City of Bottineau

New Fire Station

115 6th Street West
Bottineau, North Dakota 58318

PROJECT TEAM

OWNER:

CITY OF BOTTINEAU
115 WEST 6TH STREET
BOTTINEAU, NORTH DAKOTA 58318
(701) 228-3232

ARCHITECT:

NOSTDAHL LIPTACK ARCHITECTS, PLC
3033 NORTH CENTRAL AVE., SUITE 420
PHOENIX, ARIZONA 85012
DAN NOSTDAHL, R.A./NCARB
(602) 200-8042
dan@nostdahlliptack.com

STRUCTURAL ENGINEERING (FOUND ONLY)

AE2S ENGINEERING
4050 GARDEN VIEW DRIVE SUITE 200
GRAND FORKS, ND 58201
JAY KLEVEN
(701) 740-4747
jay.kleven@AE2S.com

MECH/PLUMB/ELEC ENGINEERING
PRAIRIE ENGINEERING
1905 17TH STREET SE
MINOT, NORTH DAKOTA 58701
JASON HUNZE, ELECTRICAL ENGINEER
TERRY HAMMER, MECHANICAL ENGINEER
(701) 852-6363 PHONE

FIRE REQUIREMENTS

A. PREMISES IDENTIFICATION TO BE LEGIBLE FROM STREET OR DRIVE.
B. COMPLY WITH THE FAIR HOUSING AMENDMENTS ACT AND AMERICAN'S WITH DISABILITIES ACT AND INCORPORATE SAME INTO BUILDING PLANS INCLUDING AUDIO VISUAL NOTIFICATION, ETC.
C. PROVIDE EMERGENCY ACCESS VIA KNOX BOX.
D. PROVIDE ALL WEATHER ACCESS ROAD (MIN 20') TO ALL BUILDINGS & HYDRANTS FROM PUBLIC WAY DURING CONSTRUCTION.
E. PORTABLE FIRE EXTINGUISHERS SHALL BE INSTALLED, SEE ARCHITECTURAL FLOOR PLANS.
F. EXIT AND EMERGENCY LIGHTING SHALL COMPLY WITH ALL ORDINANCES AND IFC. SEE ELECTRICAL LIGHTING PLANS.

ACCESSIBILITY NOTES

ACCESSIBILITY SHALL BE PROVIDED IN ACCORDANCE WITH THE A.D.A.A.G. AND CHAPTER 11 OF THE I.B.C.

REST ROOMS MUST BE DESIGNED FOR ACCESSIBILITY TO THE DISABLED.

AN ACCESSIBLE ROUTE OF TRAVEL SHALL NOT PASS THROUGH KITCHENS, STORAGE ROOMS, REST ROOMS AND OTHER SIMILAR SPACES.

ACCESSIBLE MEANS OF EGRESS SHALL BE PROVIDED WITH NOT LESS THAN ONE ACCESSIBLE MEANS OF EGRESS AS PER I.B.C. SECTION 1007.1

FEDERAL LAW MAY REQUIRES THIS CONSTRUCTION PROJECT TO CONFORM WITH THE A.D.A.A.G. FOR BUILDINGS AND FACILITIES.

GENERAL CONTRACTOR NOTES

1. THIS PROJECT SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS. NO EXCEPTIONS WILL BE ALLOWED WITHOUT THE EXPRESSED WRITTEN APPROVAL OF THE ARCHITECT.
2. IMMEDIATELY REPORT ANY DISCREPANCIES AND/OR CONFLICTS WITH THESE DRAWINGS AND/OR ACTUAL SITE CONDITIONS TO THE ARCHITECT. DO NOT PROCEED WITHOUT WRITTEN RESOLUTION OF SUCH CONDITIONS.
3. ALL EXISTING UTILITIES TO BE ABANDONED SHALL BE PROPERLY DISCONNECTED, PLUGGED OR CAPPED AS REQUIRED BY CODE AND SOUND CONSTRUCTION PRACTICES.
4. CONTRACTOR SHALL VERIFY LOCATION OF UTILITY EASEMENTS AND PROTECT SAME.
5. CONTRACTOR SHALL VERIFY LOCATION OF BUILDING SETBACK LINES AND NOTIFY ARCHITECT OF ANY DISCREPANCIES/CONFLICTS PRIOR TO CONSTRUCTION.

PROJECT DATA

PROJECT ADDRESS: 115 16th Street West
BOTTINEAU, NORTH DAKOTA

PROJECT SCOPE:
PREFABRICATED STEEL BUILING ADDITION
ADJACENT TO THE EXISTING ARMORY BUILDING

ALL CONSTRUCTION SHALL CONFORM TO
THE FOLLOWING CODES AND THEIR AMENDMENTS:

2021 INTERNATIONAL BUILDING CODE w/ AMMENDMENTS
2021 INTERNATIONAL MECHANICAL CODE w/ AMMENDMENTS
2021 INTERNATIONAL FUEL GAS CODE w/ AMMENDMENTS
2021 INTERNATIONAL ENGERGY CONSERVATION CODE w/ AMMENDMENTS
2021 INTERNATIONAL EXISTING BUILDING CODE w/ AMMENDMENTS
2010 ADA STANDARDS FOR ACCESSIBLE DESIGN 2010 STANDARDS

ALL PRODUCTS LISTED BY ICBO/NER NUMBERS SHALL BE INSTALLED PER THE REPORT AND MANUF. WRITTEN INSTRUCTIONS. PRODUCT SUBSTITUTION(S) FOR PRODUCT(S) LISTED SHALL ALSO HAVE ICBO APPROVAL EVALUATION REPORTS OR BE APPROVED AND LISTED BY OTHER NATIONALLY RECOGNIZED TESTING AGENCIES.

I.B.C. CODE INFORMATION:

TYPE OF CONSTRUCTION: V-B (EXISTING S2/B OCCUPANCY - WOOD FRAMED) FIRE SPRINKER REQUIRED

BUILDING USE DESCRIPTION	OCCUPANCY CLASSIFICATION: (IBC 309.1)	S. F. AREA OF BUILDING	BASIC ALLOWABLE AREA (PER IBC TABLE 503)
PROPOSED BUILDING FIRE STATION (PARKING GARAGE)	S2 / B OCCUP. NON-SEPARATED PER 508.3	10,416 G.S.F. 2,025 G.S.F. MEZZANINE 12,441 G.S.F. UNDER ROOF	36,000 (B) / 54,000 (S2) / NON SEPARATED OCCUPANCIES 36,000 S.F. MAX ALLOWED PER (B) OCCUPANCY LIMITS 12,641 G.S.F. = LESS THAN 36,000 G.S.F. ALLOWED
PROPOSED BUILDING S2 OCCUP.	S2 AREA	8,391 G.S.F. GARAGE 2,025 G.S.F. MEZZANINE	8391 (S2 GARAGE) @ 1:200 = 41.96 OCCUPANTS 2025 (S2 STORAGE) @ 1:500 = 4.05 OCCUPANTS
PROPOSED BUILDING B OCCUP.	B AREA	2,205 G.S.F. OFFICE/MTG	2,025 (B) @ 1:150 = 13.5 OCCUPANTS 41.96 + 4.05 + 13.5 = 59.51 (60) OCCUPANTS

CURRENT IBC CODES REQUIRE A FIRE SPRINKLER SYSTEM (A.F.P.S.) FOR THE STORAGE OF COMMERCIAL TRUCKS OVER 5,000 S.F. (903.2.10.1). PROPOSED S2 OCCUPANCY

PLUMBING FIXTURES - NOT PROVIDED THIS PERMIT - CALCULATIONS FOR REFERENCE ONLY
AS FINISHED PLUMBING WILL BE BY OTHERS, AT A LATER DATE. NOT PART OF THIS PERMIT.
TOILETS REQUIRED:
S2 GARAGE OCCUPANCY:
NOT REQUIRED PER TABLE 2902.1

S2 OCCUPANCY (MEZZ STORAGE) PER 2902.1
1 TOILET PER 100 OCCUPANTS (4.05 OCCUPANTS TOTAL)
4.05 OCCUPANTS = 2 MEN/2 WOMEN
2/100 = 0.02 TOILETS MEN / 0.02 TOILETS WOMEN
1 SINK PER 100 OCCUPANTS
2/100 = 0.02 SINKS MEN / 0.02 SINKS WOMEN

B OCCUPANCY (13.5 OCCUPANTS TOTAL)
1 TOILET PER 25 FOR THE FIRST 50
13.5 OCCUPANTS = 6.75 MEN/6.75 WOMEN
6.75/ 25 = 0.27 TOILETS MEN / 0.27 TOILETS WOMEN
1 SINK PER 40 FOR THE FIRST 80
6.75/40 = 0.17 SINKS MEN / 0.17 SINKS WOMEN

FIXTURES REQUIRED:
TOLETS
.02 TOILETS (S2) + 0.27 TOILETS (B) = 1 TOILET MEN / 1 TOILET WOMEN

SINKS
.02 SINKS (S2) + 0.17 SINKS (B) = 1 SINK MEN / 1 SINK WOMEN

FIXTURES PROVIDED
TOLETS
1 TOILET MEN / 1 TOILET WOMEN

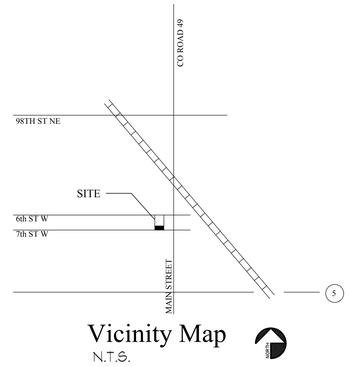
SINKS
1 SINK MEN / 1 SINK WOMEN

SHOWER
1 EACH MEN / WOMEN

SYMBOLS

- A / A4 — DETAIL NUMBER / SHEET NUMBER
- A / A4 — BUILDING SECTION / SHEET NUMBER
- B / 101 / A4 / A / C — VIEW DESIGNATION / ROOM NUMBER / SHEET NUMBER
- D / 1 — DOOR REFERENCE NUMBER
- CONFERENCE — ROOM NAME / ROOM NUMBER
- 1 — WINDOW REFERENCE NUMBER
- DATUM ELEVATION
- 9'-0" A.F.F. — CEILING HEIGHT A.F.F.
- 2 / A16 — WALL TYPE / DETAIL SHEET LOCATION

SHEET INDEX



Vicinity Map
N.T.S.

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FAX (602) 200-0787

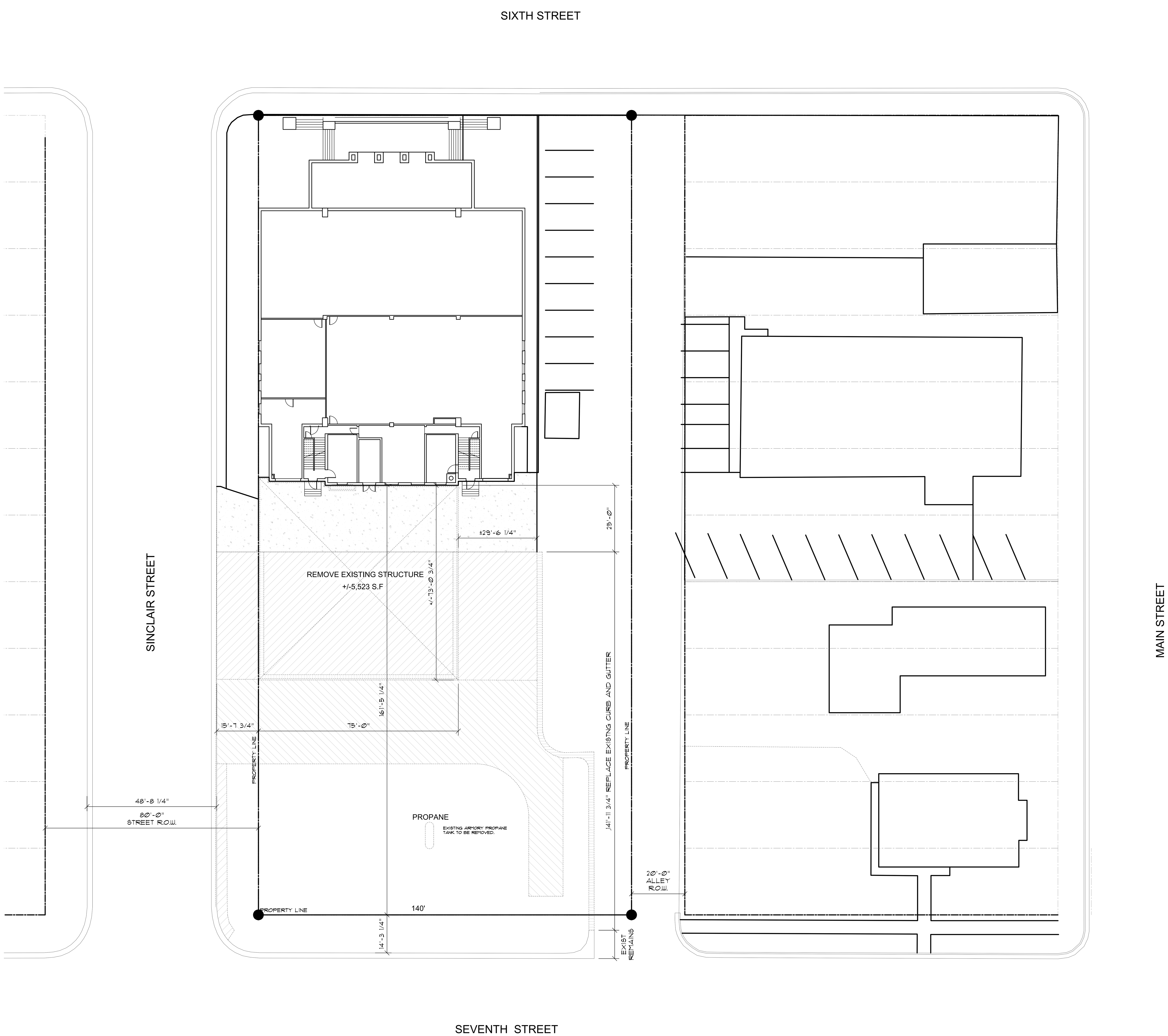
DRAWN BY: DN / GL
CHECKED BY: DN / GL
PROJECT NO.:
FILE NAME: A1.0CoverSheet.dwg
DATE:
☒ SCHEMATIC DESIGN
☒ DESIGN DEVELOPMENT
☒ CONSTRUCTION DOCUMENTS

REVISIONS

City of Bottineau
New Fire Station
115 6th Street West
Bottineau, North Dakota 58318

Cover Sheet

Scale:
SHEET NO.
Cover



SITE DEMOLITION EXTENTS:
ALL DEMO BY CITY OF BOTTINEAU, (N.I.C.)

1. CITY OF BOTTINEAU WILL REMOVE EXISTING FIREHOUSE BUILDING, FOUNDATIONS AND SLABS AND CLEAR SITE.
2. CITY OF BOTTINEAU WILL REMOVE ALL ASPHALT AND CONCRETE PAVING WITHIN CROSS HATCHED AREA. THE EXISTING ARMORY PROPANE TANK WILL BE RELOCATED (T.B.D.).
3. CITY OF BOTTINEAU WILL REMOVE ALL EXISTING CONDUIT AND SYSTEMS INSTALLED WITHIN THE EXISTING FIREHOUSE STRUCTURE ON THE ARMORY SOUTH WALL FACE AND RESTORE.
4. CITY OF BOTTINEAU WILL REMOVE AND THE EXISTING PROPANE GAS TANK AND SUPPLY LINES..
5. EXISTING STREET CURB AND GUTTER ON SINCLAIR AND 7TH STREETS SHALL REMAIN.

- DEMO AND REMOVE EXISTING CURB/GUTTER
  DEMO AND REMOVE EXISTING BULDING STEM AND FOUNDATION
- EXISTING CONCRETE SLAB TO REMAN, TYPICAL U.N.O.
- DEMO AND REMOVE EXISTING STRUCTURE, CONCRETE SLABS AND FOUNDATION SYSTEM
- DEMO AND REMVOE EXISTING ASPHALT PAVEMENT

Site Demolition Plan

Scale: 1"=20'-0"

NORTH

SCALE: 1"= 20'-0"

DRAWN BY: dn
CHECKED BY: dn/gl
PROJECT NO.: 2024.xx
FILE NAME:
DATE:

☒ SCHEMATIC DESIGN
☒ DESIGN DEVELOPMENT
☒ CONSTRUCTION DOCUMENTS

REVISIONS

NOSTDAHL LIPTACK
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CITY OF BOTTINEAU

NEW FIRE STATION
115 6th Street W
Bottineau, North Dakota

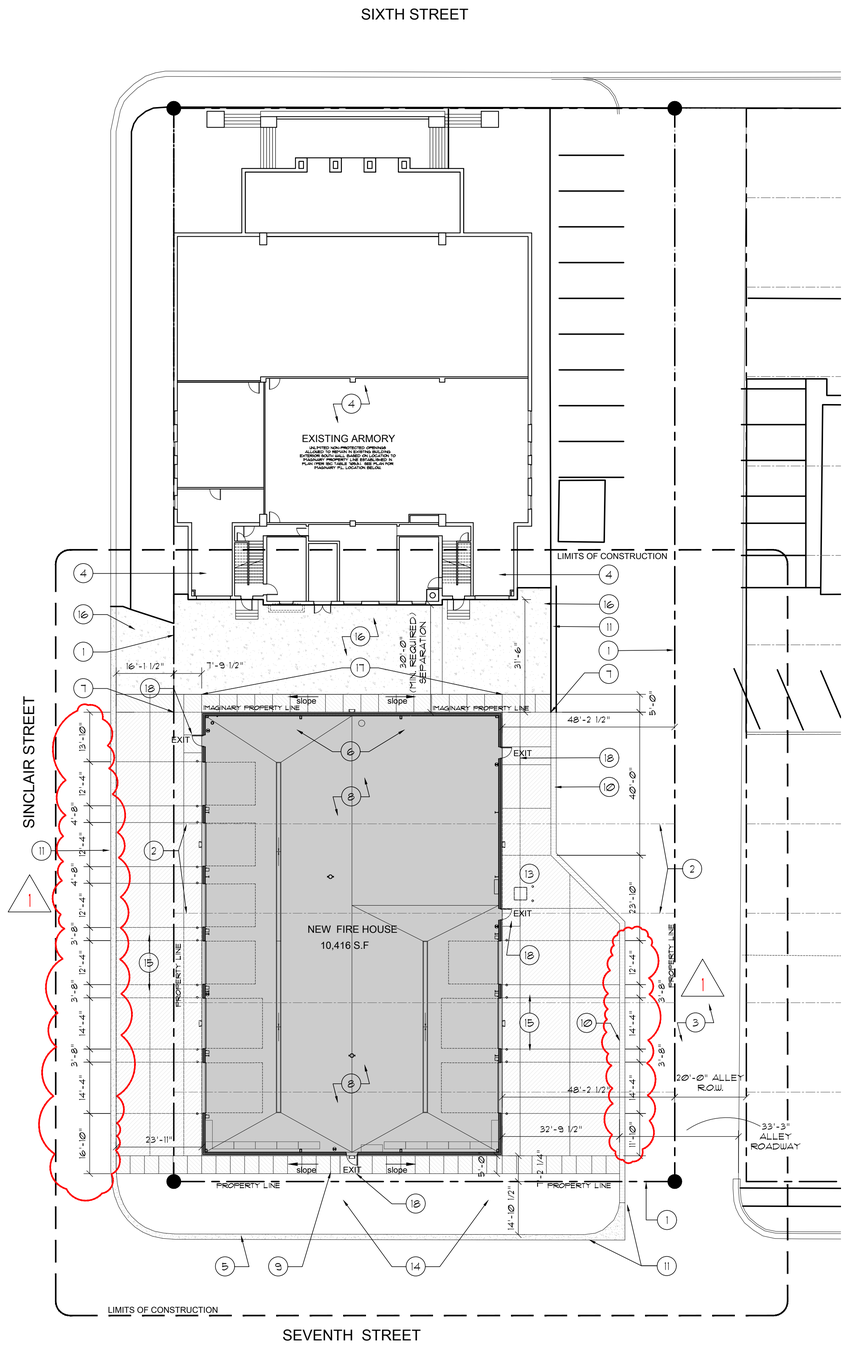
LICENSED ARCHITECT
DANIEL L. NOSTDAHL
(1964)
DATE 6/4/2024
STATE OF NORTH DAKOTA

Site Demolition Plan

Scale: 1"=20'-0"

SHEET NO.

AS1.0



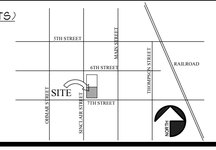
PROJECT DATA

OWNER:	CITY OF BOTTINEAU/BOTTINEAU RURAL FIRE
PROJECT ADDRESS:	115 6th STREET W, BOTTINEAU, ND 58318
ZONING:	B-2 CENTRAL BUSINESS DISTRICT
NEW FIREHOUSE BLDG:	OCCUPANCY: B2 + B OCCUPANCIES CONSTRUCTION TYPE: TYPE V-B FIRE SPRINKLER: YES BLDG AREA: 10,416 S.F. TOTAL
PERMIT AREA	10,416 G.S.F.
BUILDING SETBACKS:	NO BUILDING SETBACKS REQUIRED, ALTHOUGH A 30' SEPARATION BETWEEN THE NEW FIREHOUSE AND THE EXISTING ARMORY IS REQUIRED TO ALLOW ALL EXISTING ARMORY SOUTH SIDE OPENINGS.
BUILDING HEIGHT:	ZONING LIMITS: (3) STORIES OR 45' MAX.

PROJECT SCOPE:

- THE NEW FREE STANDING FIRE STATION BUILDING WILL SHARE THE EXISTING ARMORY SITE ON BLOCK 22 OF THE ORIGINAL TOWN SITE & REPLACE THE EXISTING FIRE DEPARTMENT B2 OCCUPANCY STRUCTURE (CURRENTLY ATTACHED TO ARMORY - SEE NEW DEMOLITION PLAN).
- THE EXISTING SOUTH WALL OF THE ARMORY WILL BE RESTORED AS A FULL EXTERIOR WALL WITH THE DEMOLITION OF THE EXISTING FIRE HALL ADDITION. TO ALLOW ALL EXISTING OPENINGS IN THE ARMORY SOUTH WALL TO REMAIN WITHOUT IN-FILLING ANY OPENINGS, A 30' MIN DISTANCE WILL BE ESTABLISHED BETWEEN THE BUILDINGS SHARING A SITE. AN IMAGINARY PROPERTY LINE (AS DELINEATED ON SITE PLAN) ESTABLISHES THIS 30' DISTANCE SEPARATION PER IBC SECTION/TABLE 705.8. THE NORTH WALL OF THE NEW FIRE STATION BUILDING WILL BE ZERO SETBACK FROM THE IMAGINARY PROPERTY LINE, AND THEREFORE BUILT AS 1-HOUR FIRE WALL (PER TABLE 705.5). THE CITY WILL COORDINATE ALL DEMOLITION AND REMOVAL OF THE EXISTING FIRE HALL ADDITION, AND ANY NECESSARY REPAIR WORK TO THE SOUTH FACE OF THE EXISTING ARMORY BUILDING. THE NEW FIRE STATION WILL BE FIRE SPRINKLERED. THE EXISTING ARMORY WILL REMAIN NON-SPRINKLERED.
- THE CITY WILL INSTALL ALL PUBLIC WATER AND SEWER UTILITY EXTENSIONS WORK FROM STREET MAINS TO THE BUILDING PAD. SITE WORK TO BE INCLUDED BY THE CONTRACTOR WILL INCLUDE: NEW SIDEWALK AT SOUTH END OF BUILDING, CONCRETE DRIVEWAY APRONS AT TRUCK BAY DOORS TO EXISTING STREET ROLLED CURB. THE REMAINING SOUTH END OF THE LOT IS TO BE GRAVEL FROM NEW SIDEWALK TO EXISTING ROLLED CURB AT THE STREET.

VICINITY MAP (NTS)



KEYNOTES

1. PROPERTY LINE.
2. LOT LINE.
3. EXISTING ALLEY.
4. EXISTING ARMORY BUILDING TO REMAIN.
5. EXISTING CURB AND GUTTER.
6. ONE HOUR FIRE RATED CONSTRUCTION THIS WALL. SEE NOTE 7/SEE SHEET A1.0
7. IMAGINARY PROPERTY LINE FOR THE DESIGNATION/DETERMINATION OF THE ONE HOUR RATED CONSTRUCTION LIMITS AND REQUIRED SEPARATION FROM THE UN-RATED ARMORY EXTERIOR WALL WITH UNPROTECTED OPENINGS PER IBC TABLE 705.5.
8. NEW STEEL BUILDING.
9. NEW 5' WIDE CONCRETE SIDEWALK.
10. NEW 6" CURB AND GUTTER TO MATCH EXISTING/CITY STANDARD.
11. EXISTING CURB AND GUTTER TO REMAIN, CONTINUE NEW CURB AND GUTTER TO THE NORTH PER CITY STANDARDS/DETAILS.
12. NOT USED.
13. NEW ELECTRICAL TRANSFORMER THIS LOCATION. SEE ELECTRICAL PLANS.
14. NEW GRAVEL PARKING APRON BETWEEN SIDEWALK AND CURB.
15. NEW CONCRETE DRIVE APRON. SLOPE AWAY FROM STRUCTURE. SEE STRUCTURAL PLANS FOR DETAILS.
16. EXISTING FLOOR SLAB AND FOUNDATION SYSTEM TO REMAIN AFTER REMOVAL OF BUILDING.
17. SAWCUT EXISTING SLAB FOR NEW FOOTINGS BEYOND BUILDING ENVELOPE. RE-COMPACT FILL, PROTECT STEM WALL INSULATION AND RE-POUR A NEW 4" THICK CONCRETE SLAB ON GRADE X 5' WIDE CONTINUOS, TO MATCH THE EXISTING ADJACENT AND REMAINING CONCRETE SLABS(S) SLOPE SLAB AWAY FROM NEW STRUCTURE.
18. EXTERIOR CONCRETE 'STOOP' AND FOUNDATION SYSTEM. SEE STRUCTURAL PLANS FOR DETAILS.

CONSIDERATIONS FOR ESTIMATING

A. PREFAB METAL BUILDING EXTERIOR WALL SYSTEM WITH 20' SIDEWALLS. INSTALL A CONTINUOS VAPOR BARRIER INTERIOR AT THE INTERIOR FACE. FINISH INTERIOR WITH WHITE METAL LINER PANELS FULL HEIGHT OF WALLS AND ON THE CEILING.
B. THE NORTH WALL OF THE BUILDING IS A ZERO LOT LINE WALL DETAILED TO BE 1 HOUR FIRE RATED WITH NO OPENINGS. DETAILING PER PLANS.
C. PREFAB METAL BUILDING ROOF STRUCTURE W/ A STANDING SEAM METAL ROOF FINISH AND LINER SYSTEM (LS) INSTALL A CONTINUOS VAPOR BARRIER LINER MEMBRANE THAT IS INSTALLED BELOW THE PURLINS AND UNINTERRUPTED BY ANY FRAMING MEMBERS. INSTALL A THERMAL BLOCK TO ROOF PURLINS UNDER METAL DECK, WITH WHITE METAL CEILING FINISH AS ABOVE.
D. CONCRETE FLOOR SLAB AND EXTERIOR WALL FOOTINGS SUMMARY: PERIMETER SPREAD FOOTINGS 60" BELOW FINISH GRADE, (12" THICK X 24" WIDE) WITH 12" THICK X 84" HIGH CAST-IN-PLACE STEM WALLS. INSULATE EXTERIOR SIDE OF STEM WALLS WITH 2" THICK POLYSTYRENE. ASSUME 6" THICK CONCRETE FLOOR SLAB WITH EMBEDDED HYDRONIC FLOOR HEAT SYSTEM THROUGHOUT
E. BUILDING HEAT: HYDRONIC FLOOR HEAT WITH NEW ELECTRIC BOILERS.
F. TRUCK BAY FLOOR DRAINS: INSTALL TWO LINEAR LENGTHS OF TRENCH DRAINS NORTH TO SOUTH UNDER ALL TRUCK BAYS (AS SHOWN IN PLAN). DRAIN SYSTEM TO INCLUDE AN OIL & WATER SEPARATOR COLLECTION TANK.
G. NEW WATER AND SEWER UTILITY SERVICE EXTENSIONS TO CITY MAINS IN SINCLAIR STREET: THE CITY WILL INSTALL A NEW DEDICATED 6" FIRELINE WATER SERVICE TO WITHIN 5' OF THE BUILDING. A 2" DOMESTIC WATER LINE SERVICE FOR TRUCK FILL AS REQUESTED VIA A BOTTOM FILL HYDRANT SYSTEM, ANTICIPATE THAT THIS INCLUDES AN UNDERSLAB 2" WATERLINE DOUN THE CENTER OF THE APPARATUS BAY WITH HOSE TO HYDRANT CONNECTS THRUOUT THE FIREBAYS (+/-6 BAYS TO BE DETERMINED).
H. FIREHOUSE TO BE FIRE SPRINKLERED. WATER SERVICE LINE WILL BE PROVIDED BY CITY TO WITHIN 5' OF THE BUILDING (N.I.C.)
I. (9) INSULATED OVERHEAD TRUCK BAY DOORS AND WALL MOUNTED OPENERS INCLUDE:
J. (5) 12' W x16' TALL
K. (4) 14' W x16' TALL
L. INCLUDE SMOKE AND HEAT SENSORS THROUGHOUT.
M. ALL INTERIOR AND EXTERIOR LIGHTING TO BE LED.
N. (4) 3070 INSULATED STEEL MAN/EXIT DOORS AS PER PLAN.

Site Plan

Scale: 1"=20'-0"

NORTH

20 0 20 40

Scale Feet

SCALE: 1"= 20'-0"

CONTRACTOR MUST VERIFY ALL DIMENSIONS PRIOR TO PROCEEDING WITH THIS WORK. THESE DRAWINGS AND SPECIFICATIONS AS INSTRUMENTS OF SERVICE ARE AND SHALL REMAIN THE PROPERTY OF THE ARCHITECT WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. THESE DRAWINGS AND SPECIFICATIONS SHALL NOT BE USED BY ANYONE ON ANY OTHER PROJECTS, EXCEPT BY AGREEMENT WITH THE ARCHITECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS EXCEPT BY THE EXPRESS WRITTEN PERMISSION OF THE ARCHITECT.

