PROVIDE TWO GANG BOX W/ SINGLE GANG MUDRING AND (1) 1" CONDUIT STUBBED INTO CONCEALED ACCESSIBLE CEILING SPACE.
- E. EACH EXISTING TO REMAIN ELECTRICAL DEVICE SHALL HAVE THEIR CIRCUITS TRACED BACK TO PANEL AND THE PANEL SCHEDULE UPDATED WITH NEW ROOM NUMBERS.
- F. ALL CIRCUITING SHALL BE FED FROM PANEL A UNLESS NOTED OTHERWISE.

KEY NOTES: ○
(NOT ALL NOTES MAY BE USED ON THIS SHEET)

- 1. PROVIDE ENVIROFAN #190A-7-18 OR EQUAL. CORD-AND-PLUG CONNECTED TO ADJACENT SIMPLEX RECEPTACLE. COORDINATE EXACT MOUNTING HEIGHT WITH OWNER/ARCHITECT. FAN SHALL BE SUPPORTED INDEPENDANT OF THE JUNCTION BOX, OR SUPPORTED FROM A JUNCTION BOX SUITABLE AND LISTED TO BE USED FOR FAN MOUNTING.
- 2. PROVIDE SINGLEPLEX RECEPTACLE ADJACENT TO FAN LOCATION. RECEPTACLE TO BE CONTROLLED BY SPEED CONTROLLER. SEE KEYNOTE 5 ON [SHEET E2.1](#)

CONSULTANT



Emanuelson-Podas, Inc.
7705 Bush Lake Road
Edina, MN 55439
(952) 930-0050 | www.epinc.com

CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Matthew W. Fults
DATE: 06/18/2024 REG. NO. 40887
PRINTED NAME: MATTHEW W. FULTS

COMMISSION NO.: EP# 4898.0000

DRAWN BY: BG

CHECKED BY: MAB

DATE: JUNE 18, 2024

BID ISSUE DATE:

REVISION DATES:

