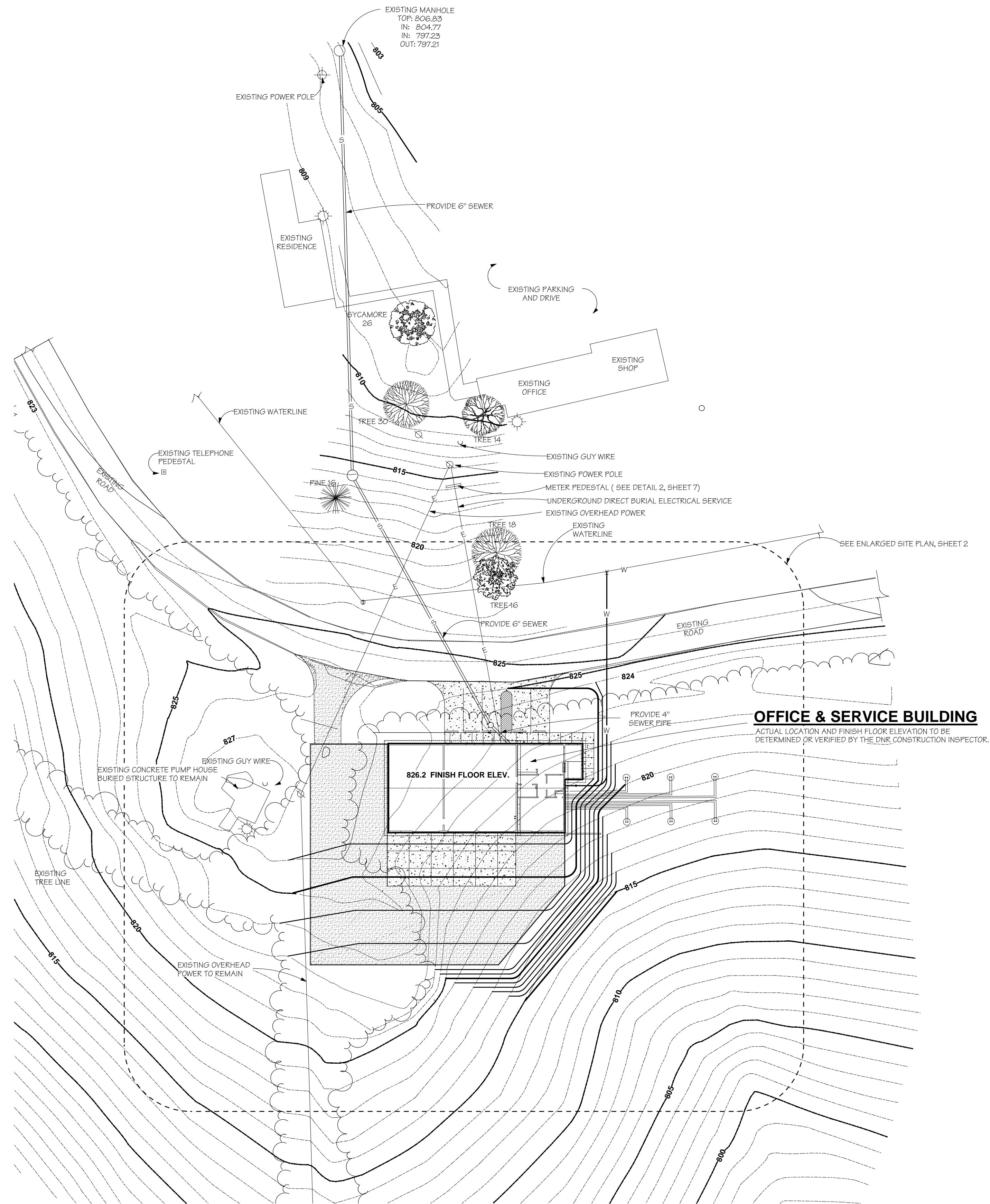
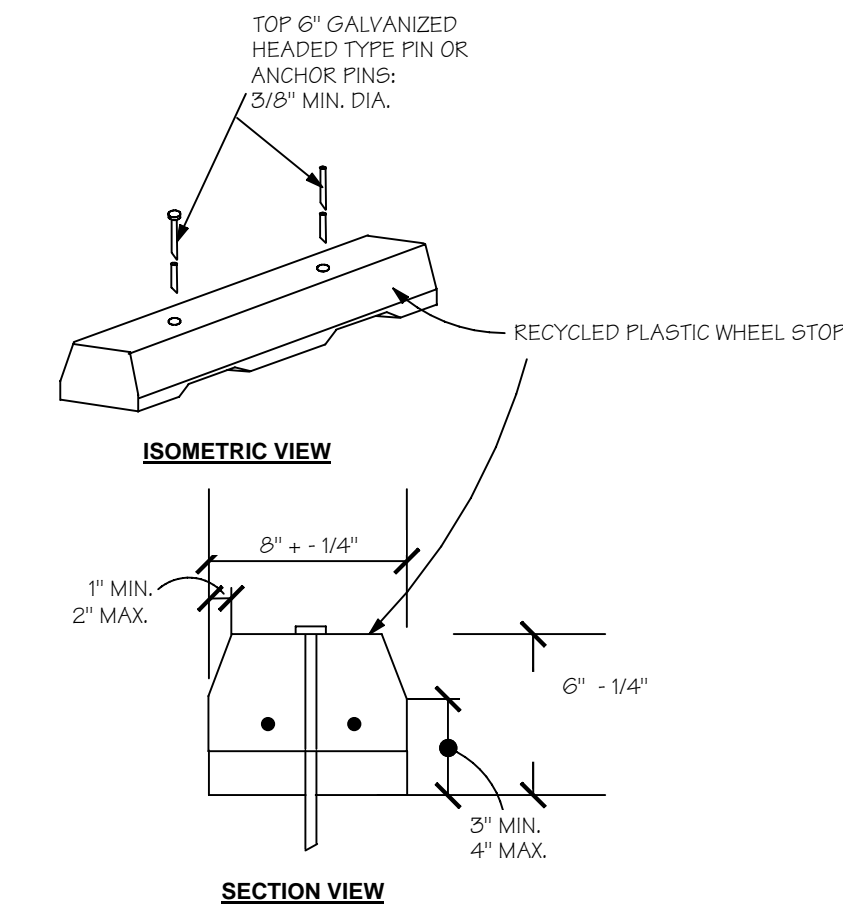


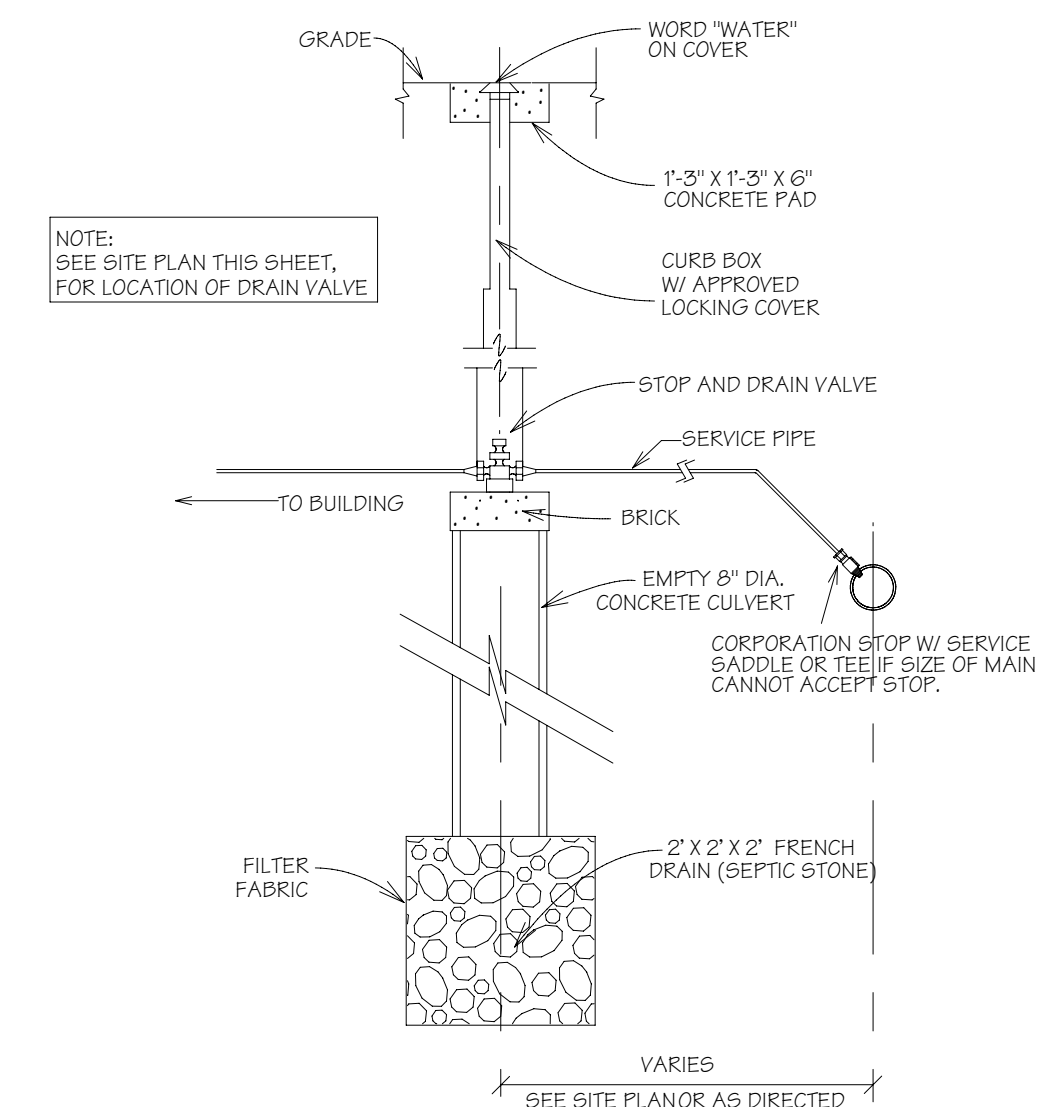
LAKE KEOMAH STATE PARK OFFICE & SERVICE BUILDING MAHASKA COUNTY, IOWA PROJ. # 08-05-62-01



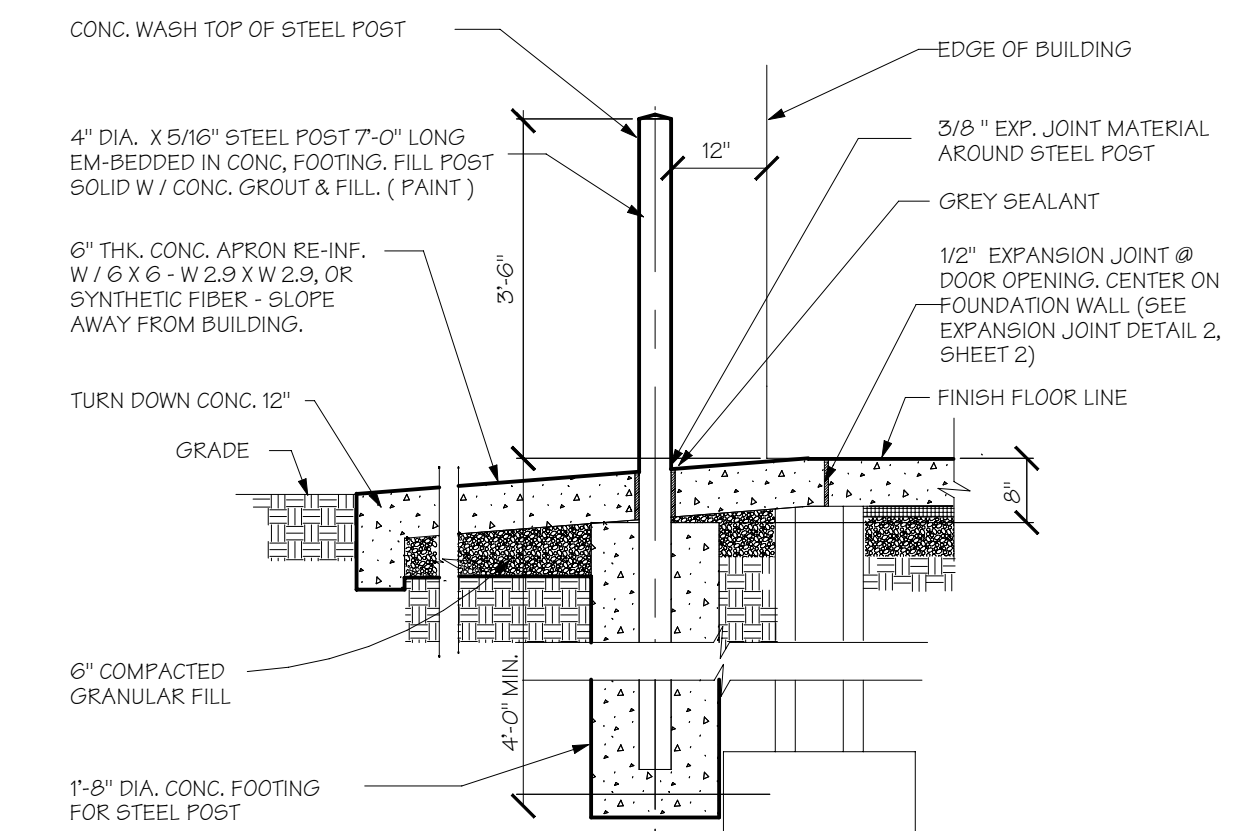
SITE PLAN
SCALE: 1" = 30'-0"



WHEEL STOP DETAIL
SCALE: 1 1/2" = 1'-0"

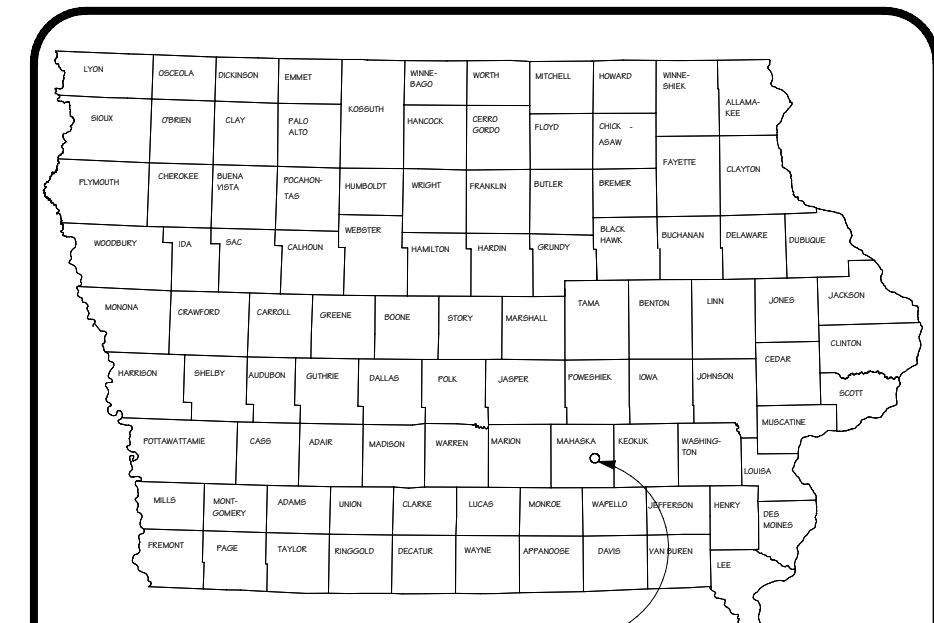


TYP. WATER SERVICE DETAIL
NO SCALE

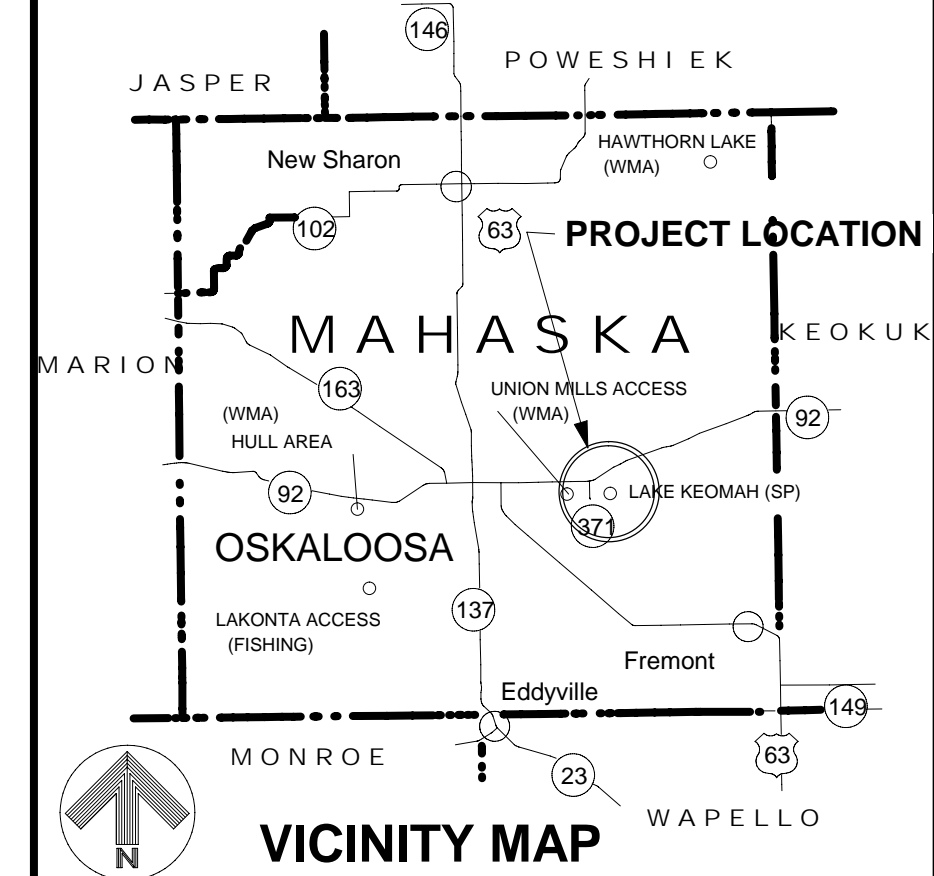


STEEL POST DETAIL
SCALE: 1/2" = 1'-0"

_____	DON LABATE, CHIEF - ENGINEERING AND REALTY SERVICES	_____	DATE
_____	KEN HERRING, ADMINISTRATOR - CONSERVATION AND RECREATION DIVISION	_____	DATE
_____	LIZ CHRISTENSEN, DEPUTY DIRECTOR - DEPARTMENT OF NATURAL RESOURCES	_____	DATE



KEY MAP



VICINITY MAP

ESTIMATE OF QUANTITIES

QUANTITIES BELOW ARE ESTIMATE TO FACILITATE CONTRACTOR'S OWN BIDDING CALCULATIONS. THESE DO NOT RELIEVE CONTRACTOR IN PROVIDING A COMPLETE SYSTEM AS REQUIRED IN THE CONTRACT DOCUMENT. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ADDITIONAL QUANTITIES, WHERE NECESSARY, TO FULFILL THE CONTRACT AND NO ADDITIONAL PAYMENTS SHALL BE MADE FOR THESE QUANTITIES.

ITEM	QUANTITY	UNIT
EARTHWORK		LUMP SUM
SITE RESTORATION		LUMP SUM
6" COMPACTED CRUSHED STONE PAVING	192	TONS
6" CONCRETE APRONS & SIDEWALK	3,014	SQ. FT.
CHAIN LINK FENCE W/ GATE	300	L.F.
OFFICE & SERVICE BUILDING	3,328	SQ. FT.
UNDERFLOOR RADIANT HEATING		LUMP SUM
DUCTLESS AIR CONDITIONING		LUMP SUM
GEO THERMAL		LUMP SUM
BUILDING ELECTRICAL		LUMP SUM
SEWER LINE	320	L.F.
MANHOLES	2	EA.
WATER SERVICE	100	L.F.
ELECTRICAL SERVICE	140	L.F.