DRAWN BY: ch
CHECKED BY: dl/jl
PROJECT NO: 2022.xx
FILE NAME:
DATE: 3/22/2024

☒ SCHEMATIC DESIGN
☒ DESIGN DEVELOPMENT
☒ CONSTRUCTION DOCUMENTS

REVISIONS
12/1/2024 CITY OF BOTTINEAU

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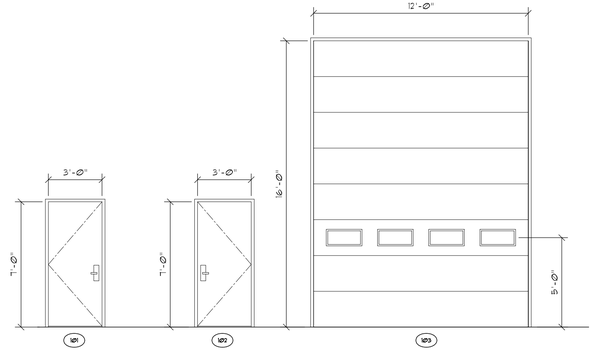
CITY OF BOTTINEAU
NEW FIRE STATION
115 6th Street W
Bottineau, North Dakota

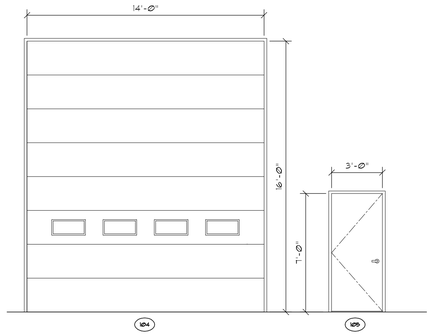
REGISTERED ARCHITECT DANIEL L. NOSTDAHL (1964) STATE OF NORTH DAKOTA DATE 12/1/2024

Site Plan

Scale: 1"=20'-0"
SHEET NO.

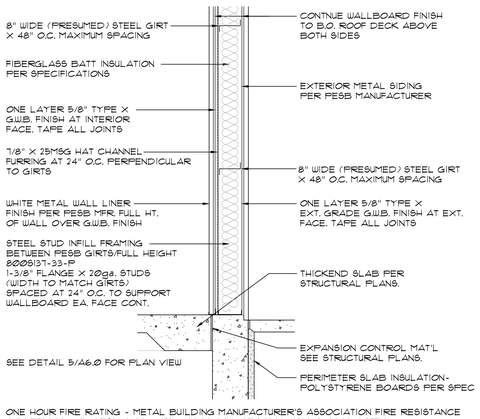
AS2.0





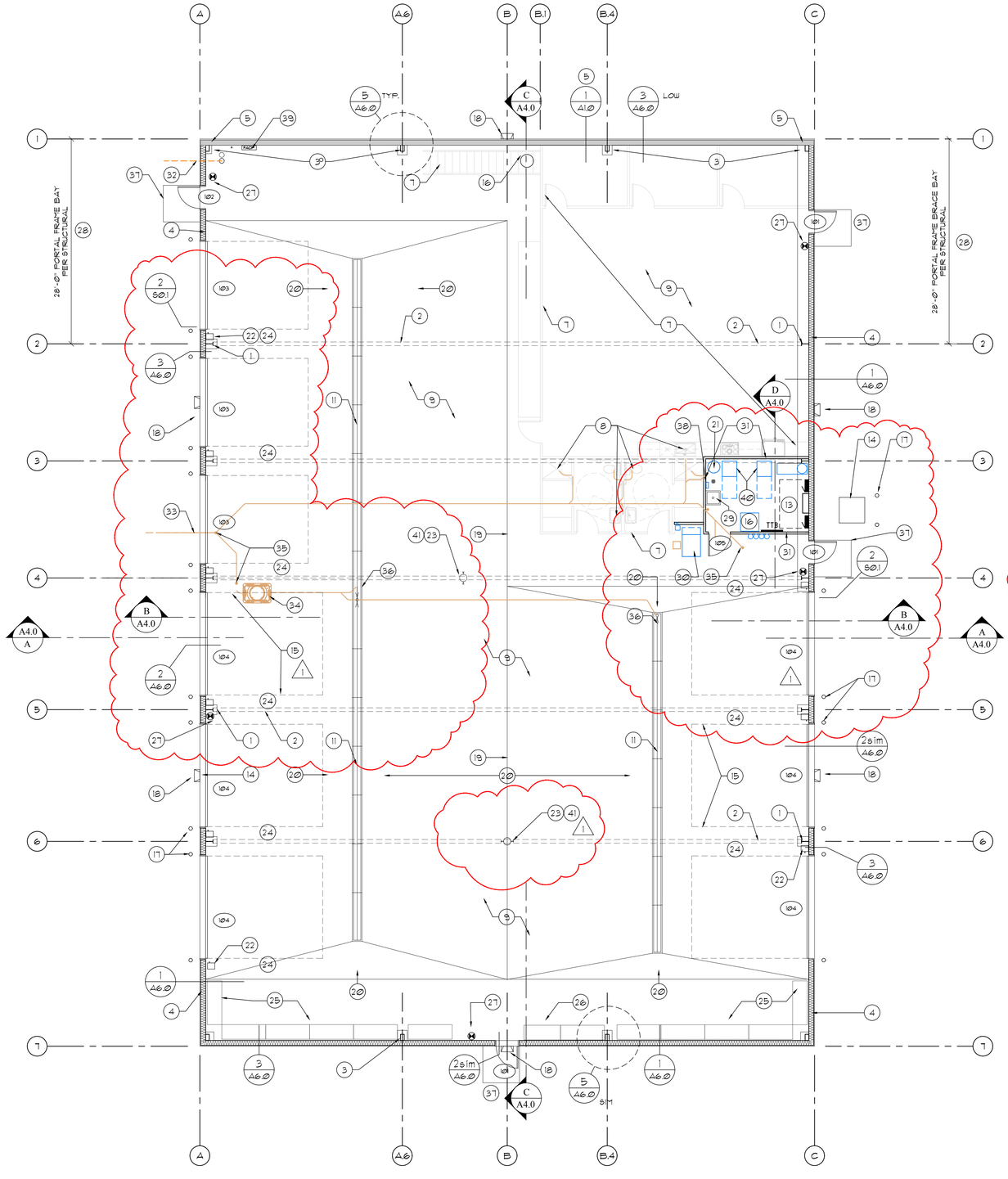
DOOR SCHEDULE

DOOR	QUANTITY	SIZE W x H	DOOR ELEVATION	DOOR TYPE: INSUL. STEEL	DOOR TYPE: OVERHEAD GAR.	DOOR TYPE: STEEL	SPECIAL FEATURES: THRESHOLD	SPECIAL FEATURES: INSULATED	FRAME TYPE: HOLLOW METAL	FRAME TYPE: JAMB	FRAME TYPE: HEAD	HARDWARE GROUP	REMARKS
101	3	3'-0" X 7'-0"	101	X			X	X	X	3/A6.1	4/A6.1	GROUP A	
102	1	3'-0" X 7'-0"	102	X			X	X	X	3/A6.1	4/A6.1	GROUP A	
103	3	12'-0" X 16'-0"	103	X	X			X	X	1/A6.1	2/A6.1	GROUP B	
104	6	14'-0"X 16'-0"	104	X	X			X	X	1/A6.1	2/A6.1	GROUP B	
105	1	3'-0" X 7'-0"	105			X			X	5/A6.1	6/A6.1	GROUP C	



ONE HOUR FIRE RATING - METAL BUILDING MANUFACTURER'S ASSOCIATION FIRE RESISTANCE BULLETIN #4 - UL DESIGN NO. V421 - NON LOAD BEARING WALL 1-HOUR RATED. PROVIDE 7 OR C SHAPED GIRTS 6" TO 12" DEEP WITH 2"-4" WIDE FLANGES SPACED 48" O.C. MAXIMUM. PROVIDE A MIN. 26ga MSG SIDING, 16" WIDE (MIN.) OFFSET A MIN OF 16" FROM WALLBOARD SHEATHING JOINTS. FASTEN TO HORIZONTAL GIRTS WITH 1-1/2" LONG NO 12-14 SELF TAPPING SCREWS AT 12" O.C. PROVIDE HAT SHAPED MIN. 25 MSG GALV STEEL APPROXIMATELY 2-5/8" WIDE X 1" DEEP PERPENDICULAR TO THE THE GIRTS. SECURE TO GIRTS WITH 1" LONG SELF TAPING PAN HEAD SHEET STEEL TYP SCREWS. TWO SCREWS AT EACH FASTENING LOCATION.
GYPSUM WALLBOARD - ONE LAYER OF 5/8" TYPE WALLBOARD EACH FACE. SECURE TO FURRING CHANNELS WITH 1" LONG TYPE S BUGLE HEAD SCREWS AT 24" O.C. VERTICALLY AND HORIZONTALLY. ONE LAYER 5/8" TYPE X EXTERIOR GRADE WALLBOARD APPLIED HORIZONTALLY OR VERTICALLY AT THE EXTERIOR FACE. INSTALL USING 1-1/4" LONG, SELF TAPPING BUGLEHEAD SHEET STEEL TYPE DRYWALL SCREWS SPACED 8" O.C. EACH WAY. SEE DETAIL 5/A6.0 FOR SIMILAR CONDITION AT END WALL COLUMNS.

1 - One Hour Fire Rated Assembly - North Wall
SCALE: 1/2"=1'-0"



Floor Plan
SCALE: 1/8"=1'-0"

KEYNOTES

1. PRE-ENGINEERED METAL BUILDING RIGID FRAME, TYPICAL OF (14).
2. PRE-ENGINEERED METAL BUILDING RIGID FRAME BEAM ABOVE, TYPICAL OF (7). TENSION BARS AND CONC. REINFORCING BELOW SLAB. SEE FOUNDATION PLAN.
3. PRE-ENGINEERED METAL BUILDING END WALL POST AND BEAM + GIRT FRAMING.
4. PRE-ENGINEERED METAL BUILDING 20' HIGH SIDE WALL.
5. ONE HOUR FIRE RATED CONSTRUCTION, AT NORTH END WALL ONLY DUE TO BUILDING PLACEMENT WITH ZERO SETBACK FROM IMAGINARY LOT LINE/30' DISTANCE FROM EXISTING ARMORY BUILDING. SEE DETAIL/ASSEMBLY 1 BELOW, THIS SHEET.
6. BATT INSULATION AT EXTERIOR WALL PER SPECIFICATIONS.
7. FUTURE INTERIOR IMPROVEMENTS BY OTHERS SHOWN FOR REFERENCE ONLY AND N.I.C.
8. ROUGH PLUMBING FOR FUTURE FIXTURE REQUIRED THIS SCOPE OF WORK TO ACCOMMODATE FUTURE INTERIOR IMPROVEMENTS BY OTHERS.
9. CONCRETE SLAB ON GRADE WITH RADIANT HYDRONIC FLOOR HEATING. SEE MECHANICAL PLAN FOR DESIGNATED ZONES.
10. SLOPE SLAB TO CENTER DRAIN PER SPECIFICATIONS.
11. FLOOR DRAIN SEE FOUNDATION PLAN AND SPECIFICATIONS.
12. INTERIOR TRUCK FILL HYDRANT THIS LOCATION, SERVED BY UNDER-SLAB WATER SUPPLY PER PLUMBING PLANS.
13. NEW ELECTRICAL PANELS PER ELECTRICAL PLANS AT THIS LOCATION.
14. NEW ELECTRICAL TRANSFORMER PER ELECTRICAL PLANS.
15. OVERHEAD GARAGE DOOR TRACK SYSTEM, TYPICAL.
16. COMPRESSOR EQUIPMENT LOCATION BY OWNER, PROVIDE POWER PER ELECTRICAL PLANS.
17. 6" DIA STEEL BOLLARD TYPICAL OF (20). PRIME AND PAINT TO MATCH BUILDING TRIM. SEE DETAILS.
18. WALL MOUNTED EXTERIOR LIGHT FIXTURE THIS LOCATION, TYPICAL OF (16) TOTAL AROUND THE BUILDING EXTERIOR. SEE EXTERIOR ELEVATIONS AND ELECTRICAL PLANS.
19. HI-POINT/CROWN OF FLOOR SLAB TO MATCH TOP OF FINISHED FLOOR ELEVATION.
20. SLOPE TO DRAIN @ 1/8" PER FOOT SLOPE.
21. SALVAGED AND RELOCATED WATER HEATER. SEE MECH. PLANS.
22. WALL MOUNTED GARAGE DOOR OPENER HEIGHT TO BE DETERMINED. TYP. EACH OH. DOOR. SEE SPECIFICATIONS.
23. PILLAR HYDRANT OR EQUIVALENT FOR FIRE TRUCK BOTTOM FILL. SEE PLUMBING PLANS.
24. PROVIDE OVERHEAD POWER AT DRIVER'S SIDE OF VEHICLE, TYP. EACH OVERHEAD DOOR.
25. DESIGNATED SPACE FOR TURN-OUT GEAR RACKING EQUIPMENT TO BE PROVIDED BY OWNER (N.I.C.).
26. COMMAND CENTER COUNTER/DESK BY FIRE DEPARTMENT (N.I.C.).
27. WALL MOUNT FIRE EXTINGUISHER THIS LOCATION PROVIDED BY OWNER LOCATION MEETS 50' MAXIMUM TRAVEL DISTANCE FOR A TYPE 2A-B RATED EXTINGUISHER FOR EMPLOYEE USE BASED ON ORDINARY HAZARD (PARKING GARAGE) DESIGNATION.
28. STRUCTURAL PORTAL FRAME BRACE THIS BAY PER STRUCTURAL/PESB FABRICATOR.
29. MOP SINK THIS LOCATION.
30. PLANNED LOCATION FOR INSTALL OF FIRE TURNOUT GEAR WASHING-EXTRACTOR MACHINE. HOOKUPS PER PLUMBING PLANS. DRAIN TO FLOOR SINK. EXISTING MACHINE SUPPLIED BY OWNER (N.I.C.)
31. NEW 2X4 STUD FRAMING AT 16" O.C. WITH ONE LAYER 5/8" G.W.B. FINISH EACH FACE.
32. COMBINATION DOMESTIC AND FIRE WATER LINE THIS LOCATION. SEE PLUMBING PLANS.
33. SANITARY SEWER LINE THIS LOCATION. SEE PLUMBING PLANS.
34. FLOOR DRAIN INTERCEPTOR THIS LOCATION. SEE PLUMING PLANS.
35. CLEAN OUT - SEE PLUMBING PLANS.
36. TRENCH DRAIN INVERT. SEE PLUMBING PLANS.
37. CONCRETE STOOP - SLAB AND FOUNDATION SYSTEM PER STRUCTURAL PLANS.
38. BCP. SEE ELECTRICAL AND PLUMBING PLANS.
39. FACP. SEE ELECTRICAL PLANS.
40. RADIANT FLOOR HEAT BOILERS THIS LOCATION. SEE MECHANICAL PLANS.
41. PILLAR HYDRANT OVER TENSION BARS AND CONCRETE THIS LOCATION. G.C. TO COORDINATE WATER SUPPLY LINE AND STRUCTURAL CONDITIONS BELOW SLAB. SEE PLUMBING AND STRUCTURAL PLANS.

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REVISIONS
1 12/1/2024 CITY OF BOTTINEAU

NOSTDAHL LIPTACK
ARCHITECTS
3033 NORTH CENTRAL AVENUE
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(602) 200-0787
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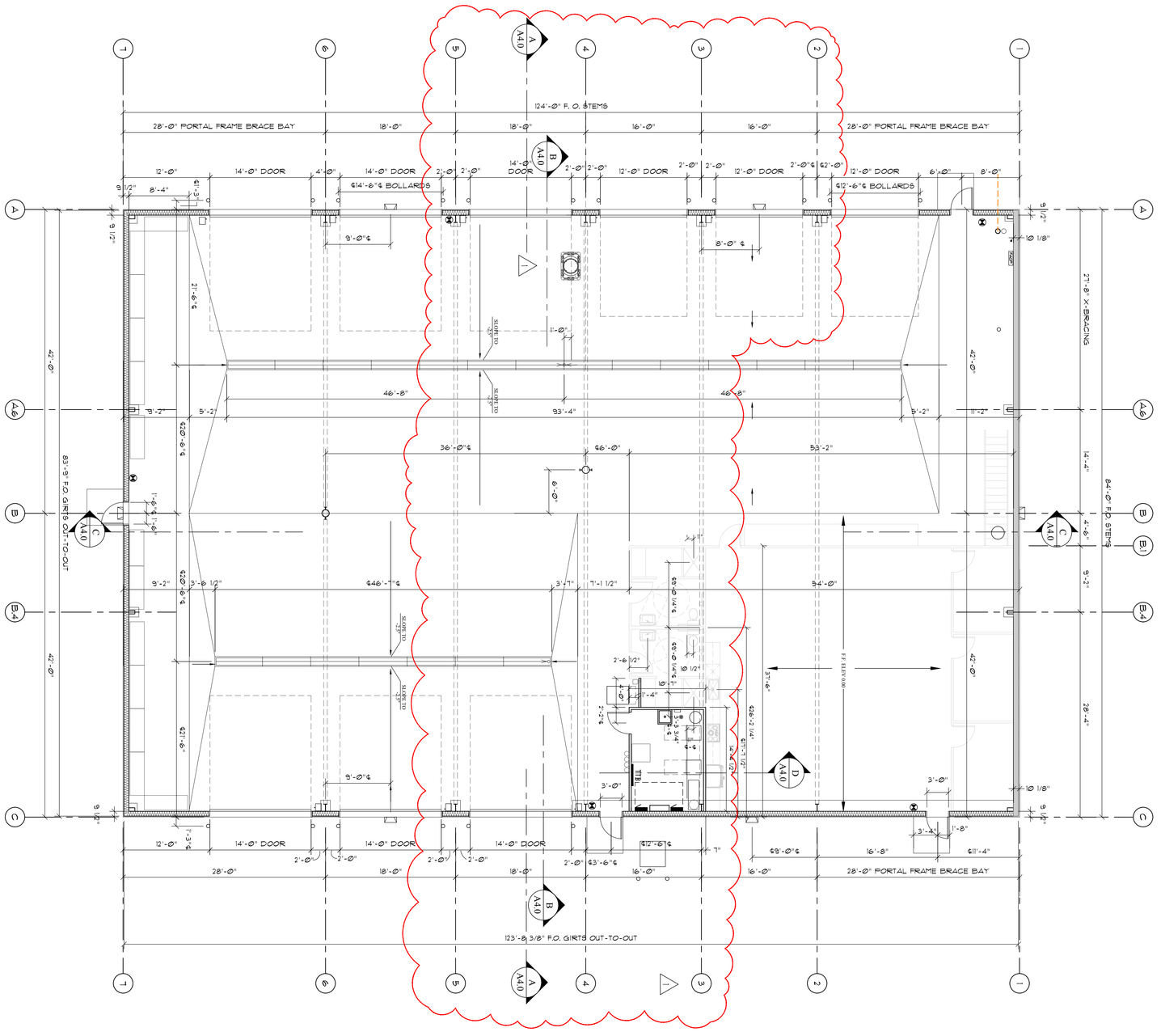
City of Bottineau
New Fire Station
115 6th Street West
Bottineau, North Dakota 58318

LICENSED ARCHITECT DANIEL L. NOSTDAHL (1964) STATE OF NORTH DAKOTA
DATE 12/1/2024

Floor Plan

Scale: 1/8"=1'-0"
SHEET NO.
A1.0



Dimension Plan

SCALE: 1/8"=1'-0"

NORTH

Dimension Plan	
Scale:	1/8"=1'-0"
SHEET NO.	A2.0

City of Bottineau

New Fire Station

115 6th Street West

Bottineau, North Dakota 58318

NOSTDAHL LIPTACK

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☒	SCHEMATIC DESIGN
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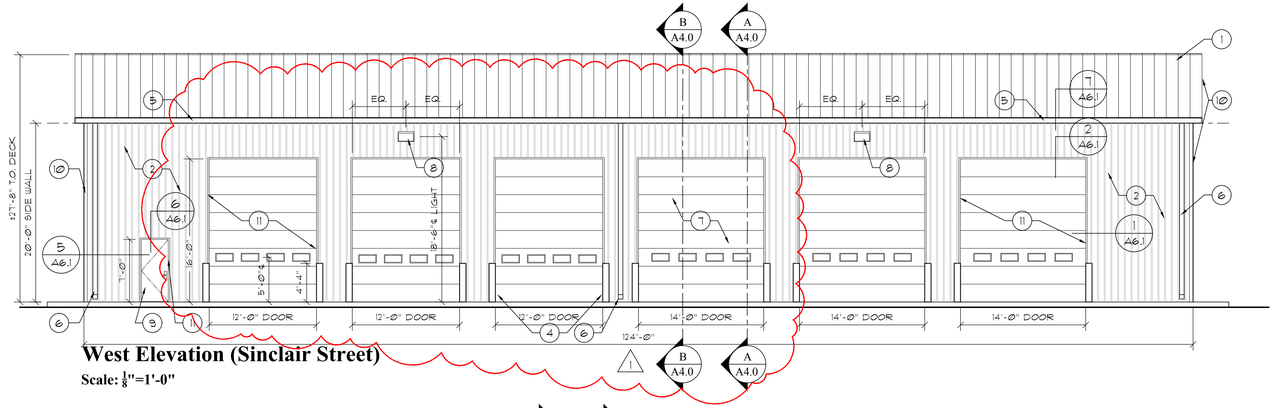
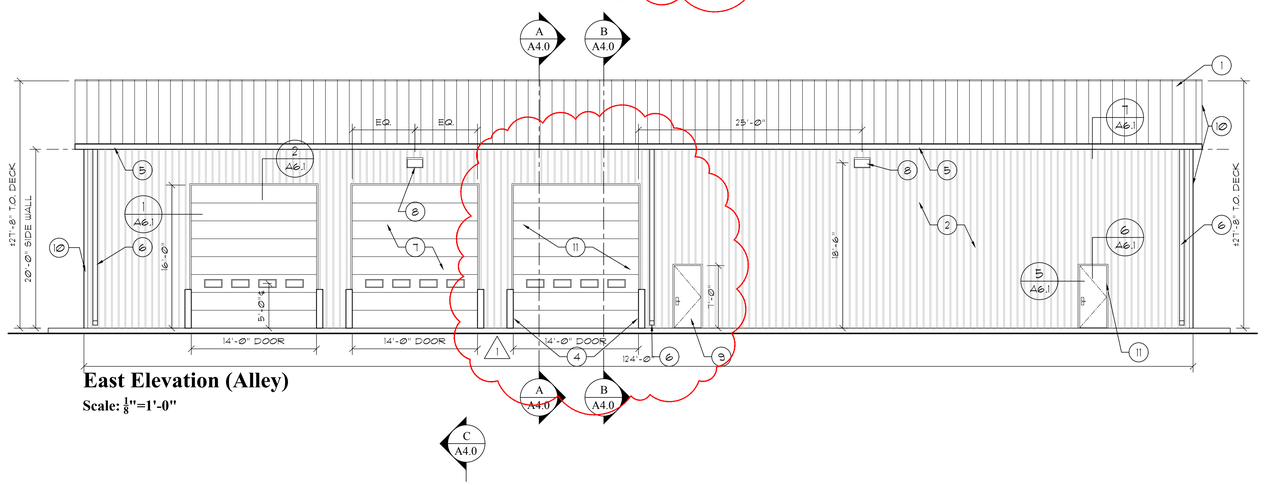
REVISIONS
1 12/1/2024 CITY OF BOTTINEAU



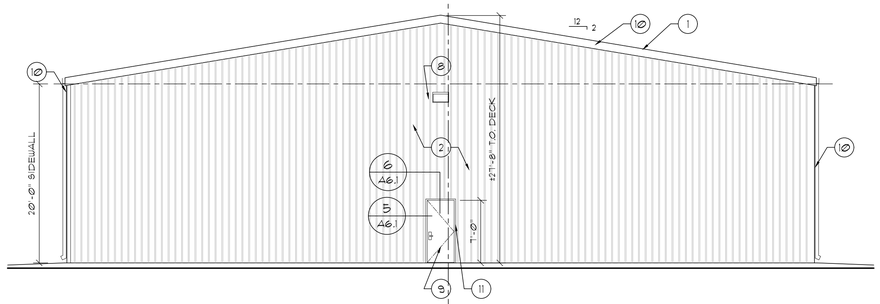
West Elevation (Sinclair Street)

Scale: $\frac{1}{8}$"=1'-0"



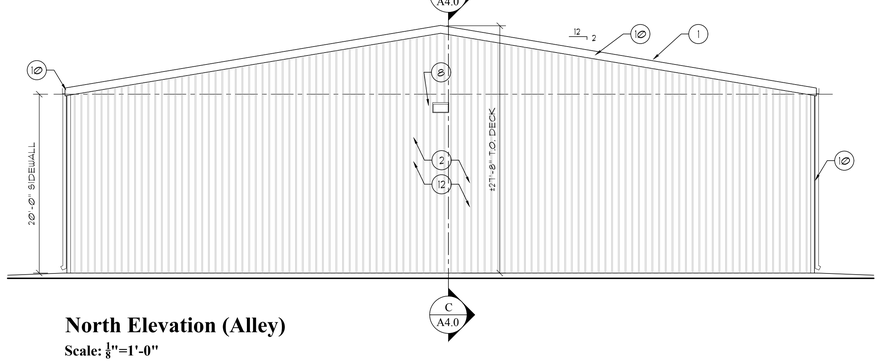
East Elevation (Alley)

Scale: $\frac{1}{8}$"=1'-0"



South Elevation (7th Street)

Scale: $\frac{1}{8}$"=1'-0"



North Elevation (Alley)

Scale: $\frac{1}{8}$"=1'-0"

KEYNOTES

1. METAL ROOF, STANDING SEAM WITH CONCEALED FASTENERS.
2. METAL SIDING
3. NOT USED.
4. STEEL FIRE BOLLARD WITH CONCRETE FILL. PRIME AND PAINT TO MATCH TRIM.
5. RAIN GUTTER. COLOR TO MATCH TRIM. SEE 1/A6.1.
6. DOWNSPOUT. COLOR TO MATCH GUTTER AND TRIM.
7. INSULATED OVERHEAD GARAGE DOOR PER PLANS.
8. EXTERIOR WALL MOUNTED FLOOD LIGHT.
9. HOLLOW METAL ENTRY DOOR.
10. METAL FASCIA/TRIM. COLOR T.B.D.
11. DOOR FRAME/TRIM. COLOR T.B.D.
12. ONE HOUR FIRE RATED CONSTRUCTION THIS WALL PER PLANS.

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REVISIONS
1 12/1/2024 CITY OF BOTTINEAU

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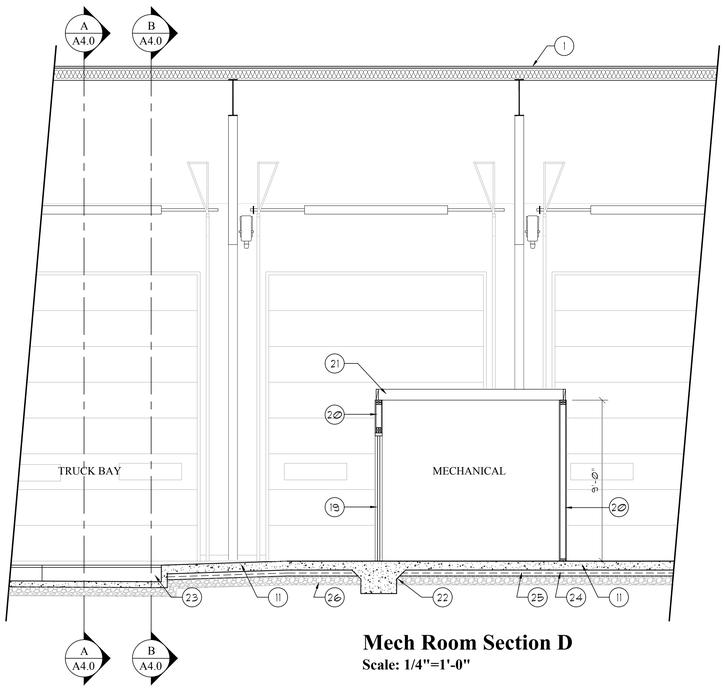
City of Bottineau
New Fire Station
115 6th Street West
Bottineau, North Dakota 58318

Exterior Elevations
SCALE: 1/8"=1'-0"

LICENSED ARCHITECT
DANIEL L. NOSTDAHL
(1964)
DATE 12/1/2024
STATE OF NORTH DAKOTA

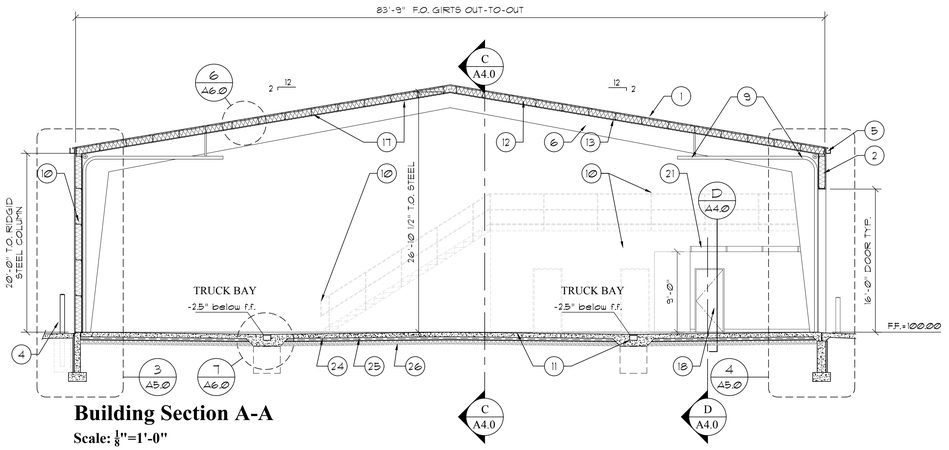
Building Elevations

Scale: 1/8"=1'-0"
SHEET NO.
A3.0



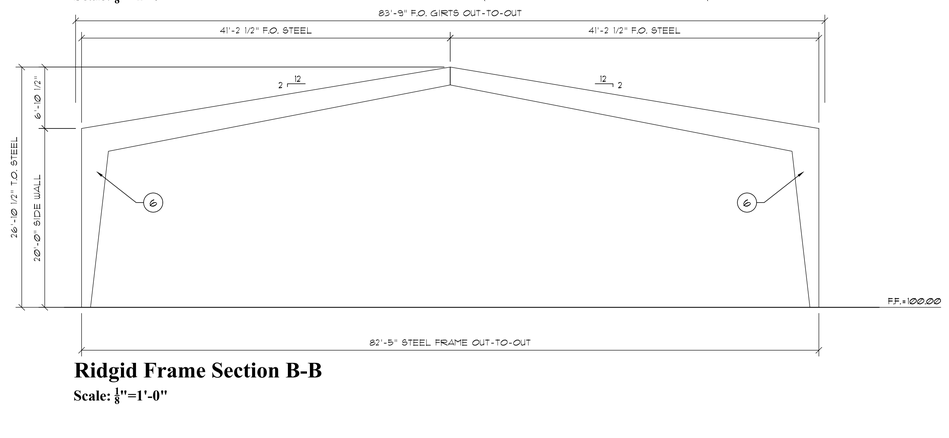
Mech Room Section D

Scale: 1/4"=1'-0"



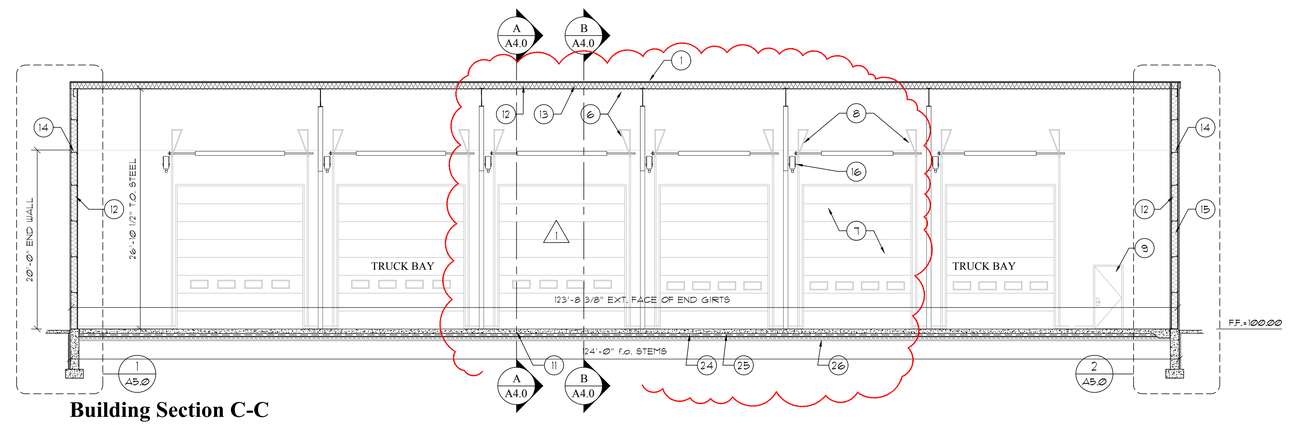
Building Section A-A

Scale: 1/8"=1'-0"



Ridgid Frame Section B-B

Scale: 1/8"=1'-0"



Building Section C-C

Scale: 1/8"=1'-0"

KEYNOTES

1. METAL ROOF, STANDING SEAM WITH CONCEALED FASTENERS.
2. METAL SIDING
3. NOT USED.
4. STEEL PIPE BOLLARD WITH CONCRETE FILL.
5. RAIN GUTTER
6. RIGID STEEL FRAME BY STEEL BLDG MFR.
7. INSULATED OVERHEAD GARAGE DOOR
8. OVERHEAD DOOR TRACK ASSEMBLY.
9. HOLLOW METAL ENTRY DOOR.
10. FUTURE INTERIOR IMPROVEMENTS SHOWN FOR REFERENCE ONLY. N.I.C.
11. SLOPED CONCRETE SLAB ON GRADE PER STRUCTURAL PLANS WITH IN-FLOOR HYDRONIC HEAT SYSTEM. SLOPE TO INTERIOR TRENCH DRAINS PER PLANS. SEE MECHANICAL PLANS FOR IN FLOOR HEATING.
12. INSULATION PER SPECIFICATIONS.
13. STEEL PURLINS PER BLD. FABRICATOR.
14. STEEL GURTS PER BLD. FABRICATOR.
15. ONE HOUR FIRE RESISTIVE CONSTRUCTION AT EXTERIOR WALL, THIS LOCATION. REQUIRES ⅝" TYPE X WALLBOARD AT INT. FACE AND EXTERIOR GRADE ⅝" TYPE X WALLBOARD AT EXTERIOR FACE. SEE WALL DETAILS.
16. WALL MOUNTED OVERHEAD GARAGE DOOR OPENER. HEIGHT TO BE DETERMINED.
17. ROOF INSULATION - LINER SYSTEM, STRAPS AND CONT. LINER VAPOR BARRIER FROM BEAM TO BEAM. SEAL VAPOR BARRIER PER SYSTEM MFR'S INSTRUCTIONS.
18. MECHANICAL ROOM, THIS PHASE. 2x4 STUD FRAMING AT 16" O.C. WITH ⅝" G.W.B. FINISH EACH FACE.
19. DOOR PER PLANS.
20. 2x4 STUD FRAMING AT 16" O.C. WITH ⅝" G.W.B. FINISH EACH FACE
21. 2x8 CEILING BRACING (WITH BLOCKING) AT 48" O.C. (TEMP UNTIL FUTURE MEZZANINE IS INSTALLED. NO WALLBOARD FINISH TO CEILING. OPEN TO STRUCTURE ABOVE AND FIRE SPRINKLER SYSTEM.
22. THICKENED SLAB/INTERIOR BEARING FOUNDATION SYSTEM PER STRUCTURAL ENGINEER FOR FUTURE MEZZANINE CONSTRUCTION.
23. LINEAR TRENCH DRAIN. SEE PLUMING PLANS AND FOUNDATION DETAILS.
24. VAPOR BARRIER - SEE SPECS.
25. SAND BASE W/ RADIANT HEAT TUBING SYSTEM AND WIRE LATTICE SUPPORT GRID. SEE MECHANICAL AND STRUCTURAL PLANS.
26. COMPACTED GRANULAR FILL.