PROJECT TITLE

DII WAREHOUSE REMODEL
MCGREGOR, MN

20898 360th St, McGregor, MN
55760

OWNER

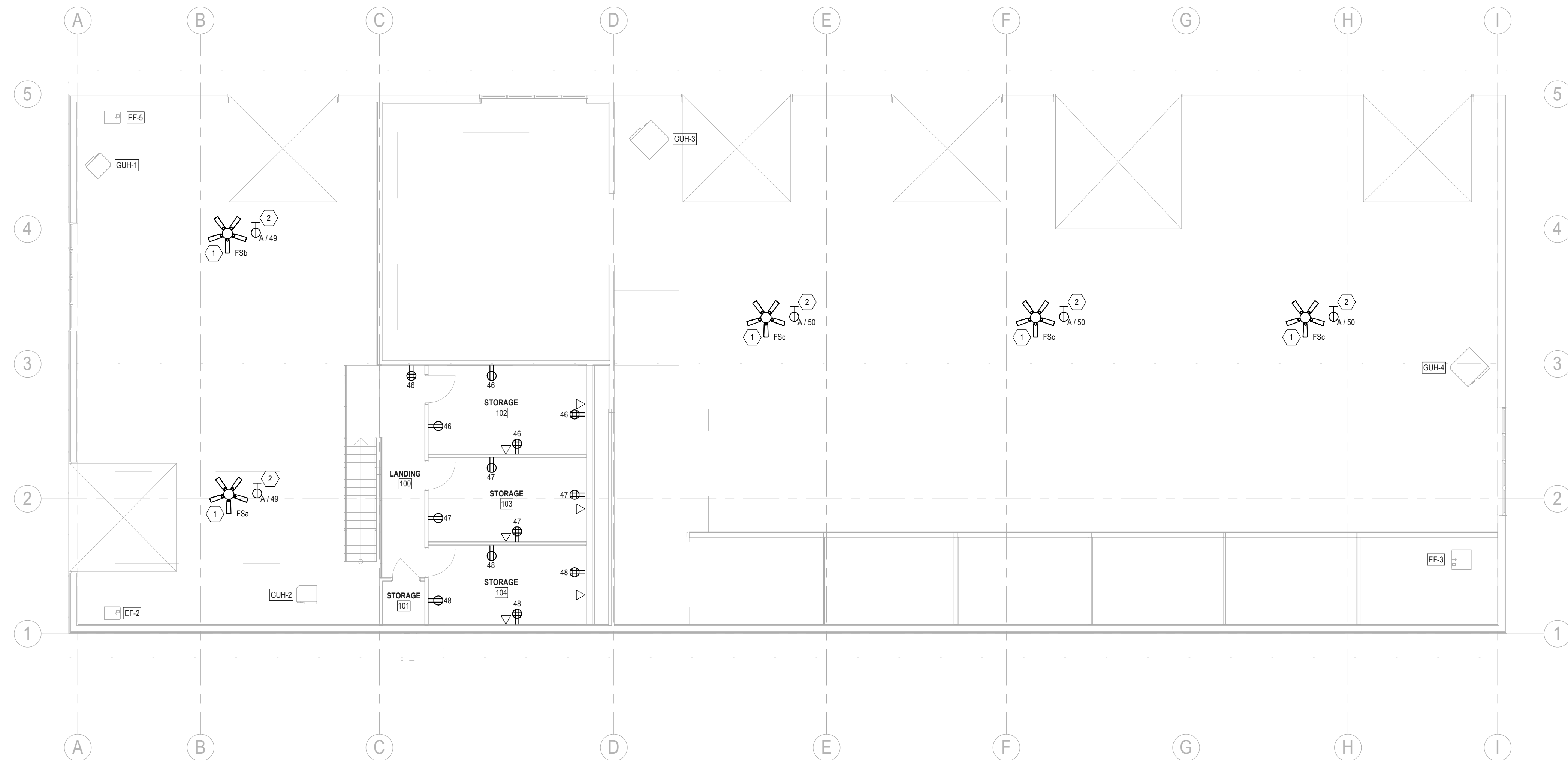
MILLE LACS BAND OF OJIBWE

SHEET TITLE

MEZZANINE LEVEL
PLAN - POWER

E2.2

SHEET NO.
PLOT DATE: 6/17/2024 2:53:43 PM



1 MEZZANINE LEVEL PLAN - POWER
SCALE: 1/8" = 1'-0"

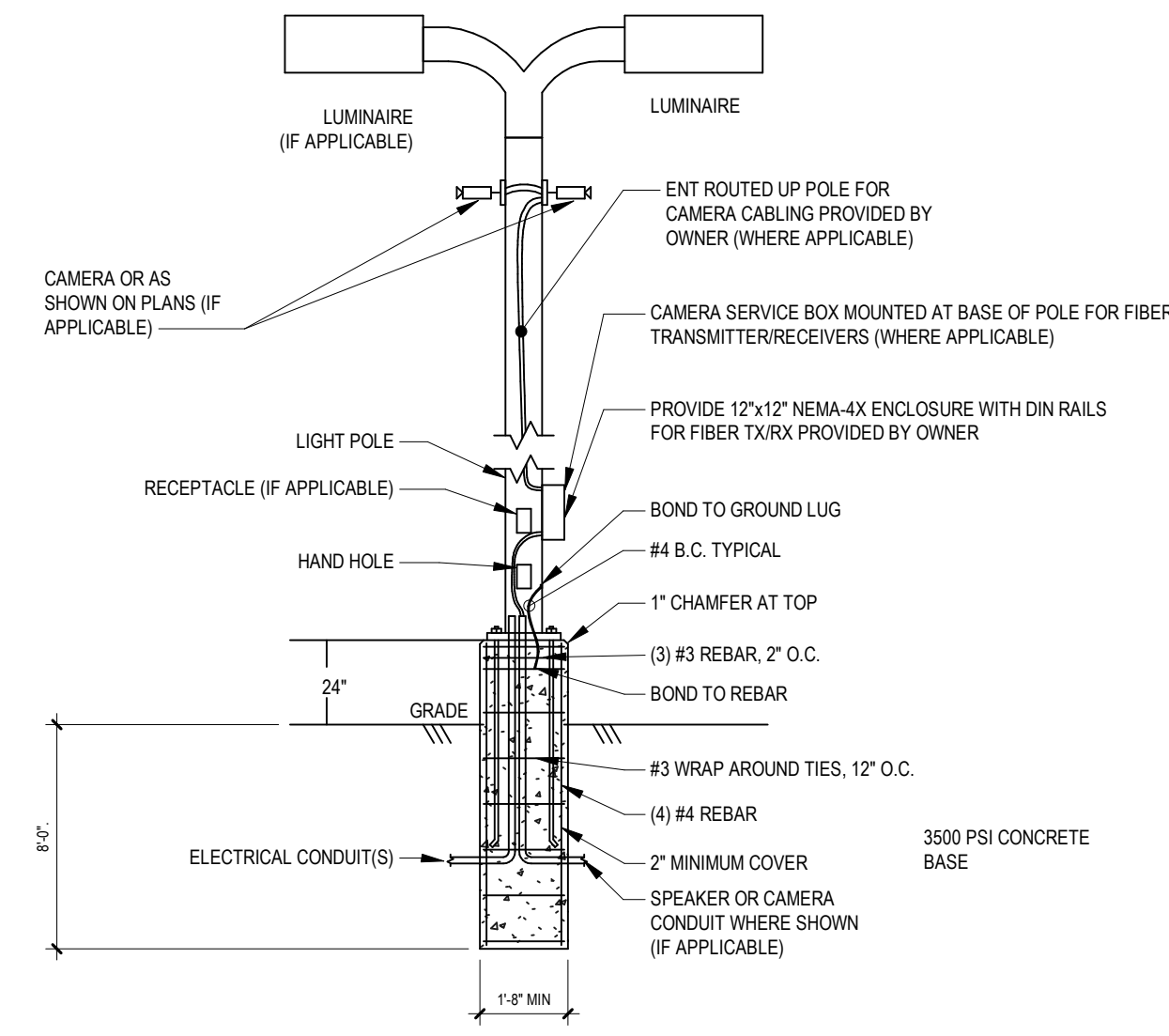
3Ø FEEDER SCHEDULE

GENERAL NOTES:
 A. APPROVED CONDUCTOR INSULATIONS: THHN/THWN-2, XHHW-2. REFER TO PROJECT SPECIFICATIONS FOR INSULATION TYPE REQUIRED WITH VARYING CONDUCTOR SIZES AND...
 B. CONDUIT TYPE REQUIREMENTS VARY DEPENDING ON APPLICATION AND LOCATION OF FEEDER. REFER TO PROJECT SPECIFICATIONS FOR REQUIREMENTS.
 C. NEUTRAL SHALL BE THE SAME SIZE AS THE PHASE CONDUCTOR UNLESS OTHERWISE NOTED.