DRAWING INDEX

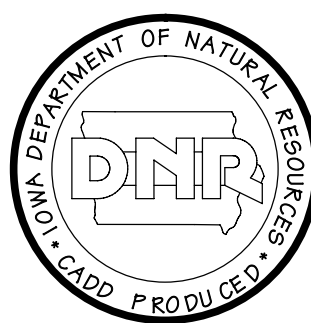
TITLE	SHEET NO.
COVER SHEET, SITE PLAN & SITE DETAILS	1
ENLARGED SITE PLAN & SITE DETAILS	2
POLE BUILDING PLANS DETAILS & SECTIONS	3
FLOOR PLAN, SCHEDULES & DETAILS	4
ELEVATIONS & SECTIONS	5
DETAILS, SECTIONS & CAB. INT. ELEV.	6
ELECTRICAL/MECHANICAL	7
CHAIN LINK FENCE & GATE	8

- GENERAL NOTES:**
- CONSTRUCT ENTIRE PROJECT IN ACCORDANCE WITH STATE BUILDING CODE ANSI 117.1 AND THE AMERICAN WITH DISABILITY ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS & FACILITIES.
 - VERIFY ACTUAL LOCATIONS AND ELEVATIONS W/ D.N.R. CONSTRUCTION INSPECTOR. DO NOT ALLOW CHANGE OF ELEVATION GREATER THAN 1'-0" OF RISE EVERY 20'-0" OF RUN ON ACCESSIBLE ROUTE FROM ACCESSIBLE PARKING STALL AND THE BUILDING.
- SLABS & SIDEWALKS PAVING:**
- PROVIDE 3/4" EXPANSION JOINTS WHERE WALKS MEET OTHER WALKS, CURBS, SLABS AND AT EVERY 45' INTERVALS.
 - PROVIDE 1/8" WIDE BY 1/4" CONTROL JOINT EVERY 5'-0" INTERVAL OR AS SHOWN.

DESIGNED BY	R. NEWELL	DATE	08/28/07
CHECKED BY	T. AMICE	DATE	03/06/08
PROJECT NO.	PA 5722	PROJECT NO.	08-05-62-01

LAKE KEOMAH STATE PARK
 OFFICE & SERVICE BUILDING
 MAHASKA COUNTY, IOWA
 COVER SHEET, SITE PLAN & SITE DETAILS
 PROJECT NO. 08-05-62-01

IOWA DEPARTMENT OF NATURAL RESOURCES
 WALLACE STATE OFFICE BUILDING
 DES MOINES, IOWA 50319-0034
OWNERSHIP OF DOCUMENTS, THE DESIGN AND DESIGN INFORMATION HEREIN AS AN INSTRUMENT OF PROFESSIONAL SERVICE IS WITHIN THE AUTHORITY OF THE RESPONSIBLE DESIGN PROFESSIONAL EMPLOYED BY THE ENGINEERING AND REALTY SERVICES DIVISION OF THE IOWA DEPARTMENT OF NATURAL RESOURCES.



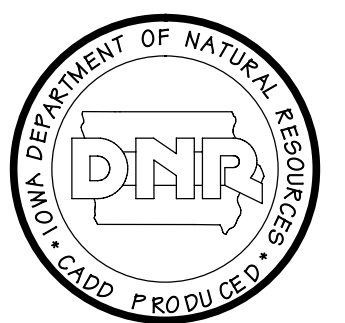
1

SHEET 1 OF 8

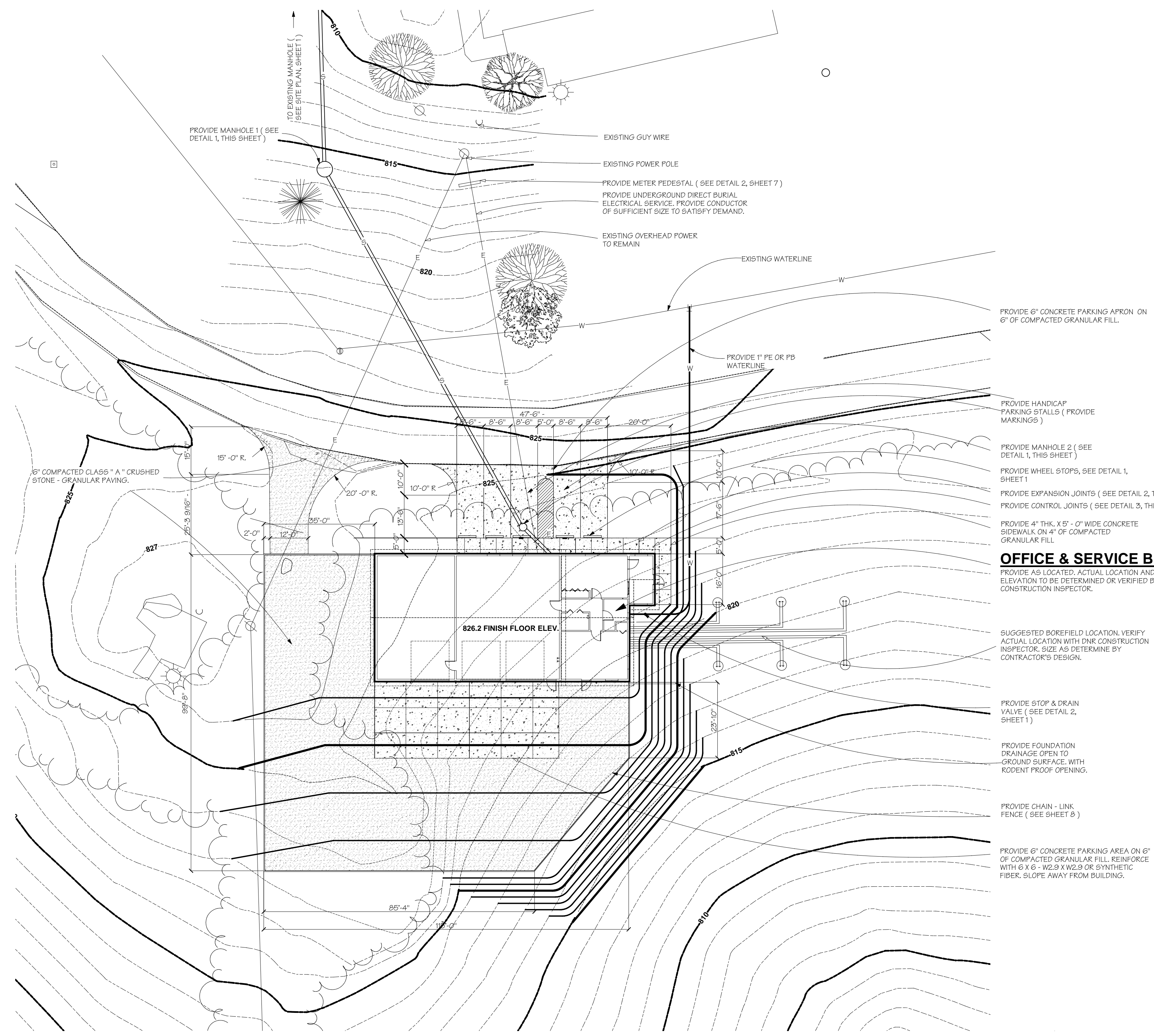
DESIGNED BY	R. NEWELL	DATE	08/28/07
CHECKED BY	T. AMICE	DATE	03/06/08
PROJECT NO.	PA 5722	PROJECT NO.	08-05-62-01

LAKE KEOMAH STATE PARK
 OFFICE & SERVICE BUILDING
 MAHASKA COUNTY, IOWA
 ENLARGED SITE PLAN & SITE DETAILS
 PROJECT NO. 08-05-62-01

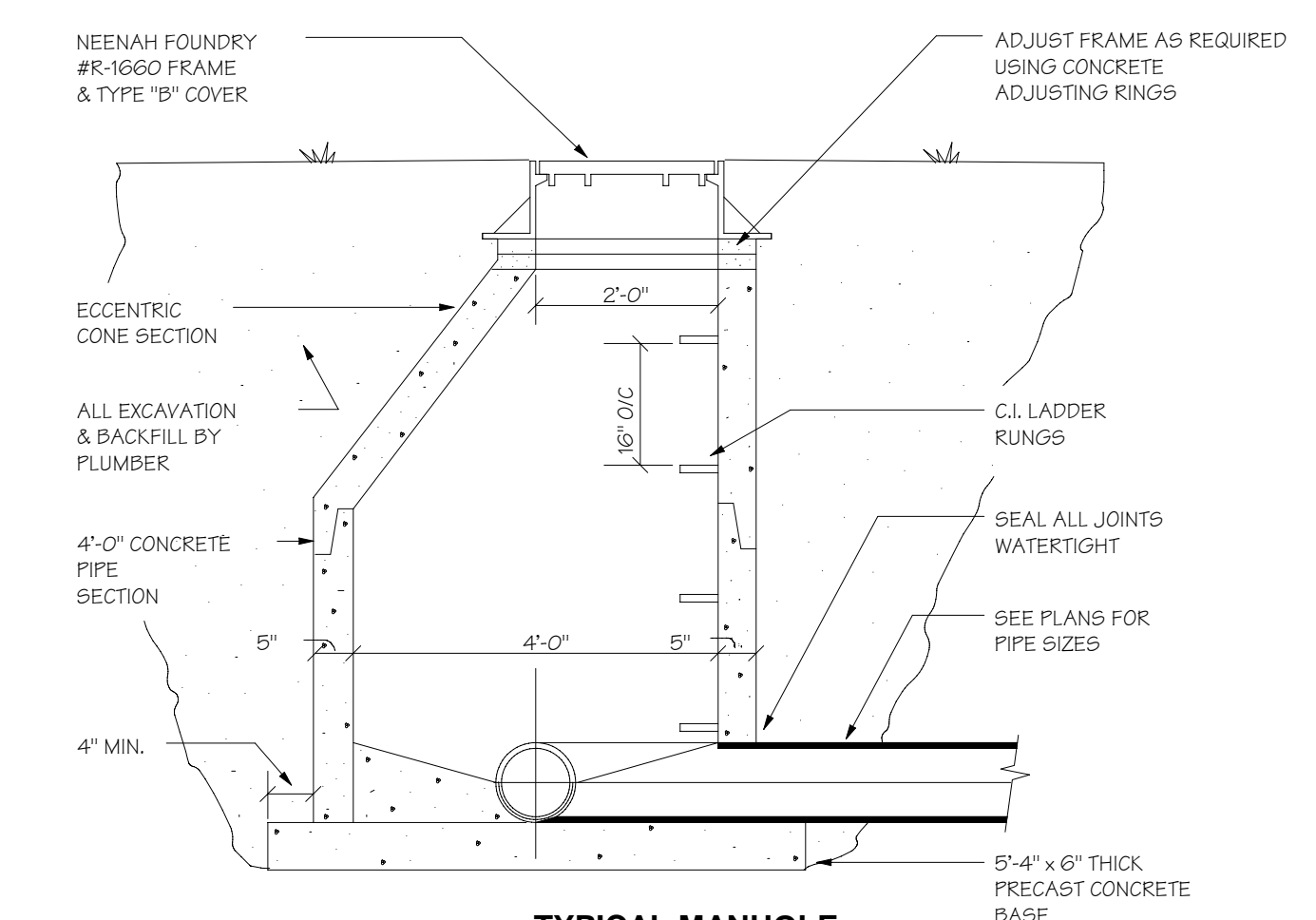
IOWA DEPARTMENT OF NATURAL RESOURCES
 WALLACE STATE OFFICE BUILDING
 DES MOINES, IOWA 50319-0034
OWNERSHIP OF DOCUMENTS, THE DESIGN AND DESIGN INFORMATION ARE THE PROPERTY OF PROFESSIONAL SERVICE BY WRITING AUTHORITY OF THE RESPONSIBLE DESIGN PROFESSIONAL EMPLOYED BY THE ENGINEERING AND REALTY SERVICES DIVISION OF THE IOWA DEPARTMENT OF NATURAL RESOURCES.



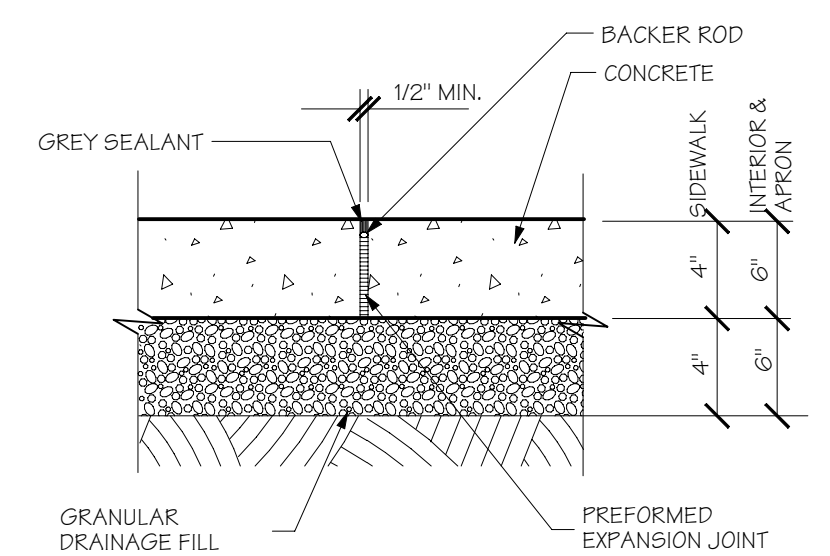
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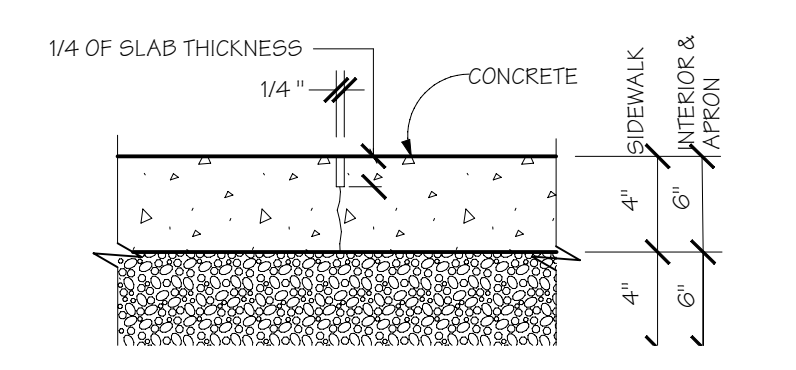
- PROVIDE 6" CONCRETE PARKING APRON ON 6" OF COMPACTED GRANULAR FILL.
- PROVIDE 1" PE OR PB WATERLINE
- PROVIDE HANDICAP PARKING STALLS (PROVIDE MARKINGS)
- PROVIDE MANHOLE 2 (SEE DETAIL 1, THIS SHEET)
- PROVIDE WHEEL STOPS, SEE DETAIL 1, SHEET 1
- PROVIDE EXPANSION JOINTS (SEE DETAIL 2, THIS SHEET)
- PROVIDE CONTROL JOINTS (SEE DETAIL 3, THIS SHEET)
- PROVIDE 4" THK. X 5' - 0" WIDE CONCRETE SIDEWALK ON 4" OF COMPACTED GRANULAR FILL
- OFFICE & SERVICE BUILDING**
- PROVIDE AS LOCATED. ACTUAL LOCATION AND FINISH FLOOR ELEVATION TO BE DETERMINED OR VERIFIED BY THE DNR CONSTRUCTION INSPECTOR.
- SUGGESTED BOREFIELD LOCATION. VERIFY ACTUAL LOCATION WITH DNR CONSTRUCTION INSPECTOR. SIZE AS DETERMINE BY CONTRACTOR'S DESIGN.
- PROVIDE STOP & DRAIN VALVE (SEE DETAIL 2, SHEET 1)
- PROVIDE FOUNDATION DRAINAGE OPEN TO GROUND SURFACE, WITH RODENT PROOF OPENING.
- PROVIDE CHAIN - LINK FENCE (SEE SHEET 8)
- PROVIDE 6" CONCRETE PARKING AREA ON 6" OF COMPACTED GRANULAR FILL. REINFORCE WITH 6 X 6 - W2.9 X W2.9 OR SYNTHETIC FIBER. SLOPE AWAY FROM BUILDING.



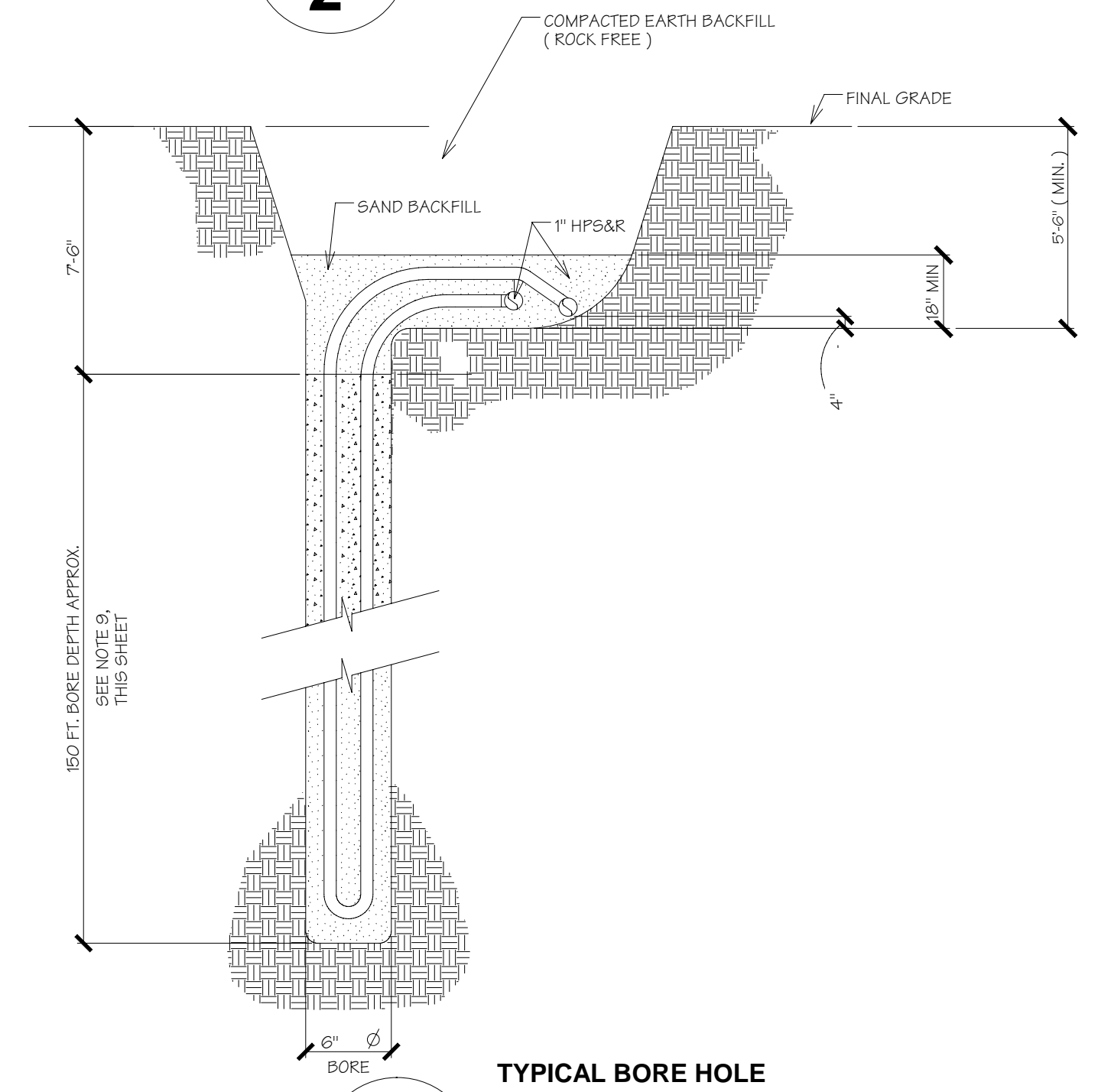
1
2
TYPICAL MANHOLE DETAIL
SCALE: 1/2" = 1'-0"