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REVISIONS
1 12/1/2024 CITY OF BOTTINEAU

NOSTDAHL LIPTACK
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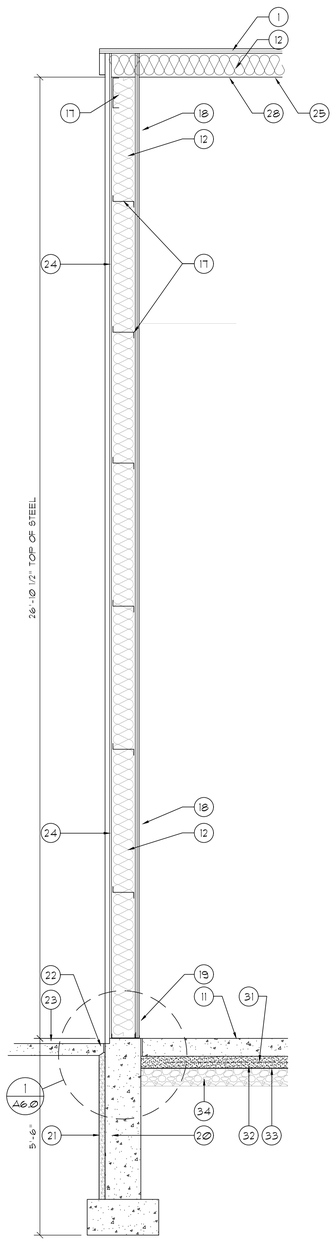
City of Bottineau
New Fire Station
115 6th Street West
Bottineau, North Dakota 58318

Building Sections
Scale: 1/8"=1'-0"
SHEET NO.
A4.0

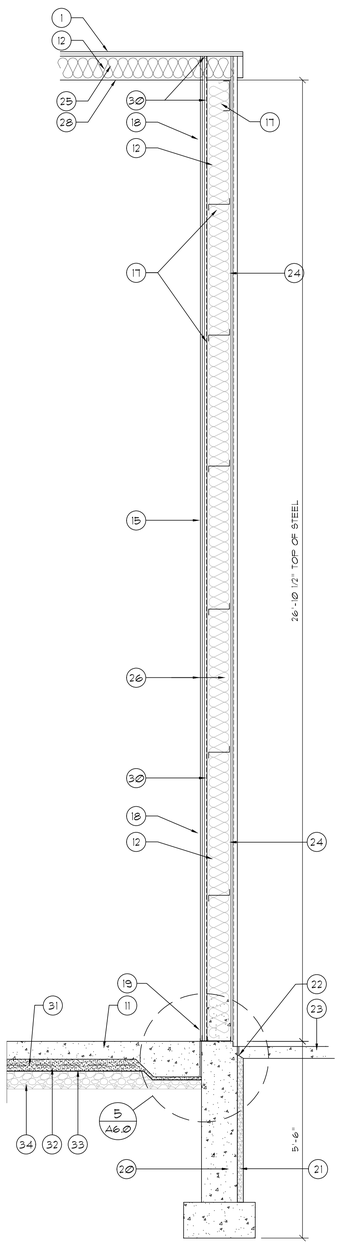
Building Sections
SCALE: 1/8"=1'-0"

KEYNOTES

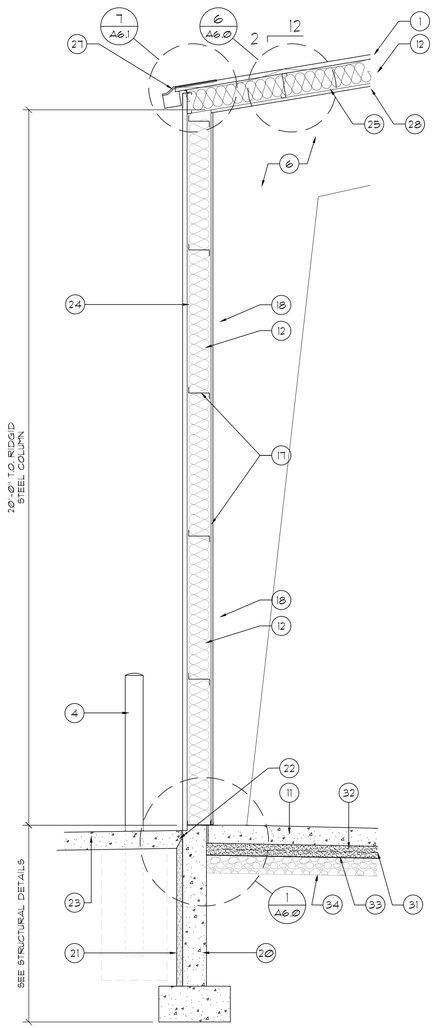
1. METAL ROOF, STANDING SEAM WITH CONCEALED FASTENERS.
2. METAL SIDING
3. OVERHEAD GARAGE DOOR TRACK SYSTEM.
4. STEEL PIPE BOLLARD WITH CONCRETE FILL.
5. RAIN GUTTER
6. RIGID STEEL FRAME
7. INSULATED OVERHEAD GARAGE DOOR
8. OVERHEAD DOOR TRACK ASSEMBLY.
9. HOLLOW METAL ENTRY DOOR.
10. FUTURE INTERIOR IMPROVEMENTS SHOWN FOR REFERENCE ONLY. N.I.C.
11. SLOPED CONCRETE SLAB ON GRADE PER STRUCTURAL PLANS. SLOPE TO INTERIOR TRENCH DRAINS PER PLANS.
12. INSULATION PER SPECIFICATIONS.
13. STEEL PURLINS PER BLD. FABRICATOR.
14. STEEL GIRTS PER BLD. FABRICATOR.
15. ONE HOUR FIRE RESISTIVE CONSTRUCTION AT EXTERIOR WALL, THIS LOCATION. REQUIRES ⅝" TYPE X WALLBOARD AT INT. FACE AND EXTERIOR GRADE ⅝" TYPE X WALLBOARD AT EXTERIOR FACE. SEE WALL DETAIL SHEET A1Ø
16. WALL MOUNTED OVERHEAD GARAGE DOOR OPENER. HEIGHT TO BE DETERMINED.
17. END WALL POSTS AND GIRTS PER BLDG. FABRICATOR.
18. METAL WALL LINER PANEL FINISH.
19. CAST STEM OVER CONCRETE SLAB/SECOND POUR SEE DETAILS.
20. CAST-IN-PLACE CONCRETE STEM WALL AND FOUNDATION SYSTEM. SEE STRUCTURAL PLANS.
21. STEM WALL RIGID FOAM INSULATION PER SPECIFICATIONS. PROTECT DURING BACKFILL.
22. CHAMFER RIGID FOAM INSULATION. INSTALL 4" EXPANSION CONTROL MATERIAL BETWEEN ADJACENT SLABS.
23. NEW CONCRETE DRIVE APRON. SLOPE AWAY FROM BUILDING.
24. METAL BUILDING SIDING ON MOISTURE BARRIER WRAP PER SPECIFICATIONS.
25. ROOF LINER SYSTEM - VAPOR BARRIER ON METAL STRAPPING.
26. ⅝" TYPE X G.W.B. FINISH EACH FACE OF WALL AT RATED WALL CONSTRUCTION, FULL HEIGHT. PROVIDE EXTERIOR GRADE TYPE X WALLBOARD AT EXTERIOR FACE. SEE WALL DETAILS.
27. STEEL GUTTER BY SEE EXTERIOR ELEVATIONS FOR DOWN SPOUT LOCATIONS.
28. STEEL LINER PANEL CEILING FINISH, TYP.
29. SLOPE SLAB AT O.H. DOOR THRESHOLD TO T.O. SILL NOTCH AND DRIVE SLAB APRON.
30. ⅞" HAT CHANNEL FURRING AT 24" O.C. PERPENDICULAR TO GIRTS FULL HEIGHT OF INTERIOR FACE OF WALL.
31. RADIANT FLOOR HEATING SYSTEM. SEE MECHANICAL PLANS.
32. SAND BASE AND WIRE LATTICE TO SUPPORT RADIANT TUBING.
33. VAPOR BARRIER.
34. GRANULAR FILL.



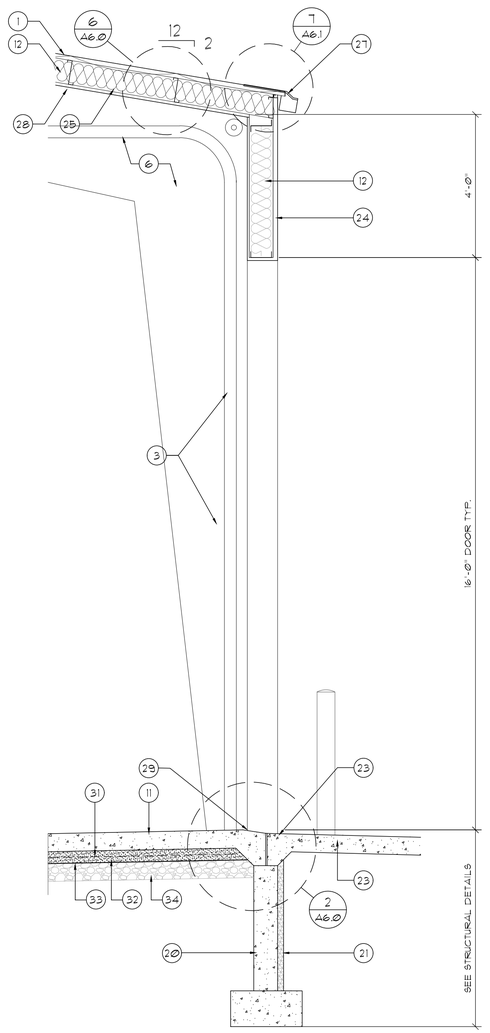
1-End Wall
SCALE: 1/2"=1'-0"



2-End Wall - Fire Rated
SCALE: 1/2"=1'-0"



3-Side Wall
SCALE: 1/2"=1'-0"



4-Side Wall - Overhead Door
SCALE: 1/2"=1'-0"

Wall Sections
SCALE: 1/2"=1'-0"

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REVISIONS

NOSTDAHL LIPTACK
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City of Bottineau
New Fire Station
115 6th Street West
Bottineau, North Dakota 58318

LICENSED ARCHITECT
DANIEL L. NOSTDAHL
(1964)
DATE 6/4/2024
STATE OF NORTH DAKOTA

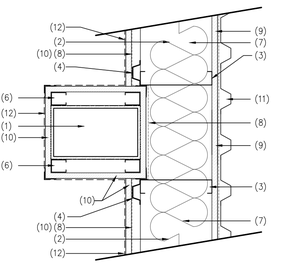
Building Sections

Scale: 1/8"=1'-0"
SHEET NO.
A5.0

NOTES:

1. STEEL END WALL COLUMN PER PEMB MANUFACTURER.
2. HORIZONTAL STEEL GIRT - PRESUMED 8" WIDTH.
3. 20ga STEEL STUD FRAMING AT 24" O.C. VERTICALLY BETWEEN GIRTS.
4. 3" HAT CHANNEL FURRING AT 24" O.C. VERTICALLY FULL HEIGHT OF WALL.
5. NOT USED.
6. WALLBOARD ATTACHMENT STUDS - 1-5/8" STUDS EACH CORNER. SEE FIRE RESISTANCE NOTE BELOW.
7. BATT INSULATION IN STUD CAVITIES PER SPECIFICATIONS.
8. VAPOR BARRIER FINISH. TAPE ALL JOINTS AND MIN. 6" OVERLAP AT SEAMS.
9. ⅝" TYPE X EXTERIOR GRADE GWB. FINISH AT EXTERIOR FACE + MOISTURE BARRIER WRAP BELOW SIDING.
10. ⅝" TYPE X GWB. FINISH. SEE DETAIL 1/A1.0.
11. METAL SIDING PER PEMB MFR.
12. METAL LINER PANEL INTERIOR FINISH PER SPECS/PEMB FABRICATOR.

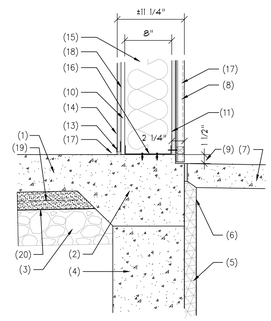
MBMA FIRE RESISTANCE BULLETIN -2
COLUMN PROTECTION PER UL DESIGN X524
STEEL COLUMN PER PEMB MANUFACTURER.
WALLBOARD ATTACHMENT STUDS - MIN. Ø0.179" THICK BARE METAL 1-5/8" DEEP WITH 1-3/8" LEGS AND 2" STIFFENING FLANGES. STUDS CUT 2" TO 3" LESS IN LENGTH THAN THE COLUMN HEIGHT. ONE LAYER ⅝" TYPE X GWB. IN LIEU OF (2) LAYERS ½" WALLBOARD MAY BE USED.
USE 1" TYPE S SELF TAPPING BUGLE HEAD SCREWS. CORNER BEAD - NO 26 MSG GALV STEEL. TWO 1-1/4" LEGS ATTACHED TO WALLBOARD WITH TYPE 4D NAILS SPACED VERTICALLY AT 12" O.C.
SEE 1/A1.0 FOR GIRT AND FRAMING PROTECTION.



5 1-HOUR FIRE AT END WALL COLUMN
SEE DETAIL 1/A1.0 FOR ADDITIONAL INFORMATION Scale: 1-1/2"=1'-Ø"

NOTES:

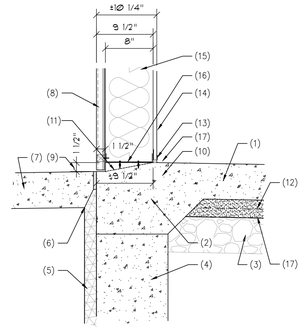
1. NEW CONCRETE SLAB ON GRADE WITH RADIANT IN-FLOOR HEATING SYSTEM ON ABC FILL. SEE STRUCTURAL PLANS FOR REINFORCING. SEE MECHANICAL PLANS FOR IN-FLOOR HEATING SYSTEM.
2. THICKEN SLAB AND TURN DOWN OVER TOP OF STEM WALL BELOW. SEE STRUCTURAL DETAILS.
3. ABC FILL PER STRUCTURAL PLANS AND DETAILS.
4. NEW CAST IN PLACE CONCRETE STEM WALL AND FOOTING BELOW. SEE STRUCTURAL DETAILS.
5. 2" RIGID POLYSTYRENE INSULATION BOARD AT STEM AND SLAB PERIMETER.
6. CHAMFER INSULATION BOARD AND PROVIDE 4" X ¼" CONTINUOUS EXPANSION CONTROL MATERIAL BETWEEN SLABS.
7. 4" THICK SIDEWALK SLAB ON GRADE PER STRUCTURAL PLANS. SLOPE AWAY FROM STRUCTURE ¼" PER FOOT.
8. METAL EXTERIOR FINISH PANEL.
9. 1-1/2" X 1-1/2" NOTCH TYP. AT BUILDING PERIMETER SLAB EDGE (EXCEPT DOORWAYS) STOP METAL PANEL A MIN. OF ½" SHORT OF THE BOTTOM OF THE NOTCH.
10. ⅜" HAT CHANNEL FURRING PERPENDICULAR TO THE GIRTS. FULL HEIGHT OF WALL. SEE DETAIL 1/A1.0
11. SET GIRT AND FRAMING BACK TO ACCOMMODATE ADDITIONAL WALLBOARD FINISH AT RATED WALL CONDITION.
12. NOT USED.
13. METAL LINER PANEL STOP. HOLD SHORT OF FLOOR FINISH BY 3/8" AND CAULK. SEE #7 BELOW.
14. WHITE METAL WALL LINER PANEL OVER VAPOR BARRIER FILM AT INTERIOR FACE OF WALLBOARD FINISH.
15. WALL INSULATION PER SPECIFICATIONS.
16. METAL TRACK TO MATCH GIRT WIDTH/DIMENSION ABOVE. CANTILEVER BEYOND CONCRETE STEM AS SHOWN. ANCHOR TO STEM PER STRUCTURAL DETAILS.
17. ONE LAYER ⅝" TYPE X EXTERIOR GWB. FINISH PER SPECS WITH TYVEK OR EQ. MOISTURE BARRIER BELOW METAL PANELS. REQUIRES A MAX. 24" FRAMING SPACING BETWEEN STRUCTURAL GIRTS. TAPE ALL JOINTS. SEE DETAIL 1/A1.0
18. ⅝" TYPE X GWB. PANEL, TAPE AND TEXTURE. REQUIRES MAX INFILL STUD FRAMING AT 24" O.C. MAX SPACING BETWEEN GIRTS. TAPE ALL JOINTS. SEE DETAIL 1/A1.0
19. SAND BASE. WIRE MESH TO SUPPORT RADIANT FLOOR HEATING SYSTEM AND TUBING.
20. VAPOR BARRIER.



3 EXTERIOR FOOTING–TYPICAL AT 1 HOUR WALL
SEE DETAIL 1/A1.0 FOR ADDITIONAL INFORMATION Scale: 1"=1'-Ø"

NOTES:

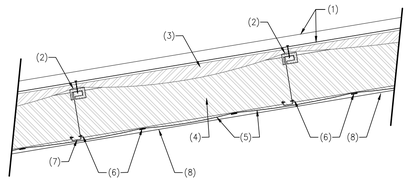
1. NEW CONCRETE SLAB ON GRADE WITH RADIANT IN-FLOOR HEATING SYSTEM ON ABC FILL. SEE STRUCTURAL PLANS FOR REINFORCING. SEE MECHANICAL PLANS FOR IN-FLOOR HEATING SYSTEM.
2. THICKEN SLAB AND TURN DOWN OVER TOP OF STEM WALL BELOW. SEE STRUCTURAL DETAILS.
3. COMPACTED AGGREGATE FILL PER STRUCTURAL PLANS AND DETAILS.
4. NEW CAST IN PLACE CONCRETE STEM WALL AND FOOTING BELOW. SEE STRUCTURAL DETAILS.
5. 2" RIGID POLYSTYRENE INSULATION BOARD AT STEM AND SLAB PERIMETER.
6. CHAMFER INSULATION BOARD AND PROVIDE 4" X ¼" CONTINUOUS EXPANSION CONTROL MATERIAL BETWEEN SLABS.
7. DRIVEWAY SLAB ON GRADE PER STRUCTURAL PLANS. SLOPE AWAY FROM STRUCTURE A MIN OF ¼" PER FOOT.
8. METAL EXTERIOR FINISH PANEL.
9. 1-1/2" X 1-1/2" NOTCH TYP. AT BUILDING PERIMETER SLAB EDGE (EXCEPT DOORWAYS) STOP METAL PANEL A MIN. OF ½" SHORT OF THE BOTTOM OF THE NOTCH.
10. LEVEL STEM THEN SLOPE TO DRAIN.
11. AT OVERHEAD DOOR SLOPE SLAB TO T.O. NOTCH. SEE DETAILS 2 BELOW.
12. SAND BASE. WIRE MESH TO SUPPORT RADIANT FLOOR HEATING SYSTEM AND TUBING.
13. METAL LINER PANEL STOP. HOLD SHORT OF FLOOR FINISH BY 3/8" AND CAULK. SEE #7 BELOW.
14. WHITE METAL WALL LINER PANEL OVER VAPOR BARRIER FILM.
15. WALL INSULATION PER SPECIFICATIONS.
16. METAL TRACK TO MATCH GIRT WIDTH/DIMENSION ABOVE. CANTILEVER BEYOND CONCRETE STEM AS SHOWN. ANCHOR TO STEM PER STRUCTURAL DETAILS.
17. VAPOR BARRIER.



1 EXTERIOR FOOTING–TYPICAL AT EXTERIOR PERIMETER
Scale: 1"=1'-Ø"

NOTES:

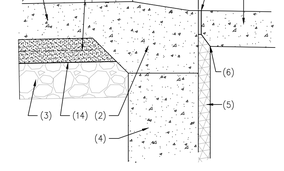
1. STANDING SEAM METAL ROOF FINISH WITH CONCEALED FASTENERS.
2. THERMAL BLOCK AT EACH PURLIN.
3. OUTER INSULATION LAYER OF BATT INSULATION OVER THERMAL BREAK.
4. INNER LAYER OF INSULATION BETWEEN EACH PURLIN.
5. LINER SYSTEM/VAPOR BARRIER SUPPORTED ON STEEL STRAPS PER MFR'S INSTALL INSTRUCTIONS.
6. LINER SYSTEM STEEL STRAP GRID.
7. STEEL PURLIN SYSTEM PER METAL BUILDING FABRICATOR.
8. STEEL LINER CEILING FINISH TO MATCH THE WALLS.



6 METAL ROOF LINER SYSTEM
Scale: 1"=1'-Ø"

NOTES:

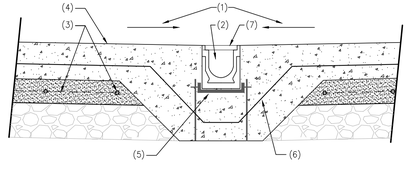
1. NEW CONCRETE SLAB ON GRADE WITH RADIANT IN-FLOOR HEATING SYSTEM ON ABC FILL. SEE STRUCTURAL PLANS FOR REINFORCING. SEE MECHANICAL PLANS FOR IN-FLOOR HEATING SYSTEM.
2. THICKEN SLAB AND TURN DOWN OVER TOP OF STEM WALL BELOW. SEE STRUCTURAL DETAILS.
3. ABC FILL PER STRUCTURAL PLANS AND DETAILS.
4. NEW CAST IN PLACE CONCRETE STEM WALL AND FOOTING BELOW. SEE STRUCTURAL DETAILS.
5. 2" RIGID POLYSTYRENE INSULATION BOARD AT STEM AND SLAB PERIMETER.
6. CHAMFER INSULATION BOARD AND PROVIDE 4" X ¼" CONTINUOUS EXPANSION CONTROL MATERIAL BETWEEN SLABS.
7. DRIVEWAY SLAB ON GRADE PER STRUCTURAL PLANS. SLOPE AWAY FROM STRUCTURE A MIN OF ¼" PER FOOT.
8. 4" X ¼" CONTINUOUS EXPANSION CONTROL MATERIAL BETWEEN SLABS.
9. METAL DOOR FRAME TRIM PER BLDG FABRICATOR.
10. OVERHEAD DOOR TRACK BEYOND.
11. SLOPE INTERIOR SLAB TO FLOOR DRAIN.
12. SLOPE T.O. SLAB OUT TO DRIVE SLAB ELEVATION AT TOP OF STEM NOTCH. SEE DETAIL 2.1 BELOW.
13. RADIANT TUBING/WIRE MESH SUPPORT AND SAND BASE.
14. VAPOR BARRIER.



2 EXTERIOR FOOTING–TYPICAL AT EXTERIOR DOORS
Scale: 1"=1'-Ø"

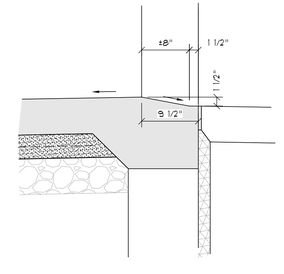
NOTES:

1. SLOPE FLOOR TO DRAIN. SEE FOUNDATION PLAN.
2. LINEAR TRENCH DRAIN SYSTEM. SEE FOUNDATION PLAN.
3. RADIANT FLOOR HEAT TUBING AND SUPPORT GRID. IN SAND BASE. SEE MECHANICAL PLANS.
4. CONCRETE SLAB ON GRADE ON ABC FILL ON TERMITE TREATED SOIL. SEE STRUCTURAL PLANS.
5. TRENCH DRAIN INSTALLATION CHAIR. SEE STRUCTURAL FOR CONTINUOUS HORIZONTAL REINFORCING ROUTED UNDER TRENCH DRAIN SYSTEM.
6. SLOTTED METAL DRAIN COVER.



7 LINEAR TRENCH DRAIN
Scale: 1"=1'-Ø"

4 NOT USED
Scale: 1"=1'-Ø"



2.1 EXTERIOR FOOTING–TYPICAL AT EXTERIOR DOORS
Scale: 1-1/2"=1'-Ø"

CONTRACTOR MUST VERIFY ALL DIMENSIONS PRIOR TO PROCEEDING WITH THIS WORK. THESE DRAWINGS AND SPECIFICATIONS AS INSTRUMENTS OF SERVICE ARE AND SHALL REMAIN THE PROPERTY OF THE ARCHITECT WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. THESE DRAWINGS AND SPECIFICATIONS SHALL NOT BE USED BY ANYONE ON ANY PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS, EXCEPT BY AGREEMENT IN WRITING AND WITH APPROPRIATE COMPENSATION TO THE ARCHITECT. DO NOT REPRODUCE ANY ANTICIPATED DESIGN FEATURES OR GRAPHIC CONCEPTS WITHOUT THE EXPRESSED WRITTEN PERMISSION OF THE ARCHITECT.
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PROJECT NO.
FILE NAME:
DATE:
☒ SCHEMATIC DESIGN
☒ DESIGN DEVELOPMENT
☒ CONSTRUCTION DOCUMENTS
REVISIONS

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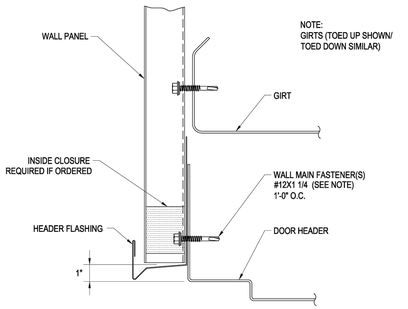
New Fire Station
115 6th Street West
Bottineau, North Dakota 58318

DANIEL L. NOSTDAHL (1964) DATE 6/4/2024 REGISTERED ARCHITECT STATE OF NORTH DAKOTA

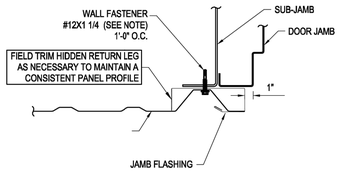
Architectural Details

Scale: 1"=1'-0"
SHEET NO.
A6.0



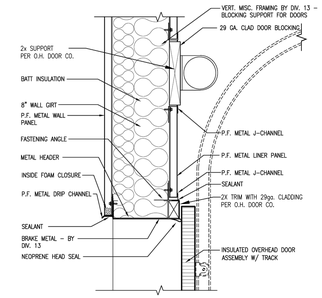
4 H.M. DOOR HEAD

Scale: 3"=1'-0"



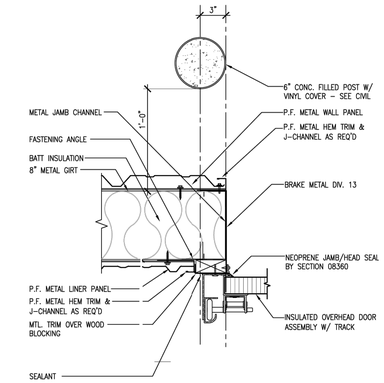
3 H.M. DOOR JAMB

Scale: 1-1/2"=1'-0"



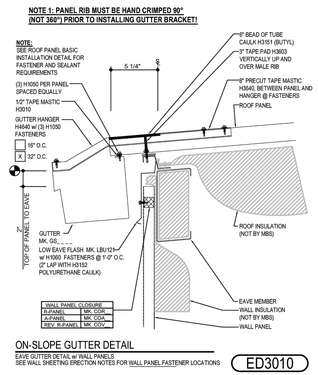
2 O.H. GARAGE DOOR HEAD

Scale: 1-1/2"=1'-0"



1 O.H. GARAGE DOOR JAMB

Scale: 1-1/2"=1'-0"



ON-SLOPE GUTTER DETAIL

EAVE GUTTER DETAIL w/ WALL PANELS
SEE WALL SHEETING ERECTION NOTES FOR WALL PANEL FASTENER LOCATIONS

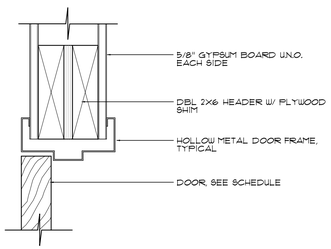
ED3010

Detailer Notes:

1) CLOSURES LOW EAVE LAYER DEFAULT IS ON. LAYER MUST BE TURNED OFF IF CLOSURES ARE NOT REQUIRED.