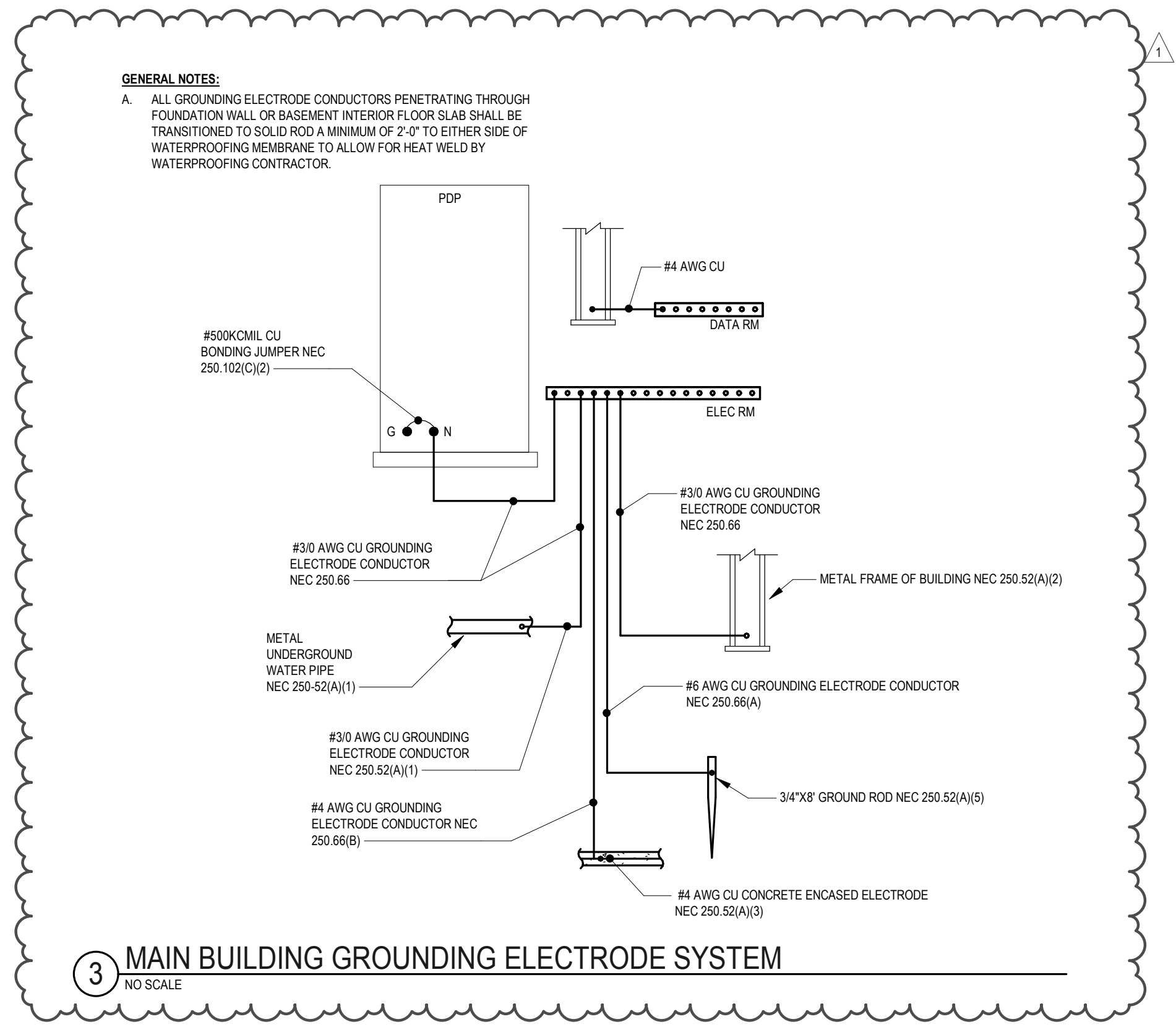
MARK (AMPACITY)	COPPER		COMPACT STRAND ALUMINUM ALLOY		MARK (AMPACITY)
	FEEDER 3W (NO NEUTRAL) PH-GND-C	FEEDER 4W (W NEUTRAL) PH-GND-C	FEEDER 3W (NO NEUTRAL) PH-GND-C	FEEDER 4W (W NEUTRAL) PH-GND-C	
20	3#12 - 1#12 GND - 3/4"C	4#12 - 1#12 GND - 3/4"C	---	---	20
30	3#10 - 1#10 GND - 3/4"C	4#10 - 1#10 GND - 3/4"C	---	---	30
40	3#8 - 1#10 GND - 3/4"C	4#8 - 1#10 GND - 1"C	---	---	40
50	3#6 - 1#10 GND - 1"C	4#6 - 1#10 GND - 1"C	---	---	50
50T	---	4#6 - 1#8 GND (SSBJ) - 1"C	---	---	50T
60	3#4 - 1#10 GND - 1"C	4#4 - 1#10 GND - 1 1/4"C	---	---	60
70	3#4 - 1#8 GND - 1 1/4"C	4#4 - 1#8 GND - 1 1/4"C	---	---	70
80	3#3 - 1#8 GND - 1 1/4"C	4#3 - 1#8 GND - 1 1/4"C	---	---	80
90	3#2 - 1#8 GND - 1 1/4"C	4#2 - 1#8 GND - 1 1/2"C	---	---	90
100	3#1 - 1#8 GND - 1 1/2"C	4#1 - 1#8 GND - 1 1/2"C	3#10 - 1#6 GND - 1 1/2"C	4#10 - 1#6 GND - 2"C	100
100P	3#3 - 1#8 GND - 1 1/4"C	4#3 - 1#8 GND - 1 1/4"C	3#1 - 1#6 GND - 1 1/2"C	4#1 - 1#6 GND - 1 1/2"C	100P
100T	---	4#3 - 1#8 GND (SSBJ) - 1 1/4"C	---	4#1 - 1#6 GND (SSBJ) - 1 1/2"C	100T
125	3#1 - 1#6 GND - 1 1/2"C	4#1 - 1#6 GND - 1 1/2"C	3#20 - 1#4 GND - 2"C	4#20 - 1#4 GND - 2"C	125
150	3#10 - 1#6 GND - 1 1/2"C	4#10 - 1#6 GND - 2"C	3#30 - 1#4 GND - 2"C	4#30 - 1#4 GND - 2 1/2"C	150
150T	---	4#10 - 1#6 GND (SSBJ) - 2"C	---	4#30 - 1#4 GND (SSBJ) - 2 1/2"C	150T
175	3#20 - 1#6 GND - 2"C	4#20 - 1#6 GND - 2"C	3#40 - 1#4 GND - 2"C	4#40 - 1#4 GND - 2 1/2"C	175
200	3#30 - 1#6 GND - 2"C	4#30 - 1#6 GND - 2"C	3#250 - 1#4 GND - 2 1/2"C	4#250 - 1#4 GND - 3"C	200
225	3#40 - 1#4 GND - 2"C	4#40 - 1#4 GND - 2 1/2"C	3#300 - 1#2 GND - 2 1/2"C	4#300 - 1#2 GND - 3"C	225
250	---	4#40 - 1#2 GND (SSBJ) - 2 1/2"C	---	4#300 - 1#10 GND (SSBJ) - 3"C	250
250T	3#250 - 1#4 GND - 2 1/2"C	4#250 - 1#4 GND - 3"C	3#350 - 1#2 GND - 3"C	4#350 - 1#2 GND - 3"C	250T
300	3#350 - 1#4 GND - 3"C	4#350 - 1#4 GND - 3"C	3#500 - 1#2 GND - 3"C	4#500 - 1#2 GND - 3 1/2"C	300
