

# MAINTENANCE BUILDING

## INDIANA DEPARTMENT OF NATURAL RESOURCES

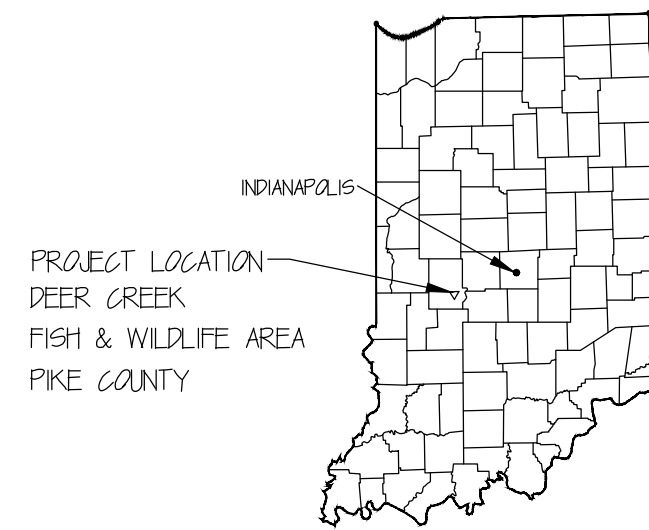
### DEER CREEK FISH & WILDLIFE AREA

#### PROJECT NO. ENG2002905497



Certified by:

### LOCATION MAP



NO SCALE

### VICINITY MAP



**AERIAL PHOTO OF BUILDING SITE**

### GENERAL NOTES:

- BIDDERS SHALL FULLY REVIEW THE PROJECT DOCUMENTS AND VISIT THE PROJECT SITE TO BECOME COMPLETELY FAMILIAR WITH THE SCOPE OF WORK, INCLUDING EXISTING CONDITIONS AND MATERIALS, PRIOR TO BIDDING.
- THE INTENTION OF THESE DOCUMENTS IS TO PROVIDE THE OWNER WITH A COMPLETE PROJECT IN ITS ENTIRETY AT THE TIME OF OCCUPANCY. IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT THE ARCHITECT DURING THE BIDDING PHASE WITH ANY DETAILS THAT ARE MISSING, VAGUE, OR INCOMPLETE SO THAT THE APPROPRIATE ADDENDUM CAN BE ISSUED. THE CONTRACTOR OF RECORD SHALL PROVIDE ALL MATERIALS, LABOR, TOOLS, EQUIPMENT, AND SERVICES NECESSARY FOR A COMPLETE, FUNCTIONAL, AND OPERATIONAL FACILITY OR PROJECT.
- MATERIALS AND WORK SHALL BE FURNISHED, INSTALLED, AND COMPLETED IN STRICT ACCORDANCE WITH PROVISIONS OF THE LATEST EDITION OF APPLICABLE BUILDING CODES, AMENDMENTS, ADOPTED STANDARDS, REGULATIONS, LOCAL ORDINANCES, AND FEDERAL LEGISLATION.
- THESE CONSTRUCTION NOTES AND/OR DRAWINGS ARE SUPPLIED TO ILLUSTRATE THE DESIGN AND GENERAL TYPE OF CONSTRUCTION DESIRED AND ARE INTENDED TO IMPLY THE FINEST QUALITY OF CONSTRUCTION, MATERIAL, AND WORKMANSHIP THROUGHOUT.
- THE MINIMUM QUALITY OF WORK SHALL BE BASED ON INDUSTRY STANDARDS FOR RESPECTIVE TRADES (I.E. ANSI, AHRAE, ASTM, AWI, BHMA, DHI, GYPSUM ASSOCIATION (GA), NFPA, SMACNA, ETC.) WHERE ONE OR MORE OF THE STANDARDS ARE IN CONFLICT, THE BETTER QUALITY OF WORK SHALL APPLY.
- THE WORD "PROVIDE" MEANS "TO FURNISH AND INSTALL"
- UNLESS NOTED OTHERWISE DIMENSIONS ARE FROM FACE OF CONCRETE, STUD, OR FRAMING. DIMENSIONS ARE SHOWN ON DRAWINGS. ANY DIMENSIONS THAT ARE NOT SHOWN OR DEEMED QUESTIONABLE SHALL BE VERIFIED WITH ARCHITECT. DO NOT SCALE DRAWINGS.
- NO GREATER THAN 1/2" CHANGE IN ELEVATION ALLOWED AT HANDICAPPED ENTRANCES.
- PROVIDE WOOD BLOCKING SUPPORT AT ALL SURFACE MOUNTED ITEMS MOUNTED TO THE FACE OF GYPSUM WALLBOARD.
- PROVIDE MISCELLANEOUS SUPPORT FOR ALL CEILING SUPPORTED ITEMS AND ANY OTHER ITEMS REQUIRING MISCELLANEOUS SUPPORT.
- CAULK JUNCTURES BETWEEN DIFFERENT MATERIALS ALONG WITH ANY AND ALL PENETRATIONS TO SEAL AGAINST ANY TYPE OF ENERGY LOSS.
- THE G.C. SHALL MAINTAIN THE LATEST ISSUE OF STAMPED AND SIGNED PLANS CONTAINING ALL SHEETS AS LISTED IN THE SHEET INDEX ON SITE DURING ALL PHASES OF CONSTRUCTION FOR USE OF ALL TRADES.
- THE G.C. ALL OTHER CONTRACTORS, AND ALL SUB-CRONTACTORS SHALL COORDINATE THEIR WORK WITH ALL ADJACENT WORK AND SHALL COORDINATE WITH ALL TRADES SO AS TO FACILITATE THE GENERAL PROGRESS OF WORK. EACH TRADE SHALL AFFORD ALL OTHER TRADES EVERY REASONABLE OPPORTUNITY FOR THE INSTALLATION OF THEIR WORK AND FOR THE STORAGE OF THEIR MATERIALS.