2
2
TYPICAL EXPANSION JOINT DETAIL
SCALE: 1" = 1'-0"



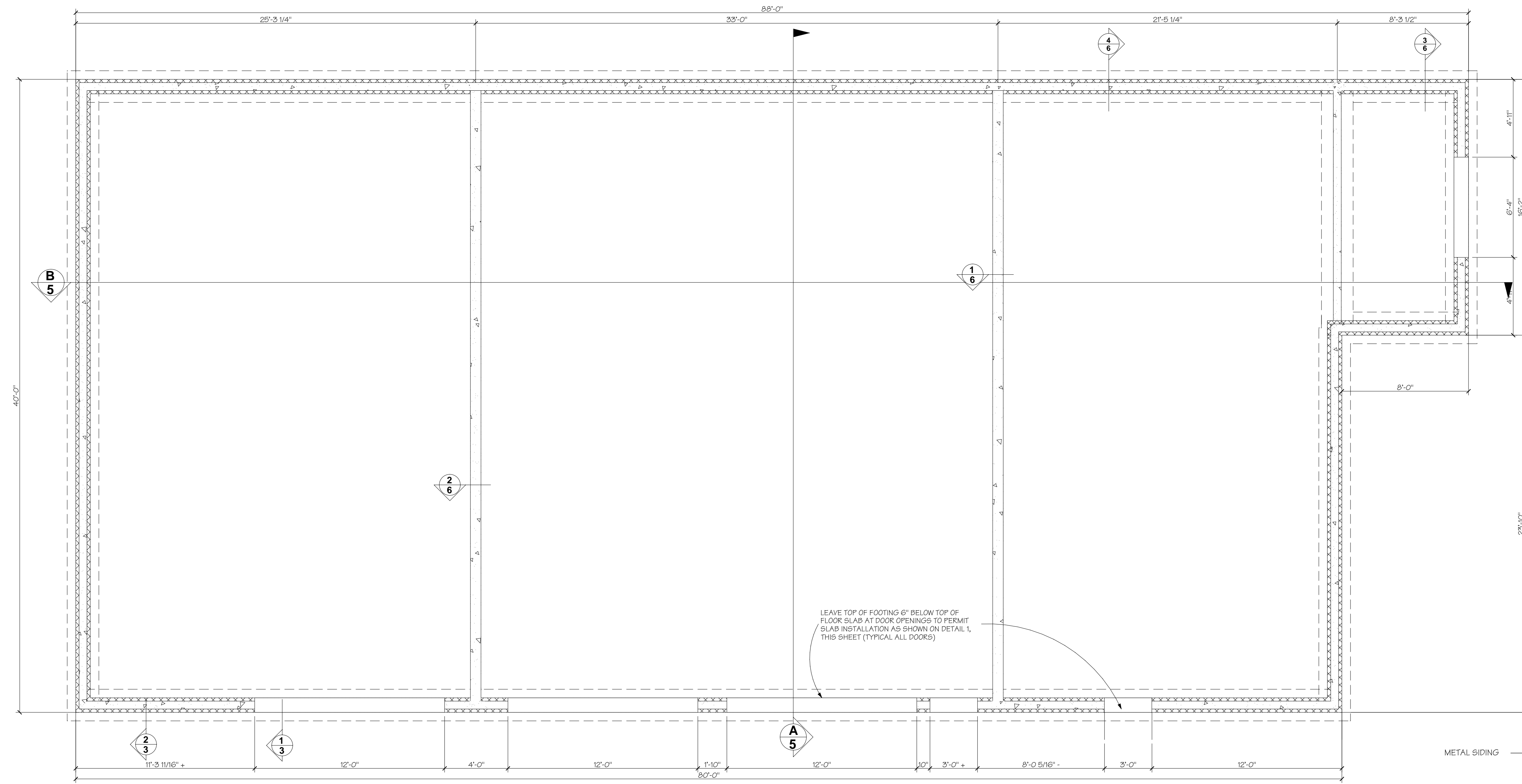
3
2
TYPICAL CONTROL JOINT DETAIL
SCALE: 1" = 1'-0"



4
2
TYPICAL BORE HOLE DETAIL
SCALE: 1" = 1'-0"

- GENERAL GOTHERMAL NOTES**
1. PROVIDE LINK - SEAL AT ALL PIPES PENETRATING A WALL OR FOUNDATION.
 2. FIELD VERIFY LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
 3. VERTICAL BORE HOLES SHALL BE A MINIMUM OF 10 FT. FROM SEWERS PER STATE CODE.
 4. LOOP FIELD CONTRACTOR SHALL COORDINATE LOOP FIELD INSTALLATION WITH BUILDING CONTRACTOR. CONTRACTORS TO COORDINATE UTILITY LOCATION AND INSTALLATION.
 5. RESTORE ALL GRADES TO CONDITIONS EXISTING PRIOR TO COMMENCING OF WORK. GROUT AND BACKFILL BORE HOLES SAME DAY AS DRILLED. DO NOT LEAVE ANY BORE HOLE OPEN OVERNIGHT OR WHEN SITE IS UNATTENDED.
 6. INSTALL ALL LOOP FIELD PIPING WITH UNIFORM SLOPE TO AVOID AIR POCKETS.
 7. GROUND - COUPLED HEAT PUMP WELL FIELD
6 FOUR INCH DIAMETER WELLS SPACED 20' - 0" APART.
 8. WELL SIZE AND DEPTH TO BE DETERMINED BY THE GEOTHERMAL DESIGN - BUILD CONTRACTOR AFTER THE SOIL CONDUCTIVITY TESTS HAVE BEEN PERFORMED.
 9. SEE ADDITIONAL NOTES ON SHEET 8 MECHANICAL/ELECTRICAL

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

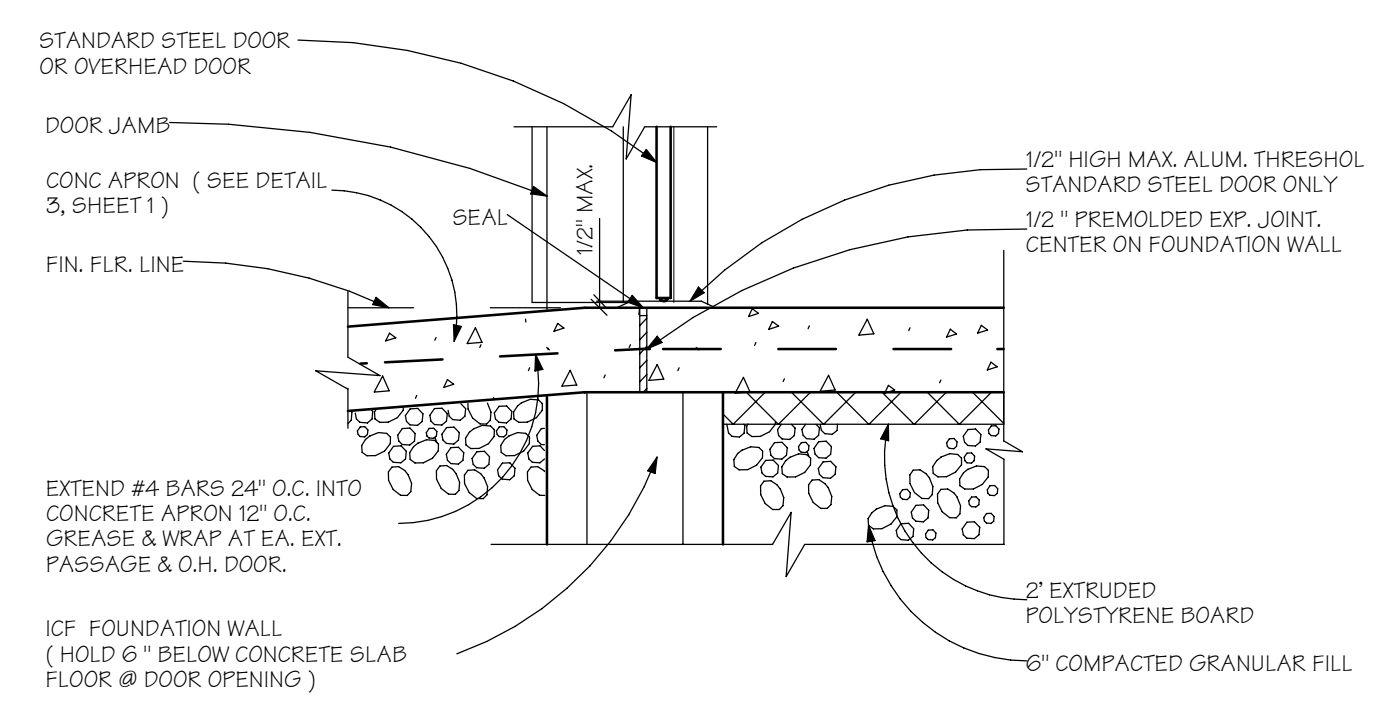


- CONCRETE NOTES:**
1. CONCRETE SLABS, APRONS, & WALKS MINIMUM 28 DAYS STRENGTH 4000 PSI.
 2. CONCRETE FOOTING & FOUNDATION WALLS MINIMUM 28 DAYS STRENGTH 3000 PSI.
 3. DO NOT PLACE CONCRETE WHEN TEMPERATURE IS EXPECTED TO FALL BELOW 40 DEGREES F. UNLESS APPROVED BY THE DNR CONSTRUCTION INSPECTOR.
 4. 6" THICK CONC. INTERIOR SLAB REINFD WITH 6 X 6 - W2.9 X W2.9 OR SUITABLE SYNTHETIC FIBER REINFORCEMENT ON 6" COMPACTED GRANULAR FILL. FINISH FLOOR TO DRAIN. SEAL SURFACE WITH CONC. SEALER, STEEL TROWEL FINISH.

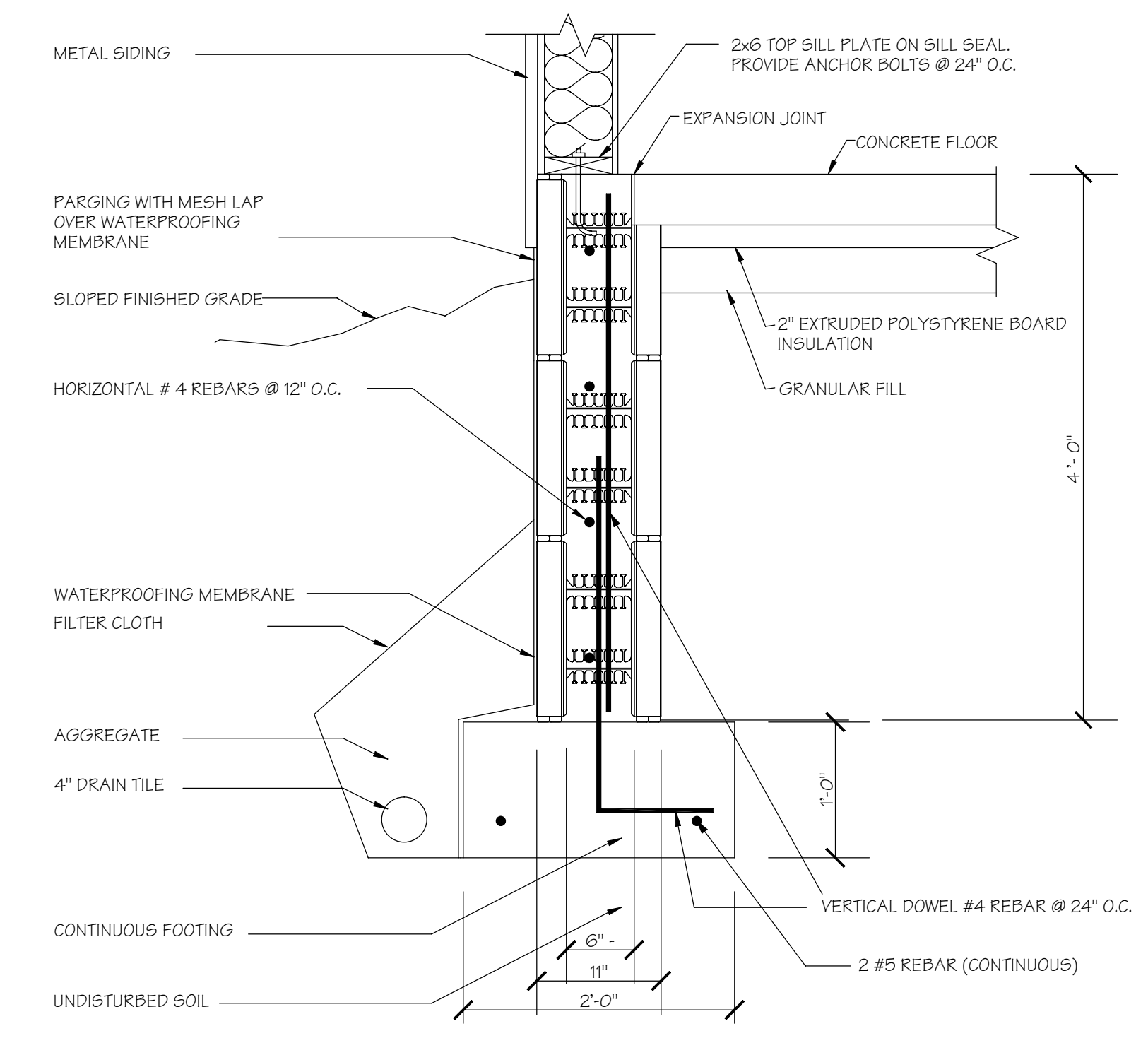
DIMENSION NOTE:
 UNLESS OTHERWISE INDICATE, THE BUILDING DIMENSIONS ARE FROM OUTSIDE TO OUTSIDE OF ICF FOUNDATION WALL SYSTEM AND OUTSIDE TO OUTSIDE OF WALL SHEATHING ABOVE.
 THE OUTSIDE EDGE OF THE ICF FORM ALIGN WITH THE OUTSIDE EDGE OF SHEATHING.
 INSIDE DIMENSIONS ARE FROM FINISHED WALLS TO FINISHED WALLS

LEAVE TOP OF FOOTING 6" BELOW TOP OF FLOOR SLAB AT DOOR OPENINGS TO PERMIT SLAB INSTALLATION AS SHOWN ON DETAIL 1, THIS SHEET (TYPICAL ALL DOORS)

FOUNDATION PLAN
 SCALE: 1/4" = 1'-0"



1 DETAIL SECTION
 SCALE: 1" = 1'-0"

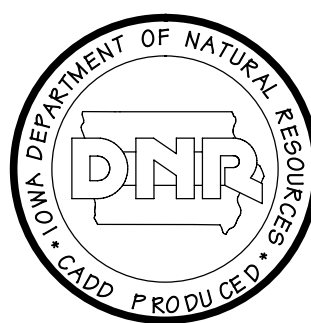


2 DETAIL SECTION
 SCALE: 1" = 1'-0"

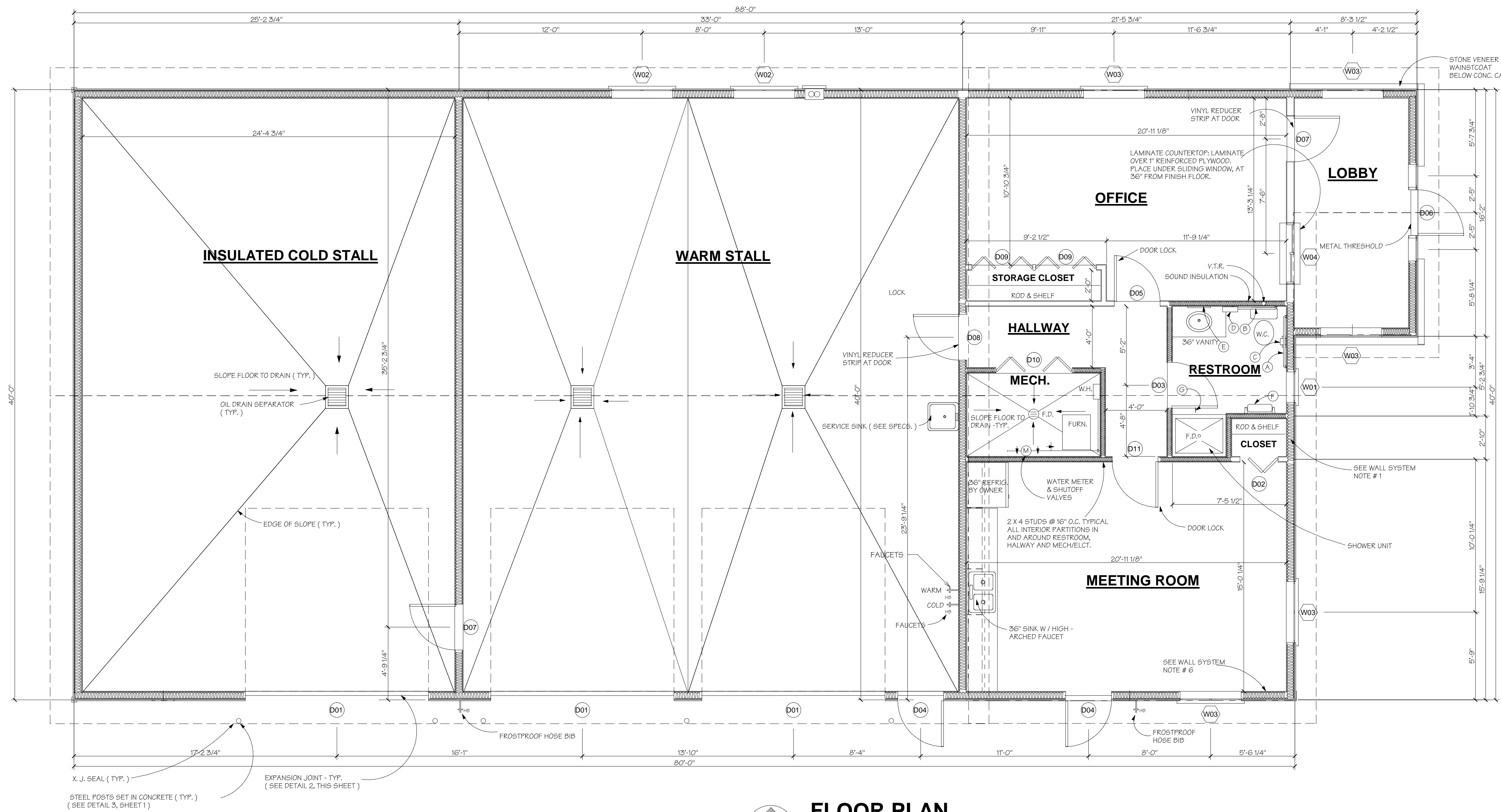
DESIGNED BY	R. NEWELL	DATE	08/28/07
CHECKED BY	T. AMICE	DATE	03/06/08
PROJECT NO.	PA 5722	PROJECT NO.	08-05-62-01