400	3#500 - 1#3 GND - 3"C	4#500 - 1#3 GND - 3 1/2"C	3#750 - 1#1 GND - 3 1/2"C	4#750 - 1#1 GND - 4"C	400
400P	(2 SETS) 3#30 - 1#3 GND - 2"C	(2 SETS) 4#30 - 1#3 GND - 2 1/2"C	(2 SETS) 3#250 - 1#1 GND - 2 1/2"C	(2 SETS) 4#250 - 1#1 GND - 3"C	400P
400T	---	(2 SETS) 4#30 - 1#10 GND (SSBJ) - 2 1/2"C	---	(2 SETS) 4#250 - 1#10 GND (SSBJ) - 3"C	400T
500	(2 SETS) 3#250 - 1#2 GND - 2 1/2"C	(2 SETS) 4#250 - 1#2 GND - 3"C	(2 SETS) 3#350 - 1#10 GND - 3"C	(2 SETS) 4#350 - 1#10 GND - 3"C	500
500T	---	(2 SETS) 4#250 - 1#10 GND (SSBJ) - 3"C	---	(2 SETS) 4#350 - 1#30 GND (SSBJ) - 3"C	500T
600	(2 SETS) 3#350 - 1#1 GND - 3"C	(2 SETS) 4#350 - 1#1 GND - 3"C	(2 SETS) 3#500 - 1#20 GND - 3"C	(2 SETS) 4#500 - 1#20 GND - 3 1/2"C	600
800	(2 SETS) 3#500 - 1#10 GND - 3"C	(2 SETS) 4#500 - 1#10 GND - 3 1/2"C	(2 SETS) 3#750 - 1#30 GND - 3 1/2"C	(2 SETS) 4#750 - 1#30 GND - 4"C	800
800P	(3 SETS) 3#300 - 1#10 GND - 2 1/2"C	(3 SETS) 4#300 - 1#10 GND - 3"C	(3 SETS) 3#400 - 1#30 GND - 3"C	(3 SETS) 4#400 - 1#30 GND - 3 1/2"C	800P
800T	---	(3 SETS) 4#300 - 1#20 GND (SSBJ) - 3"C	---	(3 SETS) 4#400 - 1#40 GND (SSBJ) - 3 1/2"C	800T
1000	(3 SETS) 3#400 - 1#20 GND - 3"C	(3 SETS) 4#400 - 1#20 GND - 3"C	(3 SETS) 3#500 - 1#40 GND - 3 1/2"C	(3 SETS) 4#500 - 1#40 GND - 4"C	1000
1000T	---	(3 SETS) 4#400 - 1#30 GND (SSBJ) - 3 1/2"C	---	(3 SETS) 4#500 - 1#250 GND (SSBJ) - 4"C	1000T
1200	(4 SETS) 3#350 - 1#30 GND - 3"C	(4 SETS) 4#350 - 1#30 GND - 3 1/2"C	(4 SETS) 3#500 - 1#250 GND - 3"C	(4 SETS) 4#500 - 1#250 GND - 3 1/2"C	1200
1600	(5 SETS) 3#400 - 1#40 GND - 3"C	(5 SETS) 4#400 - 1#40 GND - 3 1/2"C	(5 SETS) 3#600 - 1#350 GND - 3 1/2"C	(5 SETS) 4#600 - 1#350 GND - 4"C	1600
1600T	---	(5 SETS) 4#400 - 1#250 GND (SSBJ) - 3 1/2"C	---	(5 SETS) 4#600 - 1#400 GND (SSBJ) - 4"C	1600T
2000	(6 SETS) 3#400 - 1#250 GND - 3"C	(6 SETS) 4#400 - 1#250 GND - 3 1/2"C	(6 SETS) 3#600 - 1#400 GND - 3 1/2"C	(6 SETS) 4#600 - 1#400 GND - 4"C	2000