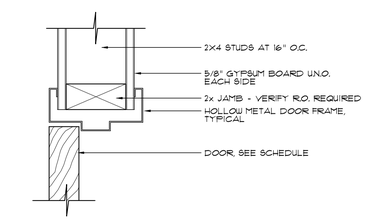
7 PEMB GUTTER

Scale: 3"=1'-0"



6 H.M. DOOR HEAD

Scale: 3"=1'-0"



5 H.M. DOOR JAMB

Scale: 3"=1'-0"

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☒ CONSTRUCTION DOCUMENTS

REVISIONS

City of Bottineau

New Fire Station

115 6th Street West

Bottineau, North Dakota 58318

LICENSED ARCHITECT
DANIEL L. NOSTDAHL
(1964)
DATE 6/4/2024
STATE OF NORTH DAKOTA

Architectural Details

Scale: AS NOTED

SHEET NO.

A6.1

GENERAL REQUIREMENTS

1. DESIGN AND CONSTRUCTION OF THIS PROJECT IS PER THE 2021 "INTERNATIONAL BUILDING CODE (IBC)" WITH THE INCLUSION OF LOCAL AMENDMENTS.
2. REFER TO ARCHITECTURAL, CIVIL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION RELATED TO: DIMENSIONS, ELEVATIONS, SLOPES, DOOR AND WINDOW OPENINGS, NON-BEARING WALLS, STAIRS, FINISHES, DRAINS, WATERPROOFING, RAILINGS, MECHANICAL UNIT LOCATIONS, INSERTS, EMBEDDED ITEMS, ANCHORAGES, AND OTHER NON-STRUCTURAL ITEMS.
3. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR: COORDINATING DETAILS, ACCURACY OF THE WORK, VERIFICATION OF ALL QUANTITIES AND DIMENSIONS, SELECTING FABRICATION PROCESSES, MEANS AND METHODS OF CONSTRUCTION, AND FOR PERFORMING THE WORK IN A SAFE AND SECURE MANNER.
4. STRENGTH AND STABILITY OF THE STRUCTURE DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. PROVIDE TEMPORARY SHORING, BRACING AND OTHER ELEMENTS REQUIRED TO MAINTAIN STABILITY UNTIL THE STRUCTURE IS COMPLETE.
5. DISCREPANCIES WITHIN THE CONSTRUCTION DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK.
6. GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS, AND CONDITIONS AT THE SITE, INCLUDING FOUNDATIONS. CONFLICTS BETWEEN THE DRAWINGS AND ACTUAL SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK.
7. NO STRUCTURAL MEMBER SHALL BE CUT OR NOTCHED OR OTHERWISE REDUCED IN STRENGTH UNLESS APPROVED BY THE ENGINEER OF RECORD.
8. CONSTRUCTION OBSERVATION BY THE STRUCTURAL ENGINEER IS FOR GENERAL CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING ALL WORK IN COMPLIANCE WITH THE CONTRACT DOCUMENTS.
9. GENERAL CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND PRODUCT DATA TO ENGINEER OF RECORD FOR REVIEW OF GENERAL CONFORMANCE WITH CONTRACT DOCUMENTS. ALL SUBMITTALS SHALL BE REVIEWED AND STAMPED BY THE GENERAL CONTRACTOR PRIOR TO SUBMISSION. SUBMITTALS ARE REQUIRED FOR: CONCRETE MIX DESIGNS, REINFORCING STEEL, AND METAL BUILDINGS.
10. SPECIAL INSPECTIONS SHALL BE PROVIDED BY AN INDEPENDENT TESTING AND INSPECTION AGENCY PER CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE AND AS NOTED WITHIN THE CONTRACT DOCUMENTS. REPORTS DOCUMENTING THE RESULTS OF THE TESTING AND INSPECTIONS SHALL BE SUBMITTED FOR REVIEW AND RECORD.

FOUNDATIONS

1. FOOTINGS HAVE BEEN DESIGNED FOR THE ALLOWABLE SOIL BEARING PRESSURE INDICATED WITHIN THE DESIGN CRITERIA AND LOADS TABLE.
2. FOUNDATIONS, WHERE PRESENT, SHALL BEAR ON EITHER COMPETENT NATIVE SOIL OR COMPACTED STRUCTURAL FILL.
3. UNLESS NOTED OTHERWISE, ALL FOOTINGS SHALL BE CENTERED UNDER COLUMNS, PIERS, WALLS, ETC.
4. BACKFILL AGAINST THE FOUNDATION WALLS SHALL BE DONE CAREFULLY TO AVOID DAMAGE TO THE FOUNDATION WALLS, FOOTINGS, PIPES, CONDUITS, ETC. IN LAYERS NOT EXCEEDING 6" THICK AND PROPERLY COMPACTED TO 92% OF STANDARD PROCTOR TEST. EXTEND BACKFILL UP EVENLY ON EACH SIDE OF THE WALL.
5. PROTECT ALL FOUNDATIONS FROM THE ACTION OF WATER AND FREEZING.
6. SEE PRE-ENGINEERED METAL BUILDING NOTES FOR ADDITIONAL FOUNDATION REQUIREMENTS AND COORDINATION.

POST INSTALLED ANCHORS

1. POST INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFIED ON THE DRAWINGS. CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER OF RECORD PRIOR TO USING POST INSTALLED ANCHORS FOR MISSING OR MISPLACED ANCHORS.
2. CARE SHALL BE TAKEN TO AVOID CONFLICTS WITH EXISTING REINFORCING WHEN DRILLING HOLES. HOLES SHALL BE DRILLED AND CLEANED PER THE MANUFACTURER'S INSTRUCTIONS. ANCHORS SHALL BE INSTALLED PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AT NOT LESS THAN MINIMUM EDGE DISTANCES AND/OR SPACING INDICATED WITHIN THE LITERATURE.

DELEGATED DESIGN

1. THE FOLLOWING ITEMS ARE IDENTIFIED IN THE DRAWINGS AND SPECIFICATIONS AS BEING DESIGNED AND SEALED BY THE CONTRACTOR OR THE CONTRACTOR'S SUPPLIER IN ACCORDANCE WITH THE SPECIFICATIONS INDICATED BELOW. SUBMITTALS FOR THESE ITEMS SHALL BE PREPARED BY THE SUPPLIERS AND SUBMITTED TO ENGINEER AND CODE OFFICIAL FOR REVIEW.

   SECTION 13 34 19 - METAL BUILDING SYSTEMS.

CAST IN PLACE CONCRETE

1. A CONCRETE MIX DESIGN FOR EACH UNIQUE COMBINATION OF STRENGTH, APPLICATION, COARSE AGGREGATE GRADATION, AND WATER CEMENT RATIO SPECIFIED SHALL BE PREPARED BY THE SUPPLIER OR AN INDEPENDENT TESTING LABORATORY AND BE SUBMITTED FOR REVIEW PRIOR TO CASTING ANY CONCRETE.
2. UNLESS NOTED OTHERWISE, MAXIMUM AGGREGATE SIZE SHALL BE 1 INCH, MAXIMUM WATER:CEMENT RATIO OF 0.5, AIR CONTENT NOT TO EXCEED 3% ENTRAPPED AT TROWEL FINISHED SLABS, AND AT APPLICATIONS EXPOSED TO FREEZE/THAW CYCLES PROVIDE 6% AIR ENTRAINMENT.
3. ALL FORMWORK SHALL BE DESIGNED, ERECTED, SUPPORTED, BRACED AND MAINTAINED ACCORDING TO ACI 347, "RECOMMENDED STANDARD PRACTICE FOR CONCRETE FORMWORK".
4. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, CONSTRUCTION, AND SAFETY OF ALL FORMWORK.
5. UNLESS OTHERWISE NOTED, TOLERANCES FOR CONCRETE FORMWORK SHALL CONFORM TO ACI STANDARD 117, "STANDARD TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS".
6. DO NOT USE ADMIXTURES CONTAINING CALCIUM CHLORIDE.
7. CONCRETE CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF ACI 301 "STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE" AND ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE." CONFORM TO THE REQUIREMENTS OF ACI 305 "HOT WEATHER CONCRETING" OR ACI 306 "COLD WEATHER CONCRETING" WHEN WEATHER CONDITIONS DICTATE.
8. OPENINGS IN CONCRETE SHALL BE REINFORCED WITH (2) #5 BARS EACH SIDE, EXTENDING 2'-0" PAST THE FACE OF THE OPENING, UNLESS OTHERWISE NOTED.
9. SEE STANDARD DETAILS FOR CORNER BAR REINFORCING AT WALL CORNERS.
10. PROVIDE DOWELS TO SUPPORTING MEMBER WITH BARS SIZED AND SPACED TO MATCH TYPICAL VERTICAL REINFORCING. DOWELS SHALL HAVE STANDARD HOOKS EMBEDDED INTO SUPPORTING CONCRETE WITH LAP SPLICE TO VERTICAL REINFORCING, UNLESS NOTED OTHERWISE.
11. A 6 INCH GRANULAR BASE SHALL BE PROVIDED BETWEEN THE SLAB ON GRADE AND SUBGRADE. A VAPOR BARRIER SHALL BE PROVIDED AT ALL SLABS ON GRADE THAT RECEIVE MOISTURE SENSITIVE COATINGS/COVERINGS.
12. SEE STANDARD DETAILS FOR SLAB ON GRADE CONSTRUCTION AND CONTRACTION JOINTS. CONTRACTION JOINTS SHALL BE CUT WITHIN 24 HOURS OF CONCRETE PLACEMENT, SPACED NOT MORE THAN 3 TIMES THE SLAB THICKNESS IN FEET, AND WITH AN ASPECT RATIO NOT EXCEEDING 1.5.

CAST IN PLACE CONCRETE (NON-PRESTRESSED) COVER ACI 318 - STRUCTURAL CONCRETE

UNLESS NOTED OTHERWISE ON DRAWINGS	COVER (in)
CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3
EXPOSED TO EARTH OR WEATHER:	
No. 6 THROUGH No. 18 BARS	2
No. 5 BAR AND SMALLER	1 1/2
NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND	
SLABS, WALLS, JOISTS:	
No. 14 AND No. 18 BARS	1 1/2
No. 11 BAR AND SMALLER	3/4
BEAMS, COLUMNS:	
PRIMARY REINFORCEMENT, TIES, STIRRUPS, SPIRALS	1 1/2
SLAB ON GRADE / SLAB ON METAL DECK	CENTERED

REINFORCING STEEL

1. LAP SPLICES OF DEFORMED BARS SHALL BE CLASS B, SEE REINFORCING SPLICE AND DEVELOPMENT TABLE FOR LENGTHS, UNLESS OTHERWISE NOTED.
2. REINFORCING STEEL SHALL NOT BE WELDED.
3. ALL REINFORCING STEEL SHALL BE SUPPORTED ON STANDARD ACCESSORIES, HELD RIGIDLY AND ACCURATELY IN PLACE, AND PROTECTED AGAINST DISPLACEMENT BEFORE AND DURING PLACEMENT OF CONCRETE. SUPPORTING ACCESSORY LEGS THAT REST ON CONCRETE SURFACES THAT WILL BE EXPOSED IN THE FINISHED STRUCTURE SHALL BE FABRICATED OF STAINLESS STEEL.
4. DOWELS AND OTHER MISCELLANEOUS STEEL EMBEDDED ITEMS SHALL BE LOCATED AND HELD IN SPECIFIED POSITION PRIOR TO PLACEMENT OF CONCRETE AND SHALL NOT BE PUSHED INTO CONCRETE FOLLOWING CONCRETE POUR.
5. PROVIDE 200' OF #5 REBAR IN 20' LENGTHS TO BE USED AS DIRECTED BY THE ENGINEER.

REINFORCING STEEL LAP SPLICE AND DEVELOPMENT LENGTH SCHEDULE

	MINIMUM LAP SPLICE LENGTH ("Ls")		MINIMUM DEVELOPMENT LENGTH ("Ld")	
BAR SIZE	TOP BARS [1]	OTHER BARS	TOP BARS [1]	OTHER BARS
#3	2'-0"	1'-7"	1'-7"	1'-3"
#4	2'-8"	2'-1"	2'-1"	1'-7"
#5	3'-4"	2'-7"	2'-7"	2'-0"
#6	4'-0"	3'-1"	3'-1"	2'-5"
#7	5'-10"	4'-6"	4'-6"	3'-6"
#8	6'-8"	5'-2"	5'-2"	3'-11"
#9	7'-7"	5'-10"	5'-10"	4'-6"

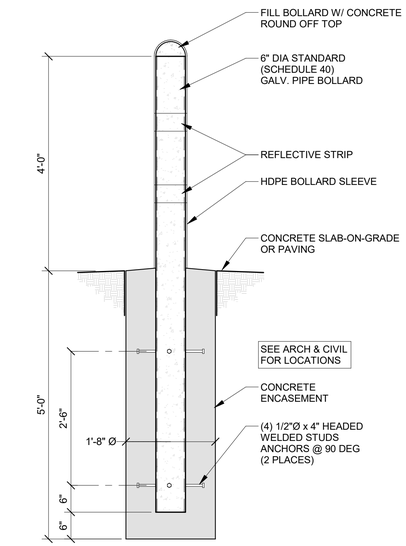
1. HORIZONTAL BARS WITH MORE THAN 12" DEPTH OF CONCRETE CAST BELOW THEM

STRUCTURAL STEEL

1. STRUCTURAL STEEL, INCLUDING ANCHOR RODS/BOLTS AND BASE PLATES, SHALL NOT BE FIELD MODIFIED WITHOUT APPROVAL OF THE ENGINEER OF RECORD.
2. BEAM AND COLUMNS SHALL BE ERECTED TRUE AND PLUMB, PROVIDE TEMPORARY BRACING.
3. NO FIELD WELDS ARE TO BE MADE UNTIL THE MEMBERS ARE PROPERLY ALIGNED. FIELD WELDS ARE TO BE MADE BY COMPETENT WELDERS USING PROPER ELECTRODES AND AMPERAGE.
4. ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AWS D1.1 BY CERTIFIED WELDERS WITH CURRENT EXPERIENCE IN TYPE OF WELD SHOWN ON THE DRAWINGS.
5. SHOP PRIME ALL STRUCTURAL STEEL WITH FABRICATOR'S STANDARD COLOR, UNLESS NOTED OTHERWISE, PER AISC 360 SECTION M3 AND AISC 303 SECTION 6.5. PRIMER SHALL BE COMPATIBLE WITH TOP COAT AND FINISH, FIELD TOUCH-UP AS NECESSARY. COORDINATE TOP COAT AND FINISH WITH ARCHITECTURAL DRAWINGS, UNLESS OTHERWISE NOTED.

PRE-ENGINEERED METAL BUILDING (PEMB)

1. GENERAL CONTRACTOR SHALL VERIFY THAT THE PIER SIZES PROVIDED AND OVERALL BUILDING DIMENSIONS ARE COMPATIBLE WITH THE METAL BUILDING ACTUALLY SUPPLIED. SUBMIT ANY REQUIRED CHANGES TO ARCHITECT/ENGINEER PRIOR TO CONSTRUCTION FOR APPROVAL REVIEW.
2. FOUNDATIONS HAVE BEEN DESIGNED BASED ON ASSUMED COLUMN LOAD REACTIONS AND ARE SUBJECT TO REVISION BASED ON FINAL BUILDING REACTIONS. THE PEMB SUPPLIER SHALL SUBMIT FINAL COLUMN LOAD REACTIONS, INCLUDING LOAD COMBINATIONS.
3. SIZE AND LOCATION OF ANCHOR RODS SHALL BE COORDINATED WITH THE PEMB SUPPLIER PRIOR TO INSTALLATION OF FOUNDATIONS.
4. PEMB DESIGN SHALL BE COMPLETED UNDER THE SUPERVISION OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THIS PROJECT FOR THE LOADS INDICATED. MAXIMUM LIVE LOAD DEFLECTION SHALL BE L/360 AT FLOOR FRAMING, L/240 AT ROOF FRAMING, AND L/240 AT WALL FRAMING. MAXIMUM RIGID FRAME DRIFT SHALL BE LIMITED TO H/200.



1 S0.1 **STANDARD PIPE BOLLARD DETAIL**

12" 6" 0 1' 2' 3'

DRAWN BY: RRS
CHECKED BY: RRS
PROJECT NO.: 18028-2024-001
FILE NAME: XXXXXX
DATE: JUNE 2024

- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
- ☒ CONSTRUCTION DOCUMENTS

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AE2S

City of Bottineau
New Fire Station
115 6th Street West
Bottineau, North Dakota 58318

REGISTERED PROFESSIONAL ENGINEER
RYAN R. STROH
PE-9490
Date 6/4/24
NORTH DAKOTA

GENERAL STRUCTURAL NOTES

Scale:

SHEET NO.

S0.1

REQUIRED SPECIAL INSPECTION OF CONCRETE CONSTRUCTION [1, 2]

VERIFICATION & INSPECTION	CONTINUOUS	PERIODIC
INSPECTION OF REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT		X
REINFORCING BAR WELDING:		
a. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A 706		X
b. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16"; AND		X
c. INSPECT ALL OTHER WELDS	X	
INSPECTION OF ANCHORS CAST INTO CONCRETE		X
INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS		X
a. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS	X	
b. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED ABOVE		X
VERIFYING USE OF REQUIRED DESIGN MIX		X
PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE	X	
INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	X	
VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES		X
INSPECTION OF PRESTRESSED CONCRETE FOR:		
a. APPLICATION OF PRESTRESSING FORCED; AND	X	
b. GROUTING OF BONDED PRESTRESSING TENDONS	X	
INSPECT ERECTION OF PRECAST CONCRETE MEMBERS		X
VERIFICATION IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS		X
INSPECTION OF FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS PRIOR TO CONCRETE POUR		X
1. ALL SPECIAL INSPECTION IN ACCORDANCE WITH CURRENT IBC AND ACI STANDARDS		
2. SEE GENERAL NOTES & SPECS FOR ADDITIONAL REQUIREMENTS		

REQUIRED SPECIAL INSPECTION OF STEEL CONSTRUCTION [1, 2]

VERIFICATION & INSPECTION	CONTINUOUS	PERIODIC
1. MATERIAL VERIFICATION OF HIGH-STRENGTH BOLTS, NUTS, AND WASHERS:		
a. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS		X
b. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED		X
2. INSPECTION OF HIGH-STRENGTH BOLTING:		
a. SNUG-TIGHT JOINTS.		X
b. PRETENSIONED AND SLIP-CRITICAL JOINTS USING TURN-OF-NUT WITH MATCHMARKING, TWIST-OFF BOLT OR DIRECT TENSION INDICATOR METHODS OF INSTALLATION		n/a
c. PRETENSIONED AND SLIP-CRITICAL JOINTS USING TURN-OF-NUT WITHOUT MATCHMARKING OR CALIBRATED WRENCH METHODS OF INSTALLATION	n/a	
3. MATERIAL VERIFICATION OF STRUCTURAL STEEL AND COLD-FORMED STEEL DECK:		
a. FOR STRUCTURAL STEEL, IDENTIFICATION MARKINGS TO CONFORM TO AISC 360.		X
b. FOR OTHER STEEL, IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS		X
c. MANUFACTURER'S CERTIFIED TEST REPORTS		X
4. MATERIAL VERIFICATION OF WELD FILLER MATERIALS:		
a. IDENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATION IN THE APPROVED CONSTRUCTION DOCUMENTS.		X
b. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED		X
5. INSPECTION OF WELDING:		
a. STRUCTURAL STEEL AND COLD-FORMED STEEL DECK		
1) COMPLETE AND PARTIAL JOINT PENETRATION GROOVE WELDS	X	
2) MULTIPASS FILLET WELDS	X	
3) SINGLE-PASS FILLET WELDS > 5/16"	X	
4) PLUG AND SLOT WELDS	X	
5) SINGLE-PASS FILLET WELDS OF 5/16" AND LESS		X
6) FLOOR AND ROOF DECK WELDS		X
b. REINFORCING STEEL:		
1) VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A 706		X
2) REINFORCING STEEL RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES	X	
3) SHEAR REINFORCEMENT	X	
4) OTHER REINFORCING STEEL		X
4. INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE:		
a. DETAILS SUCH AS BRACING AND STIFFENING		n/a
b. MEMBER LOCATIONS		n/a
c. APPLICATION OF JOINT DETAILS AT EACH CONNECTION		n/a
1. ALL SPECIAL INSPECTION IN ACCORDANCE WITH CURRENT IBC AND AISC REQUIREMENTS		
2. SEE GENERAL NOTES & SPECS FOR ADDITIONAL REQUIREMENTS		

MATERIAL STRENGTHS [1]

CONCRETE		
	28 DAY COMPRESSIVE STRENGTH	f'c
	FOOTINGS	3000 PSI
	FOUNDATION WALLS / PIERS	4000 PSI
	SLAB ON GRADE	4000 PSI
REINFORCING STEEL		
	REINFORCING BARS	ASTM A615, GRADE 60, DEFORMED
STRUCTURAL STEEL		
STRUCTURAL MEMBERS	WIDE FLANGE (W) & TEE (WT)	ASTM A992, Fy=50 KSI
	CHANNEL (C & MC) & ANGLE (L)	ASTM A36, Fy=36 KSI
	STRUCTURAL BARS & PLATES	ASTM A36, Fy=36 KSI
	HOLLOW STRUCTURAL SECTIONS - RECT/SQ (HSS)	ASTM A500, GRADE C, Fy=50 KSI
	STRUCTURAL PIPE (SCHED 40 UNO)	ASTM A53, GRADE B, Fy=35 KSI
FASTENERS	HIGH STRENGTH BOLTS	ASTM A325-N
	ANCHOR RODS	ASTM F1554, GRADE 36
	THREADED RODS	ASTM A36
	COMMON BOLTS	ASTM A307
	SHEAR STUD CONNECTORS	ASTM A108
WELDS	WELD ELECTRODES	E70XX
POST INSTALLED ANCHORS		
ADHESIVE ANCHORS	HILTI HIT-HY200	ANCHORAGE TO CONCRETE
EXPANSION ANCHORS	HILTI KWIK BOLT 3	ANCHORAGE TO CONCRETE
SCREW ANCHORS	HILTI KWIK HUS-EZ	ANCHORAGE TO CONCRETE
	(OR APPROVED EQUALS)	
1. SEE GENERAL NOTES & SPECS FOR ADDITIONAL REQUIREMENTS		

DESIGN CRITERIA AND LOADS (IN ADDITION TO THOSE INDICATED ON PLANS & DETAILS)

OCCUPANCY	BUILDING RISK CATEGORY		III
DEAD LOADS	**(SUPERIMPOSED)**		
	ROOF		BY PEMB SUPPLIER
LIVE LOADS			
	TYPICAL FLOOR		100 PSF
SNOW LOAD			
	GROUND SNOW LOAD	Pg	50 PSF
	SNOW EXPOSURE	Ce	1.00
	IMPORTANCE FACTOR	Is	1.10
	THERMAL FACTOR	Ct	1.00
	FLAT ROOF SNOW LOAD	Pf	38.5 PSF
	DESIGN MINIMUM SNOW LOAD		38.5 PSF
	SNOW DRIFT LOAD		SEE PLAN
	UNBALANCED SNOW LOAD PER ASCE7		
WIND DESIGN	**(STRENGTH LEVEL, UNO)**		
MAIN WIND FORCE RESISTING SYSTEM	BASIC WIND SPEED	V	118 MPH
	EXPOSURE CATEGORY		C
	BUILDING TYPE		ENCLOSED
	INTERNAL PRESSURE COEFFICIENT	GCpi	+/-0.18
UPLIFT	NET UPLIFT LOAD - (SERVICE LEVEL)		11 PSF
SEISMIC DESIGN			
	SEISMIC DESIGN CATEGORY		A
	SEISMIC FORCE RESISTING SYSTEM		N/A
	IMPORTANCE FACTOR	Ie	1.25
	SITE CLASS		D
	SPECTRAL RESPONSE ACCELERATION	Ss	0.045g
		S1	0.018g
	SPECTRAL DESIGN RESPONSE COEFFICIENT	Sds	0.048g
		Sd1	0.029g
FOUNDATIONS			
	SOIL BEARING PRESSURE (ASSUMED)	fbrg	1500PSF

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DRAWN BY: RRS
CHECKED BY: RRS
PROJECT NO.: 18228-2024-001
FILE NAME: XXXXXX
DATE: JUNE 2024
☐ SCHEMATIC DESIGN
☐ DESIGN DEVELOPMENT
☐ CONSTRUCTION DOCUMENTS
☒

AES

City of Bottineau

New Fire Station

115 6th Street West
Bottineau, North Dakota 58318

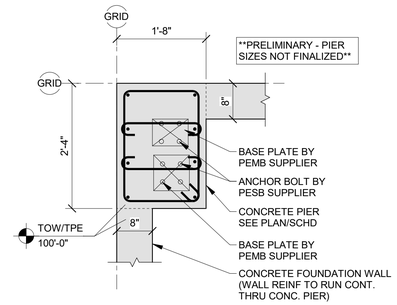
REGISTERED PROFESSIONAL ENGINEER
RYAN R. STROH
PE-9490
Date 6/4/24
NORTH DAKOTA

GENERAL STRUCTURAL NOTES

Scale:

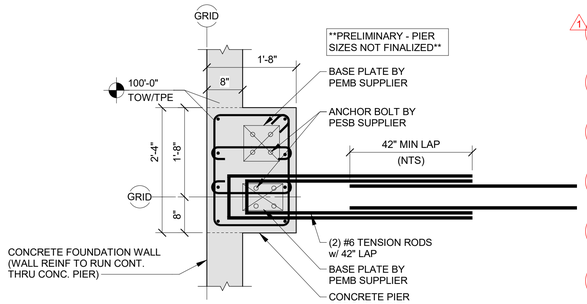
SHEET NO.

S0.2



5 S1.0 **P-4 PIER DETAIL**

12" 6" 0 1' 2' 3'



4 S1.0 **P-3 PIER DETAIL**

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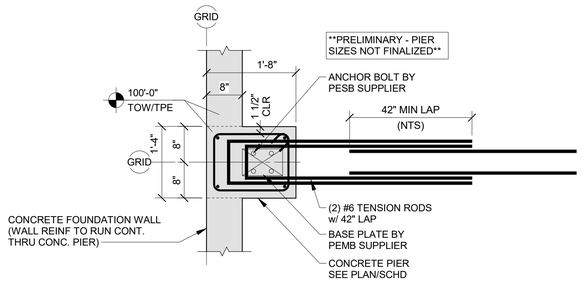

3 S1.0 **P-2 PIER DETAIL**

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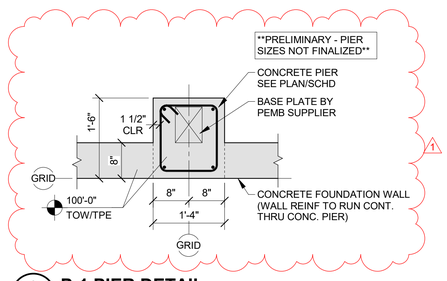
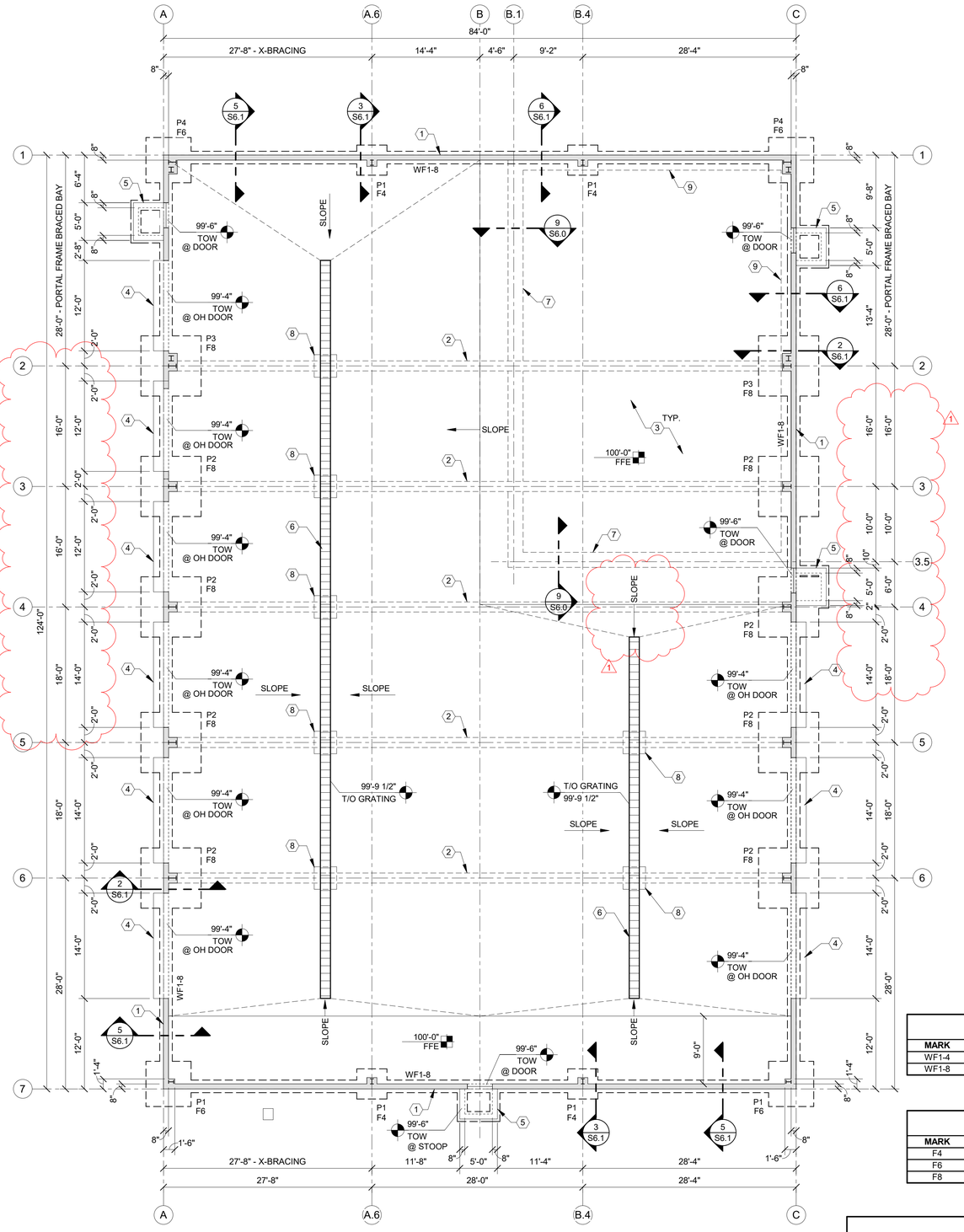


2 S1.0 **P-1 PIER DETAIL**

12" 6" 0 1' 2' 3'



1 S1.0 **FOUNDATION PLAN**

0 4' 8' 12' 16' 20'

NORTH

DRAWING SYMBOLS LEGEND

INDICATES NEW ELEVATION OF TOP OF FOOTING, PIER CAP, PILE CAP, ETC

INDICATES NEW ELEVATION OF FINISH FLOOR, FINISH SLAB, TOP OF DECK, ETC

PLAN NOTES

1. TOP OF FOOTING ELEVATION (TFE) = 96'-0" U.N.O.
2. TOP OF PIER ELEVATION (TPE) = 100'-0" U.N.O.
3. TOP OF WALL ELEVATION (TWE) = 100'-0" U.N.O.
4. CONSTRUCTION/CONTRACTION JOINT LAYOUT BY G.C. - SEE DETAIL 5 / S6.0 & ARCHITECTURAL DRAWINGS FOR GUIDELINES - SUBMIT JOINTING PLAN PRIOR TO POURING CONCRETE SLAB FOR REVIEW AND APPROVAL.