LAKE KEOMAH STATE PARK
 OFFICE & SERVICE BUILDING
 MAHASKA COUNTY, IOWA
 POLE BUILDING PLAN, DETAILS & SECTIONS
 PROJECT NO. 08-05-62-01

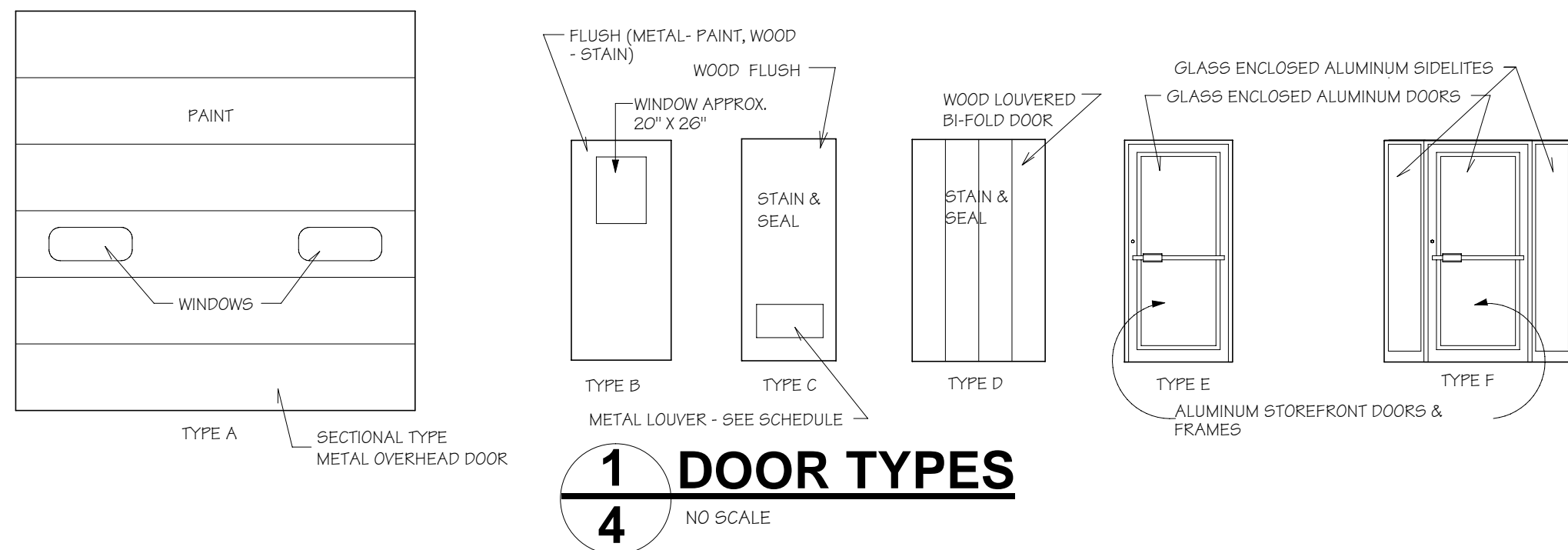
IOWA DEPARTMENT OF NATURAL RESOURCES
 WALLACE STATE OFFICE BUILDING
 DES MOINES, IOWA 50319-0034



3



FLOOR PLAN
SCALE: 1/4" = 1'-0"



DIMENSION NOTE:
UNLESS OTHERWISE INDICATE, THE BUILDING DIMENSIONS ARE FROM OUTSIDE TO OUTSIDE OF ICF FOUNDATION WALL SYSTEM AND OUTSIDE TO OUTSIDE OF WALL SHEATHING ABOVE.
THE OUTSIDE EDGE OF THE ICF FORM ALIGN WITH THE OUTSIDE EDGE OF SHEATHING.
INSIDE DIMENSIONS ARE FROM FINISHED WALLS TO FINISHED WALLS

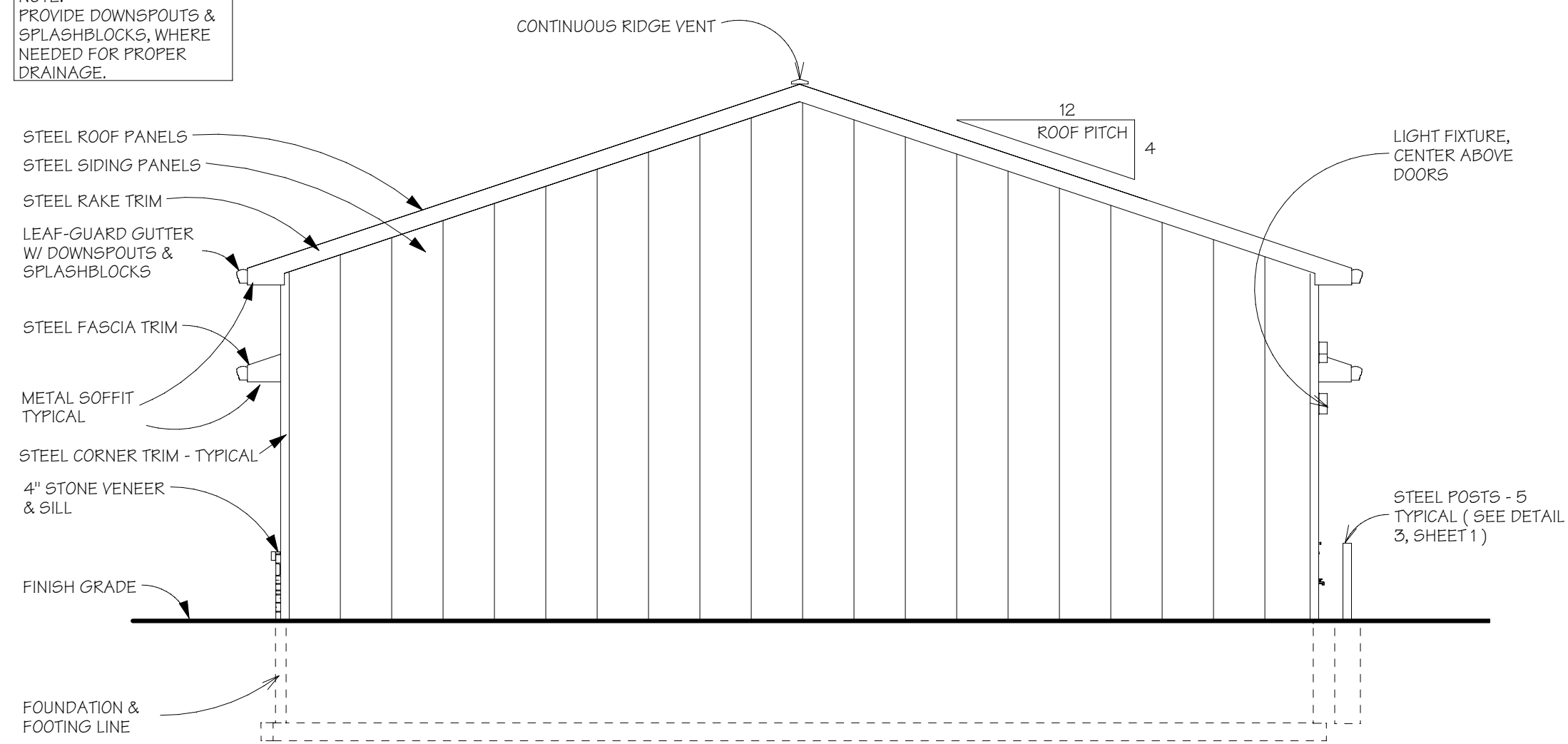
NUMBER	QTY	SIZE	DIMENSIONS	DESCRIPTION	COMMENTS
W01	1	2030SC	24'X36"SC	SINGLE CASEMENT - ALUM.	
W02	2	4036DC	48'X48"DC	DBL CASEMENT - H/L/RHR - METAL ALUMINUM	
W03	5	4040DC	48'X48"DC	DBL CASEMENT - H/L/RHR - METAL ALUMINUM	
W04	1	4040RS	48'X48"RS	SLIDER - METAL ALUMINUM	

ROOM NAME	FLOOR	BASE	WALL	CEILING	REMARKS
LOBBY					PROVIDE GYPSUM WALLBOARD WALLS & CEILING WITH SPRAY TEXTURED TREATMENT AND PAINT
OFFICE & STORAGE CLOSET					SEAL AND PAINT PLYWOOD
MEETING / PROJECT ROOM					PROVIDE ACCOUSTICAL DROP CEILING BELOW GYPSUM CEILING
RESTROOM					PROVIDE ACCOUSTICAL DROP CEILING BELOW GYPSUM CEILING
HALL					PROVIDE ACCOUSTICAL DROP CEILING BELOW GYPSUM CEILING
MECHANICAL ROOM					
WARM STALL					
INSULATED COLD STALL					

NUMBER	QTY	SIZE	WIDTH	HEIGHT	DESCRIPTION	THICKNESS	COMMENTS
D01	3	120120	144"	144"	STEEL SECTIONAL OVERHEAD DOOR - TYPE A	1 3/4"	HARDWARE SET 106
D02	1	2668	30"	80"	WOOD DOOR & FRAME - TYPE D	1 3/4"	HARDWARE SET 105
D03	1	3068	36"	80"	WOOD DOOR & FRAME - TYPE C	1 3/4"	HARDWARE SET 104 - 24" X 16" SIGHTPROOF METAL LOUVER
D04	1	3068	36"	80"	ALUMINUM STOREFRONT - TYPE F	1 3/4"	HARDWARE SET 106
D05	1	3068	36"	80"	METAL DOOR & FRAME - TYPE B	1 3/4"	HARDWARE SET 102 - FIRE RATED
D06	2	4068	24"	80"	WOOD DOOR & FRAME - BI-FOLD - TYPE D	1 3/8"	HARDWARE SET 105
D07	1	4068	30"	80"	WOOD DOOR & FRAME - BI-FOLD - TYPE D	1 3/8"	HARDWARE SET 105
D08	2	3068	36"	80"	METAL DOOR & FRAME - TYPE B	1 3/4"	HARDWARE SET 101
D09	2	3068	36"	80"	WOOD DOOR & FRAME - TYPE B	1 3/4"	HARDWARE SET 102
D10	2	3068	36"	80"	ALUMINUM STOREFRONT - TYPE E	1 3/4"	HARDWARE SET 106 - INCLUDE LOCKING DEVICE

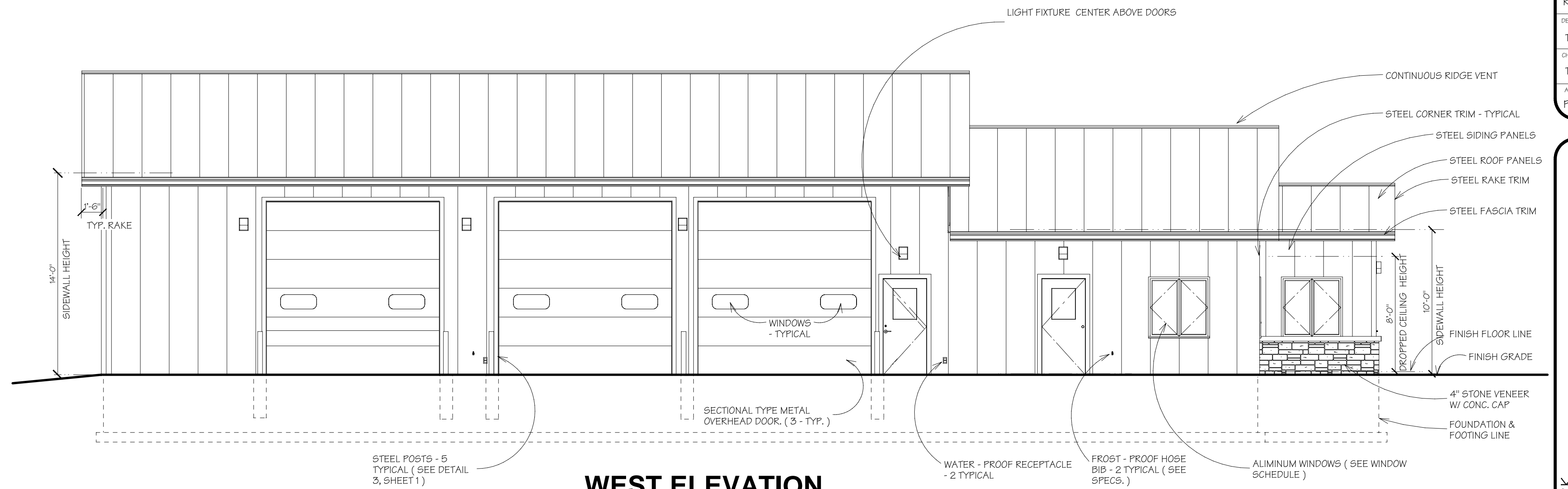
LT.	DESCRIPTION	MFR'S. MODEL NO.	MT. HGT.	REMARKS
(A)	GRAB BAR-CONCEALED MT.	ASI 3100 - 1 1/4" TYPE F-42"	36" A.F.F.	NON-SLIP FINISH.
(B)	GRAB BAR-CONCEALED MT.	ASI 3100 - 1 1/4" TYPE F-38"	36" A.F.F.	NON-SLIP FINISH.
(C)	TOILET PAPER DISPENSER	ASI 0031	30" A.F.F. TO BOTTOM	FREE TURNING 9 SPINDLE.
(D)	TOWEL DISPENSER	ASI 6457		
(E)	RECESSED MED. CAB. W/MIR.	ASI 0952	40" A.F.F. TO BOTTOM	
(F)	TOWEL BAR 24" LONG	ASI 7355	36" A.F.F. 60" & 36" A.F.F.	
(G)	COAT HOOKS - 2	ASI 7345		

NOTE: PROVIDE DOWNSPOUTS & SPLASHBLOCKS, WHERE NEEDED FOR PROPER DRAINAGE.



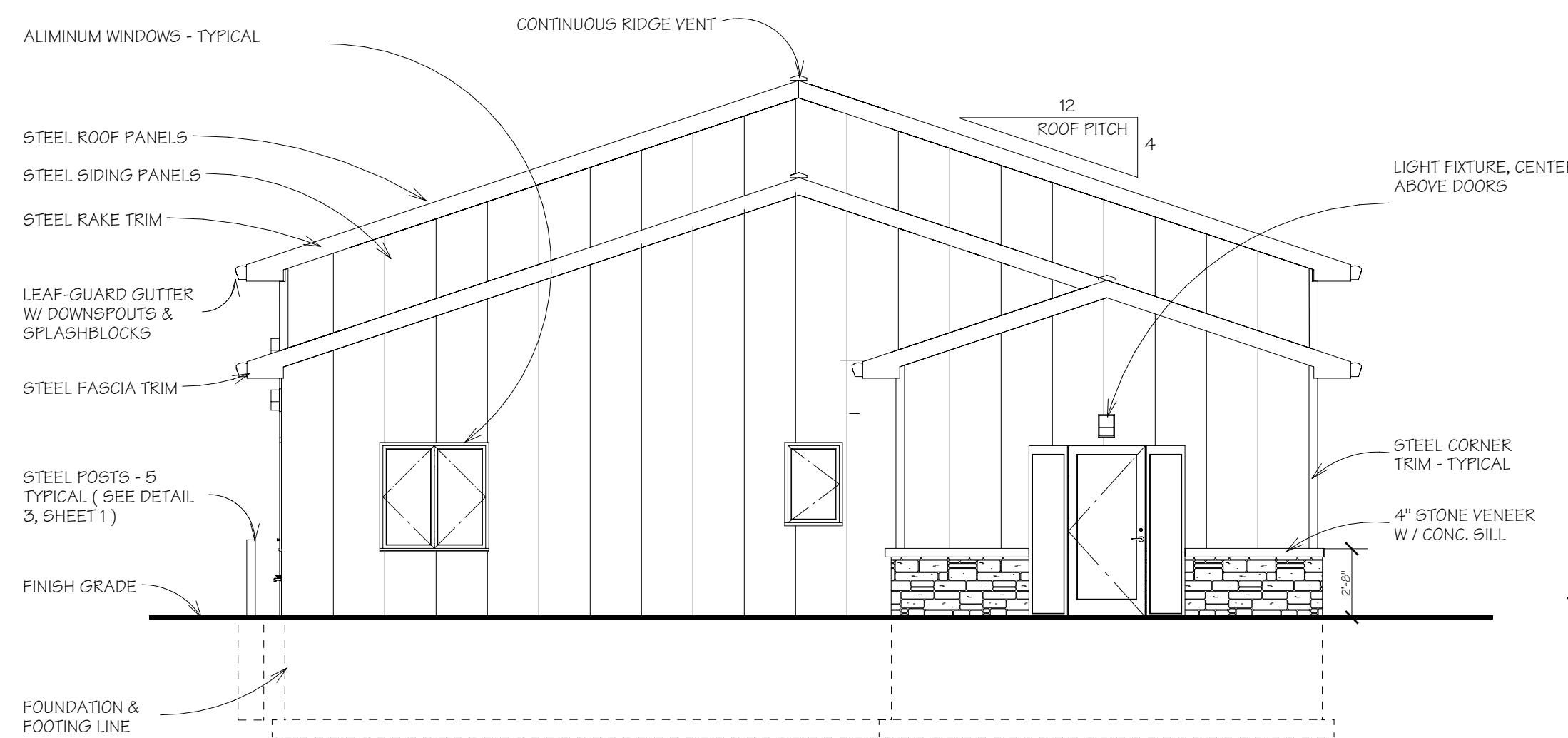
NORTH ELEVATION

SCALE: 3/16" = 1'-0"



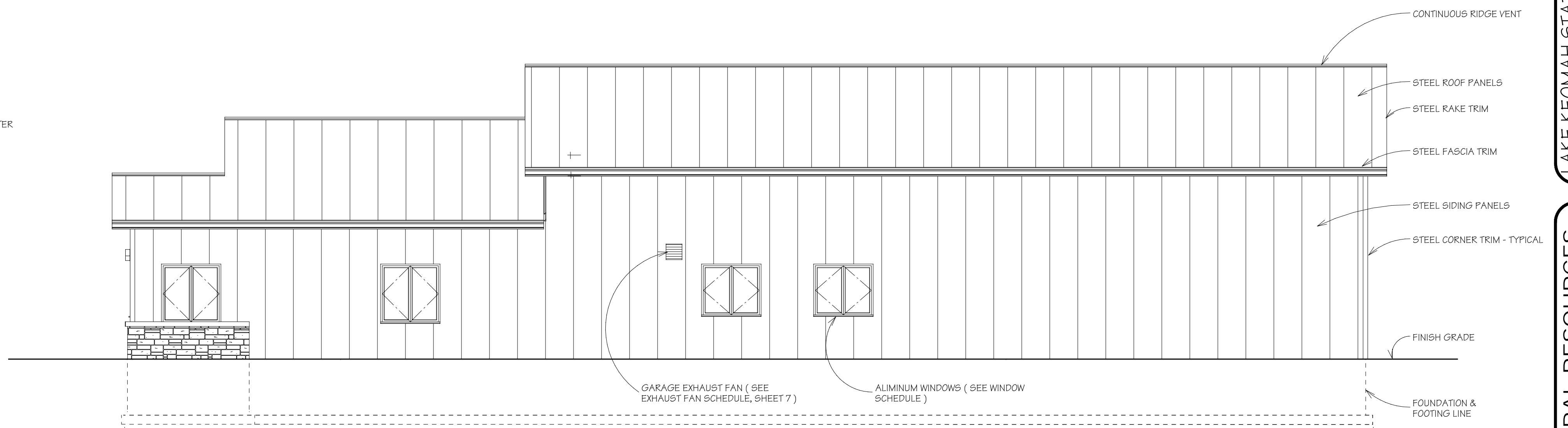
WEST ELEVATION

SCALE: 3/16" = 1'-0"