LIGHTING CONTROL COMMISSIONING

PROVIDE FUNCTIONAL TESTING AND DOCUMENTATION FOR ALL LIGHTING CONTROL DEVICES AND CONTROL SYSTEMS TO MEET THE REQUIREMENTS OF THE 2023 MN STATE ENERGY CODE. LIGHTING CONTROL SUPPLIER SHALL BE RESPONSIBLE TO PROVIDE A REPRESENTATIVE WHO WILL PERFORM THIS SCOPE OF SERVICE. ALL TIMING SHALL MEET CODE MINIMUM REQUIREMENTS AND BE ADJUSTED AS REQUESTED BY OWNER UPON COMPLETION. PROVIDE DOCUMENTATION TO AUTHORITY HAVING JURISDICTION AS REQUESTED.



1 POLE BASE DETAIL WITH CAMERAS
NO SCALE



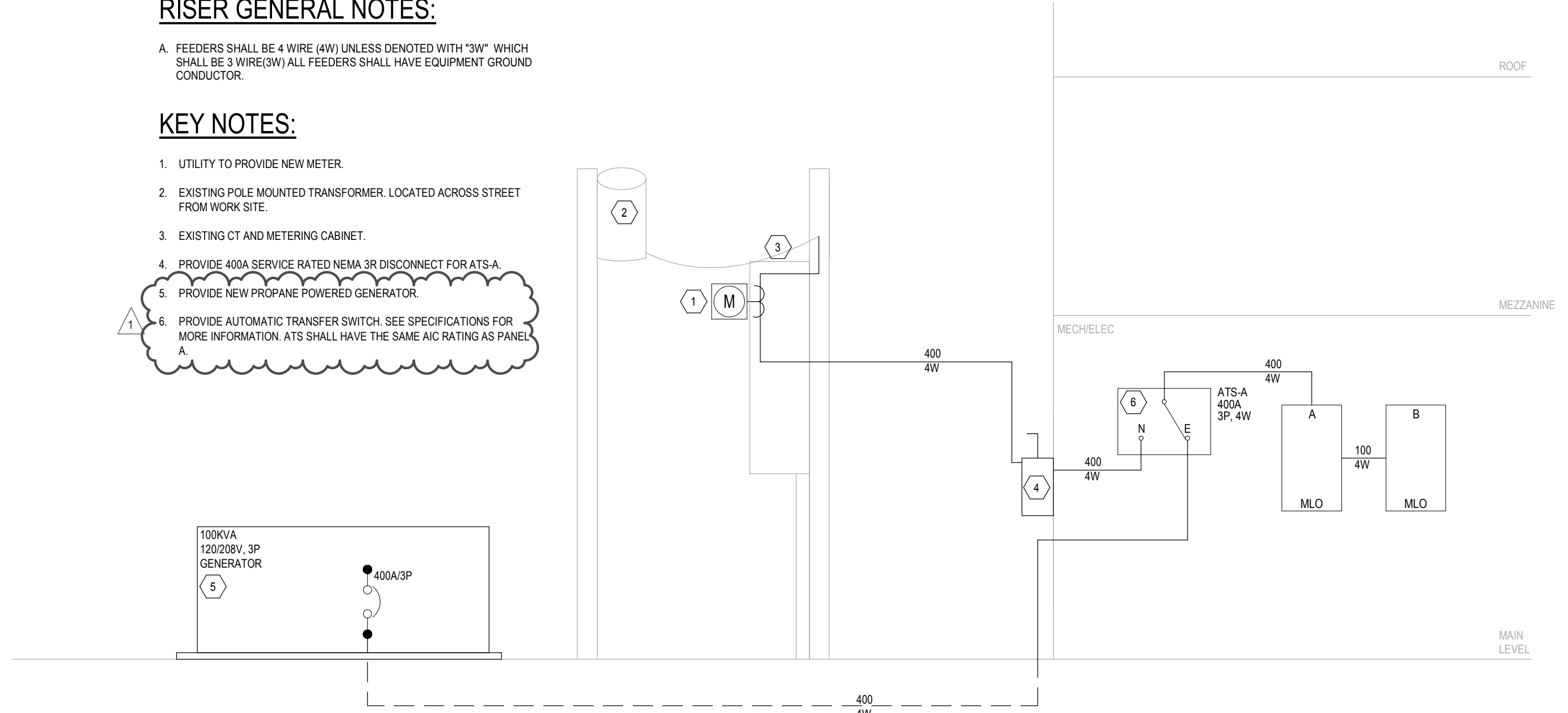
3 MAIN BUILDING GROUNDING ELECTRODE SYSTEM
NO SCALE

RISER GENERAL NOTES:

- FEEDERS SHALL BE 4 WIRE (4W) UNLESS DENOTED WITH "3W" WHICH SHALL BE 3 WIRE (3W) ALL FEEDERS SHALL HAVE EQUIPMENT GROUND CONDUCTOR.

KEY NOTES:

- UTILITY TO PROVIDE NEW METER.
- EXISTING POLE MOUNTED TRANSFORMER. LOCATED ACROSS STREET FROM WORK SITE.
- EXISTING CT AND METERING CABINET.
- PROVIDE 400A SERVICE RATED NEMA 3R DISCONNECT FOR ATS-A.
- PROVIDE NEW PROPANE POWERED GENERATOR.
- PROVIDE AUTOMATIC TRANSFER SWITCH. SEE SPECIFICATIONS FOR MORE INFORMATION. ATS SHALL HAVE THE SAME AIC RATING AS PANEL A.



2 ELECTRICAL RISER DIAGRAM
NO SCALE

CONSULTANT



Emanuelson-Podas, Inc.
7705 Bush Lake Road
Edina, MN 55439
(952) 930-0050 | www.epinc.com

CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: 06/18/2024 REG. NO. 40887
 PRINTED NAME: MATTHEW W. FULTS

COMMISSION NO.: EP# 4698.0000

DRAWN BY: BG

CHECKED BY: MAB

DATE: JUNE 18, 2024

BID ISSUE DATE:

REVISION DATES:

PROJECT TITLE

DII WAREHOUSE REMODEL
McGREGOR, MN

20898 360th St, McGregor, MN
55760

OWNER

MILLE LACS BAND OF OJIBWE

SHEET TITLE

ELECTRICAL
DETAILS

E3.1

MOTOR SCHEDULE

ABBREVIATIONS:
MAG - MAGNETIC, HOA - HAND/OFF/AUTOMATIC, SS - START/STOP, TT - THERMAL TOGGLE, PB - PUSHBUTTON, START - STARTER, EMS - ENERGY MANAGEMENT SYSTEM, BAS - BUILDING AUTOMATION SYSTEM, F.A. - FIRE ALARM, DSD - DUCT SMOKE DETECTOR, MFR - MANUFACTURER

GENERAL NOTES:
A. CONFIRM ALL CONNECTIONS TO MECHANICAL EQUIPMENT WITH SHOP DRAWINGS PRIOR TO ROUGH-IN.
B. DISCONNECTS SHALL NOT BE FEATURED DIRECTLY TO MECHANICAL EQUIPMENT.
C. ALL FEEDERS TO MECHANICAL EQUIPMENT SHALL BE COPPER.

NOTES:
1. PROVIDE NEMA 3R DISCONNECT ADJACENT THE UNIT. DO NOT INSTALL DIRECTLY ON THE UNIT.
2. PROVIDE TOGGLE SWITCH AT UNIT FOR DISCONNECT.
3. ROUTE POWER THROUGH SPEED CONTROLLER SWITCH BY DIV 23. MOUNT IN CEILING SPACE. FOR BALANCING PURPOSES ONLY.
4. ROUTE POWER THROUGH OCCUPANCY SENSOR IN ROOM.
5. PROVIDE SINGLE-POINT CONNECTION.
6. 24V COIL RELAY CONTROLLED VIA FUME DETECTION SENSOR PROVIDED BY DIV 23.
7. PROVIDE 120V STAND-ALONE DUCT SMOKE DETECTOR FOR FURNACE SHUTDOWN. PROVIDE ANY RELAYS NECESSARY FOR A COMPLETE CONNECTION. PROVIDE SPACE AGE TECHNOLOGIES #SM-501 OR APPROVED EQUAL.