(#) CONSTRUCTION NOTES

1. CONCRETE CAST-IN-PLACE FOUNDATION WALL
2. (4) #6 TENSION TIES ENCASED IN CONCRETE w/ 42" TENSION LAPS - WRAP AROUND O.S. PAIR OF ANCHOR BOLTS & EXTEND ACROSS THROUGH CONCRETE - SEE DETAIL 8 / S6.0
3. 6" CONCRETE SLAB-ON-GRADE REINF. w/ #4@12" O/C
4. APPROXIMATE LOCATION OF OVERHEAD DOOR - VERIFY SIZE AND LOCATION WITH PEMB SUPPLIER
5. APPROXIMATE LOCATION OF STOOP - VERIFY SIZE AND LOCATION WITH ARCHITECTURAL AND PEMB SUPPLIER - SEE DETAIL 1 / S6.1
6. TRENCH DRAIN - SEE DETAIL 7 / S6.0
7. 2'-0"x12" THICKENED SLAB - REINF w/ (2)-#5 LONGIT BARS (3" CLR COVER) - SEE DETAIL 9 / S6.0
8. 3'-0" WIDE x 3'-0" LENGTH x 3'-0" DEPTH DEADMAN - POUR DEADMAN TO BE UNDER BOTTOM SLAB OF TRENCH DRAIN - TENSION TIES TO RUN CONTINUOUS THROUGH DEADMAN - SEE DETAIL 2 / S6.0
9. 1'-4"x12" THICKENED SLAB - REINF w/ (2)-#5 LONGIT BARS (3" CLR COVER) - SEE DETAIL 6 / S6.1

STRIP FOOTING SCHEDULE (TFE = 96'-0" U.N.O.)

MARK	WIDTH	THICKNESS	BOTTOM REINFORCING
WF1-4	1'-4"	12"	(2) - #5 LONGIT w/ #4@48" TRANSV BARS
WF1-8	1'-8"	12"	(2) - #5 LONGIT - TYP @ STOOPS

PAD FOOTING SCHEDULE (TFE = 96'-0" U.N.O)

MARK	WIDTH	LENGTH	THICKNESS	BOTTOM REINFORCING
F4	4'-0"	4'-0"	12"	(4) #5 BARS EA WAY - BTM BARS
F6	6'-0"	6'-0"	12"	(6) #5 BARS EA WAY - TOP & BTM BARS
F8	8'-0"	8'-0"	12"	(7) #5 BARS EA WAY - TOP & BTM BARS

PIER SCHEDULE (TPE = 100'-0" U.N.O.)

MARK	SIZE	VERTICAL REINFORCING	TIES	REMARKS
P1	16" x 18"	(4) #6	#3 TIES @ 12" o/c w/ (3)-#3 TIES @ TOP	SEE DETAIL 2/S1.0
P2	16" x 20"	(4) #6	#3 TIES @ 12" o/c w/ (3)-#3 TIES @ TOP	SEE DETAIL 3/S1.0
P3	28" x 20"	(8) #6	#3 TIES @ 12" o/c w/ (3)-#3 TIES @ TOP	SEE DETAIL 4/S1.0
P4	30" x 20"	(8) #6	#3 TIES @ 12" o/c w/ (3)-#3 TIES @ TOP	SEE DETAIL 5/S1.0

DRAWN BY: RRS
CHECKED BY: RRS
PROJECT NO.: 16328-2024-001
FILE NAME: XXXXXX
DATE: JUNE 2024

- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
- X CONSTRUCTION DOCUMENTS

REVISION #1, DATE: 12/1/2024

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AE2S

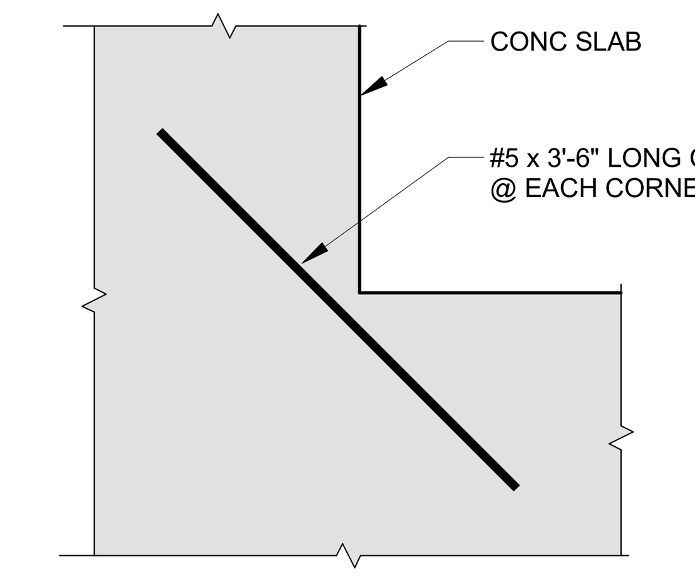
City of Bottineau
New Fire Station
115 6th Street West
Bottineau, North Dakota 58318

FOUNDATION PLAN

Scale:

SHEET NO.

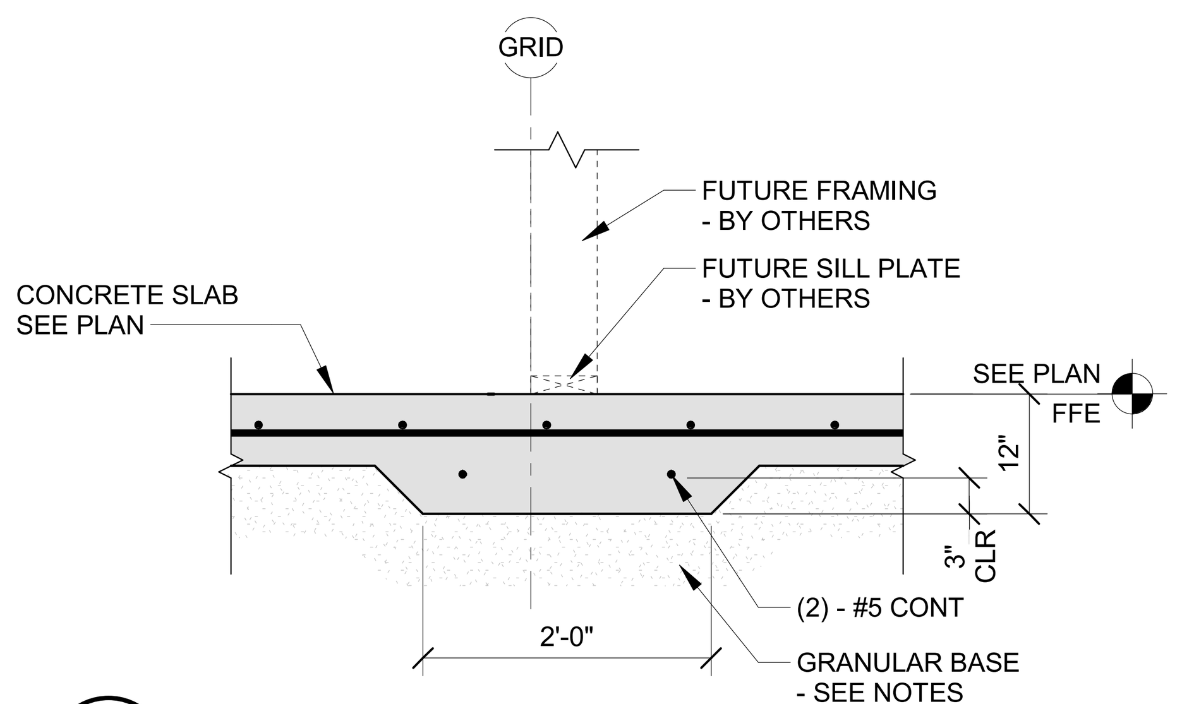
S1.0



NOTE: TYPICAL UNLESS NOTED OTHERWISE AS INDICATED ON DRAWINGS

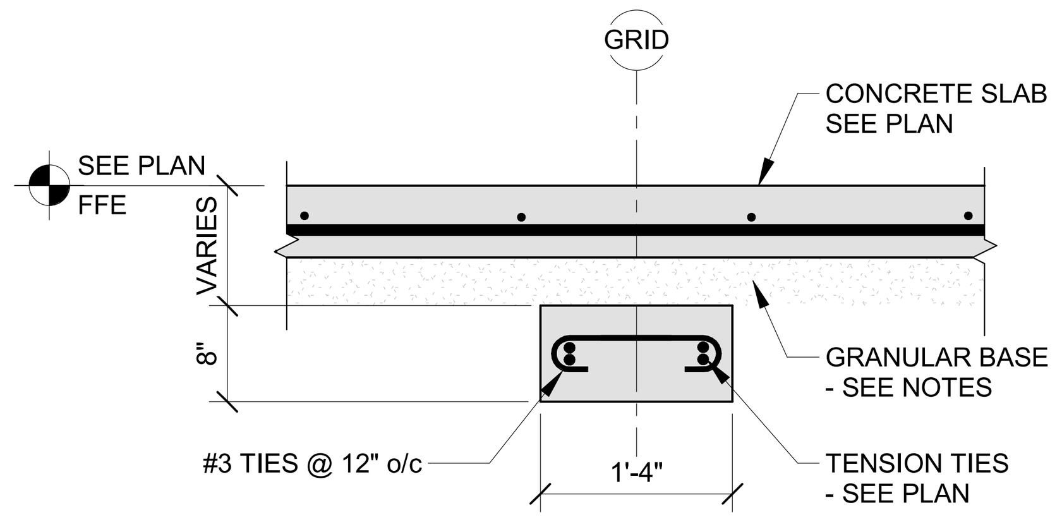
10 S6.0 SLAB REINF @ RE-ENTRANT CORNERS

12" 6" 0 1' 2' 3'



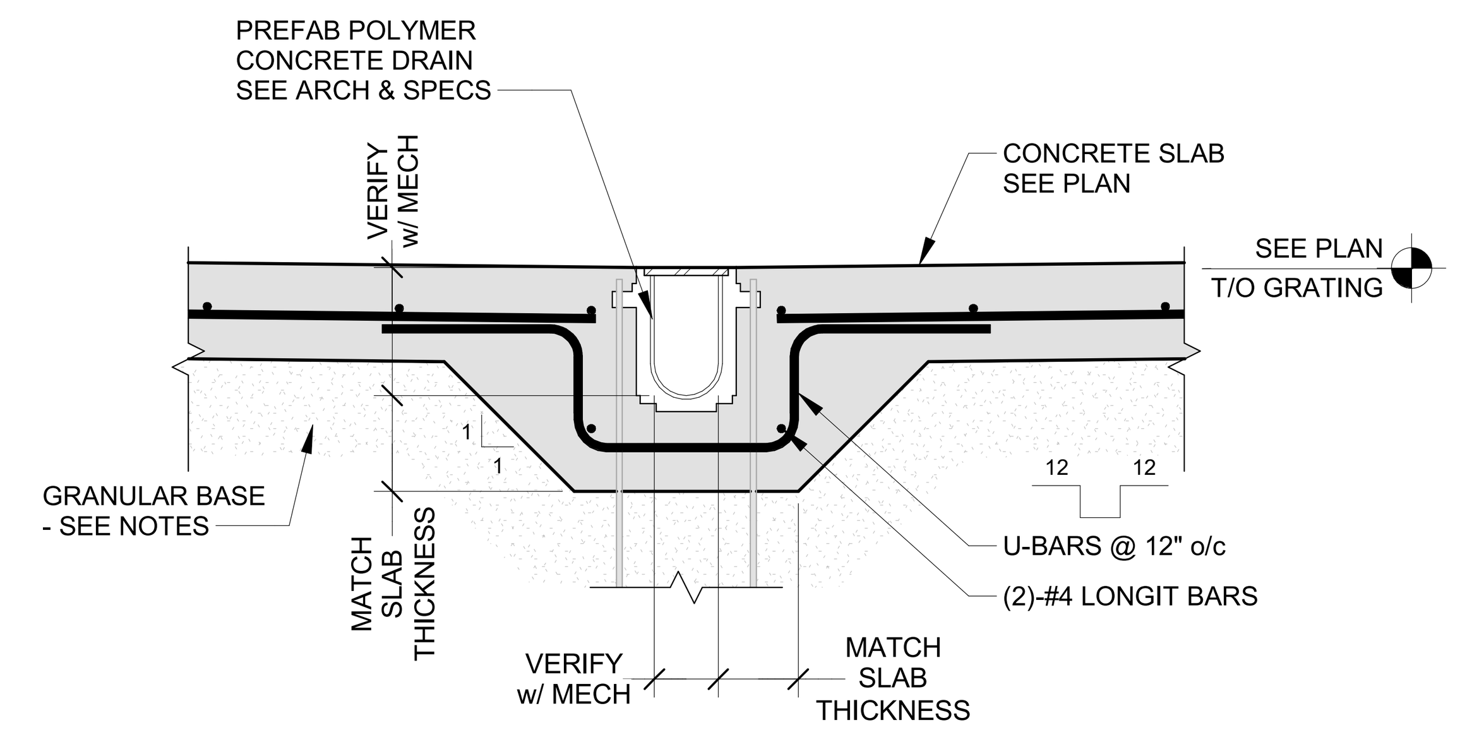
9 S6.0 THICKENED SLAB DETAIL

12" 6" 0 1' 2' 3'



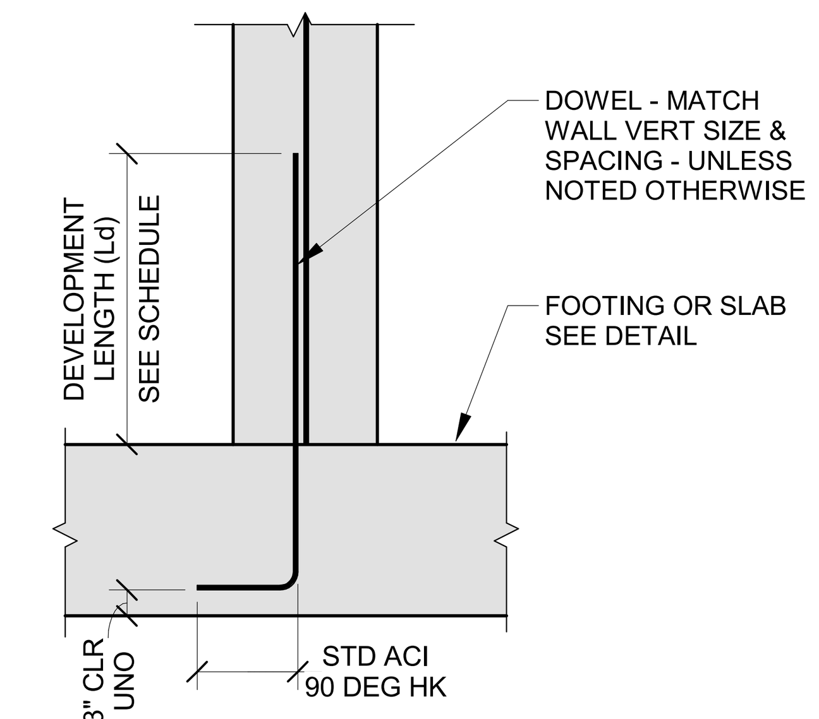
8 S6.0 SECTION @ TENSION TIE1

12" 6" 0 1' 2' 3'



7 S6.0 TRENCH DRAIN @ SLAB ON GRADE

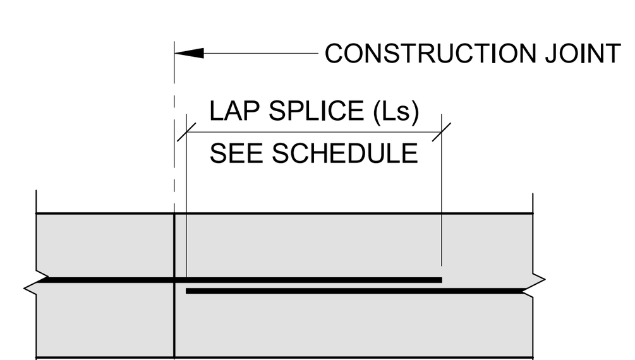
12" 6" 0 1' 2'



6 S6.0 STANDARD WALL DOWEL DETAIL

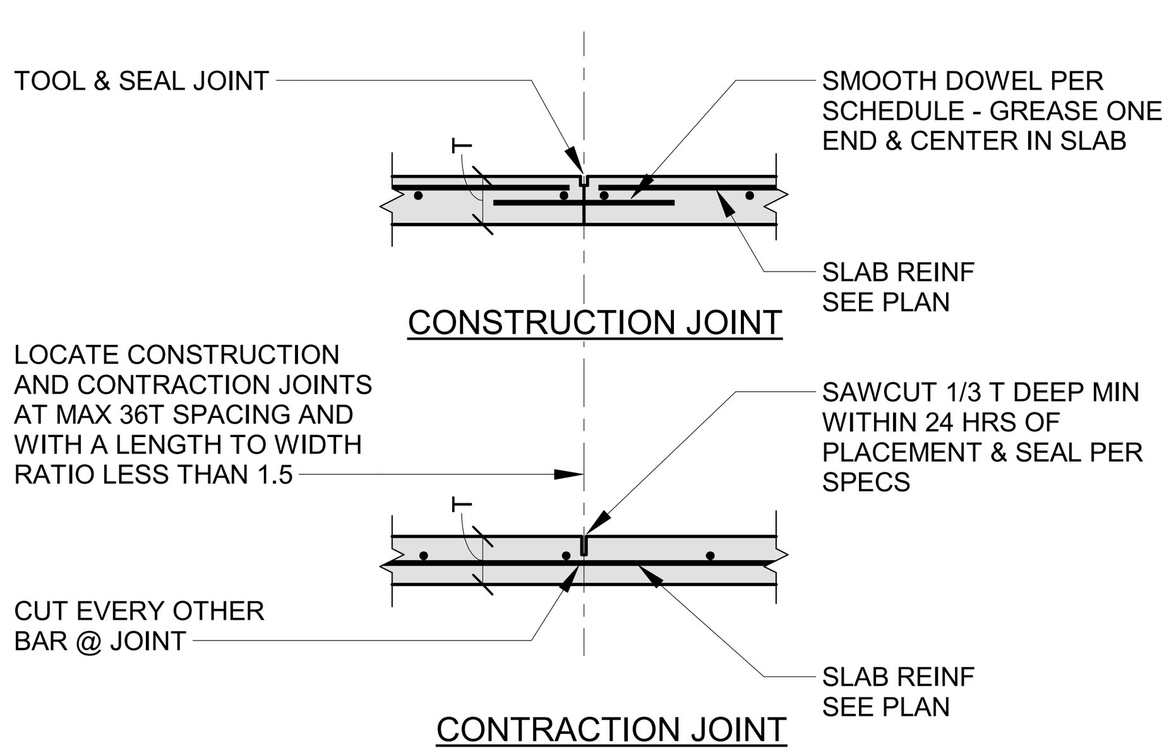
12" 6" 0 1' 2' 3'

DOWEL SCHEDULE			
SLAB (T) THICKNESS	SMOOTH DOWELS		
	DIAMETER	LENGTH	SPACING
4	1/2"	16"	18"
5 - 6	3/4"	16"	12"



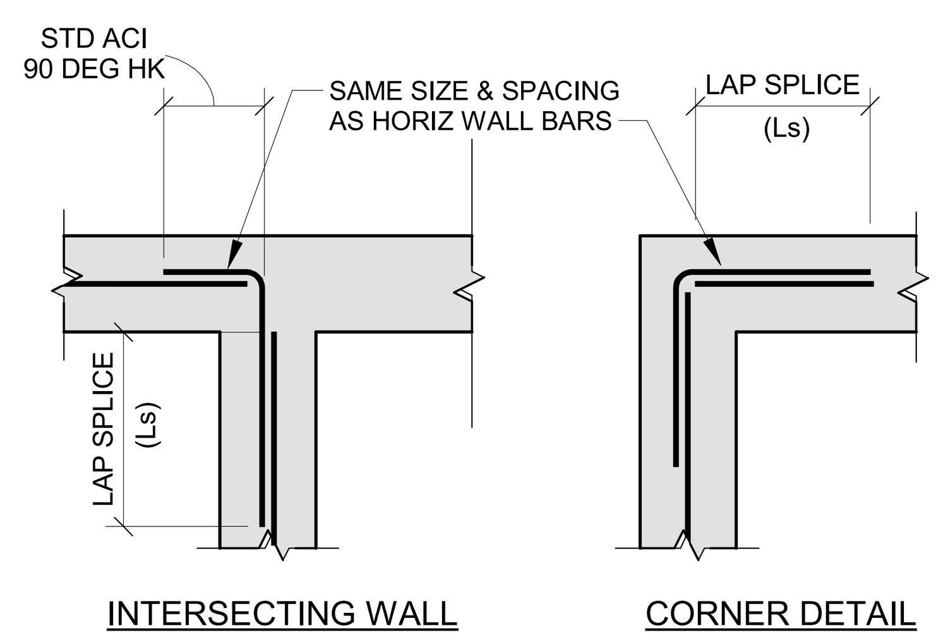
4 S6.0 TYP WALL CONSTRUCTION JOINT

12" 6" 0 1' 2' 3'



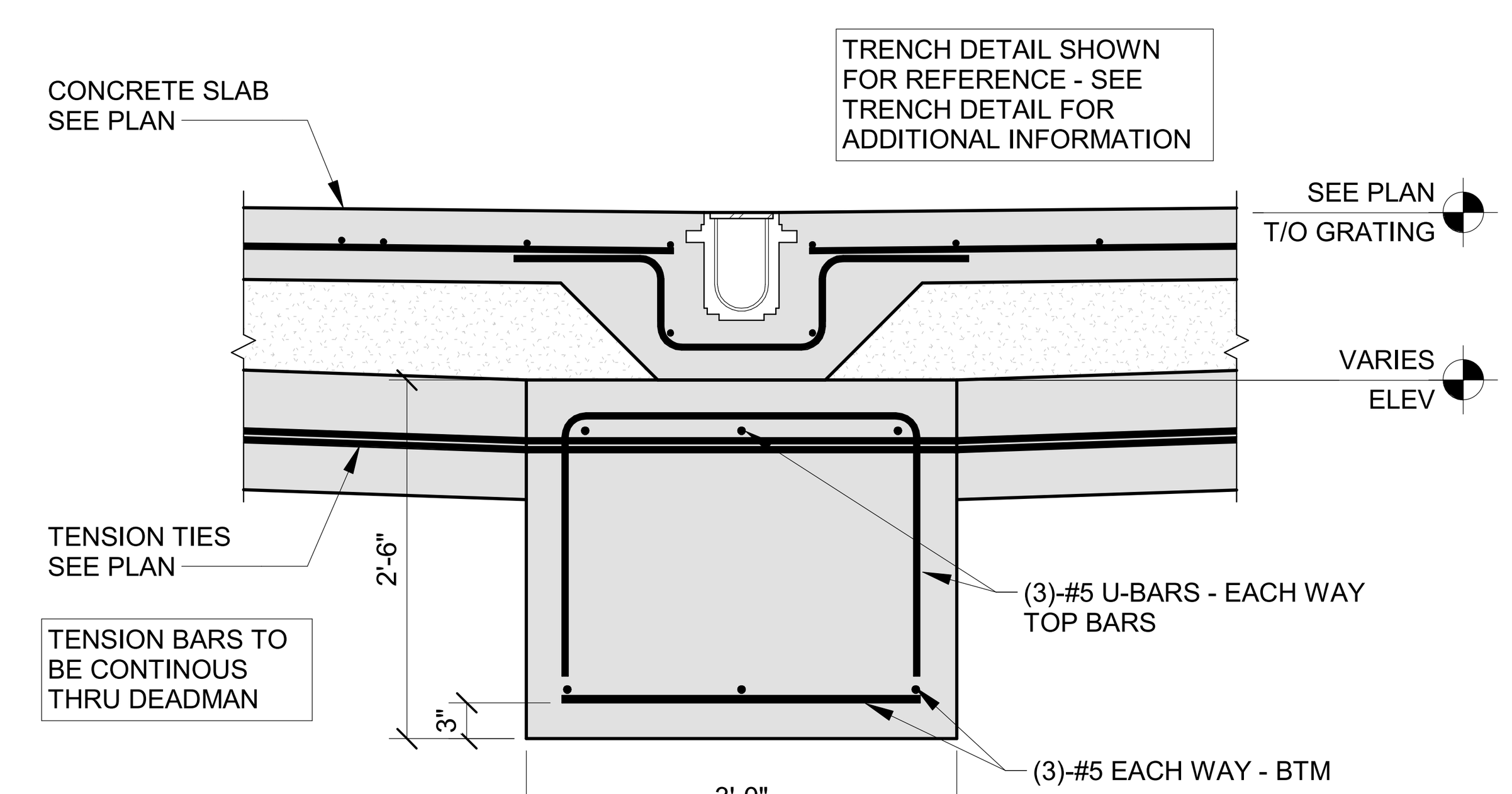
5 S6.0 SLAB-ON-GRADE JOINT DETAIL

12" 6" 0 1' 2' 3'



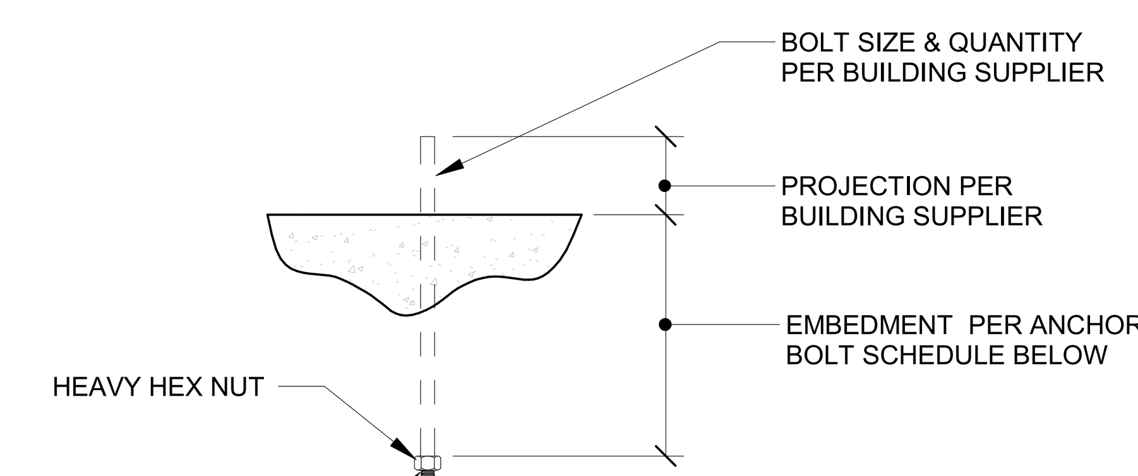
3 S6.0 TYP WALL CORNER REINF DETAIL

12" 6" 0 1' 2' 3'



2 S6.0 DEADMAN DETAIL

12" 6" 0 1' 2' 3'



ANCHOR BOLT SCHEDULE	
SIZE	EMBEDMENT
5/8" DIA	12"
3/4" DIA	18"
1" DIA	18"

1 S6.0 TYP ANCHOR BOLT DETAIL

12" 6" 0 1' 2' 3'

DRAWN BY: RRS
CHECKED BY: RRS
PROJECT NO.: 16528-2024-001
FILE NAME: XXXXXX
DATE: JUNE 2024

- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
- ☒ CONSTRUCTION DOCUMENTS

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AES2

City of Bottineau
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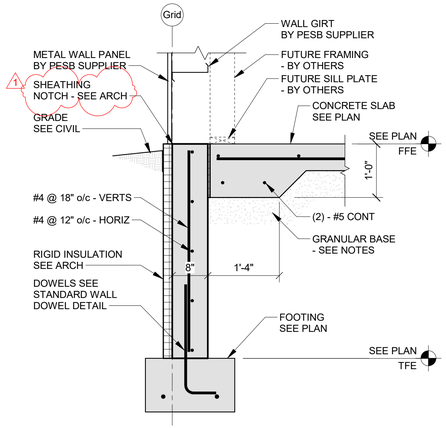
Bottineau, North Dakota 58318

REGISTERED PROFESSIONAL ENGINEER
RYAN R. STROH
PE-9490
Date 6/4/24
NORTH DAKOTA

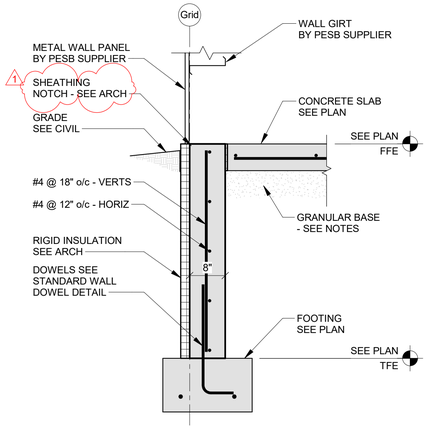
FOUNDATION DETAILS

Scale:
SHEET NO.
S6.0



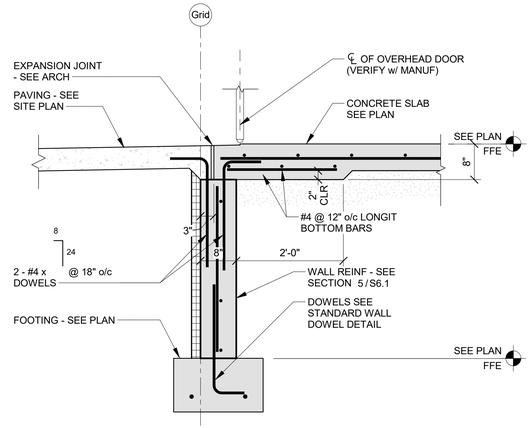
6 S6.1 FNDN WALL SECTION

12" 6" 0 1' 2' 3'