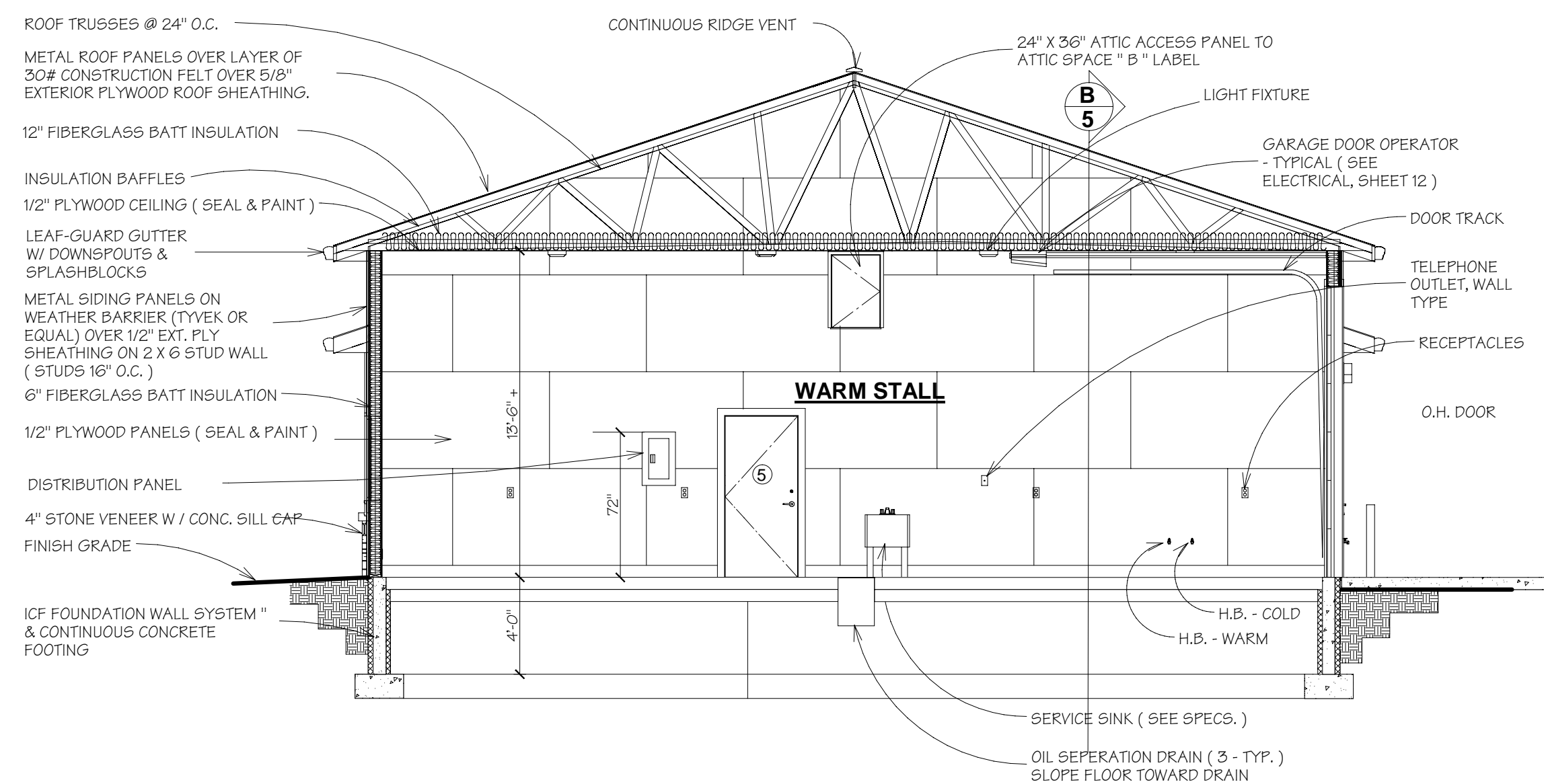
SOUTH ELEVATION

SCALE: 3/16" = 1'-0"



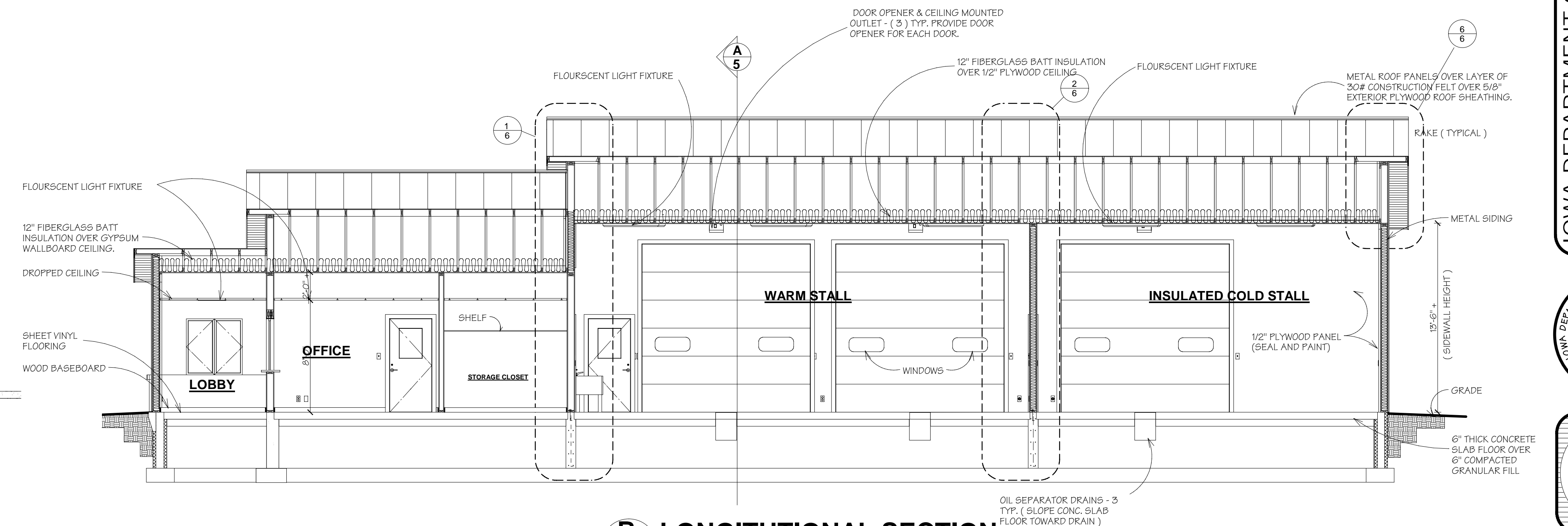
EAST ELEVATION

SCALE: 3/16" = 1'-0"



A CROSS SECTION

SCALE: 3/16" = 1'-0"



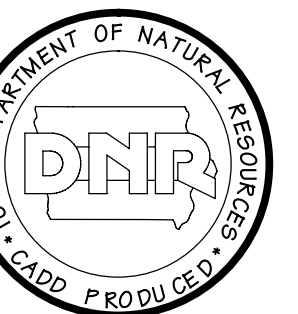
B LONGITUDINAL SECTION

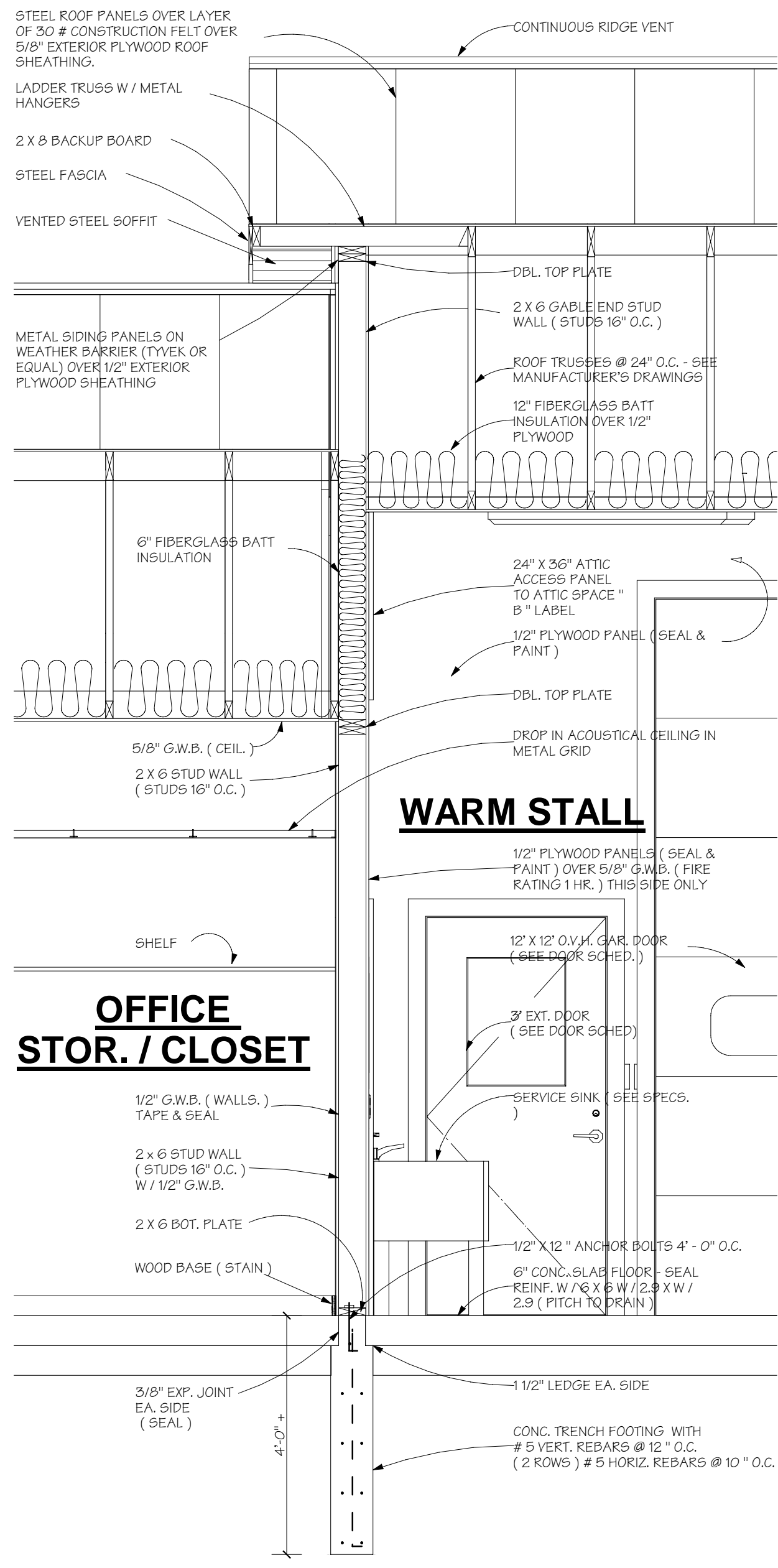
SCALE: 3/16" = 1'-0"

DESIGNED BY	R. NEWELL	DATE	08/28/07
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PROJECT NO.	PA 5722	PROJECT NO.	08-05-62-01

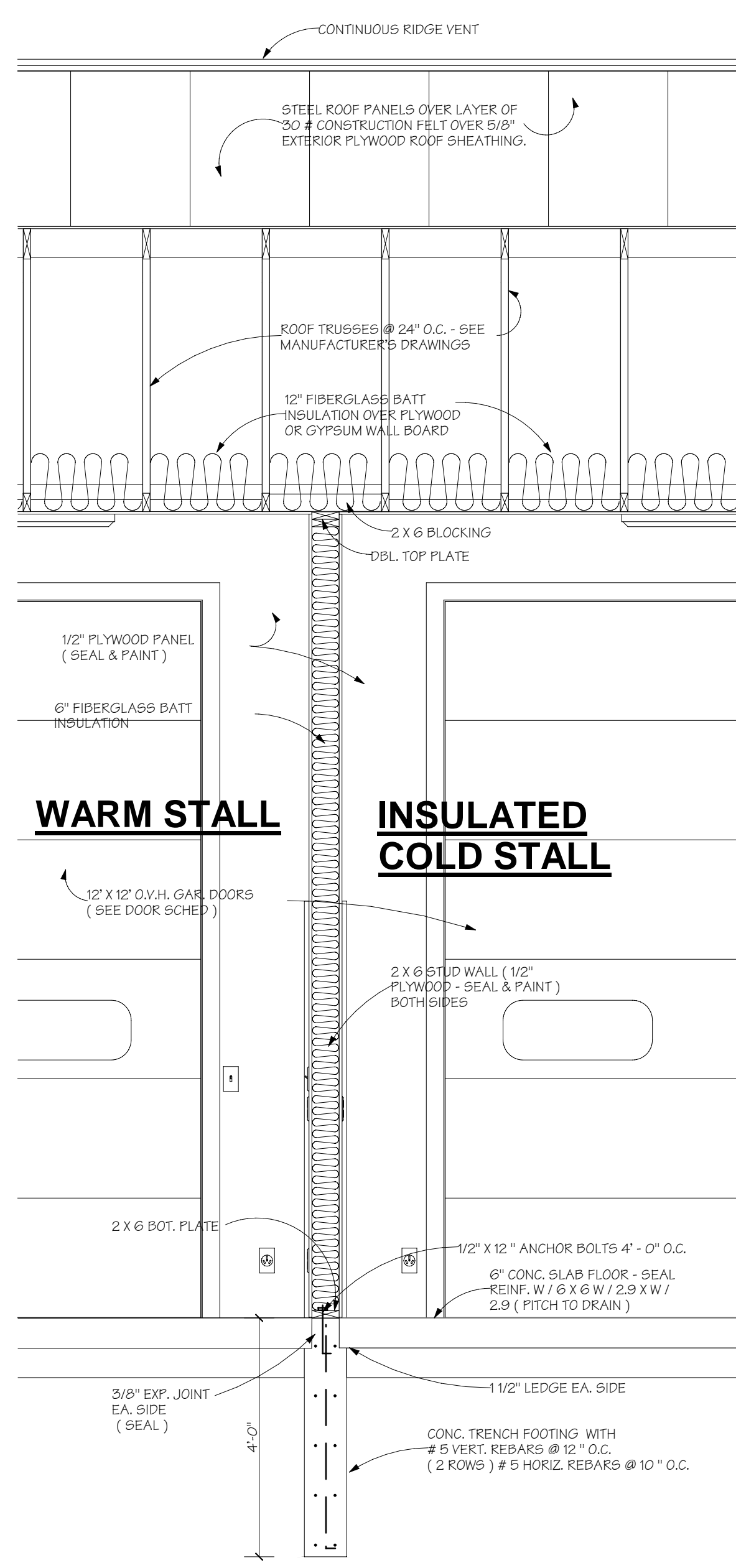
LAKE KEOMAH STATE PARK
OFFICE & SERVICE BUILDING
MAHASKA COUNTY, IOWA
ELEVATIONS & SECTIONS
PROJECT NO. 08-05-62-01

IOWA DEPARTMENT OF NATURAL RESOURCES
WALLACE STATE OFFICE BUILDING
DES MOINES, IOWA 50319-0034
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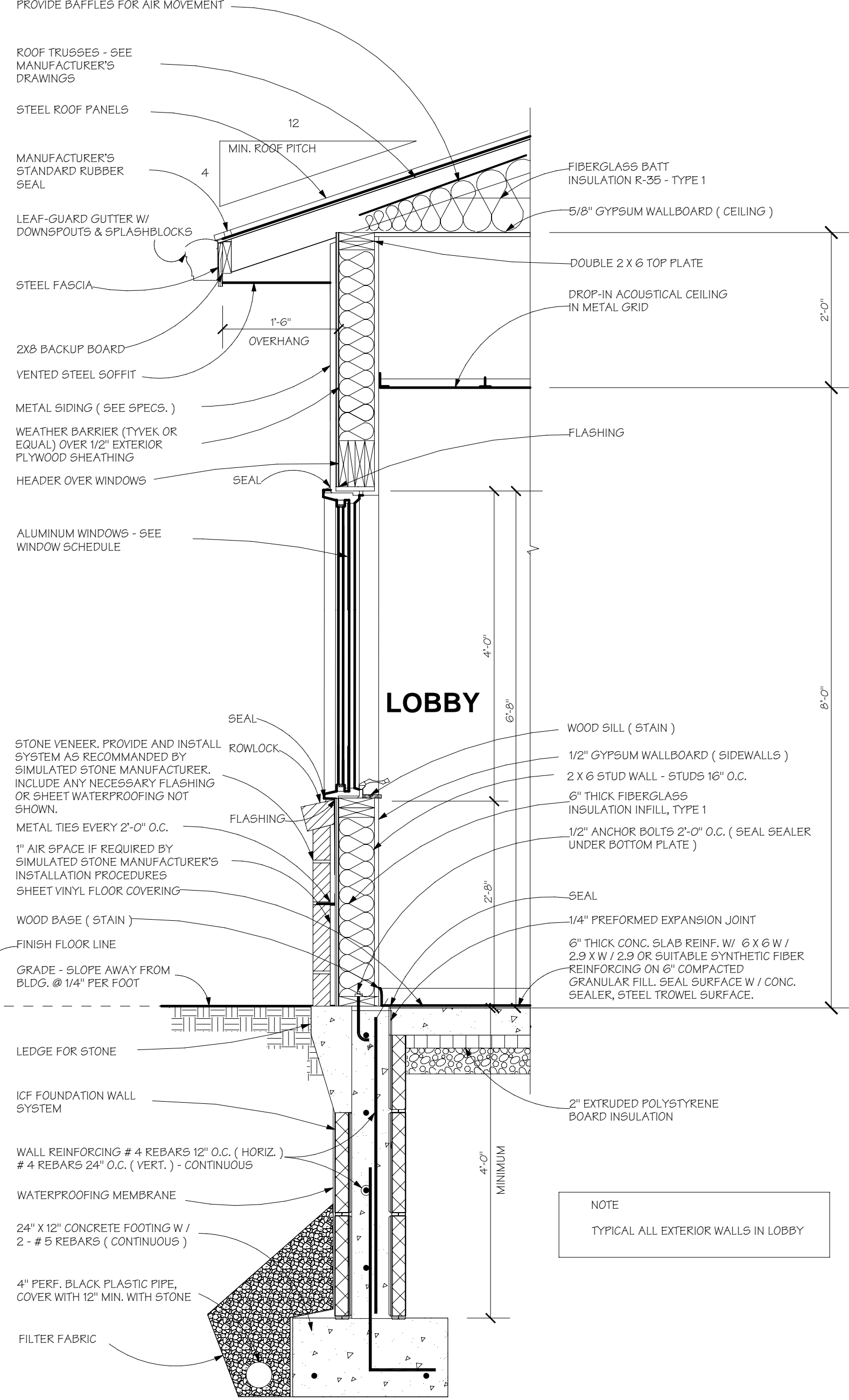