### PROJECT INFORMATION

**BUILDING ADDRESS:** GOOSE POND FISH AND WILDLIFE AREA  
1815 STATE ROAD 59  
LINTON, IN 47441  
(812) 512-9185

**COUNTY:** GREENE

**OCCUPANCY TYPE:** S-1

**CONSTRUCTION TYPE:** TYPE VB

**ENERGY CODE ZONE:** 5

**ZONING AUTHORITIES:** N/A

**BUILD-OUT AREA:** 5,848 S.F. (gross)

**ALLOWABLE AREA:** 9,000 S.F. (gross) PER TABLE 503

**OCCUPANT LOAD:** 28 PEOPLE

**BUILDING HEIGHT:** 23'-1"

**BUILDING STORIES:** 1

### BUILDING CODE

**BUILDING CODE EDITION:** 2014 INDIANA BUILDING CODE (2012 IBC)

**MECHANICAL CODE EDITION:** 2014 INDIANA MECHANICAL CODE (2012 IMC)

**ELECTRICAL CODE EDITION:** 2009 INDIANA ELECTRICAL CODE (NFPA 70-2008)

**FIRE PREVENTION CODE:** 2014 INDIANA FIRE CODE (2012 IFC)

**PLUMBING CODE EDITION:** 2012 IPC W/ INDIANA AMMENDMENTS

**ACCESSIBILITY CODE:** 2014 INDIANA ACCESSIBILITY CODE

**ENERGY CODE:** INDIANA ENERGY CONSERVATION CODE ANSI/ASHRAE 90.1 2007)

### COMCHECK ENVELOPE

**WALL R-VALUE:** R-19 CAVITY, R-5 MIN. CONTINUOUS

**OH DOOR R-VALUE:** R-17.40

**ATTIC R-VALUE:** R-38 CAVITY, R-19 MIN. CONTINUOUS

**WINDOWS:** U-.3 MAX

**MAN DOORS:** U-.6 MAX

### DESIGNERS OF RECORD

**ARCHITECTURAL:** STATE OF INDIANA  
DEPARTMENT OF NATURAL RESOURCES

**MECHANICAL:** DEPARTMENT OF NATURAL RESOURCES

**ELECTRICAL:** DIVISION OF ENGINEERING

**PLUMBING:** ROOM W299, INDIANA GOVERNMENT CENTER SOUTH

**CIVIL:**

**STRUCTURAL:**

**EROSION CONTROL:**

### DRAWINGS INDEX

#### GENERAL

G-1 DRAWINGS INDEX, LOCATION MAP

#### CIVIL

C-1 SITE PLAN, BASE BID  
C-2 SITE PLAN, ALTERNATE #1  
C-3 SITE PLAN, ALTERNATE #2  
D-1 UTILITIES PLAN

#### EROSION CONTROL:

1 COVER  
2 EROSION CONTROL INDEX  
3 EROSION CONTROL REFERENCES  
4 STORM WATER POLLUTION PREVENTION PLAN  
5 EROSION CONTROL DETAILS

#### STRUCTURAL

S-0 GENERAL NOTES  
S-1 FOUNDATION / SLAB PLAN  
S-2 WALL TYPE AND LINTEL PLAN  
S-3 ROOF FRAMING PLAN  
S-4 FOUNDATION DETAILS  
S-5 FOUNDATION DETAILS  
S-6 FOUNDATION DETAILS  
S-7 FRAMING DETAILS  
S-8 FRAMING DETAILS

#### ARCHITECTURAL

A-1 FLOOR PLAN  
A-2 REFLECTED CEILING PLAN, ROOF PLAN  
A-3 BUILDING ELEVATIONS  
A-4 WALL SECTIONS  
A-5 WALL SECTIONS, DOOR AND WINDOW SCHEDULE & DETAILS