MOTOR NO.	LOCATION	ROOM NAME	ROOM NO	KW	UNIT FLA	UNIT HP	UNIT MCA	VOLTS	PHASE	STARTER				CONTROL DEVICE				INTERLOCK				PANEL	CIRCUIT	BREAKER	FEEDER PH-G-C	NOTES	MOTOR NO.
										TYPE	SIZE	LOC	BY	DISC FUSW	DISC BY	DEVICE	FURNISHED BY	WIRED BY	DEVICE	FURNISHED BY	WIRED BY						
CONDENSING UNIT - AIR COOLED SCHEDULE																											
AC-1				3.32	16	1/3	20	208	1	--	--	--	--	NEMA 3R 30ANF	ELEC	T-STAT	MECH	ELEC	--	--	--	B	1.3	20	12-12-34°C	1	AC-1
AC-2				3.32	16	1/3	20	208	1	--	--	--	--	NEMA 3R 30ANF	ELEC	T-STAT	MECH	ELEC	--	--	--	B	2.4	20	12-12-34°C	1	AC-2
FAN SCHEDULE																											
EF-1	RESTROOM	004		0.07	0.56	--	0.7	120	1	--	--	--	--	INTEGRAL	MFR	OCCUPANCY SENSOR	ELEC	ELEC	--	--	--	A	26	15	12-12-34°C	4	EF-1
EF-2	WORKSHOP	007		0.35	1.7	0.25	2	120	1	RELAY	--	UNIT	ELEC	TOGGLE	ELEC	FUME DETECTION	MECH	MECH	--	--	--	B	8	15	12-12-34°C	2.3.6	EF-2
EF-3	STORAGE BAY	018		2.5	12	2	15	208	1	RELAY	--	UNIT	ELEC	NEMA 3R 30ANF	ELEC	FUME DETECTION	MECH	MECH	--	--	--	B	9.11	20	12-12-34°C	1.3.6	EF-3
EF-4	RESTROOM	010		0.07	0.56	--	0.7	120	1	--	--	--	--	INTEGRAL	MFR	OCCUPANCY SENSOR	ELEC	ELEC	--	--	--	A	26	15	12-12-34°C	4	EF-4
EF-5	GLASS	008		0.35	1.7	0.25	2	120	1	RELAY	--	UNIT	ELEC	TOGGLE	ELEC	FUME DETECTION	MECH	MECH	--	--	--	B	8	15	12-12-34°C	2.3.6	EF-5
FURNACE - GAS FIRED SCHEDULE																											
SU-1	MECHANICAL	005		0.924	7.7	--	9.625	120	1	--	--	--	--	TOGGLE	ELEC	T-STAT	MFR	MECH	--	--	--	B	5	15	12-12-34°C	7	SU-1
SU-2	MECHANICAL	006		0.924	7.7	--	9.625	120	1	--	--	--	--	TOGGLE	ELEC	T-STAT	MFR	MECH	--	--	--	B	6	15	12-12-34°C	7	SU-2
PLUMBING PUMP SCHEDULE																											
PP1	MECHANICAL	005		0.01	0.8	--	1	120	1	RELAY	--	UNIT	ELEC	TOGGLE	ELEC	LIGHTING CONTROL PANEL	ELEC	ELEC	--	--	--	B	12	15	12-12-34°C	2	PP1
UNIT HEATER - GAS FIRED SCHEDULE																											
GUH-1	GLASS	008		0.276	4.3	1/30	5.375	120	1	--	--	--	--	INTEGRAL	MFR	T-STAT	MFR	MECH	--	--	--	B	13	15	12-12-34°C	5	GUH-1
GUH-2	WORKSHOP	007		0.276	4.3	1/30	5.375	120	1	--	--	--	--	INTEGRAL	MFR	T-STAT	MFR	MECH	--	--	--	B	13	15	12-12-34°C	5	GUH-2
GUH-3	GLASS	010		0.747	7.5	1/4	9.375	120	1	--	--	--	--	INTEGRAL	MFR	T-STAT	MFR	MECH	--	--	--	B	14	15	12-12-34°C	5	GUH-3
GUH-4	WAREHOUSE	012		0.747	7.5	1/4	9.375	120	1	--	--	--	--	INTEGRAL	MFR	T-STAT	MFR	MECH	--	--	--	B	15	15	12-12-34°C	5	GUH-4
WATER HEATER - ELECTRIC SCHEDULE																											
WH1	MECHANICAL	005		4.5	12.5	--	15.6	208	1	--	--	--	--	TOGGLE	ELEC	--	--	--	--	--	--	B	16.18.20	20	12-12-34°C	2.5	WH1

LIGHT FIXTURE SCHEDULE

GENERAL NOTES:
A. CATALOG NUMBER INDICATES BASIC FIXTURE TYPE REQUIRED FOR THIS PROJECT AND MAY NOT BE COMPLETE. VERIFY WITH MANUFACTURER TO INCLUDE ALL OPTIONS AND ACCESSORIES REQUIRED FOR THIS INSTALLATION.
B. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING FIXTURE LOCATIONS, MOUNTING, AND REQUIREMENTS WITH ARCHITECTURAL PLANS, SECTIONS, ELEVATIONS, AND REFLECTED CEILING PLANS PRIOR TO ORDERING FIXTURES.
C. ALL FINISHES SHALL BE VERIFIED WITH THE ARCHITECT PRIOR TO ORDERING FIXTURES. FINISH SELECTION TO BE FROM MANUFACTURER'S STANDARD FINISHES UNLESS NOTED OTHERWISE. FINISHES SHALL BE VERIFIED AT THE TIME OF SHOP DRAWING SUBMITTAL.
D. SEE SPECIFICATIONS FOR EXTRA MATERIALS REQUIRED FOR LIGHT FIXTURES.
E. SAMPLES OF ALL FIXTURES SHALL BE AVAILABLE AT THE ENGINEER'S REQUEST DURING SHOP DRAWING REVIEW.
F. COORDINATE THE COMPATIBILITY OF DIMMING WITH SPECIFIED CONTROLS. DIMMING SHALL BE ACCOMPLISHED WITH NO VISIBLE FLICKER.
G. NO SUBSTITUTIONS SHALL BE ACCEPTED WITHOUT PRIOR APPROVAL BY THE ENGINEER.