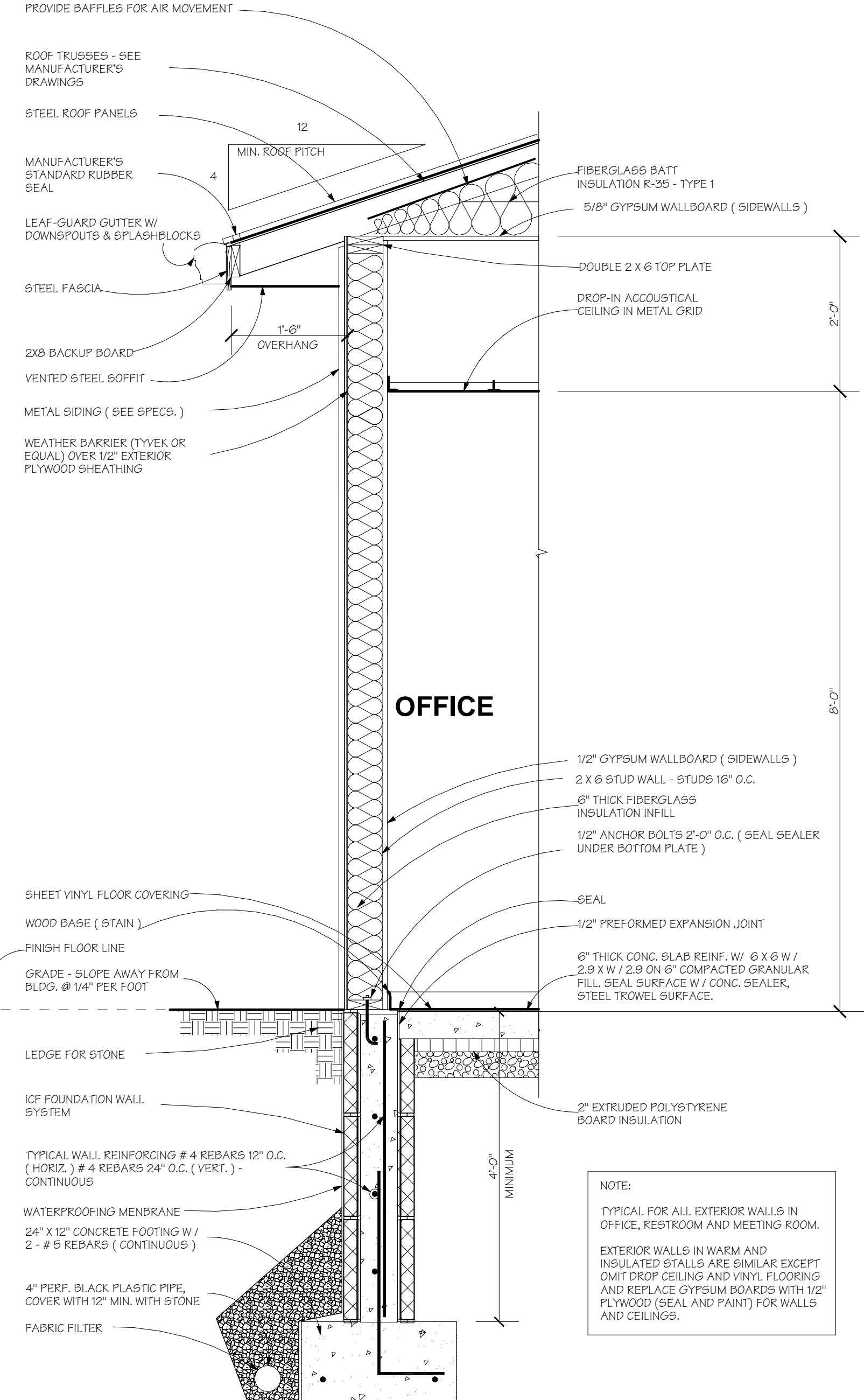
1 DETAIL SECTION
6 SCALE: 1/2" = 1'-0"



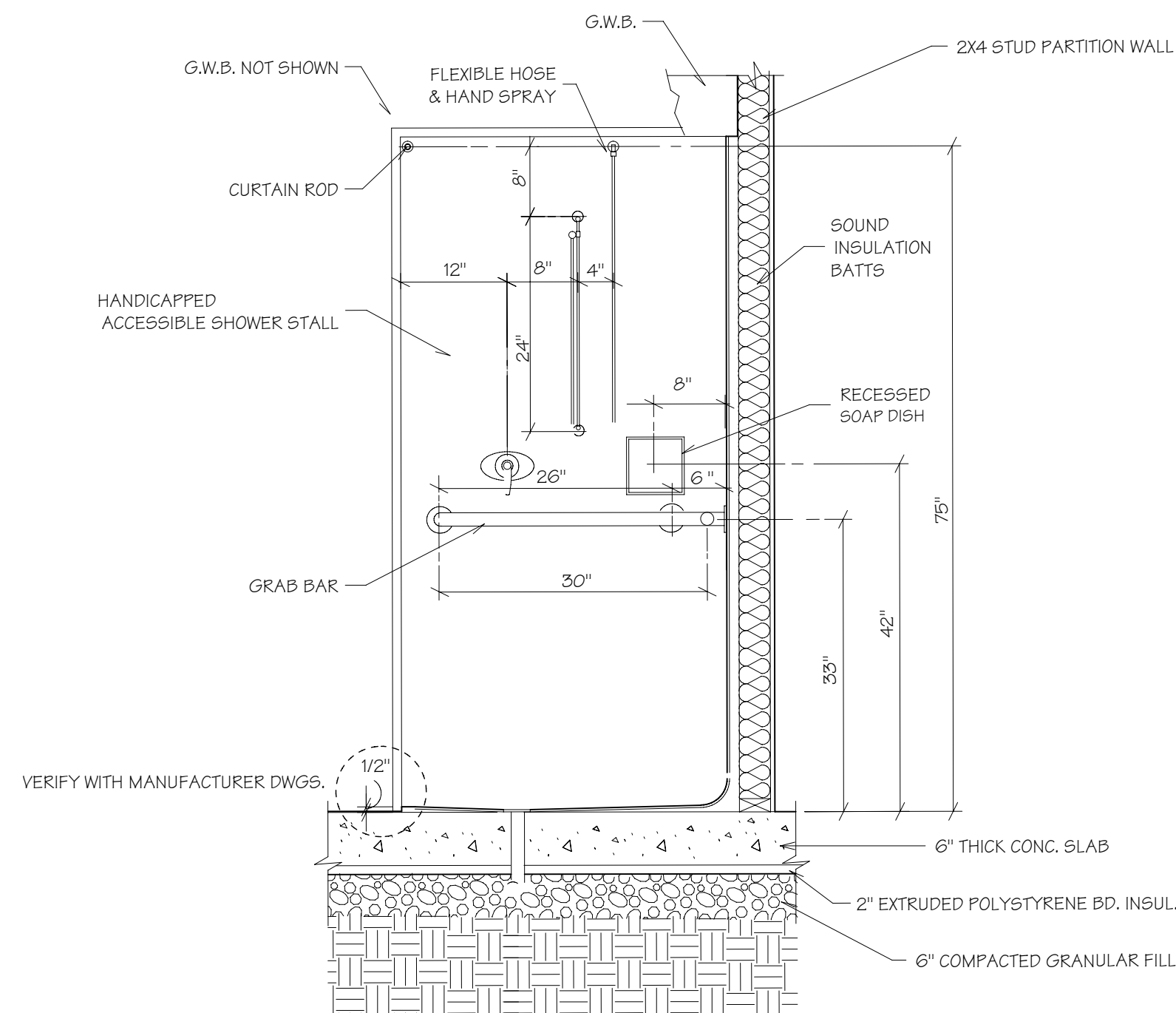
2 DETAIL SECTION
6 SCALE: 1/2" = 1'-0"



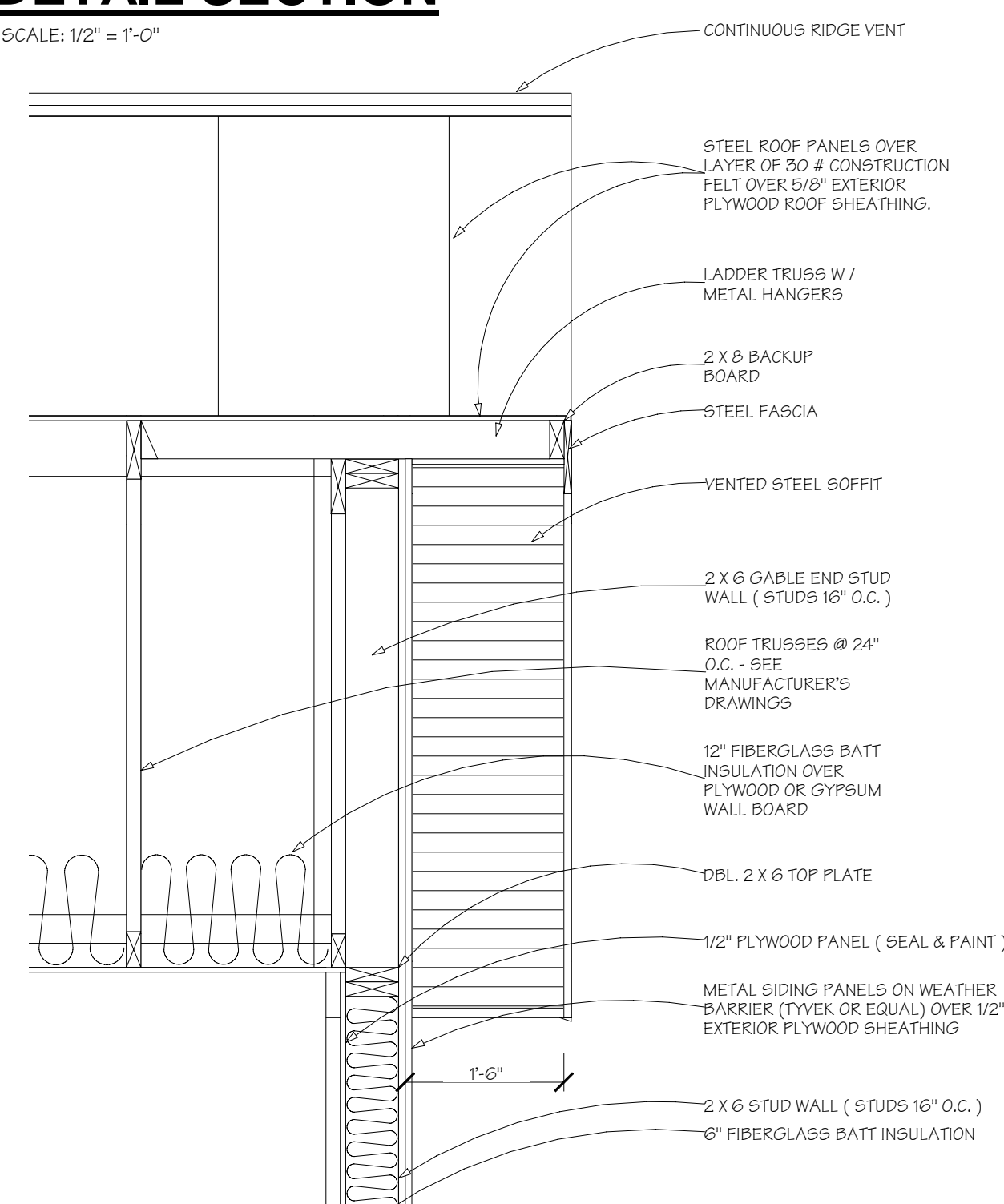
3 DETAIL SECTION
6 SCALE: 3/4" = 1'-0"



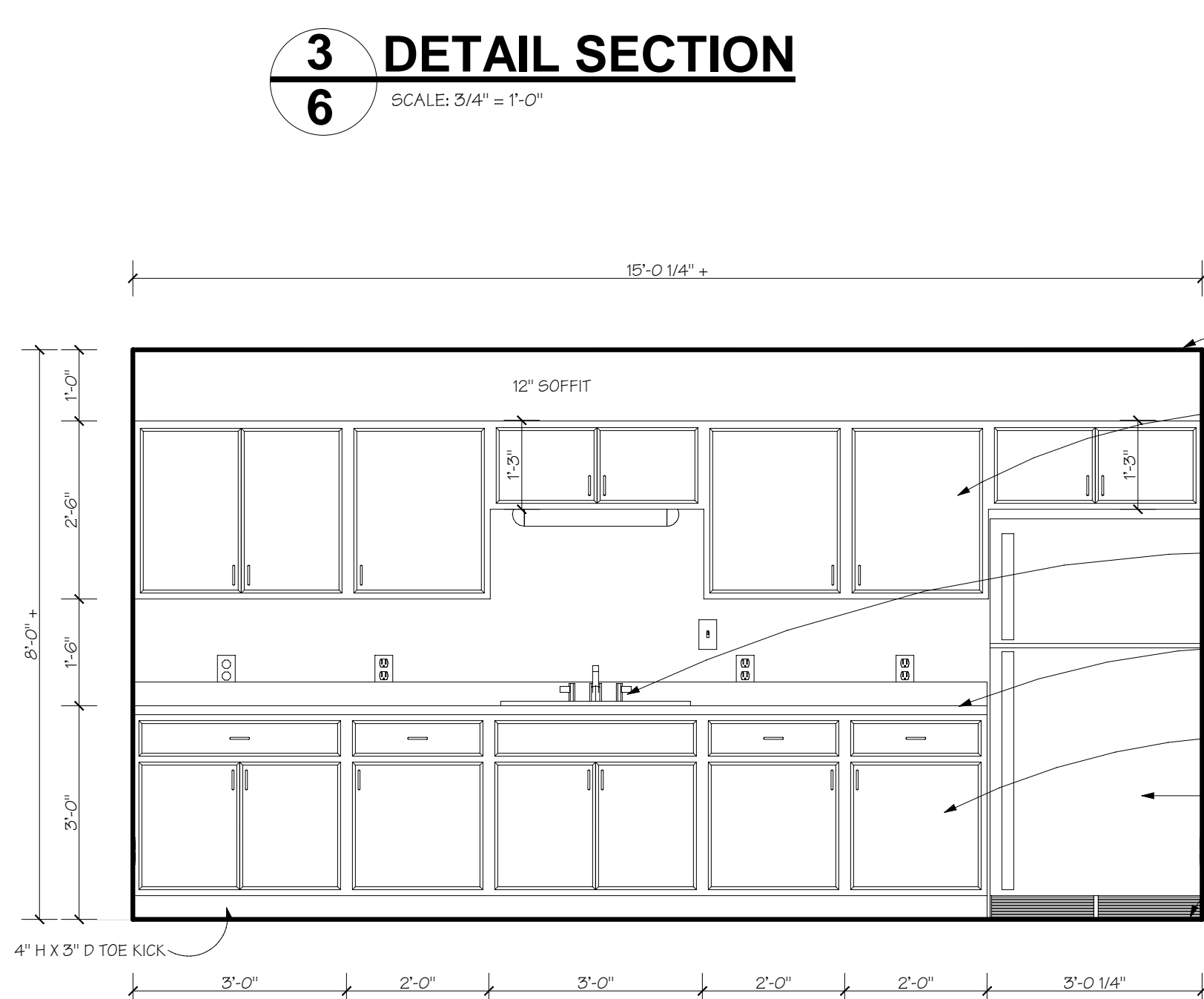
4 DETAIL SECTION
6 SCALE: 3/4" = 1'-0"



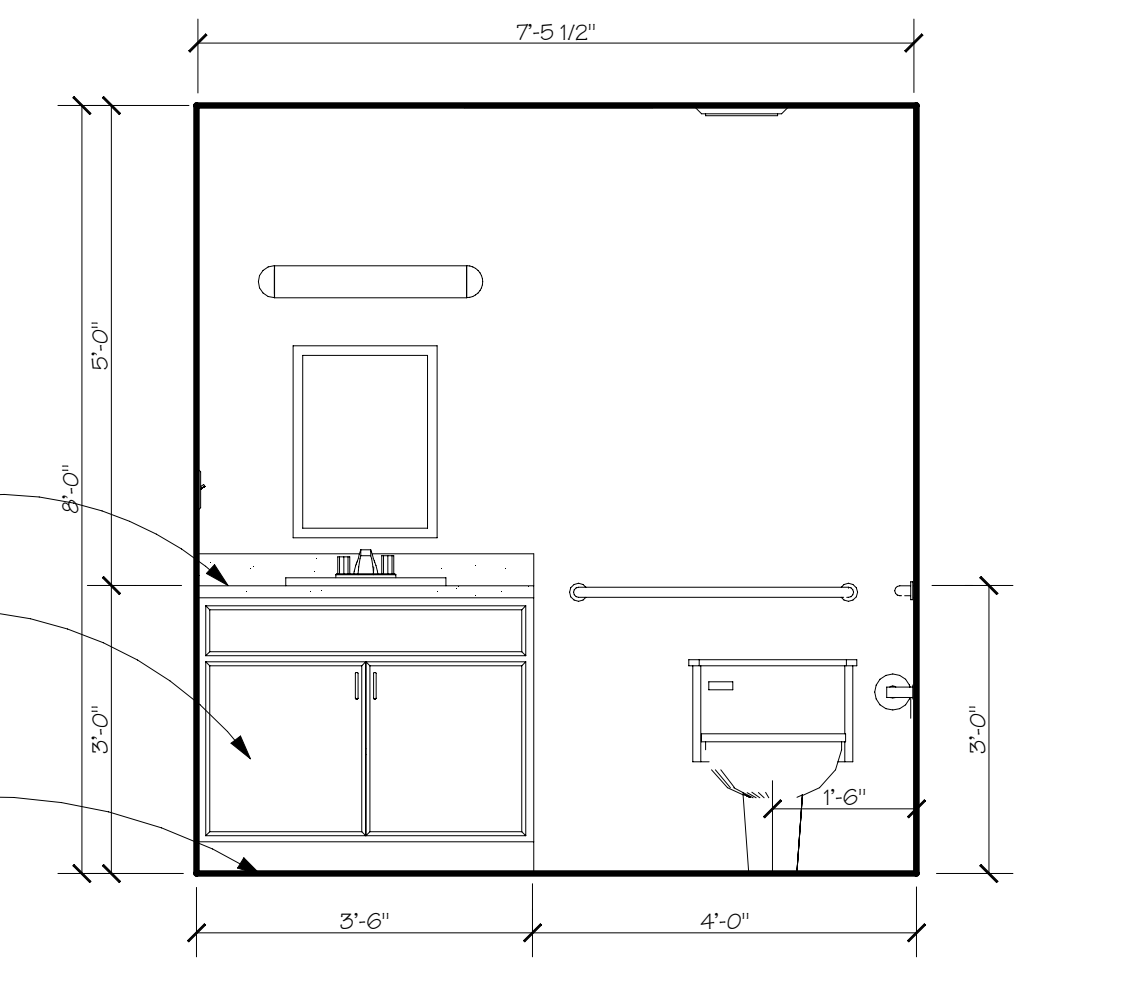
5 DETAIL SECTION
6 SCALE: 3/8" = 1'-0"



6 DETAIL SECTION
6 SCALE: 3/4" = 1'-0"



A CABINET INTERIOR ELEVATION
6 SCALE: 1/2" = 1'-0"

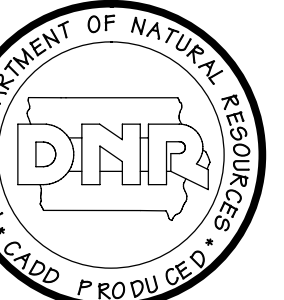


B CABINET INTERIOR ELEVATION
6 SCALE: 1/2" = 1'-0"

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LAKE KEOMAH STATE PARK
OFFICE & SERVICE BUILDING
MAHASKA COUNTY, IOWA
DETAILS, SECTIONS & CABINET INT. ELEV.
PROJECT NO. 08-05-62-01

IOWA DEPARTMENT OF NATURAL RESOURCES
WALLACE STATE OFFICE BUILDING
DES MOINES, IOWA 50319-0034



6

PLUMBING NOTES

1. PROVIDE WATER AND SEWER SERVICES AS SHOWN ON SITE PLANS AND AS SPECIFIED IN APPROPRIATE SECTIONS OF THE PROJECT MANUAL FOR A COMPLETE AND PROPER INSTALLATION.
2. NO PLUMBING PLANS OF EITHER WASTE OR WATER INSIDE OF THE BUILDING ARE PROVIDED. ONLY LOCATIONS AND TYPES OF FIXTURES HAVE BEEN SHOWN AND/OR LOCATED THROUGHOUT THE DRAWINGS. USE BOTH THE ELECTRICAL PLAN, THE FLOOR PLAN AND THE PROJECT MANUAL TO LOCATE FIXTURES, DRAINS AND OTHER ANY OTHER PLUMBING SPECIALTIES. DO NOT SOLELY RELY ON THE MECHANICAL/ELECTRICAL DRAWING SHEET.
3. CONTRACTOR TO LAYOUT SYSTEMS IN ACCORDANCE WITH PROPER PRACTICES AND THE IOWA PLUMBING CODE. THE ACTUAL SIZE AND LOCATION IS TO BE DETERMINED BY THE CONTRACTOR SUBJECT TO APPROVAL OF THE DNR CONSTRUCTION INSPECTOR.