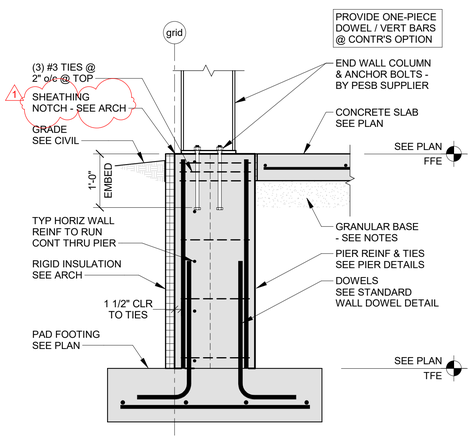
5 S6.1 FNDN WALL SECTION

12" 6" 0 1' 2' 3'



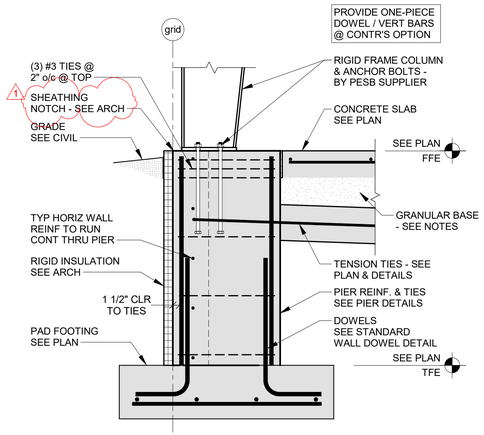
4 S6.1 TYPICAL APRON SECTION

12" 6" 0 1' 2' 3'



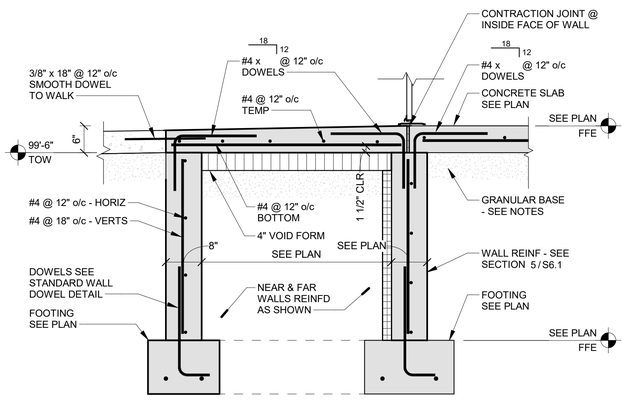
3 S6.1 TYP END FRAME PIER DETAIL

12" 6" 0 1' 2' 3'



2 S6.1 TYP RIGID FRAME PIER DETAIL

12" 6" 0 1' 2' 3'



1 S6.1 TYP STOOP FNDN

12" 6" 0 1' 2' 3'

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CHECKED BY: RRS
PROJECT NO.: NSB-2024-001
FILE NAME: XXXXXX
DATE: JUNE 2024

- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
- X CONSTRUCTION DOCUMENTS

1ST SUBMITTAL
REVISION #1 DATE 12/17/2024

AE2S

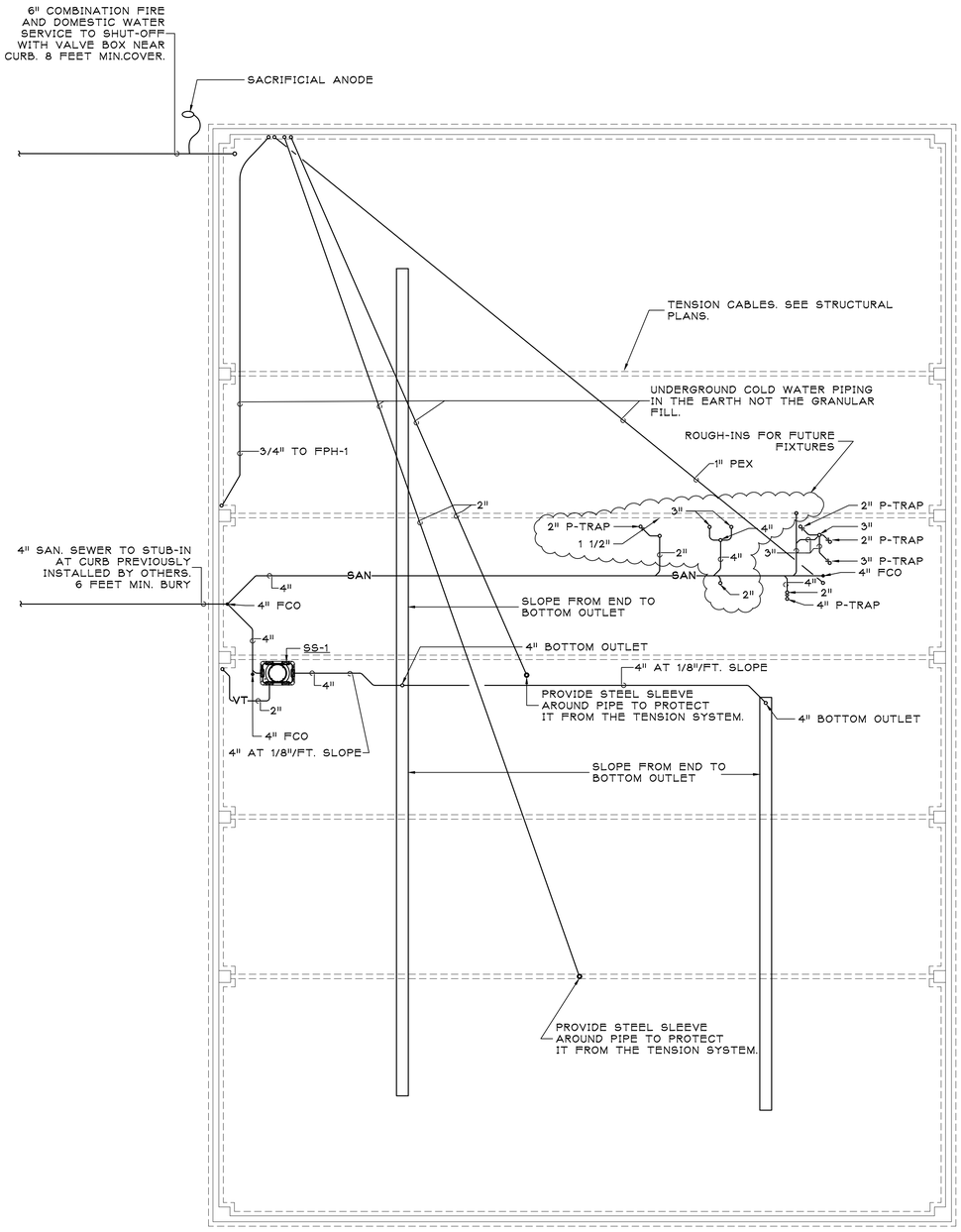
City of Bottineau
New Fire Station
115 6th Street West
Bottineau, North Dakota 58318

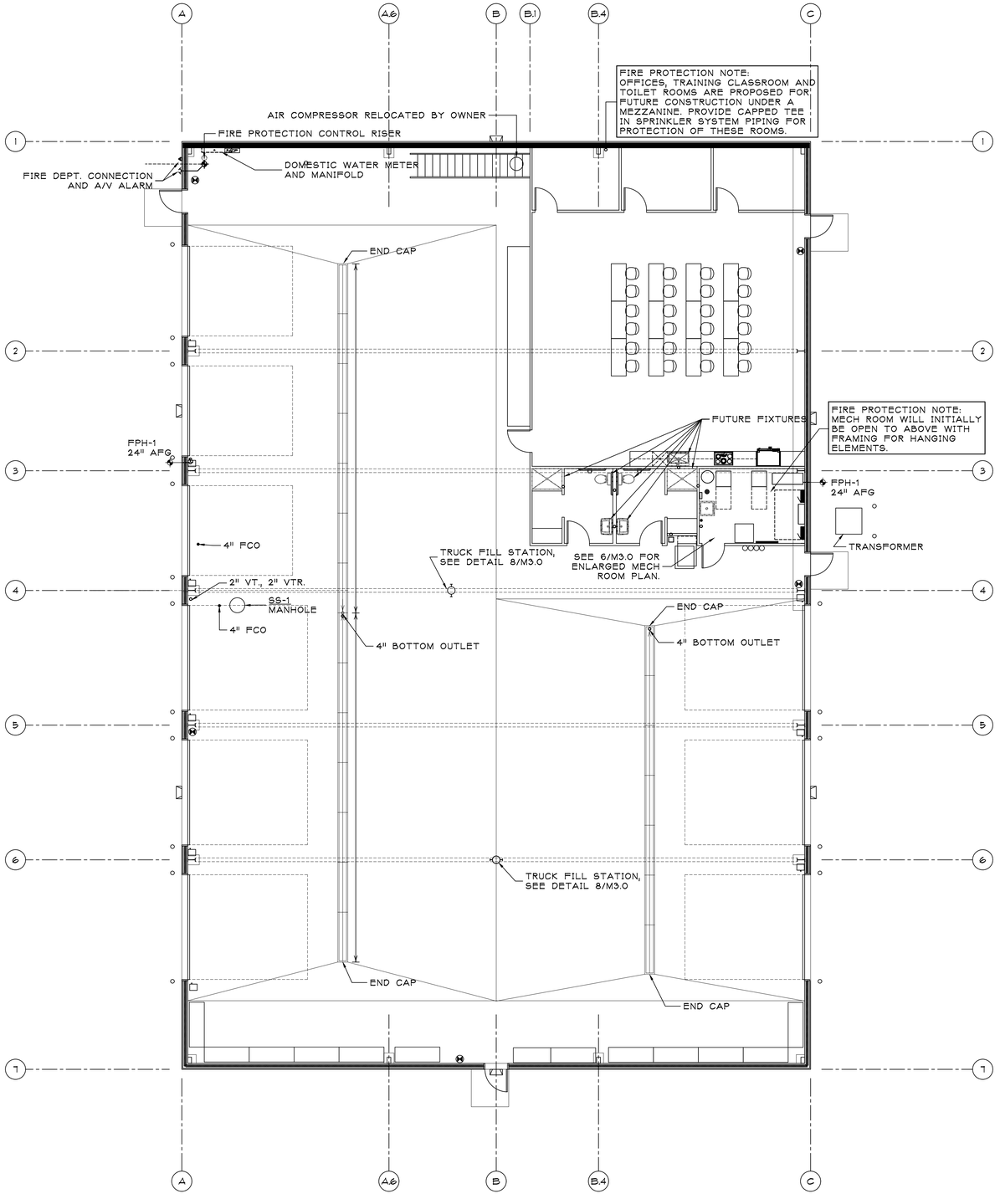
FOUNDATION DETAILS

Scale:

SHEET NO.

S6.1





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DRAWN BY: TDH
CHECKED BY: CAB
PROJECT NO.:
FILE NAME:
DATE: JUNE 2024

- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
- ☐ CONSTRUCTION DOCUMENTS
- ☒ REVISIONS

City of Bottineau
New Fire Station
115 6th Street West
Bottineau, North Dakota 58318

REGISTERED PROFESSIONAL ENGINEER
CALEB A. CULOM
PE-7110
DATE 12/1/24
NORTH DAKOTA

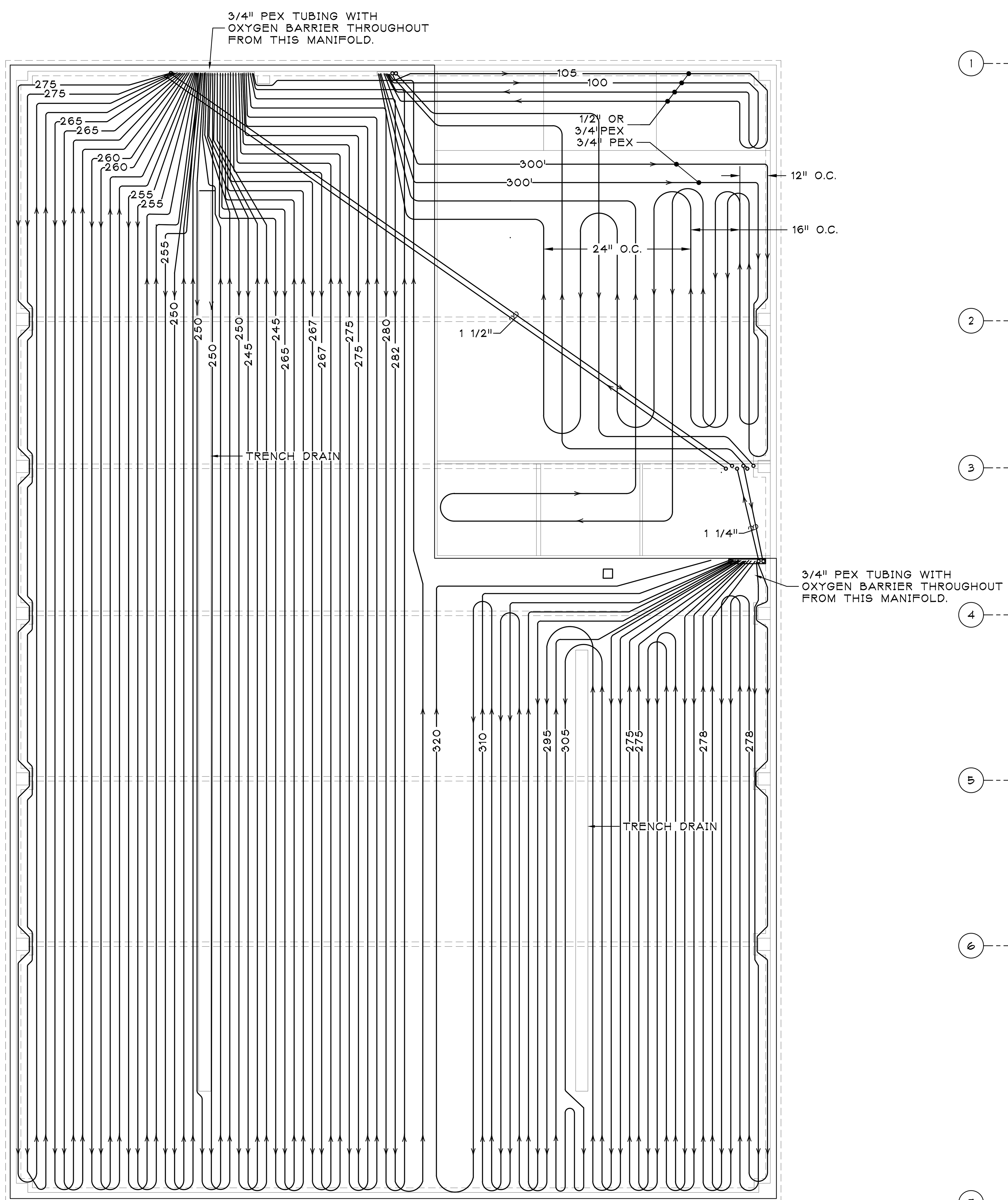
Prairie Engineering P.C.
Professional Consulting Engineers

Plumbing Plans

Scale: 1/8"=1'-0"
SHEET NO.
M1.0

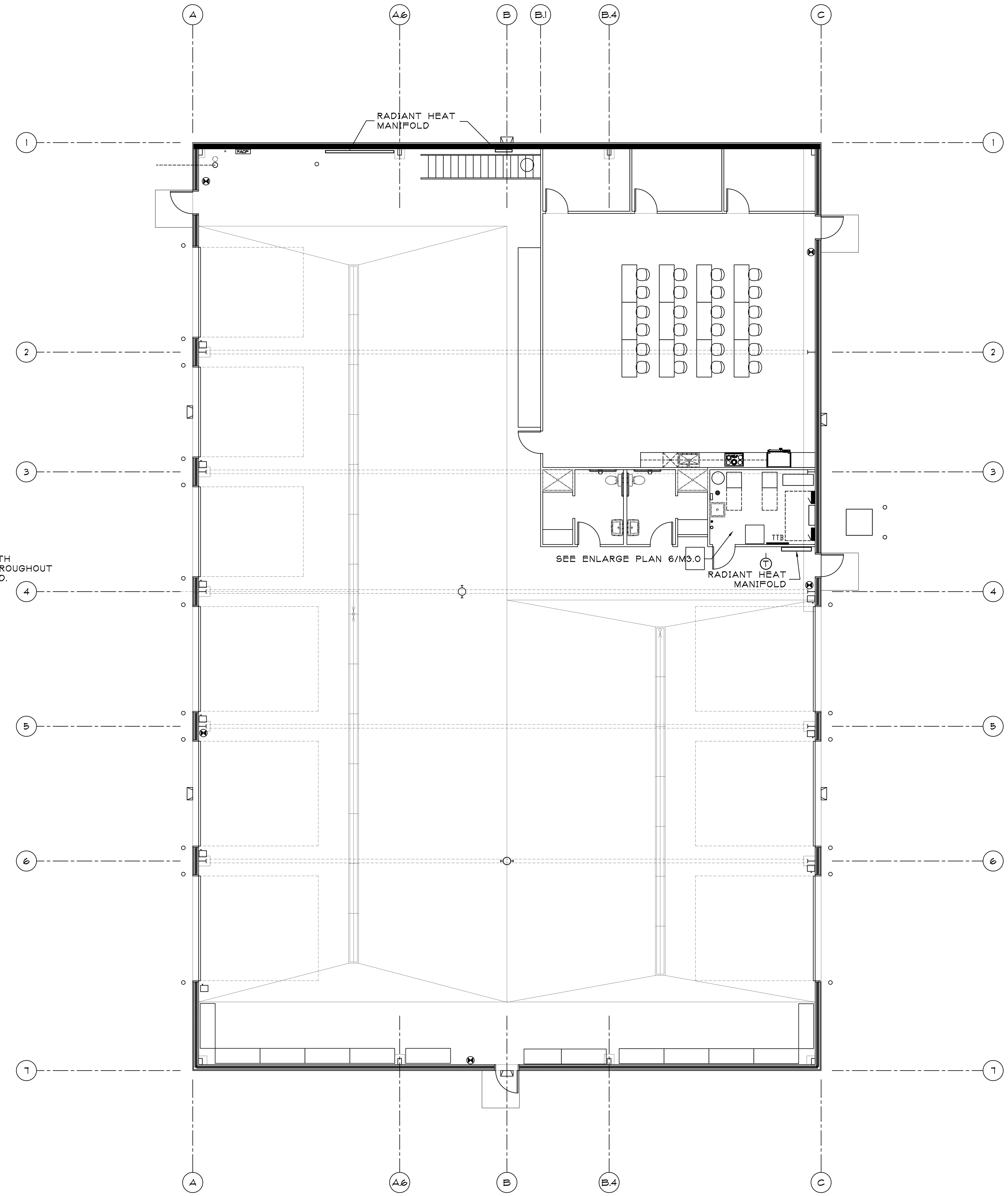
UNDERGROUND PLUMBING PLAN
1/8" = 1'-0"
NORTH
1 / M1.0

PLUMBING PLAN
1/8" = 1'-0"
NORTH
2 / M1.0



UNDERGROUND HEATING PLAN 1/8" = 1'-0" 1 M2.0

NORTH



HEATING PLAN 1/8" = 1'-0" 2 M2.0

NORTH

DRAWN BY: TDH
CHECKED BY: CAB
PROJECT NO.:
FILE NAME:
DATE: JUNE 2024

- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
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REVISIONS

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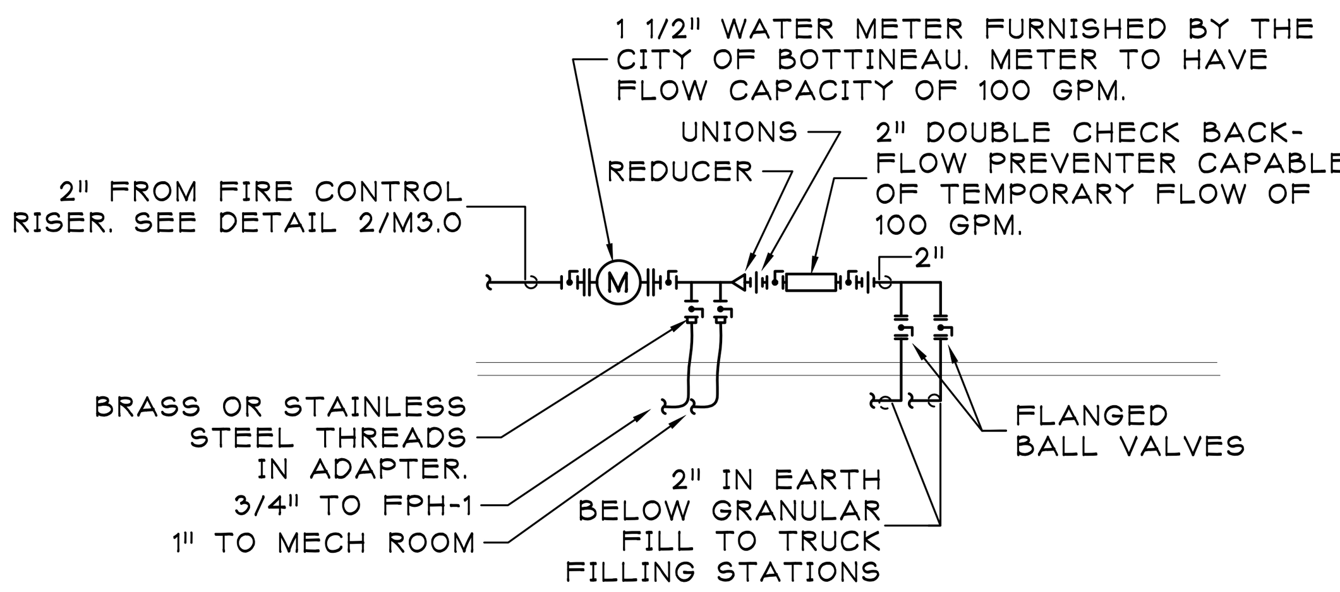
DATE 12/1/24
NORTH DAKOTA

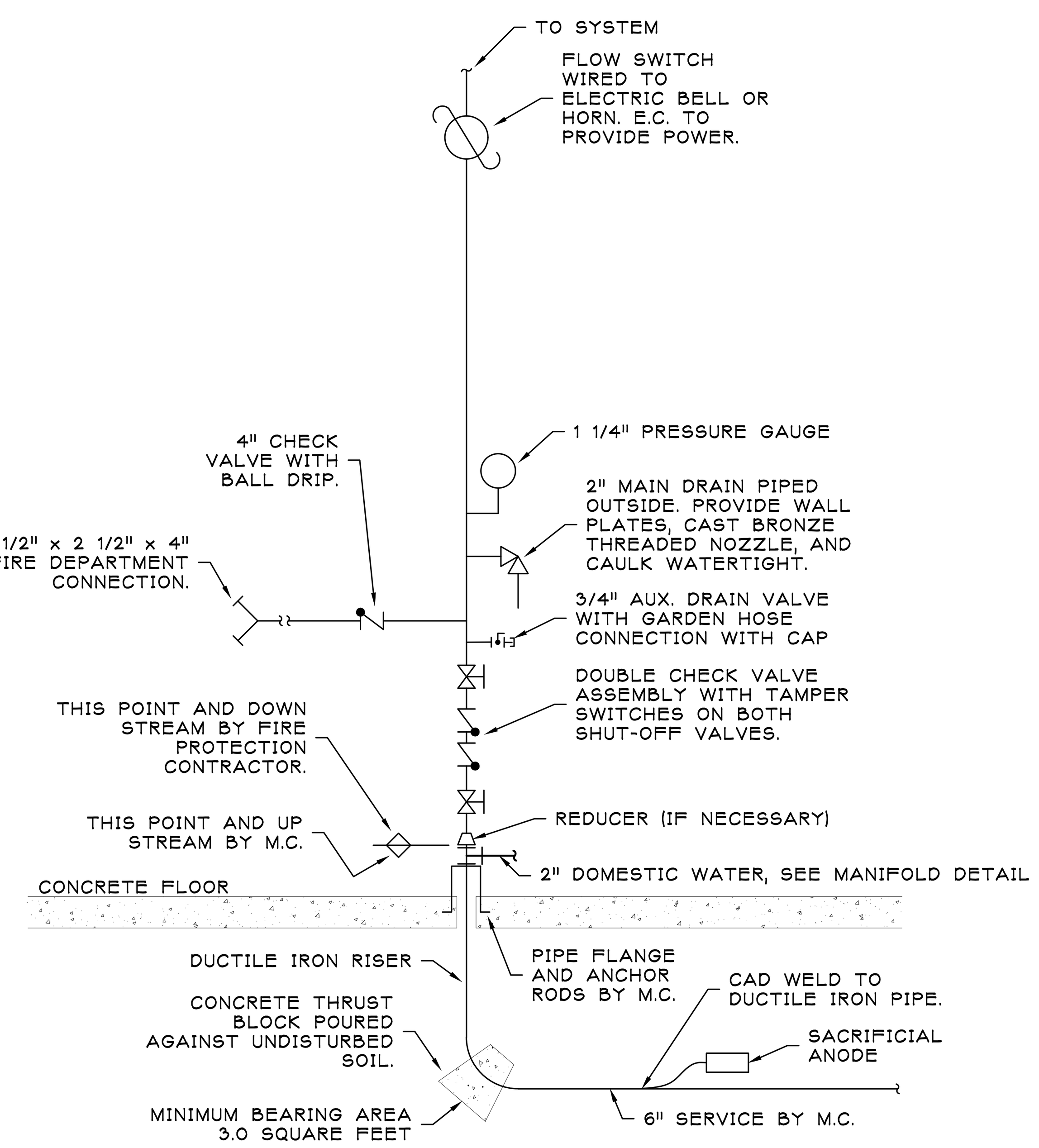
Prairie Engineering P.C.
Professional Consulting Engineers