FIXTURE NOTES:
1. FIXTURE IS BY ALLOWANCE. ALLOWANCE PRICING SHALL INCLUDE FREIGHT TO SITE AND LAMPS IF APPLICABLE.

TYPE	DESCRIPTION	VOLT	LAMPS		VA / FIXT.	MANUFACTURER	CATALOG NUMBER	EQUAL MANUFACTURERS	NOTES	TYPE
			TYPE	QTY / FIXT.						
A1	2X4 LED SURFACE MOUNT FLAT PANEL TROFFER. 4500 NOMINAL DELIVERED LUMENS. 0-10 DIMMING DRIVER	UNIV	LED 3500K	1	42	METALLUX	24FP4735C	COLUMBIA, DAYBRITE, LITHONIA		A1
A1X	SAME AS A1 EXCEPT WITH EMERGENCY BATTERY DRIVER	UNIV	LED 3500K	1	62	METALLUX	24FP4735C	COLUMBIA, DAYBRITE, LITHONIA		A1X
A2	2X4 LE RECESSED FLAT PANEL TROFFER. 4000 NOMINAL DELIVERED LUMENS. 0-10 DIMMING DRIVER	UNIV	LED 3500K	1	30	METALLUX	24FP4735C	COLUMBIA, DAYBRITE, LITHONIA		A2
A2X	SAME AS A2 EXCEPT WITH EMERGENCY BATTERY DRIVER	UNIV	LED 3500K	1	30	METALLUX	24FP4735C	COLUMBIA, DAYBRITE, LITHONIA		A2X
E1	POLYCARBONATE CEILING MOUNT LED EXIT. SINGLE FACE. SURFACE MOUNT. WHITE FINISH. LETTERS ILLUMINATED TO 3/4" STROKE TO MEET NFPA 101. RED LETTERING. PROVIDE CHEVRONS WHERE NOTED ON PLANS. CONTRACTOR TO COORDINATE MOUNTING HARDWARE.	UNIV	LED	N/A	4	SURE-LITES	APXEL-7-I-R	DUALITE, LITHONIA LIGHT ALARMS		E1
E2	POLYCARBONATE WALL MOUNT LED EXIT. SINGLE FACE. SURFACE MOUNT. WHITE FINISH. LETTERS ILLUMINATED TO 3/4" STROKE TO MEET NFPA 101. RED LETTERING. PROVIDE CHEVRONS WHERE NOTED ON PLANS. CONTRACTOR TO COORDINATE MOUNTING HARDWARE.	UNIV	LED	N/A	4	SURE-LITES	APXEL-7-I-R	DUALITE, LITHONIA LIGHT ALARMS		E2
G1	4" CHAIN MOUNTED LED STRIP LIGHT WITH DIFFUSED LENS. BAKED ENAMEL FINISH. 10,000 NOMINAL DELIVERED LUMENS. PROVIDE HARDWARE FOR CHAIN MOUNTING.	MULTI	LED 3500K	1	84	COLUMBIA	LCL4-35ML-EU	DAYBRITE #FSS, LITHONIA #ZL10, METALLUX #SLED		G1
G1X	SAME AS G1 EXCEPT WITH EMERGENCY BATTERY DRIVER	MULTI	LED 3500K	1	42	COLUMBIA	LCL4-35ML-EU	DAYBRITE #FSS, LITHONIA #ZL10, METALLUX #SLED		G1X
G2	4" CHAIN MOUNTED LED STRIP LIGHT WITH DIFFUSED LENS. BAKED ENAMEL FINISH. 5000 NOMINAL DELIVERED LUMENS. PROVIDE HARDWARE FOR CHAIN MOUNTING.	MULTI	LED 3500K	1	42	COLUMBIA	LCL4-35ML-EU	DAYBRITE #FSS, LITHONIA #ZL10, METALLUX #SLED		G2
G2X	SAME AS G2 EXCEPT WITH EMERGENCY BATTERY DRIVER AND INTEGRAL TEST SWITCH.	MULTI	LED 3500K	1	42	COLUMBIA	LCL4-35ML-EU	DAYBRITE #FSS, LITHONIA #ZL10, METALLUX #SLED		G2X
G3	4" SURFACE MOUNT LED STRIP LIGHT WITH DIFFUSED LENS. BAKED ENAMEL FINISH. 5000 NOMINAL DELIVERED LUMENS. PROVIDE HARDWARE FOR CHAIN MOUNTING.	MULTI	LED 3500K	1	42	COLUMBIA	LCL4-35ML-EU	DAYBRITE #FSS, LITHONIA #ZL10, METALLUX #SLED		G3
G3X	SAME AS G3 EXCEPT WITH EMERGENCY BATTERY DRIVER	MULTI	LED 3500K	1	42	COLUMBIA	LCL4-35ML-EU	DAYBRITE #FSS, LITHONIA #ZL10, METALLUX #SLED		G3X
N1	LED WALL PACK. 3600 NOMINAL DELIVERED LUMENS. PROVIDE BRONZE FINISH. PROVIDE INTEGRAL BACK UP BATTERY.	UNIV	LED 3000K	1	26	RAB	WP1LED-36L-750-UE2	GARCOO, MCGRAW EDISON, BEACON		N1
N2	LED WALL PACK. 8300 NOMINAL DELIVERED LUMENS.	UNIV	LED 3000K	1	55	RAB	WP3LED-83L-750-UE2	GARCOO, MCGRAW EDISON, BEACON		N2
P1	TYPE IV DISTRIBUTION LED POLE MOUNTED FIXTURE W/ HOUSESIDE SHIELD. 25 SQUARE STEEL POLE. BLACK IN COLOR. HEAD AND POLE SHALL HAVE MATCHING FINISH. 11500 NOMINAL DELIVERED LUMENS. PROVIDE CONCRETE BASE PER DETAIL. PROVIDE BASE COVER. PROVIDE WITH INTEGRAL HILOU OCCUPANCY SENSOR.	UNIV	LED 3000K	1	90	LITHONIA	DSXLED-PS-36K-80CR1-14MMVOLT-SPA-PIR-HS-DBLXD	MCGRAW EDISON, HE WILLIAMS, GARCOO		P1