UNDERFLOOR HEATING NOTES:

1. PROVIDE DESIGN AND INSTALLATION OF AN UNDERFLOOR RADIANT SYSTEM AS SPECIFIED, BUT NOT SHOWN ON THE DRAWINGS, FOR THE WARM STALL, OFFICE, MEETING ROOM, LOBBY, HALLWAY AND RESTROOM. PROVIDE FOR A COMPLETE AND PROPER DESIGN AND INSTALLATION. THE SYSTEM IS EXPECTED TO BE SOURCED BY GEOTHERMAL (SEE NOTE BELOW) AND INDEPENDENT FROM THE AIR CONDITIONING.
2. PROVIDE DESIGN DRAWINGS OF COMPLETE SYSTEM TO THE ARCHITECT FOR REVIEW AND APPROVAL.

GEOTHERMAL NOTES:

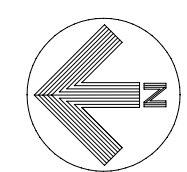
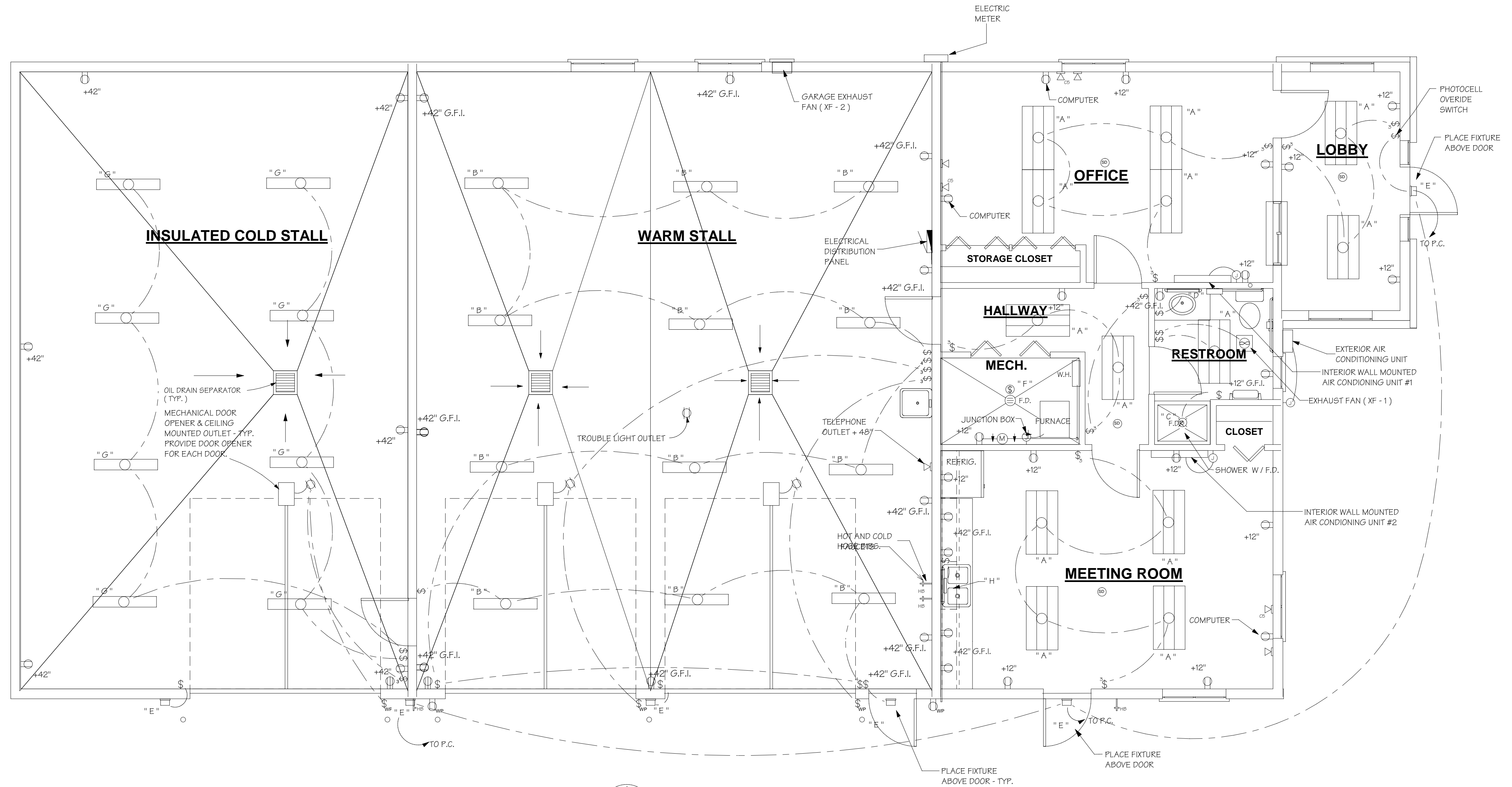
1. THE SUGGESTED LOCATION OF THE BORE FIELD HAS BEEN SHOWN ON THE SITE PLANS. IT IS INTENDED FOR THE CONTRACTOR TO CALCULATE THE ACTUAL SIZE, NUMBER OF WELLS, TYPE OF SYSTEM... FROM THE DESIGN INFORMATION OF THE UNDERFLOOR HEATING SYSTEM.
2. PROVIDE DESIGN DRAWINGS AND CALCULATIONS OF COMPLETE SYSTEM TO THE ARCHITECT FOR REVIEW AND APPROVAL.

AIR CONDITIONING NOTES:

1. PROPERLY SIZE AND INSTALL A DUCTLESS AIR CONDITIONING SYSTEM, INDEPENDENT OF THE HEATING SYSTEM, AS SHOWN AND AS SPECIFIED.
2. PROVIDE SUBMITTALS OF SELECTED PRODUCTS FOR REVIEW AND APPROVAL.

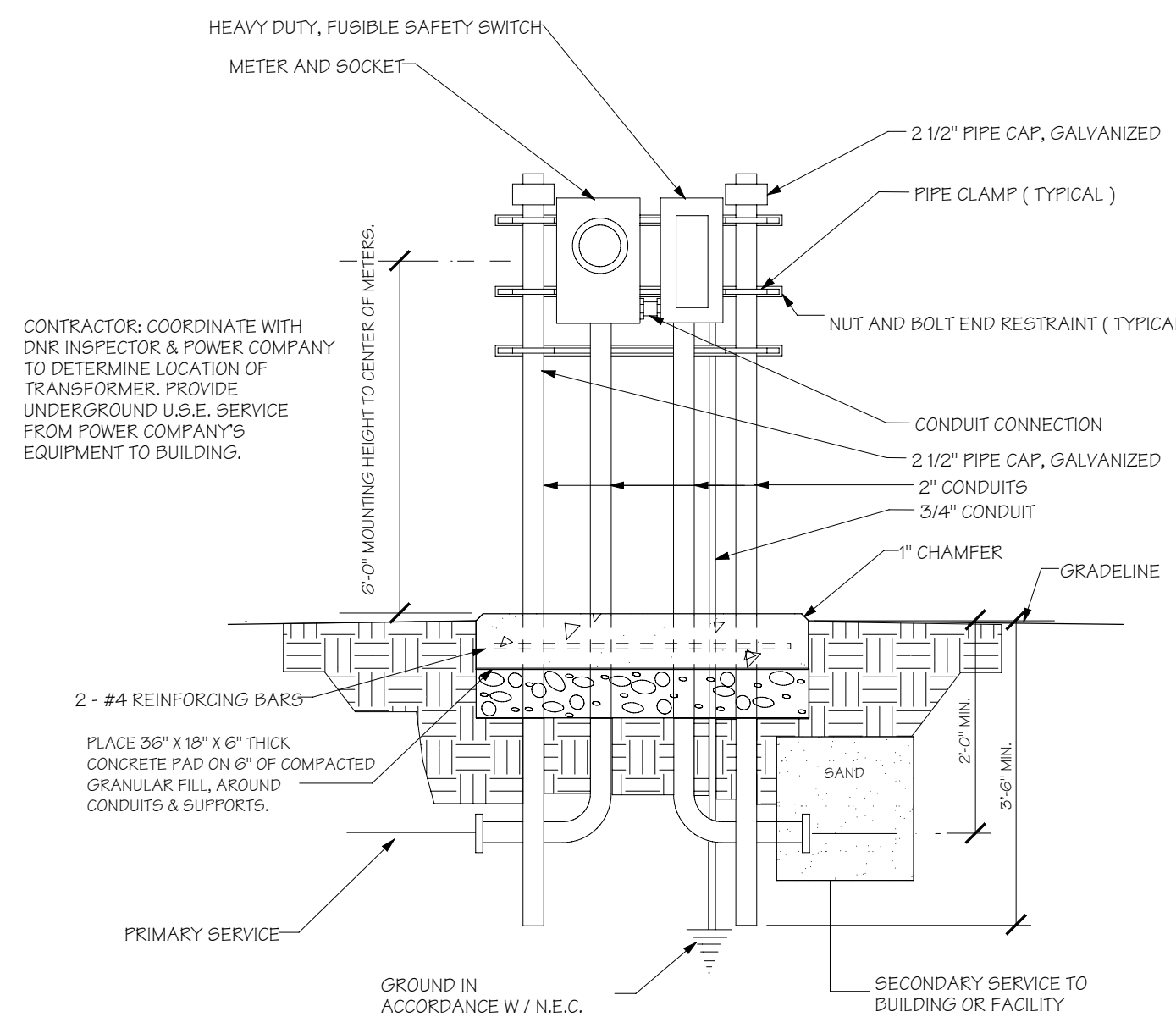
ELECTRICAL NOTES

1. ELECTRICAL CONTRACTOR TO CALCULATE AND PROVIDE ELECTRICAL CALCULATION, PANEL SIZE, AND SCHEDULE TO DETERMINE SERVICE SIZE. COORDINATE WITH MECHANICAL CONTRACTOR(S) FOR ANY ADDITIONAL POWER REQUIREMENTS THAT WILL AFFECT THE SYSTEM.
2. ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENT OF THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE - NEC.
3. PROVIDE GROUND FAULT INTERRUPTERS ON EACH INDIVIDUAL OUTLET AS SHOWN.
4. ELECTRIC METER & SOCKET LOCATION TO BE DETERMINED BY ELECTRICAL CONTRACTOR AND APPROVED BY DNR CONSTRUCTION INSPECTOR.
5. ALL INTERIOR WIRING SHALL BE COPPER TYPE THW IN RIGID STEEL CONDUIT.
6. VERIFY WITH THE DNR CONSTRUCTION INSPECTOR WHICH EXTERIOR FIXTURES WILL BE CONTROLLED BY PHOTOCELLS. IT IS EXPECTED THAT ONE CELL WILL CONTROL ALL FIXTURES REQUIRING SUCH CONTROL, AND THAT THESE WILL BE ABLE TO BE OVERRIDDEN BY A SINGLE SWITCH.
7. PROVIDE ANY ADDITIONAL MATERIAL OR EQUIPMENT REQUIRED FOR THE DESIGN AND INSTALLATION OF HEATING AND COOLING AND NOT SHOWN HEREIN.

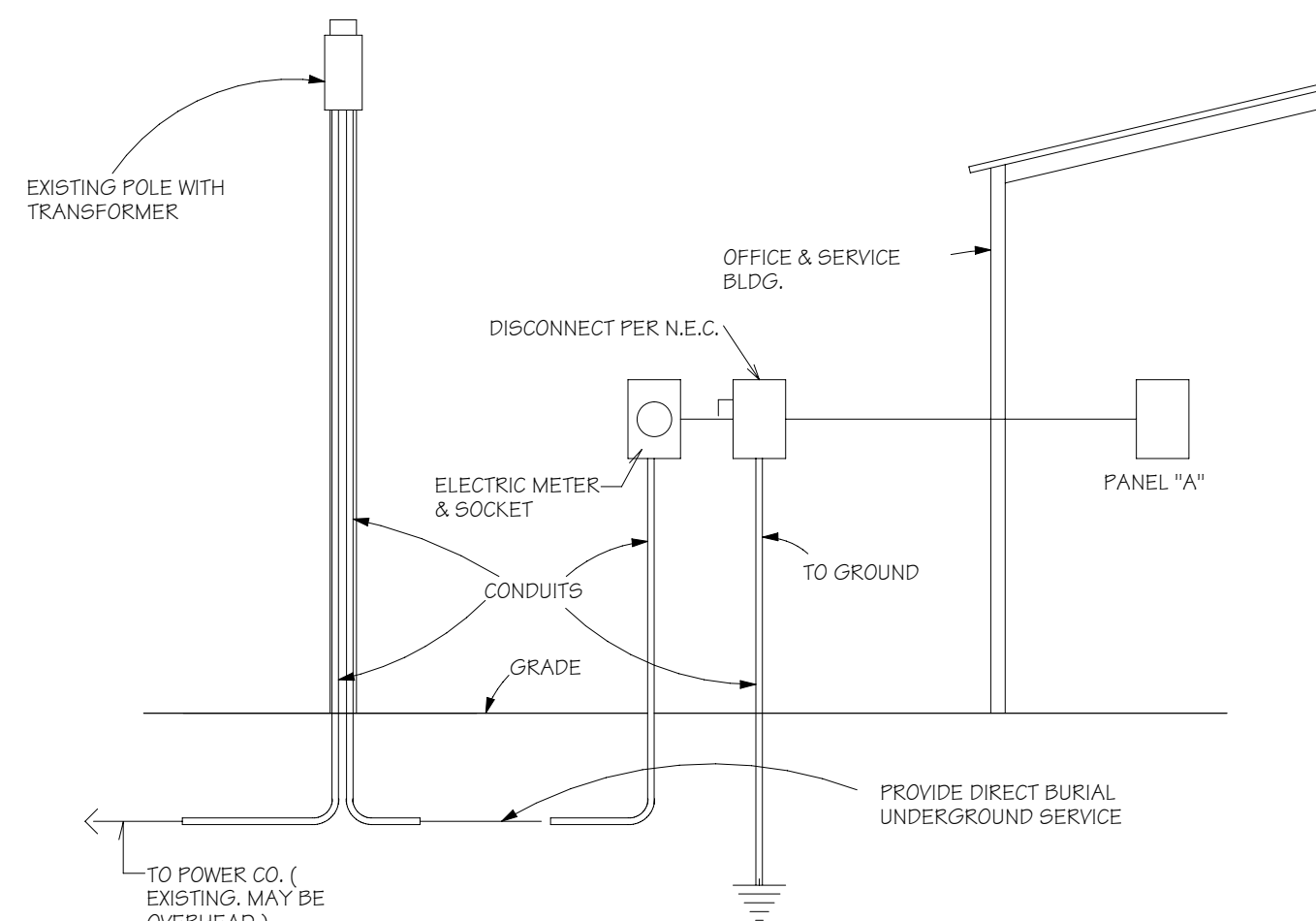


ELECTRICAL/MECHANICAL PLAN

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



1
STANDARD METER PEDESTAL
DETAIL
NO SCALE



2
FROM UTILITY CO. TO MAINT. BLDG.
RISER DIAGRAM
NOT TO SCALE

LIGHTING FIXTURE SCHEDULE

SYMBOL	MANUFACTURER MODEL NO.	LAMPS	VOLTAGE	MOUNTING	NOTES
A	LITHONIA - 25P8 - G - 32 - FW - A12 - 120 - LP	32WT8	120	IN GRID	
B	LITHONIA - L - 2 - 48 - 120 - ES	38W SLIMLINE	120	SURFACE	
C	JUNO - IC22 / 250 WH	60W	120	RECESSED	MOUNT IN SHOWER STALL
D	AMERICAN FLUORESCENT 28" CLOUD VANITYEPN220E8	2-T8	120	WALL MNT.	MOUNT ABOVE MED. CABINET &
E	KENALL - H69EL - C - D8 - 120	(1) 13 W	120	WALL MNT.	MNT'G. HEIGHT +10'-0" A.F.F.
F	PORCELAIN RECEPTACLE - P & S - 288	12W FLUORESCENT	120	SURFACE	
G	LITHONIA - EUDA - 2 - 48HO - 120 - CW20	48HO 60W T12	120	SUSPEND	-20 LOW TEMP. BALLAST
H	METALUX 24" - 872DR	(1) 20WT12	120	UNDER COUNTER	

PROVIDE LAMPS - REPLACE INCANDESCENT BULBS WITH EQUIVALENT ENERGY SAVING COMPACT FLUORESCENT LAMPS.

EXHAUST FAN SCHEDULE

MARK	PURPOSE & TYPE	CFM	SP IN. WC	ELECTRICAL DATA H.P.	VOLTS	RPM	REMARKS
XE-1	TOILET ROOM EXHAUST, NUTONE, MODEL QT 160	170			120		
XF-2	GARAGE EXHAUST, SINGLE PHASE, 60 CYCLE	2534 1635	125	1/3	120	1725	TWO-SPEED MOTOR & SWITCH, & DISCHARGE SIDE FAN GUARDS, GRAVITY SHUTTER W/ MOTOR OPERATED KIT FOR POSITIVE BLADE CLOSURE.