#### MECHANICAL

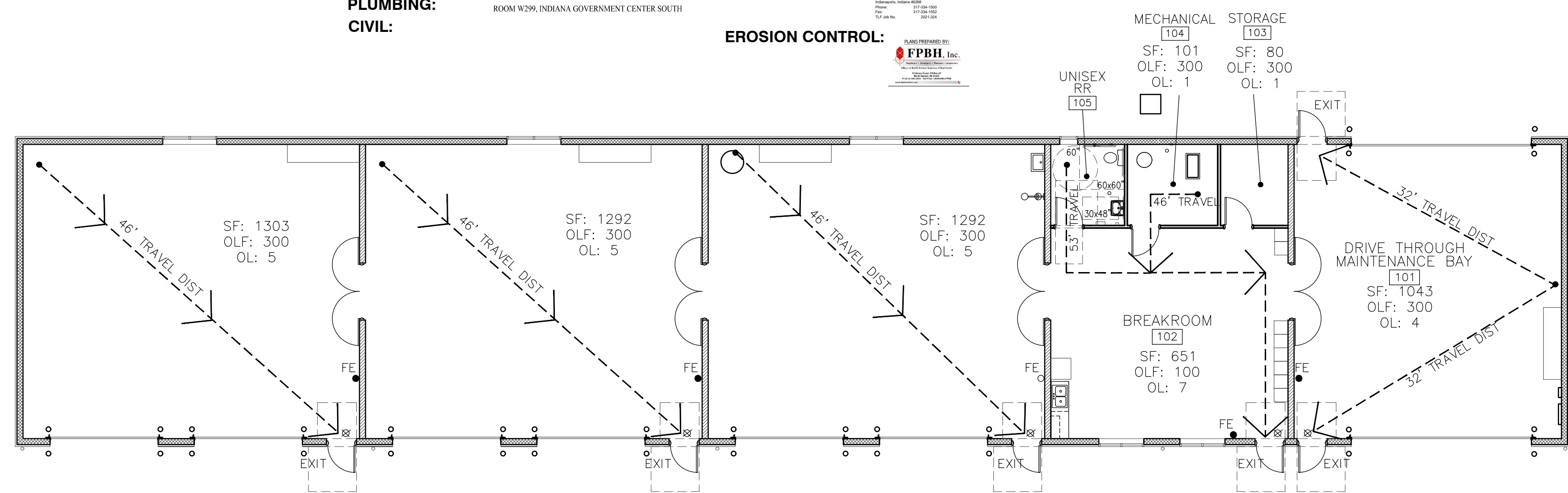
M-1 MECHANICAL PLAN & SECTION

#### PLUMBING

P-1 PLUMBING SANITARY PLAN  
SANITARY ISOMETRIC, DETAIL  
P-2 PLUMBING SUPPLY PLAN  
SUPPLY ISOMETRIC, DETAIL

#### ELECTRICAL

E-1 ELECTRICAL POWER PLAN  
E-2 ELECTRICAL LIGHTING PLAN



**LIFE SAFETY LEGEND**

FE FIRE EXTINGUISHER LOCATION

EXIT SIGN

EXIT DISCHARGE

**DEER CREEK**  
LIFE SAFETY FLOOR PLAN  
SCALE: 1" = 10'-0"

**F&W Maintenance Building - Deer Creek**  
 Deer Creek Fish & Wildlife Area  
 DEPT. OF NATURAL RESOURCES  