PANEL: A

LOCATION: MECHANICAL 006
BUS RATING: 400 A
MAIN BREAKER: MLO

VOLTS: 120/208 Wye
PHASES: 3
WIRES: 4

MOUNTING: SURFACE
FED FROM: SEE RISER
ENCLOSURE: Type 1

AVAILABLE FAULT CURRENT: 11,155A

CKT	CIRCUIT DESCRIPTION	CB	P	A	B	C	P	CB	CIRCUIT DESCRIPTION	CKT		
1	WORKSHOP RCPTS	20	1	720	720			1	20	WORKSHOP RCPTS	2	
3	GLASS RCPTS	20	1		720	720		1	20	GLASS RCPTS	4	
5	GLASS RCPTS	20	1					1	20	GLASS RCPTS	6	
7	TRAINING RCPTS	20	1	900	540			1	20	TRAINING RCPTS	8	
9	REFRIGERATOR	20	1		600	1000		1	20	MICROWAVE	10	
11	COFFEE MAKER	20	1			800	1000	1	20	DISPOSER	12	
13	MODULAR DOCK 120V	20	1	1800	825			2	20	MODULAR DOCK 208V	14	
15	MODULAR DOCK 208V	30	2		1248	825		2	20	MODULAR DOCK 208V	16	
17		--	--	--	--	1248	2496	2	60	MODULAR DOCK 208V	18	
19	WORKSHOP, CORRIDOR RCPTS	20	1	900	2496			--	--	--	20	
21	RESTROOM, MECHANICAL RCPTS	20	1		360	720		1	20	OFFICE RCPTS	22	
23	OFFICE RCPTS	20	1			540	720	1	20	OFFICE RCPTS	24	
25	OFFICE RCPTS	20	1	540	1277			1	20	MAIN LEVEL LIGHTING	26	
27	LIFT	20	1		2000	344		1	20	EXTERIOR WALL PACK, EXIT LIGHTING	28	
29	RESTROOM, WAREHOUSE RCPTS	20	1			540	360	1	20	WAREHOUSE WORK BENCH RCPTS	30	
31	WAREHOUSE WORK BENCH RCPTS	20	1	360	360			1	20	WAREHOUSE WORK BENCH RCPTS	32	
33	WAREHOUSE RCPTS	20	1		720	720		1	20	WAREHOUSE RCPTS	34	
35	WAREHOUSE RCPTS	20	1			720	720	1	20	WAREHOUSE STORAGE BAY RCPTS	36	
37	WAREHOUSE STORAGE BAY RCPTS	20	1	720	540			1	20	WAREHOUSE STORAGE BAY RCPTS	38	
39	DOOR OPERATOR	20	1			1000	1000	1	20	DOOR OPERATOR	40	
41	DOOR OPERATOR	20	1					1	20	DOOR OPERATOR	42	
43	NORTH EXTERIOR RCPTS	20	1	720	540			1	20	NORTH EXTERIOR RCPTS	44	
45	WEST/SOUTH EXTERIOR RCPTS	20	1		540	1800		1	20	MEZZ STORAGE RCPTS	46	
47	MEZZ STORAGE RCPTS	20	1			1440	1440	1	20	MEZZ STORAGE RCPTS	48	
49	WORKSHOP, GLASS FANS	20	1	720	1080			1	20	WAREHOUSE FANS	50	
51	WELDER	50	2			2500	1208	1	20	WORKSHOP GLASS, MEZZ LTG	52	
53		--	--	--	--		2500	2226	1	20	WAREHOUSE STORAGE LTG	54
55	POLE LIGHTS	20	1	90	500			1	20	GENERATOR LIGHTS	56	
57	GENERATOR JACKET HEATER	20	1		500	1000		1	20	GENERATOR BATTERY CHARGER	58	
59	DOOR OPERATORS	20	1				2000	400	1	20	SURVEILLANCE PANEL	60
61	FUME DETECTION CONTROL PANEL	20	1	500							62	
63											64	
65											66	
67	PANEL B	100	3	10019							68	
69		--	--	--	11367						70	
71		--	--	--		10158					72	
TOTAL LOAD:				26929 VA	30890 VA					32748 VA		
TOTAL AMPS:				224 A	262 A					278 A		

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
Electric Heat	13500 VA	100.00%	13500 VA	
Lighting	4978 VA	125.00%	6223 VA	CONNECTED LOAD: 90665 VA
Motor	27384 VA	100.00%	27384 VA	ESTIMATED DEMAND: 111316 VA
Other	13738 VA	100.00%	13738 VA	CONNECTED CURRENT: 251 A
Receptacle	30980 VA	66.14%	20490 VA	EMD CURRENT: 226 A

PANEL: B

LOCATION: MECHANICAL 006
BUS RATING: 100 A
MAIN BREAKER: MLO

VOLTS: 120/208 Wye
PHASES: 3
WIRES: 4

MOUNTING: SURFACE
FED FROM: SEE RISER
ENCLOSURE: Type 1

AVAILABLE FAULT CURRENT: 11,155A

CKT	CIRCUIT DESCRIPTION	CB	P	A	B	C	P	CB	CIRCUIT DESCRIPTION	CKT	
1	AC-1	20	2	1660	1660			2	20	AC-2	2
3	--	--	--	--	1660	1660		--	--	--	4
5	SU-1	15	1			924	924	1	15	SU-2	6
7				900				1	20	EF-2, EF-5	8
9	EF-3	20	2		2800						10
11	--	--	--	--		2800	10	1	20	PP1	12
13	GUH-1, GUH-2	15	1	552	747			1	15	GUH-3	14
15	GUH-4	--	--	--	747	4500		3	20	WH1	16
17	GATE OPERATOR	20	1			1000	4500				