HEATING
Plans

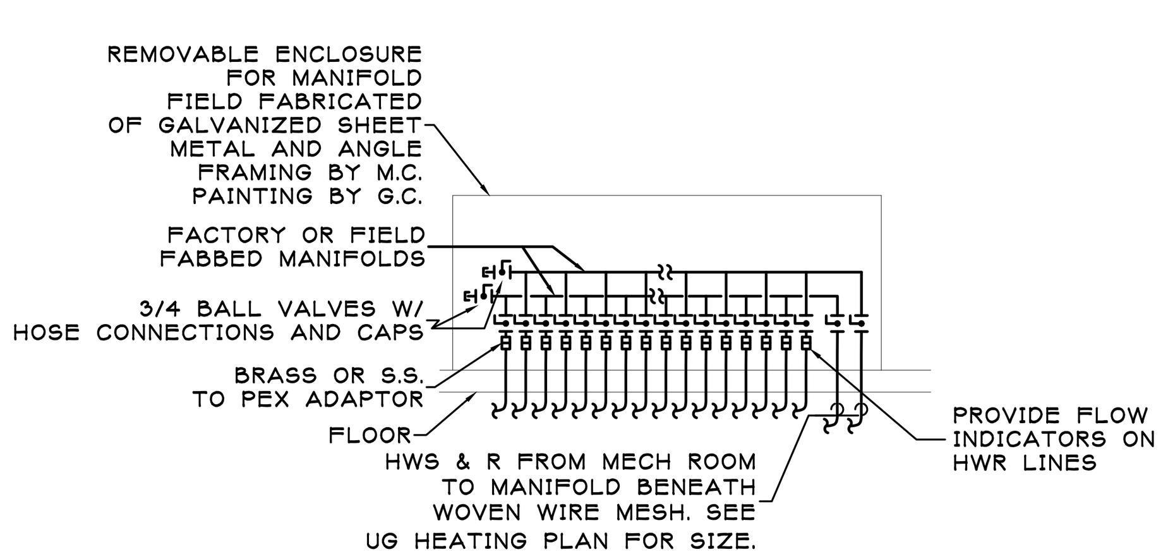
Scale: 1/8"=1'-0"
SHEET NO.
M2.0



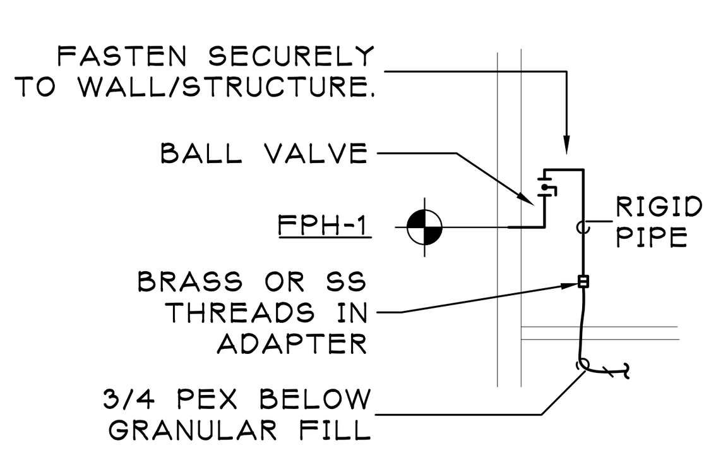
DOMESTIC WATER MANIFOLD DETAIL 1/M3.0
NO SCALE



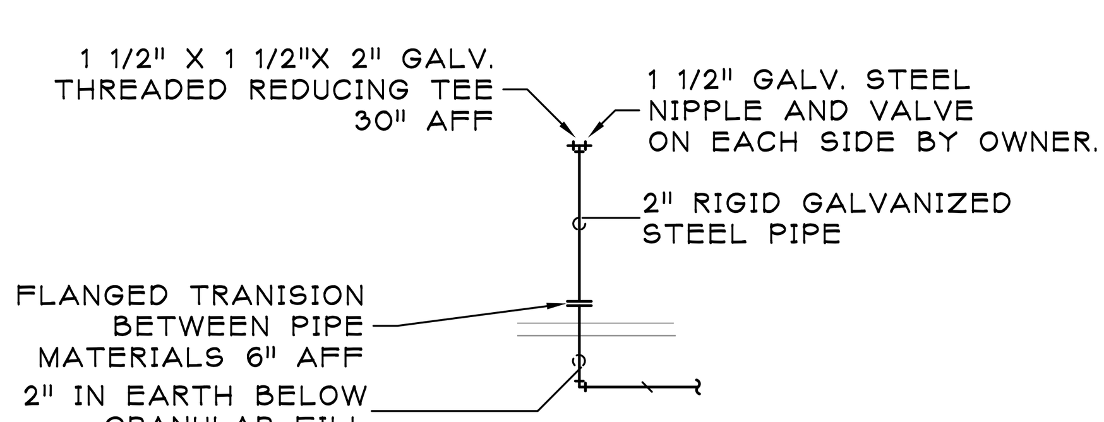
FIRE CONTROL RISER DETAIL 2/M3.0
NO SCALE



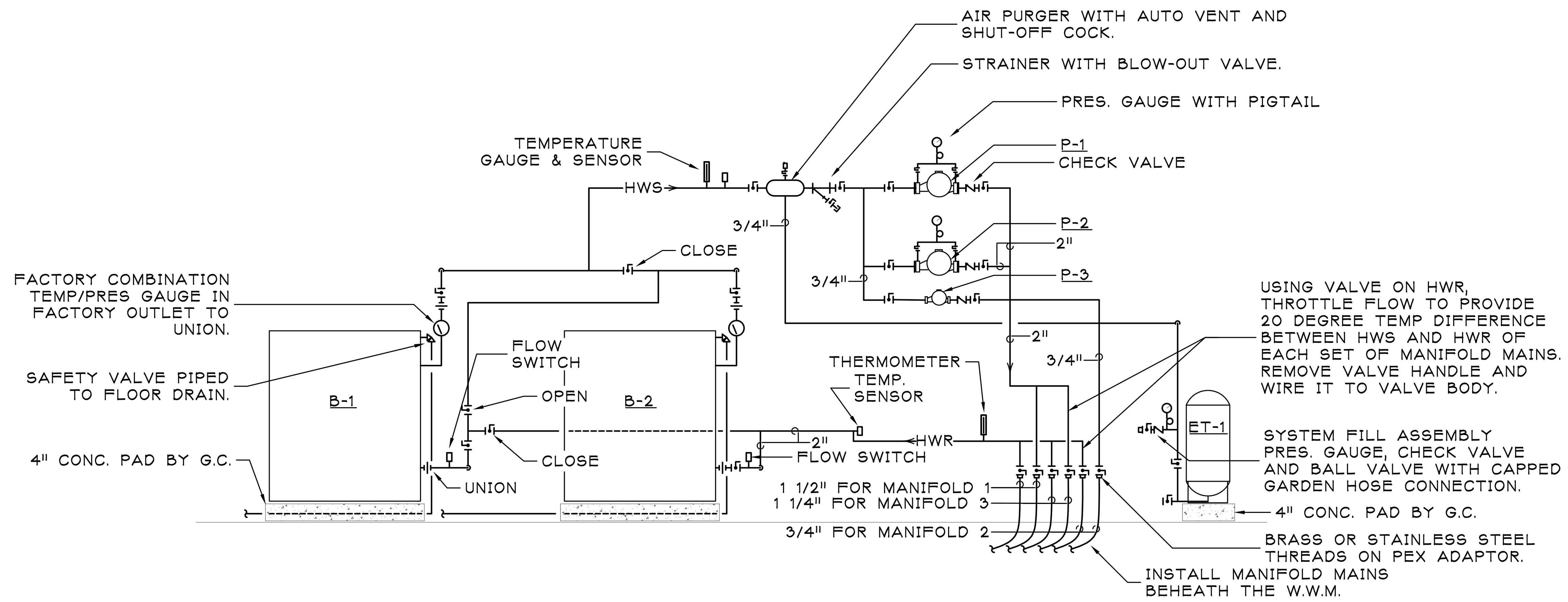
RADIANT HEAT MANIFOLD DETAIL 3/M3.0
NO SCALE



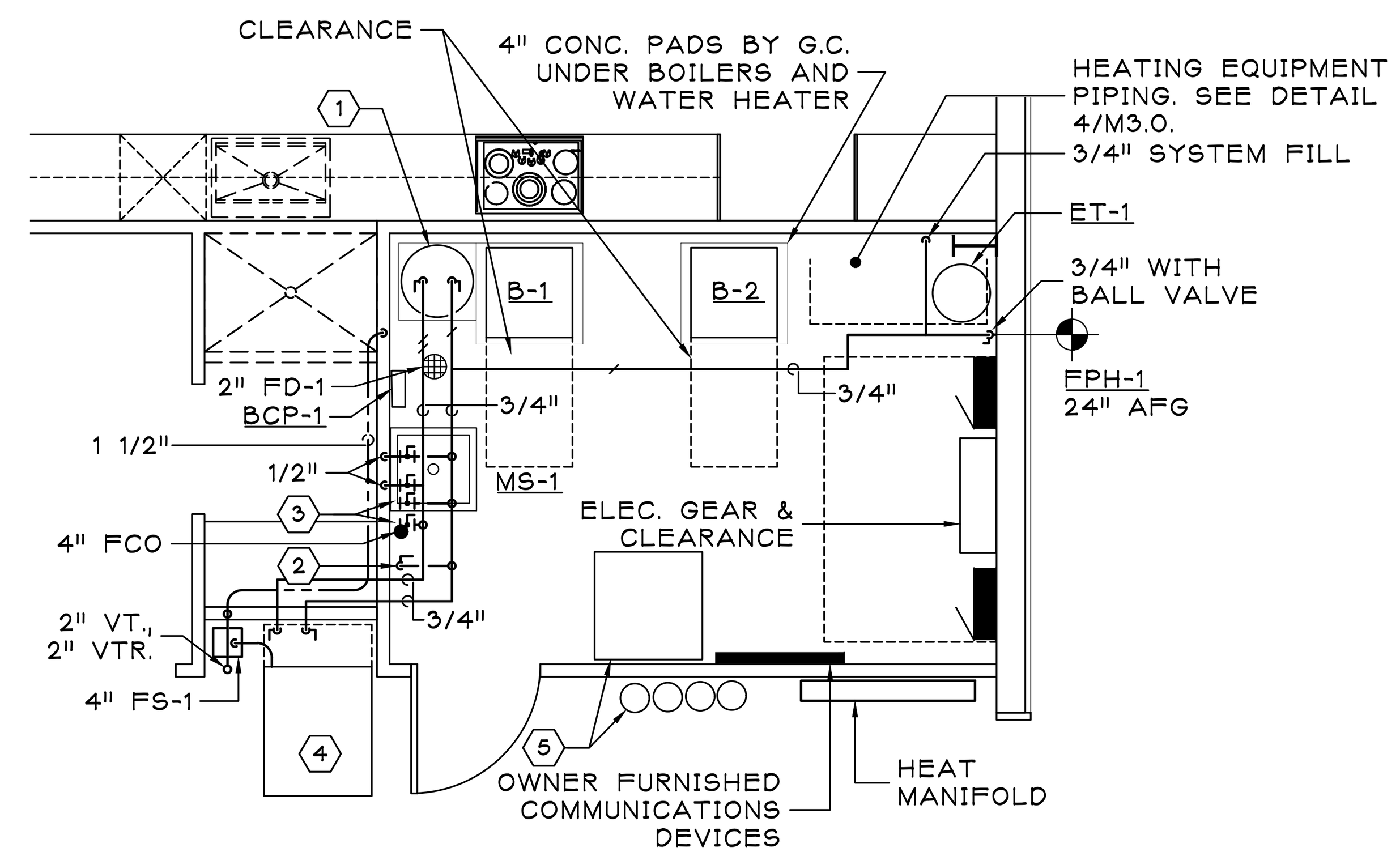
WEST FPH-1 SUPPLY DETAIL 7/M3.0
NO SCALE



TRUCK FILLING STATION DETAIL 8/M3.0
NO SCALE



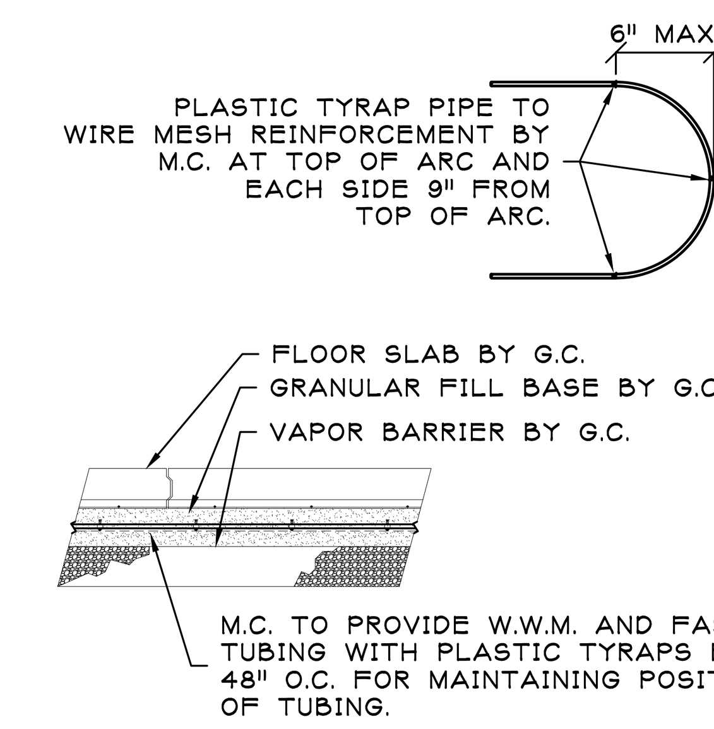
BOILERS SYSTEM PIPING SCHEMATIC 4/M3.0
NO SCALE



ENLARGED MECH ROOM PLAN 6/M3.0
1/4"=1'-0"

MECH/ELEC ROOM KEYNOTES

1. 50 GALLON ELECTRIC WATER HEATER RELOCATED BY OWNER. M.C. TO SET AND PIPE WITH BALL VALVE ON INLET AND OUTLET. PIPE SAFETY VALVE TO FLOOR.
2. 1" WATER SUPPLY UNDERGROUND FROM WATER MANIFOLD. PROVIDE ADAPTER FROM TUBING TO PIPE WITH BRASS OR SS THREADS AND BALL VALVE.
3. 3/4" BALL VALVES WITH CAPPED STUBS FOR FUTURE EXTENSION.
4. COMMERCIAL CLOTHES WASHER RELOCATED BY OWNER. M.C. TO PROVIDE 3/4" BALL VALVES AND HOSE CONNECTIONS ON H&CW AS WELL AS PIPE 3" DRAIN TO FLOOR SINK.
5. AIR COMPRESSOR AND STORAGE BOTTLES RELOCATED AND PIPED BY OWNER.



RADIANT HEAT TUBING DETAIL 5/M3.0
NO SCALE

PIPE LEGEND

UNDER GROUND WASTE	SAN
UNDER GROUND VENT	VT
ABOVE GROUND WASTE	
ABOVE GROUND VENT	
DOMESTIC COLD WATER	
DOMESTIC HOT WATER	
HOT WATER SUPPLY	HWS
HOT WATER RETURN	HWR
BALL VALVE	
GATE VALVE	
STRAINER	
CHECK VALVE	
UNION	

STANDARD ABBREVIATIONS

VT	VENT
VTR	VENT THRU ROOF
W	WASTE
CW	COLD WATER
HW	HOT WATER
RD	ROOF DRAIN
FD	FLOOR DRAIN
CO	CLEAN OUT
FCO	FLOOR CLEAN OUT
WCO	WALL CLEAN OUT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
MC	MECHANICAL CONTRACTOR
EC	ELECTRICAL CONTRACTOR
GC	GENERAL CONTRACTOR
FA	FRESH AIR
CA	COMBUSTION AIR
SA	SUPPLY AIR
RA	RETURN AIR
PRV	POWER ROOF VENTILATOR
BDD	BACK DRAFT DAMPER
OBD	OPPOSED BLADE DAMPER
VD	VOLUME DAMPER
FDR	FIRE DAMPER
AD	ACCESS DOOR
FPH	FREEZE PROOF HYDRANT

SAND SEPARATOR SCHEDULE

MARK	MFR	MODEL	MAX FLOW RATE	LIQUID CAPACITY	SOLIDS CAPACITY	INLET/OUTLET SIZE	VENTS SIZE
SS-1	STRIEM	OT-75	50 GPM	110 GAL.	11 GAL.	4" PLAIN END	3"

NOTES
Lifetime guaranteed and made in USA separator constructed of polyethylene with 7/8" nominal wall thickness manufactured for below grade installation. Unit to have field adjustable risers to finished floor with H20 rated pickable cast iron covers. Separator shall be certified to IAPMO IGC 183-2016 and carry UPC listing. Separator shall be installed in accordance with Manufacturers Installation Instruction.

TRENCH DRAIN SCHEDULE

MFR	MODEL	REVEAL WIDTH	CHANNEL LENGTH	THROAT	PIPE SIZE	FRAME	GRATE NO.
Zurn	Z886	6 1/4"	80"	4"	4"	HEAVY DUTY	DGC

Notes:
Modular channel sections made of 0% water absorbent high density polyethylene (HDPE). Channels to have a positive mechanical connection between channel sections and mechanically lock into the concrete surround a minimum of every 10". Channels to have smooth, 1 1/2" radius self cleaning bottom with Mannings coefficent of .009 and 075% or neutral 0% built in slope. Channels to have rebar clips standard to secure trench in its final location. Grate to be ductile iron slotted - Class C. See notes on drawings for accessories.

SANITARY FIXTURE SCHEDULE

MARK	FIXTURE			DESCRIPTION
	TYPE	MFR	MODEL	
FD-1	FLOOR DRAIN	WATTS	FD-102-ER5	FLOOR DRAIN WITH 5" ROUND NICKEL BRONZE STRAINER WITH EXTENDED RIM AND TRAP SEAL
FS-1	FLOOR SINK	WATTS	FS-714-22	CAST IRON WITH WHITE PORCELAIN INTERIOR COATING LESS ALUMINUM DOME STRAINER AND GRATE.
FCO-1	FLOOR CLEANOUT	WATTS	CO-200-R	4" FLOOR CLEANOUT WITH ROUND NICKEL BRONZE TOP

NOTES:
1) THIS SCHEDULE IS ABBREVIATED. SEE MECHANICAL SPECIFICATIONS SECTION 221300 FOR FULL SPECIFICATIONS.

BOILER SCHEDULE

MARK	MFR	MODEL	KW	PRES. RELIEF	STEPS	ELECTRICAL
B-1	LATTNER	S52.5LW	52.5	30	2	240/3/60
B-2	LATTNER	S52.5LW	52.5	30	2	240/3/60

NOTES
1) BOILERS TO BE FURNISHED WITH FLOW SWITCH AND SAFETY VALVE.

PUMPS SCHEDULE

MARK	MFR	MODEL	TYPE	FUNCTION	FLOW	HEAD	RPM	HP	ELECTRICAL	NOTES
P-1	TACO	2400-50	IN-LINE	HW SUPPLY	25	22	3450	0.5	120/1/60	1
P-2	TACO	2400-50	IN-LINE	HW SUPPLY	25	22	3450	0.5	120/1/60	1
P-3	TACO	IL009	WET ROTOR	HW SUPPLY	5	20	n/a	1/8	120/1/60	1

NOTES
1) SINGLE SPEED MOTOR.

EXPANSION TANK SCHEDULE

MARK	MFR	MODEL	AIR SEPARATOR	PRESSURE (PSI)		VOLUME (GAL)			FLUID
				FILL	FINAL	ACCEPT.	TANK	EST. SYS.	
ET-1	AMTROL	AX-15V	DIAPHRAM	12	30	2.5	7.8	240	WATER

DRAWN BY: TDH
CHECKED BY: CAB
PROJECT NO.:
FILE NAME:
DATE: JUNE 2024
☐ SCHEMATIC DESIGN
☐ DESIGN DEVELOPMENT
☒ CONSTRUCTION DOCUMENTS
REVISIONS

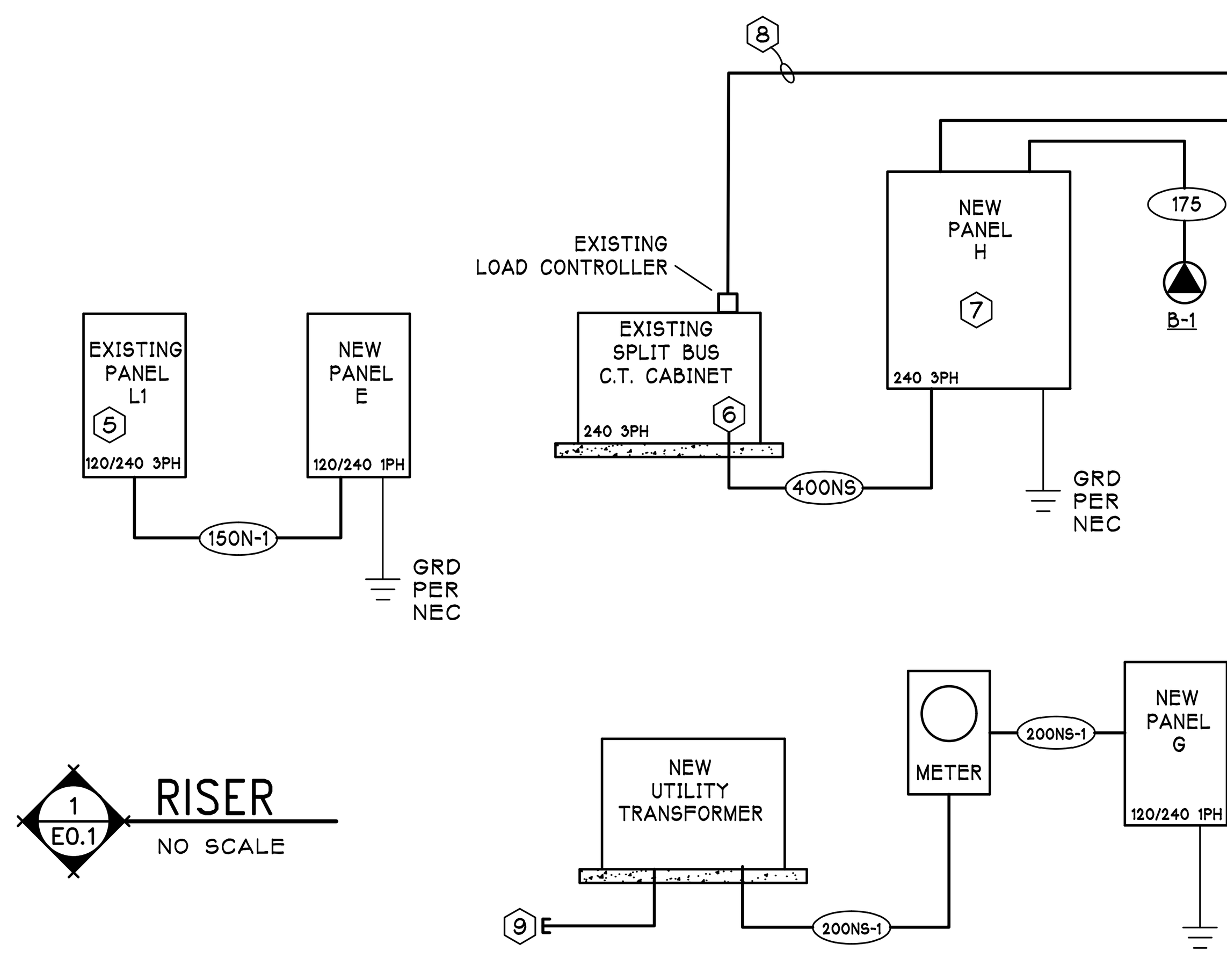
NOSTDAHL LIPTACK
ARCHITECTS
3033 NORTH CENTRAL AVENUE
SUITE #420
Phoenix, Arizona 85012
(602) 200-8042
FAX (602) 200-0787

City of Bottineau
New Fire Station
115 6th Street West
Bottineau, North Dakota 58318

REGISTERED PROFESSIONAL ENGINEER
CALEB A BULOW
PE-7110
DATE 12/1/24
NORTH DAKOTA
Prairie Engineering P.C.
Professional Consulting Engineers

Schedules And Details

Scale: AS NOTED
SHEET NO.
M3.0



1 E0.1 RISER
NO SCALE

FEEDER SCHEDULE

DESIGNATION	CONFIGURATION	REQUIRED AMPACITY	CONDUCTOR SIZE (NOTE 3) PHASE	NEUTRAL	EGC	CONDUIT
400NS	3ø 4W	400	500 KCMIL	1/0	NR	3"
200NS-1	1ø 3W	200	3/0	3/0	NR	2"
175	3ø 3W	175	2/0	NR	#6	2"
150N-1	1ø 3W	150	1/0	1/0	#6	1-1/2"

NOMENCLATURE:

400 N S - 1

AMPACITY

N - NEUTRAL REQ'D BLANK NOT REQ'D

SPECIALTY INDICATOR S - SERVICE FEEDER

1- SINGLE PHASE BLANK3-PHASE

NOTES:

1. FEEDER RISERS ARE SCHEMATIC ONLY, AND NOT INTENDED TO INFER LUG ARRANGEMENTS.
2. SEE SPECIFICATION FOR GROUNDING REQUIREMENTS, ALLOWABLE PVC USAGE, AND ALLOWABLE EXPOSED EXTERIOR STUB-UPS.
3. CONDUCTORS SIZING BASED UPON 60 DEGREE TERMINATIONS FOR OVERCURRENT PROTECTIVE DEVICES RATED 100 AMPERES OR LESS, AND 75 DEGREE TERMINATIONS FOR RATINGS GREATER THAN 100 AMPERES, AS PER NEC TABLE 310.16, 240.4, 310.15(B2), AND 310.15(B4). IN NO CASE SHALL INDICATED SIZING BE DECREASED.
4. OBTAIN AVAILABLE FAULT CURRENT AT UTILITY COMPANY TRANSFORMER SECONDARY TERMINALS OF NEW TRANSFORMER DIRECTLY FROM SERVING UTILITY COMPANY. ASSUME SAME RATING AT SERVICE MAIN. INCLUDE UTILITY COMPANY CORRESPONDENCE WITH SHOP DRAWINGS. SIZE INTERRUPTING RATINGS OF ALL DOWNSTREAM DEVICES IN ACCORDANCE WITH AVAILABLE FAULT CURRENT AS PER NEC 110-9. UL-RECOGNIZED SERIES RATINGS ACCEPTABLE WITH MINIMUM RATINGS AS PER SPECIFICATION. EQUIPMENT THAT IS PART OF A SERIES RATED COMBINATION SHALL BE LEGIBLY MARKED IN THE FIELD BY THE CONTRACTOR AS PER NEC 110.22), TO INDICATE THE EQUIPMENT HAS BEEN APPLIED WITH A SERIES COMBINATION RATING.

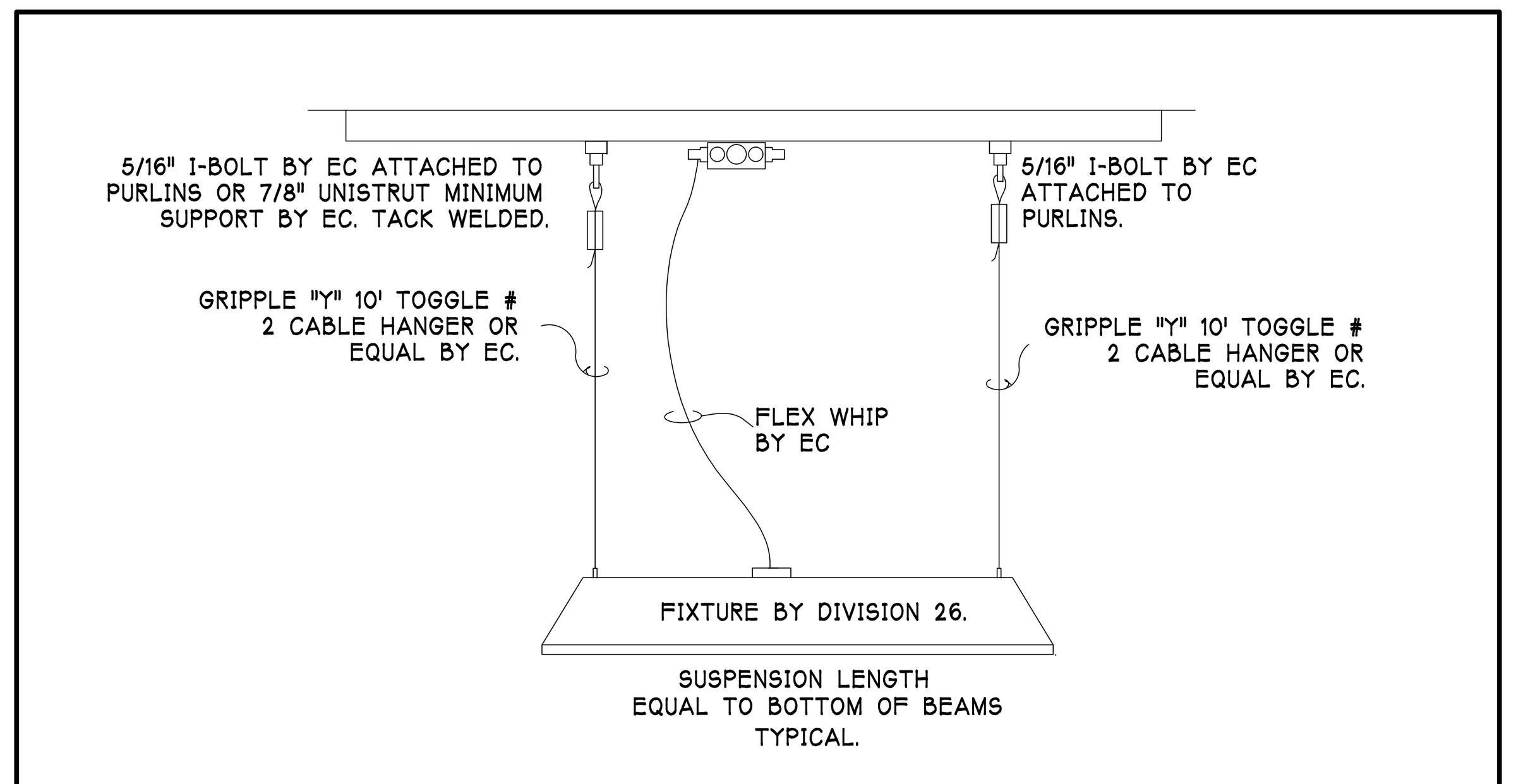
(5) TERMINATE TO EXISTING 150/2 CIRCUIT BREAKER THAT PREVIOUSLY FED THE ORIGINAL FIRE HALL.

(6) TERMINATE TO EXISTING 400 AMP SIDE OF THE CABINET THAT PREVIOUSLY SERVED THE ORIGINAL FIRE HALL.

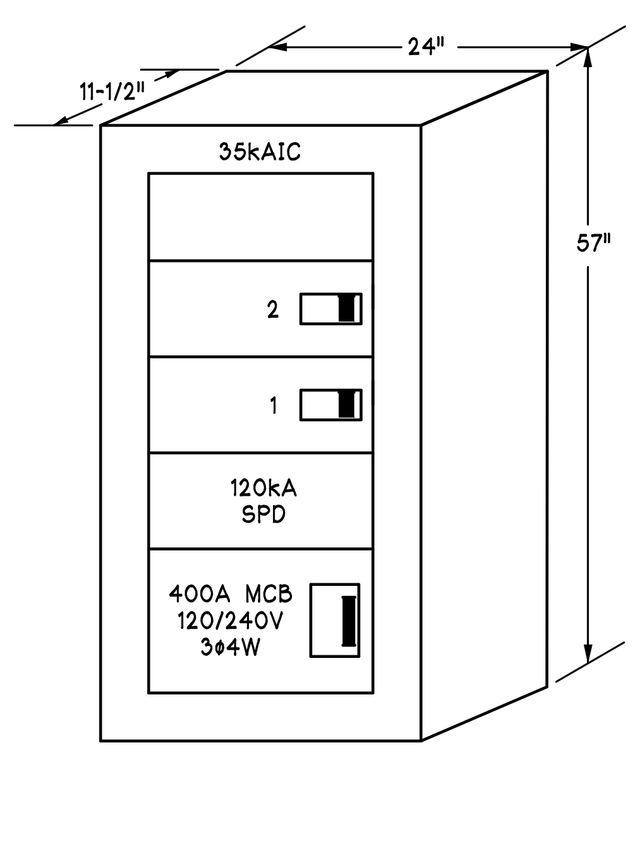
(7) PANELS ARE FOR ELECTRIC HEATING CIRCUITS ONLY. PROVIDE ADDITIONAL LABEL ON EXTERIOR OF PANEL: "DEMAND CONTROLLED HEATING EQUIPMENT ONLY".

(8) INTERFACE BOILER CONTROL PANEL WITH EXISTING OTTER TAIL POWER COMPANY LOAD CONTROLLER. SEE DETAIL 4/E0.1.

(9) PROVIDE 4" CONDUIT STUBBED OUT FROM UNDER TRANSFORMER PAD FOR UTILITY COMPANY'S PRIMARY CONDUCTORS.