ELECT. SYMBOLS

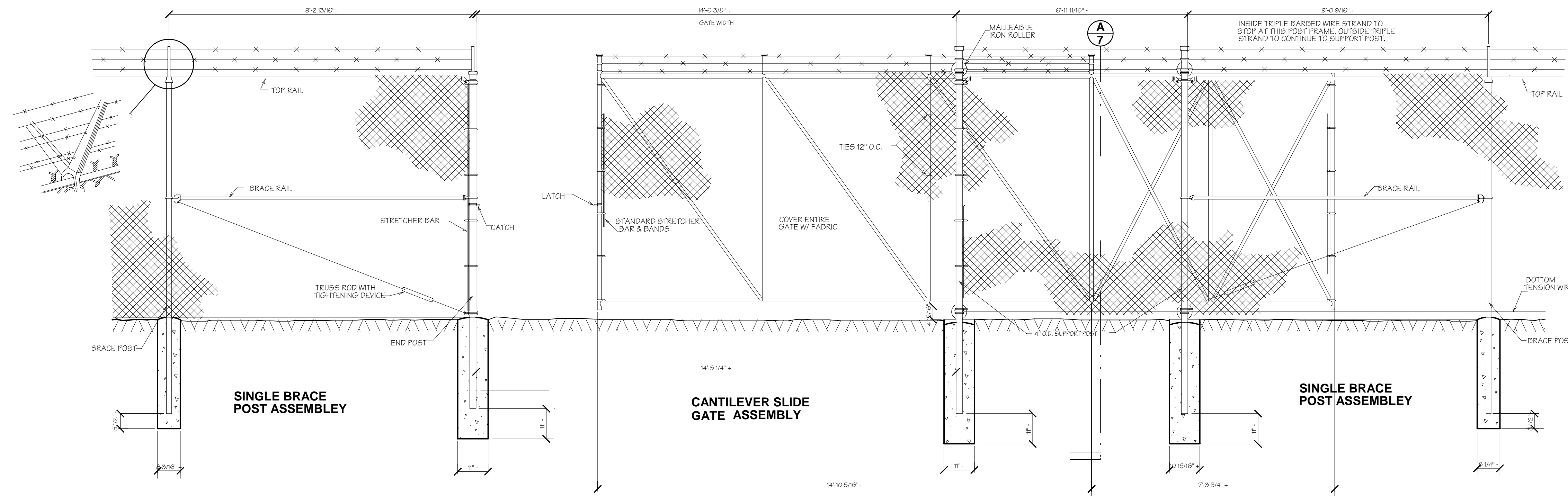
	WALL FIXTURE, LETTER INDICATES FIXTURE TYPE
	FLUORESCENT LIGHTING FIXTURE, LETTER INDICATES FIXTURE TYPE.
	RECESSED LIGHT FIXTURE, LETTER INDICATES FIXTURE TYPE.
	DUPLEX RECEPTACLE, NEMA 5-20P, 12" MOUNTING HEIGHT OR AS NOTED.
	GROUND FAULT INTERRUPT (GFI) DUPLEX OUTLET
	SWITCHES-SINGLE POLE-THREE WAY-FOUR WAY
	JUNCTION BOX
	THERMOSTAT, MOUNTING HEIGHT INDICATED.
	TELEPHONE OUTLET, WALL TYPE.
	PANELBOARD, LIGHTING & APPLIANCE BRANCH CIRCUIT.
	PULL CHAIN FIXTURE
	CEILING MOUNTED OUTLET
	COMPUTER NETWORK OUTLET
	WATERPROOF DUPLEX OUTLET
	TROUBLE LIGHT OUTLET
	EXHAUST FAN
	GARAGE EXHAUST FAN
	SMOKE DETECTOR
	GARAGE OPERATOR KEYPAD
	PHOTOCELL CONTROL
	220 OUTLET

DESIGNED BY	R. NEWELL	DATE	08/28/07
CHECKED BY	T. AMICE	DATE	03/06/08
PROJECT NO.	PA 5722	PROJECT NO.	08-05-62-01

LAKE KEOMAH STATE PARK
OFFICE & SERVICE BUILDING
MAHASKA COUNTY, IOWA
ELECTRICAL/MECHANICAL
PROJECT NO. 08-05-62-01

IOWA DEPARTMENT OF NATURAL RESOURCES
WALLACE STATE OFFICE BUILDING
DES MOINES, IOWA 50319-0034
OWNER'S OF DOCUMENTS: THE DESIGN AND DESIGN INFORMATION HEREIN ARE AN INSTRUMENT OF PROFESSIONAL SERVICE BY THE ENGINEERING AND ARCHITECTURE FIRM OF NATURAL RESOURCES, INC. A PROFESSIONAL CORPORATION, DES MOINES, IOWA. THE ENGINEER AND ARCHITECT ARE NOT RESPONSIBLE FOR THE DESIGN OR CONSTRUCTION OF THE BUILDING OR EQUIPMENT SHOWN ON THESE PLANS.





FENCE & GATE ELEVATION

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

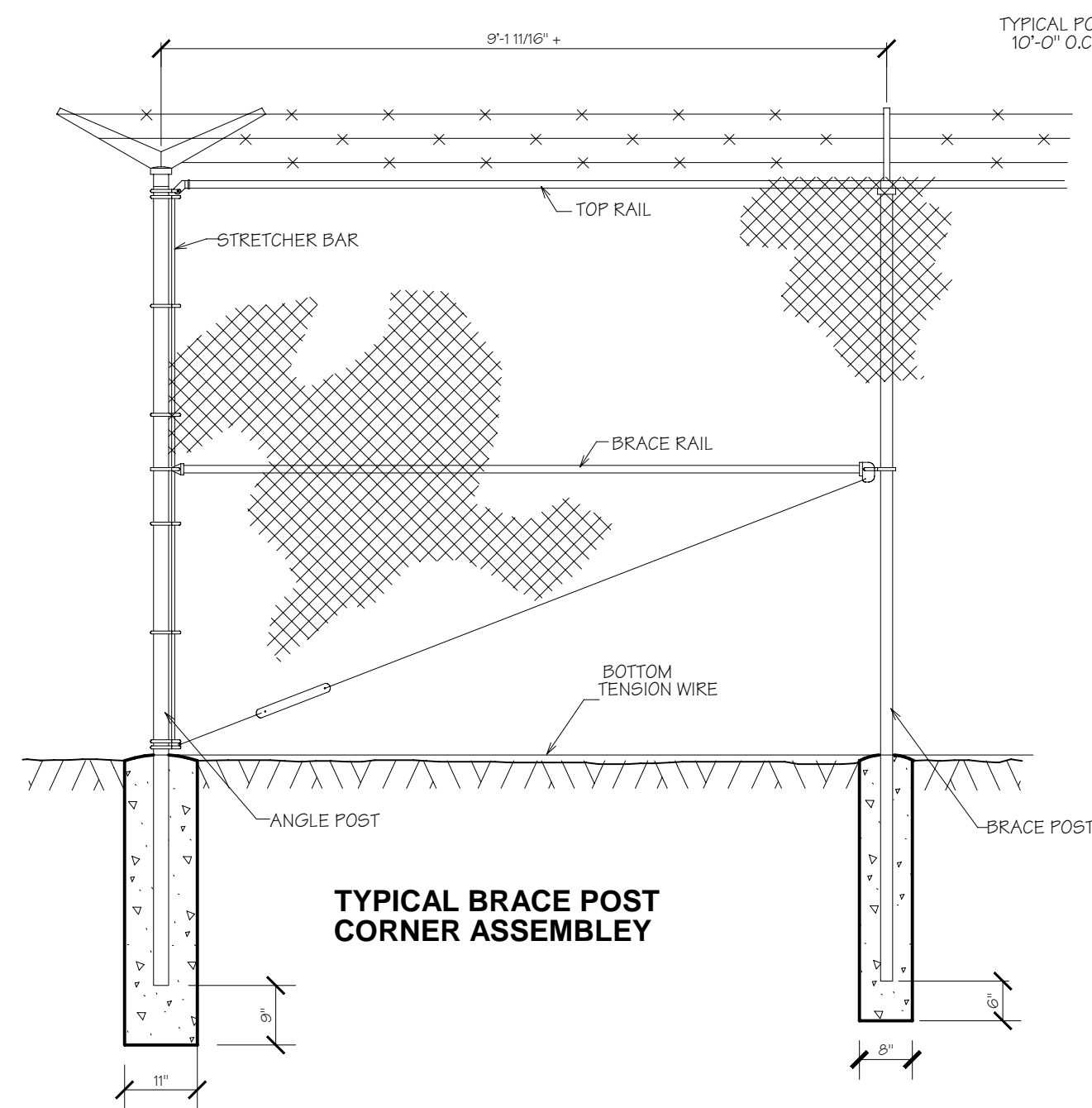
NOTE:
ALL ANGLE BRACE SUPPORT END & STANDARD POSTS TO BE ENCASED IN CONCRETE 3'-0" UNDER GROUND LEVEL.
ALL FABRIC TO BE NO. 9 GA. - 2# MESH BARBED ON TOP, KNUCKLED AT BOTTOM, 8" WIDE UNLESS NOTED.

FENCE
FURNISH HOT DIPPED GALVANIZED IRON OR STEEL COMPONENTS ACCORDING TO THE REQUIREMENTS OF ASTM A120 FOR PIPE AND ROLLED FORMED SECTIONS, ASTM A153 FOR HARDWARE AND ACCESSORIES, AND ASTM A120 FOR OTHER MISCELLANEOUS ITEMS.
FURNISH 8" HIGH CHAIN LINK FABRIC, IN ONE PIECE OF WOVEN 2 INCH MESH OF 9 GAUGE COPPER - BEARING STEEL WIRE WITH A MINIMUM TENSILE STRENGTH AFTER COATING OF 90,000 P.S.I. ACCORDING TO THE REQUIREMENTS OF ASTM A392, CLASS II, GALVANIZED AFTER FABRICATION.
DETAILS THIS SHEET DRAWN FROM INFORMATION PROVIDED BY ANCHOR FENCE CO.

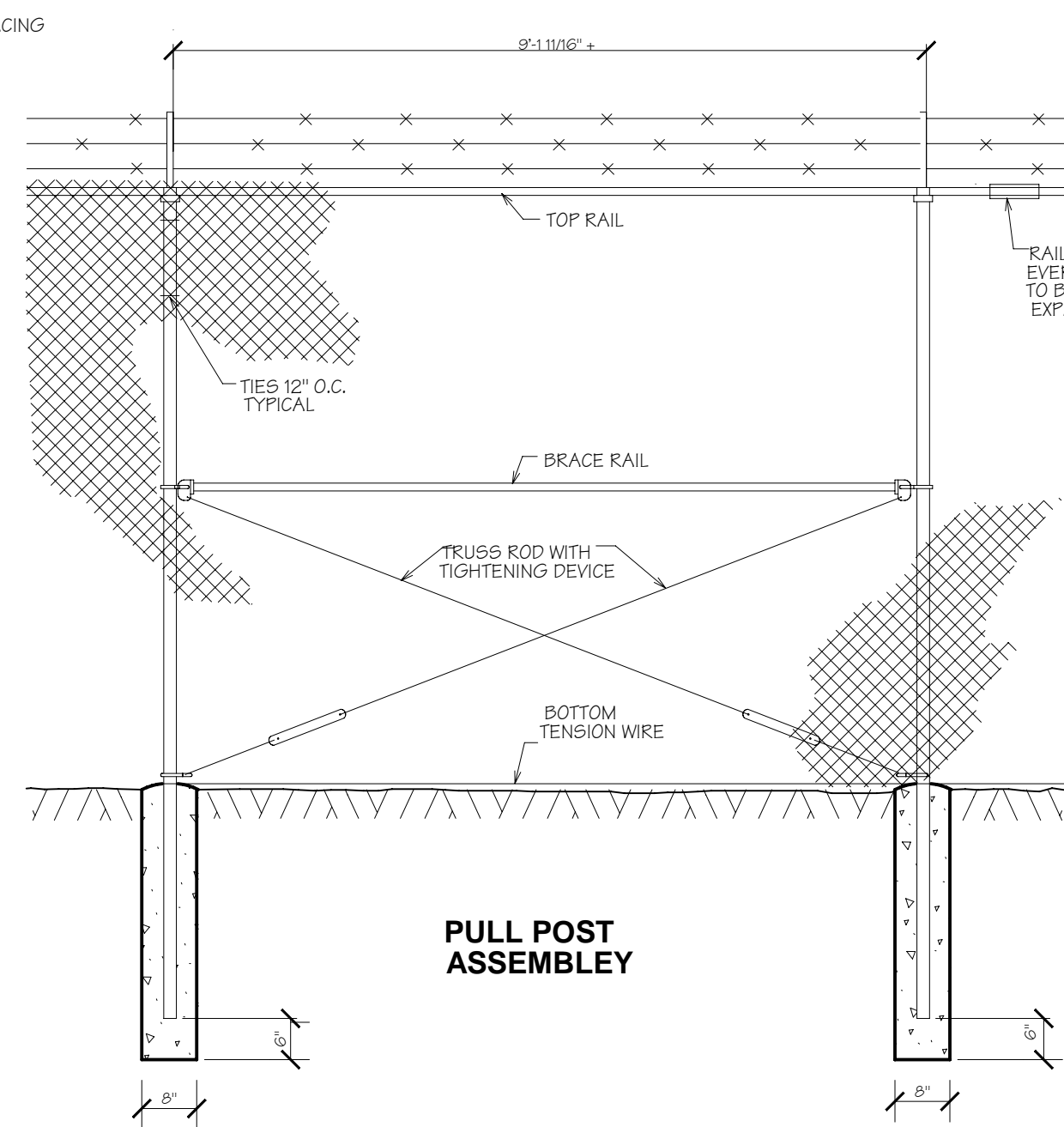
DESIGNED BY: R. NEWELL
CHECKED BY: T. AMICE
DATE: 03/06/08
PROJECT NO.: 08-05-62-01

FORM BY: R. NEWELL
DATE: 08/28/07
DESIGNED BY: T. AMICE
DATE: 03/06/08
CHECKED BY: T. AMICE
DATE: 03/06/08
ACT. CODE NO.: PA 5722
PROJECT NO.: 08-05-62-01

LAKE KEOMAH STATE PARK
OFFICE & SERVICE BUILDING
MAHASKA COUNTY, IOWA
CHAINLINK FENCE & GATE
PROJECT NO. 08-05-62-01



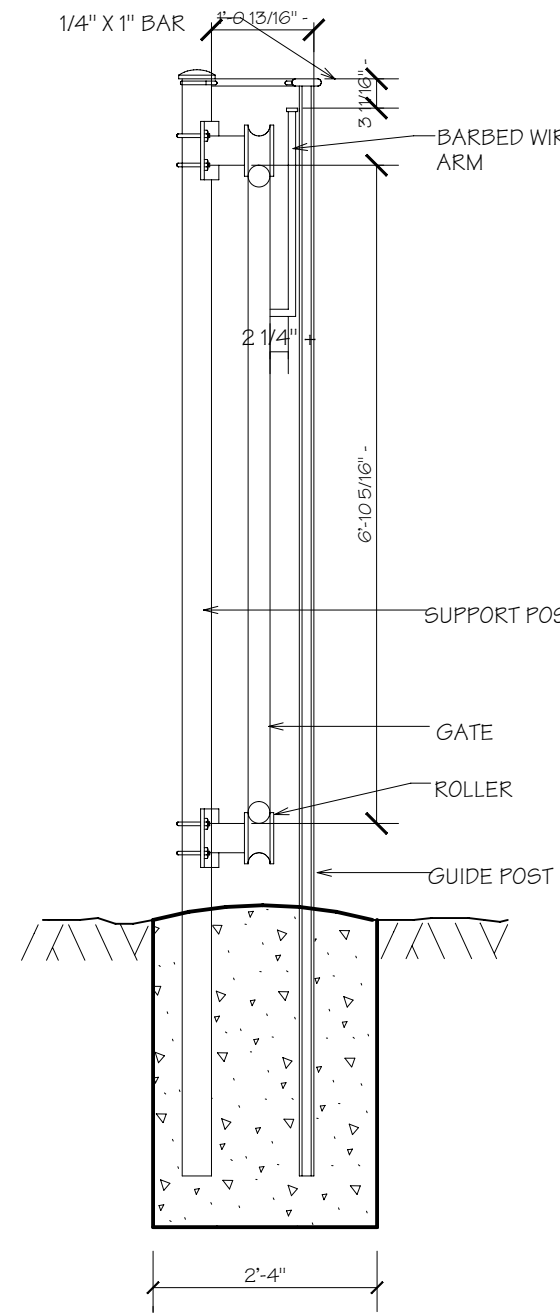
TYPICAL BRACE POST CORNER ASSEMBLY



PULL POST ASSEMBLY

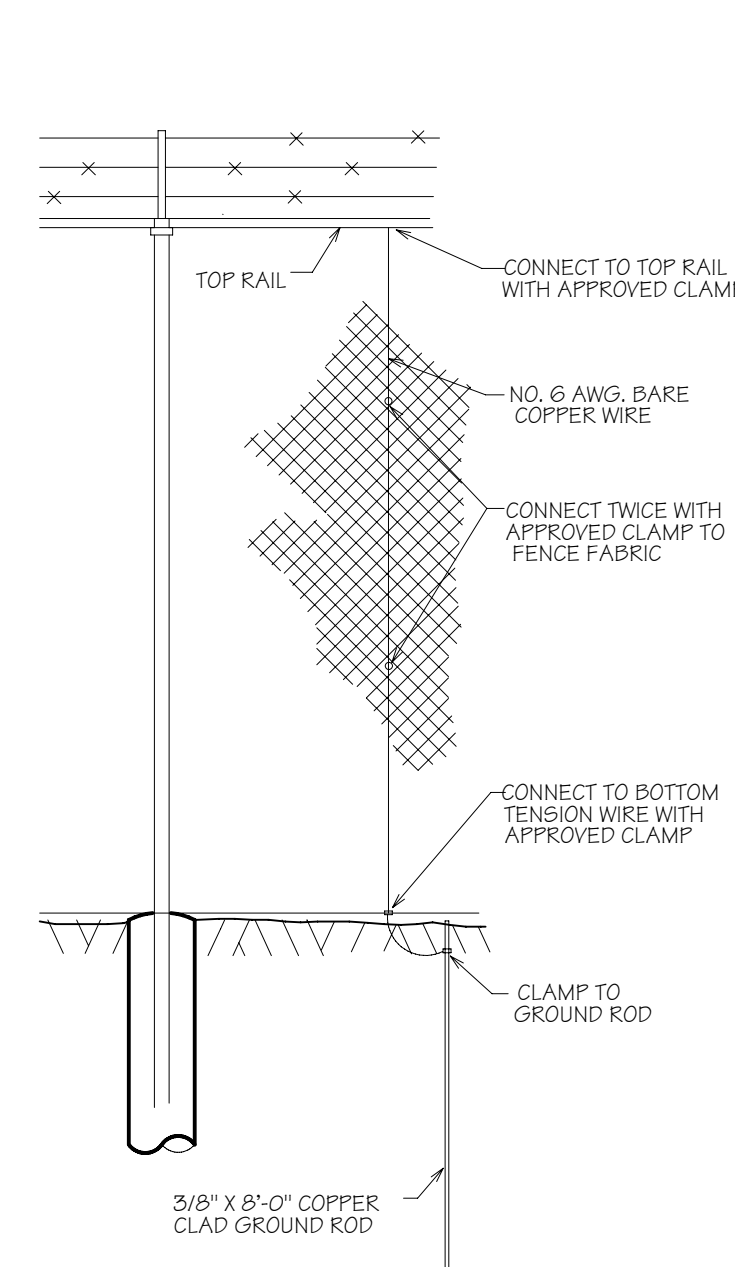
PARTIAL ELEVATION

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



A SECTION

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



1 DETAIL

NOT TO SCALE

RAILS & POSTS SCHEDULE					
MATERIAL	SECTION	NOMINAL OUTSIDE DIAMETER	NOMINAL SIZE	LENGTH	NOMINAL WEIGHT LB./FT.
LINE POSTS	ROUND	2.375	2"	11'-0"	3.65
	U-SECTION H-SECTION	2.5 X 1.875 X 3/16 MIN. 2.25 X 1.95 X 9/64 MIN.	2"	11'-0" 11'-0"	4.00 4.10
END, CORNER, PULL POSTS	ROUND SQUARE	2.875	2 1/2"	11'-0"	5.79
		2.5 MIN.	11'-2"	5.70	
SUPPORT POSTS	ROUND SQUARE	4.0	3 1/2"	12'-2"	9.11
		3.0	12'-2"	9.36	
GATE FRAME - HORIZONTAL	ROUND SQUARE U-SECTION	2.375	2"	24'-3"	3.65
		2.5 X 1.875 X 3/16 MIN.	2"	24'-3"	4.00
GATE FRAME - VERTICAL	ROUND SQUARE	1.80	1 1/2"		2.72
		2.00			2.66
GATE FRAME - DIAG. BRACES TOP RAIL POST BRACES	ROUND H-SECTION	1.660	1 1/4"		2.27
					2.27

IOWA DEPARTMENT OF NATURAL RESOURCES
WALLACE STATE OFFICE BUILDING
DES MOINES, IOWA 50319-0034