2 E0.1 HIGH BAY FIXTURE DETAIL
NO SCALE



3 E0.1 PANEL H
NO SCALE

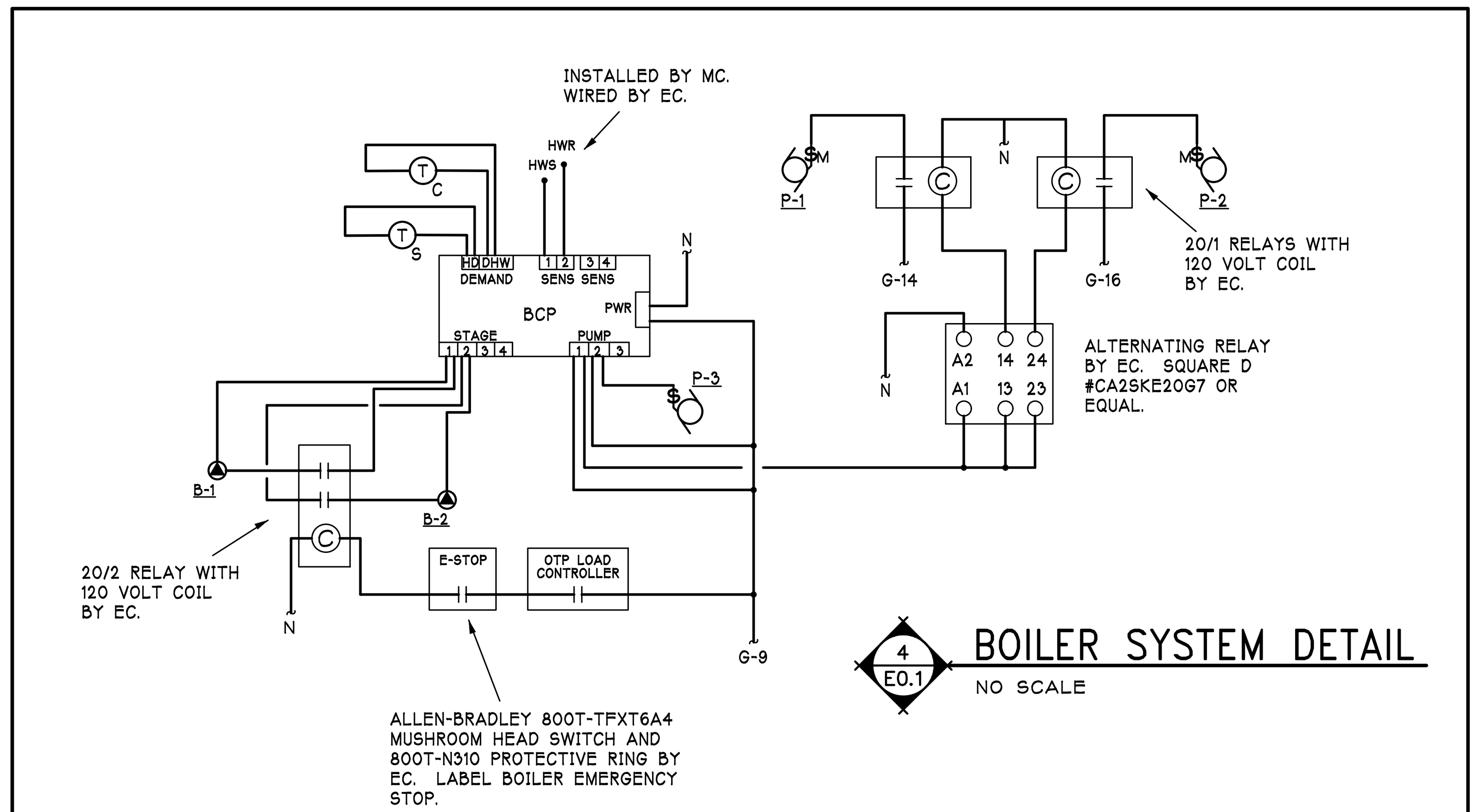
PANEL H SCHEDULE

EATON POW-R-LINE 4

DESIG.	LOAD SERVED	TYPE	SIZE
1	BOILER 1	CB	175/3
2	BOILER 2	CB	175/3

FACP ZONE SCHEDULE

ZONE	AREA SERVED
1	SMOKE DETECTORS
2	SUPRESSION SYSTEM FLOW SWITCH
3	SUPRESSION SYSTEM VALVES (SUPERVISORY)
4	SPARE
5	SPARE



4 E0.1 BOILER SYSTEM DETAIL
NO SCALE

FIXTURE SCHEDULE

TYPE	MANUFACTURER	CATALOG NO.	DELIVERED LUMENS	FINISH	MOUNTING	REMARKS
E1	LITHONIA MULE	LQM-S-W-3-G-ELN-SD MX-B-G-U-SD	-	WHITE	WALL ABOVE DOOR	THERMOPLASTIC LED EXIT SIGN WITH GREEN LETTERS, BATTERY BACKUP, AND SELF DIAGNOSTICS.
E2	LITHONIA MULE	ELM2L-SDRT M5-U-LFP-SD-W	-	WHITE	WALL 8' AFF	ARCHITECTURAL EMERGENCY WALL PACK WITH AIMABLE HEADS AND SELF DIAGNOSTICS.
F1	LITHONIA METALUX	ZL1D-L48-5000LM-FST-MVOLT-40K-80CRI-WH-HC36M12 4SNLED-LD5-47SLLW-UNV-L840-CD1-AYC-CHAIN/SET	5,000	WHITE	CHAIN HANG OR SURFACE MOUNT	4' STRIP FIXTURE WITH LENS.
H1	LITHONIA METALUX	CPHB-18000LM-SEF=GCL-MD-MVOLT-GZ10-40K-80CRI-NLTAIR2RLSXR6 OHB-18-SE-MFL-UNV-L840-CD-WLS4	18,000	WHITE	S.D. 2/E0.1	HIGH BAY FIXTURE WITH LENSED COVER AND INTEGRAL WIRELESS SENSOR.
H2	LITHONIA METALUX	CPHB-9000LM-SEF-GCL-WD-MVOLT-GZ10-40K-80CRI OHB-9-SE-W-UNV-L840-CD	9,000	WHITE	S.D. 2/E0.1	HIGH BAY FIXTURE WITH LENSED COVER.
K1	LITHONIA McGRAW EDISON	WDGE3LED-P3-40K-70CRI-R4-MVOLT-SRM-PIRH1FC3V-DDBXD IST-PA1-E-740-T4FT-BZ-SPB2	10,000	BRONZE	WALL 18'-6" AFF	FULL CUTTOFF WALL PACK WITH FORWARD THROW OPTICS AND INTEGRAL PHOTOCELL/OCCUPANCY SENSOR.

MOTOR & EQUIPMENT SCHEDULE

EQUIPMENT SERVED	CHARACTERISTICS HP	VOLT	PHASE	DISCONNECT (BY EC)	CONTROLLER (BY EC)	CONTROL INITIATING DEVICE DEVICE	FURN	MTD	NOTE
BOILER B-1,2	52.5 kW	240	3	NR	INTEGRAL	BCP	MC	EC	
PUMP P-1,2	1/2	120	1	INCLUDED WITH STARTER	TOGGLE OR MANUAL AS REQ'D	BCP	MC	EC	
PUMP P-3	FRAC	120	1	INCLUDED WITH STARTER	TOGGLE	BCP	MC	EC	
WATER HEATER WH	4.5 kW	240	1	NR	INTEGRAL	INTEGRAL	-	-	
AIR COMPRESSOR AC-1	3	240	1	30/2 FDS	INTEGRAL	INTEGRAL	-	-	
OVERHEAD DOOR ODx	1/2	120	1	TOGGLE	INTEGRAL	PUSHBUTTON	GC	EC	1

NOTES:
1. SEE PLANS FOR MULTIPLE PUSHBUTTON LOCATIONS PER EACH OVERHEAD DOOR.

PANEL E SCHEDULE
120/240 VOLTS 1 PH 3 W 150 A. MCB SURFACE MOUNTED
EATON POW-R-LINE SERIES
INCLUDE INTEGRAL 80kA SPD

DESCRIPTION	CKT BKR	GFCI	CKT #	PH.	CKT #	GFCI	CKT BKR	DESCRIPTION
SOUTH LIGHTS	20/2		1	A	2		20/1	DOOR 7
CENTER LIGHTS	20/1		3	B	4	X	20/1	TRUCK 7 CORD
NORTH LIGHTS	20/1		5	A	6		20/1	DOOR 8
DOOR 1	20/1		7	B	8	X	20/1	TRUCK 8 CORD
TRUCK 1 CORD	20/1	X	9	A	10		20/1	DOOR 9
DOOR 2	20/1		11	B	12	X	20/1	TRUCK 9 CORD
TRUCK 2 CORD	20/1	X	13	A	14		20/1	DOOR 5
DOOR 3	20/1		15	B	16	X	20/1	TRUCK 5 CORD
TRUCK 3 CORD	20/1	X	17	A	18		20/1	DOOR 6
DOOR 4	20/1		19	B	20	X	20/1	TRUCK 6 CORD
TRUCK 4 CORD	20/1	X	21	A	22		20/1	SPARE
FACP	20/1		23	B	24		20/1	SPARE
SPARE	20/1		25	A	26		20/1	SPARE
SPARE	20/1		27	B	28		20/1	SPARE
SPARE	20/1		29	A	30		20/1	SPARE

LOAD	CONNECTED	DEMAND	ADJUSTED
LIGHTING (kVA)	3.9	125%	4.8
RECEPTACLES (kVA)	5.0	100% / 50%	5.0
HVAC (kVA)	2.4	100%	2.4
KITCHEN (kVA)	0.0	100%	0.0
OTHER (kVA)	0.0	100%	0.0
		TOTAL ADJUSTED kVA	12.2
		TOTAL AMPS	51

PANEL G SCHEDULE
120/240 VOLTS 1 PH 3 W 200 A. MCB SURFACE MOUNTED
EATON POW-R-LINE SERIES
INCLUDE INTEGRAL 80kA SPD

DESCRIPTION	CKT BKR	GFCI	CKT #	PH.	CKT #	GFCI	CKT BKR	DESCRIPTION
NW RECPT	20/1		1	A	2		30/2	AIR COMPRESSOR
SW RECPT	20/1		3	B	4		-	AIR COMPRESSOR
EAST RECPT	20/1		5	A	6		50/2	TANK COMPRESSOR
TTB	20/1		7	B	8		-	TANK COMPRESSOR
BOILER CONTROL	20/1		9	A	10		30/2	WATER HEATER
WASHING MACHINE	20/1		11	B	12		-	WATER HEATER
SPARE	20/1		13	A	14		20/1	PUMP 1
SPARE	20/1		15	B	16		20/1	PUMP 2
SPARE	50/2	X	17	A	18		20/1	SPARE
SPARE	-	X	19	B	20		20/1	SPARE
SPARE	20/1	X	21	A	22		20/1	SPARE
SPARE	20/1	X	23	B	24		20/1	SPARE
SPARE	20/1	X	25	A	26		20/1	SPARE
SPARE	20/1		27	B	28		20/1	SPARE
SPARE	20/1		29	A	30		20/1	SPARE
SPARE	30/2	X	31	B	32		20/1	SPARE
SPARE	-	X	33	A	34		-	SPACE
SPARE	20/1		35	B	36		-	SPACE
SPARE	20/1		37	A	38		-	SPACE
SPARE	20/1		39	B	40		-	SPACE

LOAD	CONNECTED	DEMAND	ADJUSTED
LIGHTING (kVA)	0.0	125%	0.0
RECEPTACLES (kVA)	18.4	100% / 50%	14.2
HVAC (kVA)	6.4	100%	6.4
KITCHEN (kVA)	0.0	100%	0.0
OTHER (kVA)	0.0	100%	0.0
		TOTAL ADJUSTED kVA	20.6
		TOTAL AMPS	86

STANDARD ELECTRICAL SYMBOLS

BASED ON ANSI Y32.9-1972, ANSI A117.1-1986, AND FEDERAL REGISTER 56-144(ADA)

MOUNTING HEIGHT MEASUREMENTS SHALL BE MADE FROM FINISH FLOOR TO CENTER LINE OF OUTLET

SYMBOL	DESCRIPTION	MTG. HT.
	LIGHTING OUTLETS	
	CEILING LUMINAIRE. TYPE A, CKT 1, SW b.	
	WALL MOUNT LUMINAIRE.	SCHEDULED
	TROFFER TYPE LUMINAIRE, SLASH INDICATES UNSWITCHED.	
	STRIP TYPE LUMINAIRE.	
	EXIT SIGNAGE	
	EMERGENCY BATTERY UNIT	SCHEDULED
	REMOTE SEALED BEAM	SCHEDULED
PLH	PORCELAIN LAMPHOLDER. 100A LAMP	
J	JUNCTION BOX	
	RECEPTACLE OUTLETS	
	SINGLE. CKT 1	18"
	DUPLEX	18"
	DOUBLE DUPLEX	18"
	DUPLEX - SPLIT WIRED	18"
	DUPLEX - GROUND FAULT CIRCUIT INTERRUPTER	18"
	DOUBLE DUPLEX - GROUND FAULT CIRCUIT INTERRUPTER	18"
A	SPECIAL CONFIGURATION. DESIGNATION REFERS TO SCHEDULE	SCHEDULED
18	MULTI-OUTLET ASSEMBLY. ARROWS EXTEND TO LIMIT OF INSTALLATION. SUBSCRIPT INDICATES SPACING OF OUTLETS	
C	CLOCK RECEPTACLE	82"
	DUPLEX RECEPTACLE - FLOOR BOX	
	SWITCH OUTLETS	
$	SINGLE POLE	46"
$2	DOUBLE POLE	46"
$3	THREE-WAY	46"
$4	FOUR-WAY	46"
$K	KEY OPERATED	
$M	MOTOR - PROVIDE OVERLOAD UNIT AS REQ'D. TOGGLE ACCEPTABLE IF INTERNAL THERMAL PROTECTION INCLUDED. SWITCH NOT REQUIRED IF MOTOR ASSEMBLY HAS INTEGRAL DISCONNECTING MEANS.	
$P	PILOT HANDLE	46"
$T	TIME DELAY	46"
	DIMMER - 1000W UNLESS OTHERWISE INDICATED	46"
$$	GANGED SWITCHES - ARROW INDICATES MULTI-LEVEL SWITCHING	46"
	CEILING MOUNTED OCCUPANCY SENSOR	
	WALL MOUNTED OCCUPANCY SENSOR - ARROW INDICATES MULTI-LEVEL SWITCHING, d - 0-10V DIMMING	46"
	COMMUNICATION/DATA SYSTEM OUTLETS	
	TELEPHONE OUTLET.	18"
	TELEPHONE OUTLET OR COMPUTER/VDT - FLOOR BOX	
	COMPUTER/VDT OUTLET	18"
	VOICE/DATA ROUGH-IN	18"
B	BELL	
B	BUZZER	
I	INTERCOM STATION	46"
M	MICROPHONE OUTLET	18"
T	TELEVISION OUTLET	18"
V	VOLUME CONTROL	46"
	PUSH BUTTON	
S	SPEAKER/BAFFLE/BACKBOX COMBINATION	CEILING
	CLOCK	84"
	MISCELLANEOUS	
1	PLAN OR DETAIL NOTE	
	SPECIAL PURPOSE CONNECTION - AS REQUIRED BY EQUIPMENT MANUFACTURER. CO-ORDINATE ROUGH-IN WITH SHOP DWG.	
	BRANCH CIRCUIT PANELBOARD, SHADING INDICATES NEW PANEL	TOP 75"
	CONTROL PANEL	
	EXTERNALLY OPERATED DISCONNECT SWITCH	
	CONTROLLER OR RELAY	
	COMBINATION CONTROLLER AND DISCONNECTION MEANS	
1	MOTOR. DESIGNATION REFERS TO SCHEDULE.	
2	EQUIPMENT DESIGNATION. SEE SCHEDULE.	
T BB-1	ELECTRIC HEAT TO SCALE. DESIGNATION REFER TO SCHEDULE. "T" INDICATES INTEGRAL THERMOSTAT.	
T E	THERMOSTAT-PROVIDED BY DIV. 26	46"
T	THERMOSTAT-FURNISHED BY DIV. 23, INSTALLED BY DIV. 26	46"
H	HUMIDISTAT-FURNISHED BY DIV. 23, INSTALLED BY DIV. 26	46"
P	POTENTIOMETER-FURNISHED BY DIV. 23, INSTALLED BY DIV. 26	46"
TS	TIME SWITCH	
PS	PHOTOELECTRIC SWITCH	
	CIRCUITING	
	HOME RUN. MIN 3/4" C. ARROWS AND SUBSCRIPTS INDICATE NUMBER AND IDENTIFICATION OF CIRCUITS.	
	EMERGENCY. MIN 1/2" C-#10 AWG.	
T	TELEPHONE. MIN 3/4"C, HOME RUN TO TERMINAL BOARD	
T	TELEPHONE. MIN 3/4"C, STUB INTO CEILING SPACE	
LV	LOW VOLTAGE. MIN 1/2"C-#14 AWG AS REQ'D.	
FA	SPECIAL SYSTEMS. MIN 3/4"C. PROVIDE CONDUCTORS AS REQUIRED BY MANUFACTURER. SUBSCRIPT INDICATES SYSTEM. SEE STANDARD ABBREVIATIONS.	
	0-10 VOLT CLASS 2 DIMMING CONDUCTORS	
	FIRE ALARM SYSTEMS	
1 P	DETECTOR. SUPERSCRIPT INDICATES ZONE. SUBSCRIPT DESCRIBES INITIATION: D-DUCT, R-RATE OF RISE THERMAL, F-FIXED TEMPERATURE THERMAL, I-IONIZATION, P-PHOTO-ELECTRIC, C-COMB. CARBON MONOXIDE & PHOTOELECTRIC,	CEILING
C	CHIME	88"
D	MAGNETIC DOOR HOLDER	
F	FAN RELAY	
FS	FLOW SWITCH	
M	MANUAL STATION	46"
A	AUDIBLE NOTIFICATION APPLIANCE	88"
V	VISUAL NOTIFICATION APPLIANCE	88"
AV	AUDIBLE-VISUAL NOTIFICATION APPLIANCE	88"
VS	MAIN VALVE SUPERVISORY ("TAMPER") SWITCH	
	FIRE ALARM CONTROL PANEL	TOP 66"

STANDARD ABBREVIATIONS

AC	ABOVE COUNTER (MIN 4" ABOVE BACKSPLASH)	MCB	MAIN CIRCUIT BREAKER
AFF	ABOVE FINISH FLOOR	MLO	MAIN LUG ONLY
AFG	ABOVE FINISH GRADE	NC	NURSES CALL
AHU	AIR HANDLING UNIT	NFDS	NON-FUSIBLE DISCONNECT SWITCH
ATC	AUTOMATIC TEMPERATURE CONTROL	NR	NOT REQUIRED
BOF	BOTTOM OF FIXTURE	P	PAGING/BACKGROUND MUSIC
CKT	CIRCUIT	PA	PUBLIC ADDRESS
CP	CONTROL PANEL	PRV	POWER ROOF VENTILATOR
CU	CONDENSING UNIT	RF	RELIEF FAN
CUH	CABINET UNIT HEATER	RGSC	RIGID GALVANIZED STEEL CONDUIT
DT	DUST TIGHT	RT	RAIN-TIGHT
DTR	DATA TERMINATION RACK	RTU	ROOFTOP UNIT
EC	ELECTRICAL CONTRACTOR	S	SECURITY
EF	EXHAUST FAN	SD	SEE DETAIL
EM	EMERGENCY	SS	SURGE SUPPRESSION
EP	EXPLOSION PROOF	SW	SWITCH
EWC	ELECTRIC WATER COOLER	TOP	TOP OF PANEL
EWH	ELECTRIC WATER HEATER	T	TELEPHONE
F	FUSED	TSSW	TWO SPEED SEPARATE WINDING
FLA	FULL LOAD AMPERES	TTB	TELEPHONE TERMINAL BOARD
FA	FIRE ALARM	VT	VAPOR TIGHT
FACP	FIRE ALARM CONTROL PANEL	W	WALL MTG. (46" AFF FORWARD REACH) (52" AFF SIDE REACH)
FARA	FIRE ALARM REMOTE ANNUNCIATOR	WP	WEATHERPROOF
FDS	FUSIBLE DISCONNECT SWITCH	WT	WATER TIGHT
FVNR	FULL VOLTAGE NON REVERSING	WM	WIREMOLD
FVR	FULL VOLTAGE REVERSING		
IC	INTERCOM		
IG	ISOLATED GROUND		
IL	INTERLOCK		
LV	LOW VOLTAGE		
MC	MECHANICAL CONTRACTOR		
MCA	MINIMUM CIRCUIT AMPACITY		

SPECIAL SYMBOLS PECULIAR TO THIS PROJECT

SPECIAL ABBREVIATIONS PECULIAR TO THIS PROJECT

REVISIONS

NOSTDAHL LIPTACK
ARCHITECTS

City of Bottineau
New Fire Station
115 6th Street West
Bottineau, North Dakota 58318

Prairie Engineering P.C.
Professional Consulting Engineers

Electrical Schedules

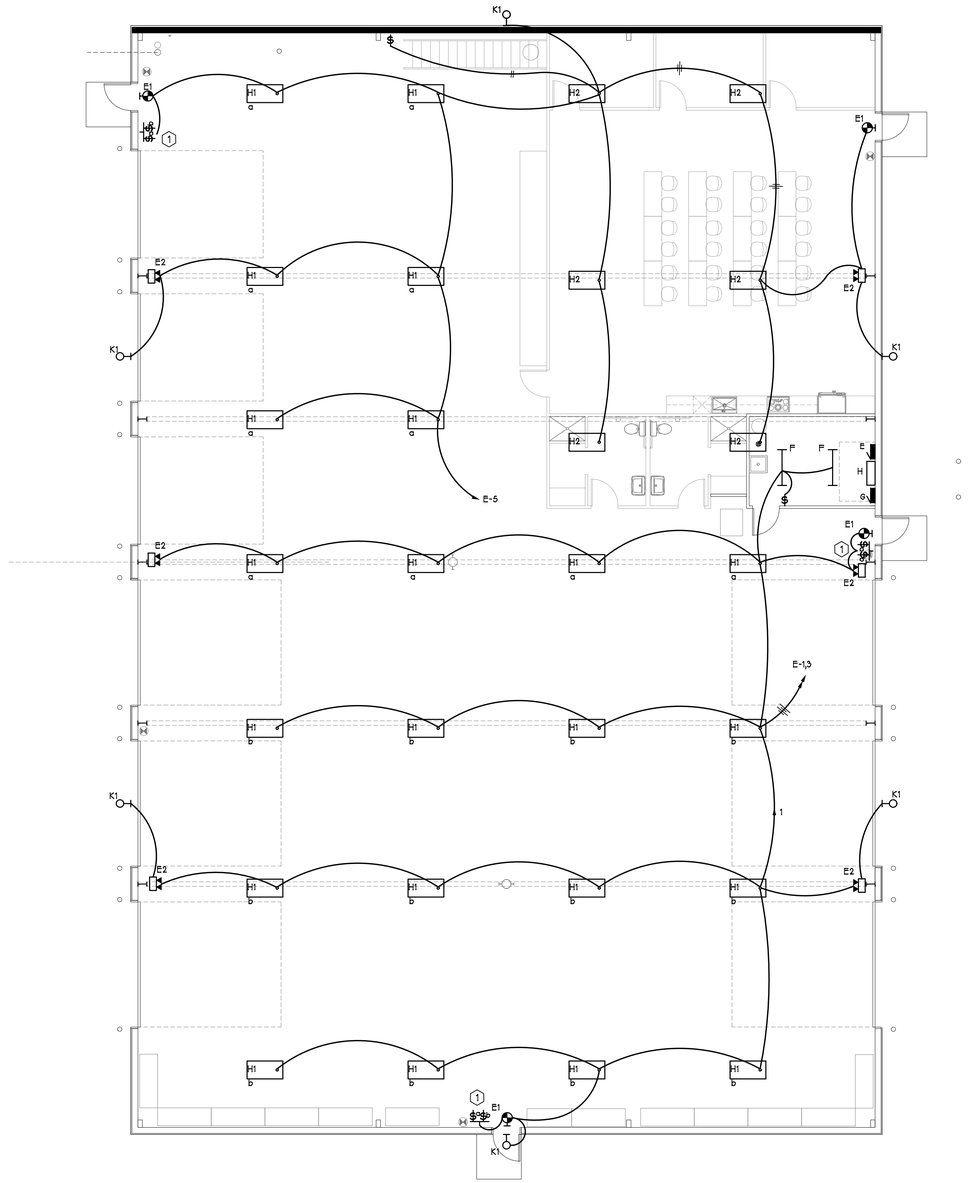
Scale:

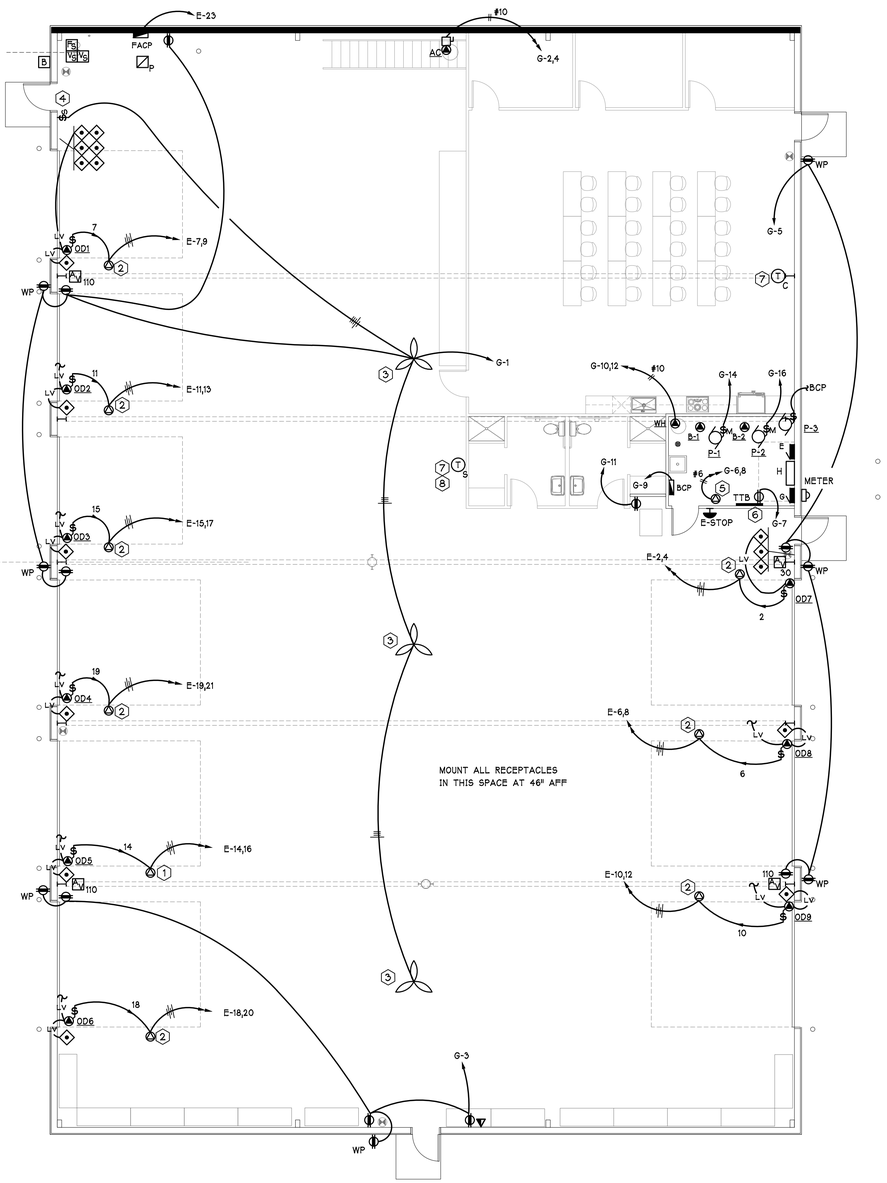
SHEET NO.

E0.1

KEYNOTES

1. WIRELESS SWITCHES FOR TYPE H1 LUMINAIRES. PROVIDE 120 VOLT POWER FOR SWITCHES. CONFIGURE TYPE H1 SWITCHING AS SHOWN ON THE DRAWINGS.
2. PROVIDE/INSTALL CORD REEL AT CEILING. CORD REAL SHALL BE HUBBELL #HBL145123C20 OR EQUIVALENT WITH 45' 12/3 SJO CORD AND HBL5369C CONNECTOR END. INCLUDE #HBL1125S BALL STOP TO HOLD RECEPTACLE AT 6'-7" AFF. PROVIDE NEMA L5-20 RECEPTACLE AT CEILING AND ASSOCIATED L5-20 CORD CAP FOR THE REEL.
3. QMARK #56201CLS OR EQUIVALENT CEILING FAN WITH #9D48BW 48" DOWNROD.
4. QMARK #CTL12004RSPD OR EQUIVALENT REVERSING SPEED CONTROL.
5. NEMA 6-50 RECEPTACLE AT 46" AFF.
6. STUB 3" CONDUIT FROM TTB TO PROPERTY LINE FOR COMMUNICATIONS SERVICE. VERIFY WITH SERVING TELCOM UTILITY.
7. T-STAT INCLUDES SLAB SENSOR. PROVIDE CONDUIT STUB FROM WALL ROUGH-IN INTO SLAB AND EXTEND OUT 6' FROM WALL.
8. PROVIDE TEMPORARY SUPPORT FOR T-STAT UNTIL PERMANENT WALL IS CONSTRUCTED.





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CHECKED BY: JLH
PROJECT NO.
FILE NAME:
DATE: DEC. 2024

- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
- ☐ CONSTRUCTION DOCUMENTS
- ☒ REVISIONS

City of Bottineau

New Fire Station
115 6th Street West
Bottineau, North Dakota 58318

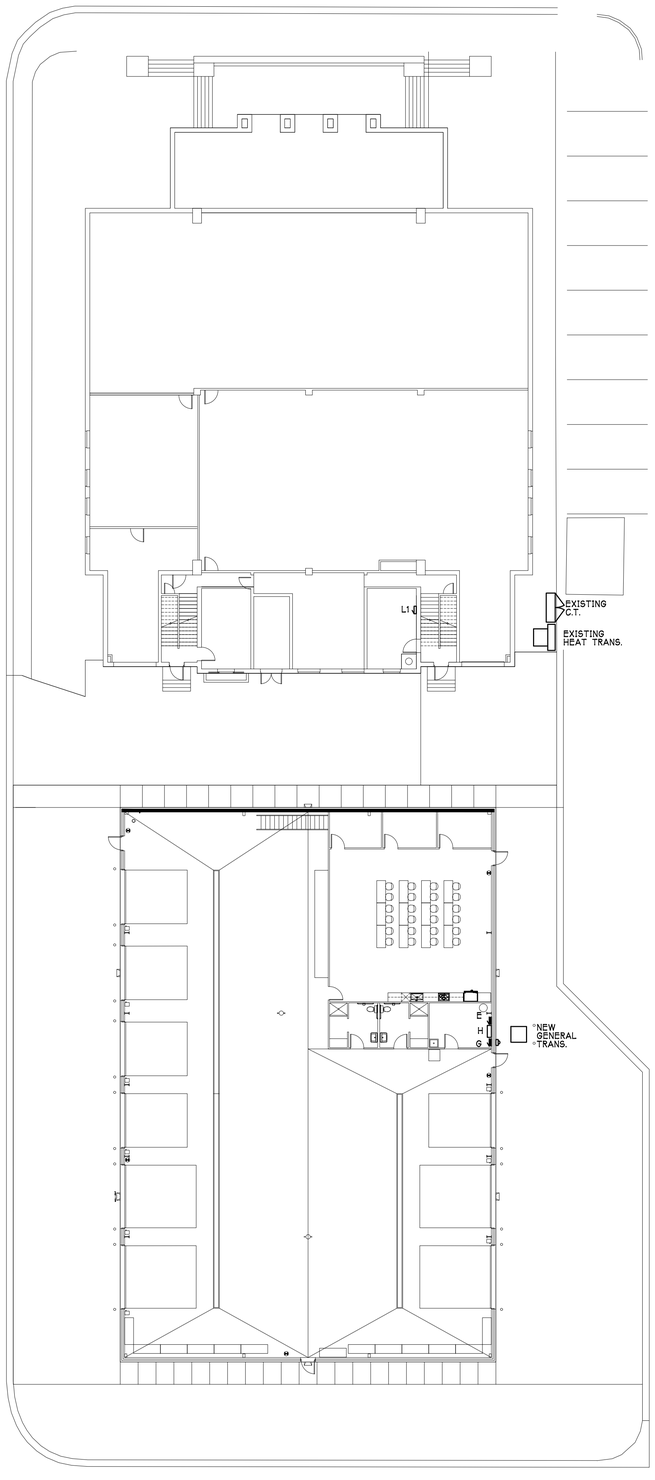
REGISTERED PROFESSIONAL ENGINEER
JASON M. FRANZEN
8879
DATE 12/01/2024
NORTH DAKOTA

Prairie Engineering P.C.
Professional Consulting Engineers

Electrical Plan

Scale: 1/8"=1'-0"
SHEET NO.

E1.1



1 E2.1 ELECTRICAL SITE PLAN N

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PROJECT NO.
FILE NAME:
DATE: DEC. 2024

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Electrical
Site Plan

Scale: 1/16"=1'-0"
SHEET NO.
E2.1