 2001 W. County Road 600 S  
 Greencastle, IN 46135



STATE OF INDIANA  
 DEPARTMENT OF NATURAL RESOURCES  
**DIVISION OF ENGINEERING**  
 ROOM W299, INDIANA GOVERNMENT CENTER SOUTH  
 402 WEST WASHINGTON STREET  
 INDIANAPOLIS, INDIANA 46204  
 TEL: 317-232-4150, FAX: 317-231-1205

Revisions:

Project Number:  
ENG2002905497

Requisition Number:  
Requisition#

Designer:  
MEJ Drawing Date:  
05/24/23

Drafter:  
NS Drawing Scale:  
AS NOTED

DNR Approval:

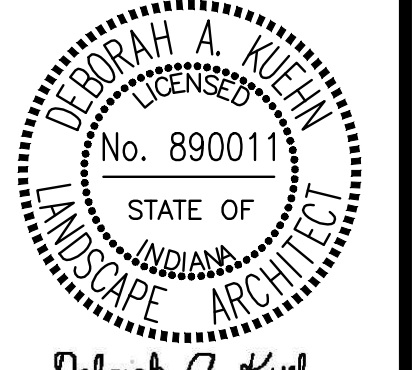
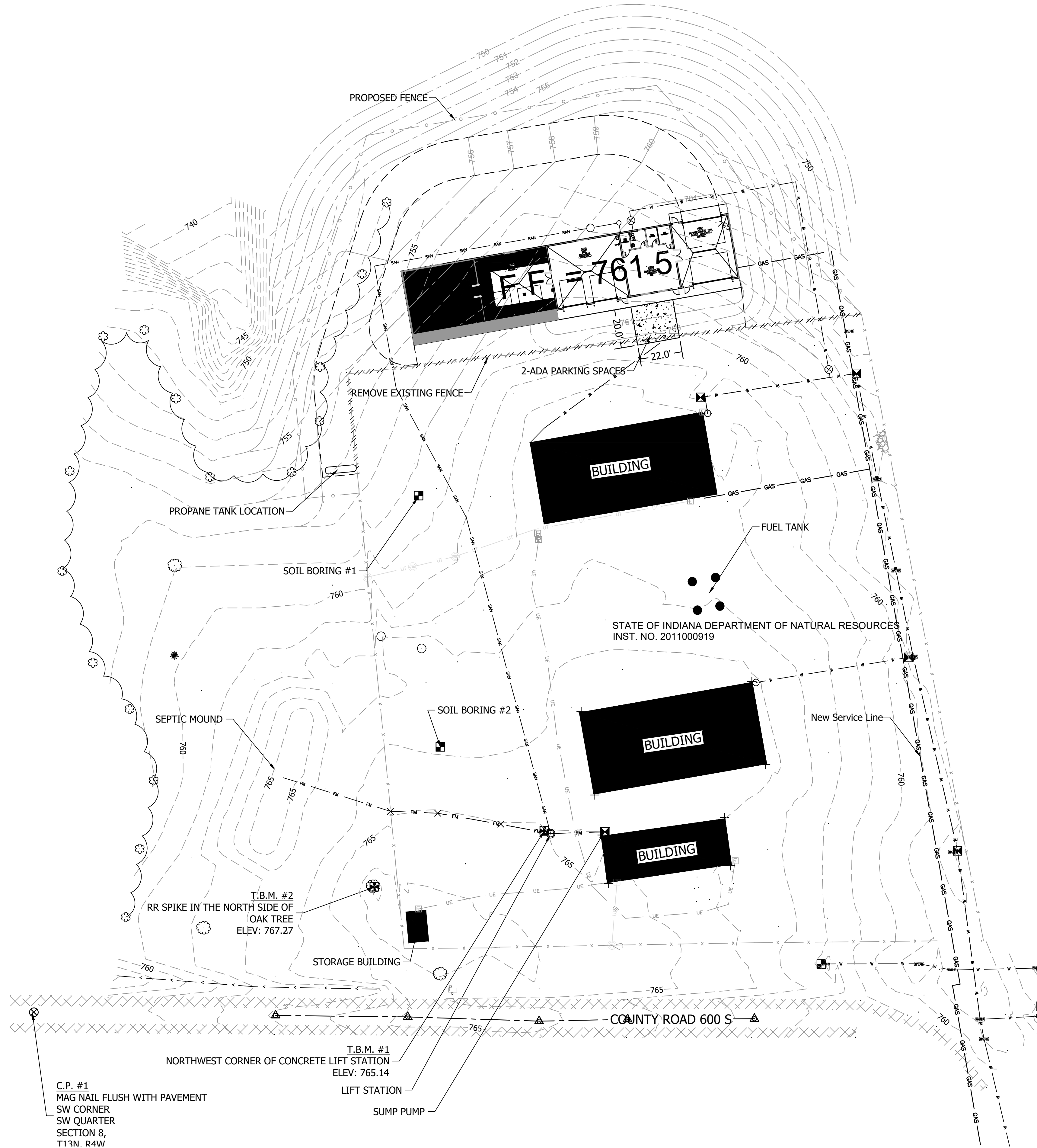
Client Approval:

File Number:  
130-003

Drawing Number:  
G-1

Sheet:  
1 of 24





Certified by:  
Deborah A. Kuhn

**F & W Maintenance Building - Deer Creek**  
Deer Creek Fish and Wildlife Area  
DEPT. OF NATURAL RESOURCES  
2001 W County Road 600 S  
Greencastle, IN 46135



STATE OF INDIANA  
DEPARTMENT OF NATURAL RESOURCES  
**DIVISION OF ENGINEERING**  
ROOM 3299, INDIANA GOVERNMENT CENTER SOUTH  
402 WEST WASHINGTON STREET  
INDIANAPOLIS, INDIANA 46204  
TEL: 317-232-4150; FAX: 317-231-1205

Revisions:

Project Number:  
**ENG2022905497**

Requisition Number:

Designer: D.A.K.	Drawing Date: 5/24/23
Drafter: D.A.K.	Drawing Scale: 1"=30'
DNR Approval:	

Client Approval:

File Number:

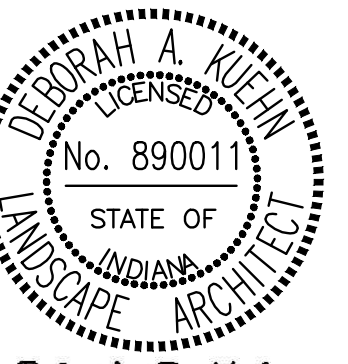
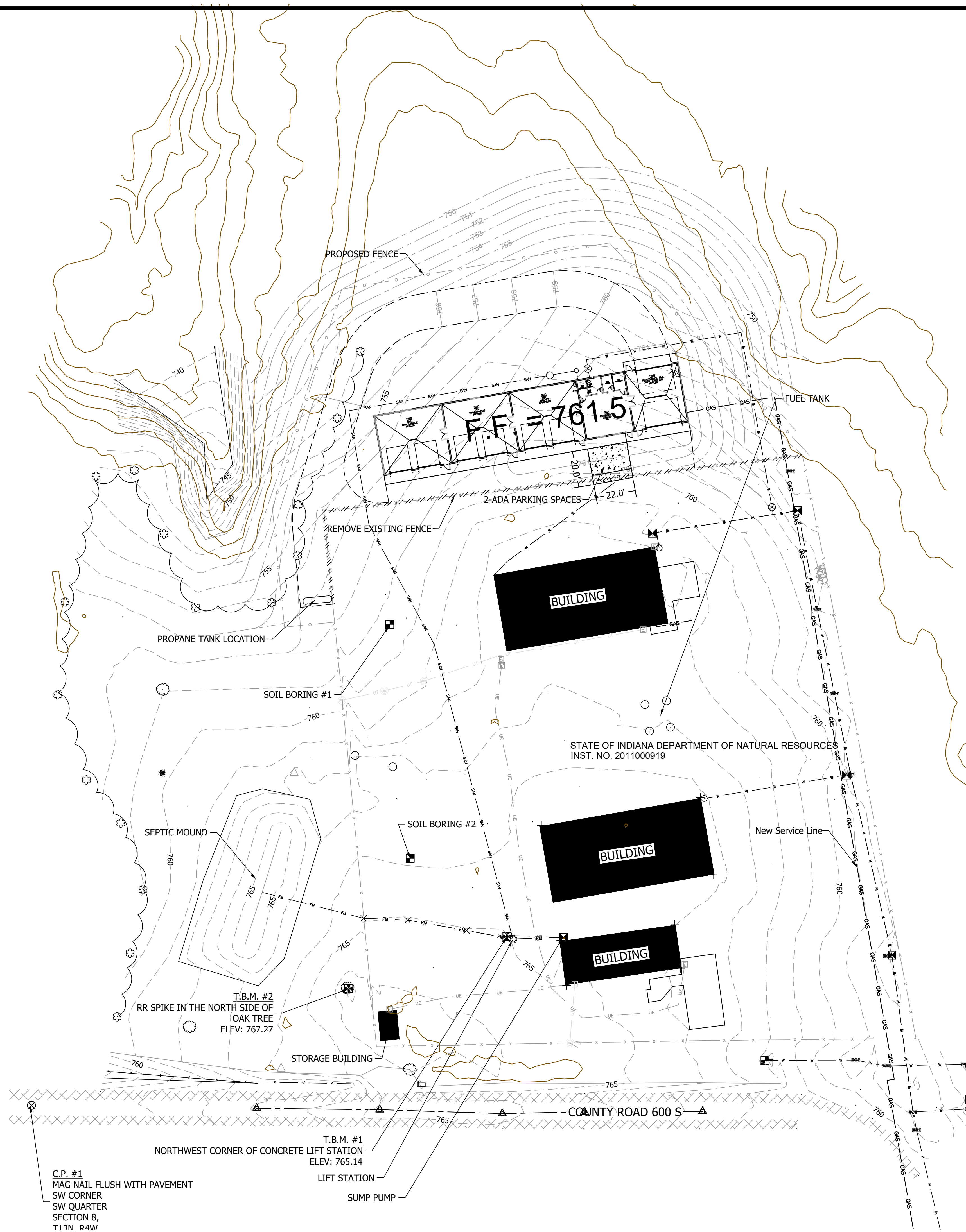
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Sheet: **C-1**  
of

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Certified by:  
*Deborah A. Kuhn*

**Storage Building - Alt 2**  
Deer Creek Fish and Wildlife Area  
Department of Natural Resources  
2001 W County Road 600 S  
Greencastle, IN 46135



STATE OF INDIANA  
DEPARTMENT OF NATURAL RESOURCES  
**DIVISION OF ENGINEERING**  
ROOM W299, INDIANA GOVERNMENT CENTER SOUTH  
402 WEST WASHINGTON STREET  
INDIANAPOLIS, INDIANA 46204  
TEL 317-232-4150, FAX 317-233-1205

Revisions:

Project Number:  
**ENG2022905497**

Requisition Number:

Designer:  
D.A.K. Drawing Date:  
5/24/2023

Drafter:  
D.A.K. Drawing Scale:  
1"=30'

DNR Approval:

Client Approval:

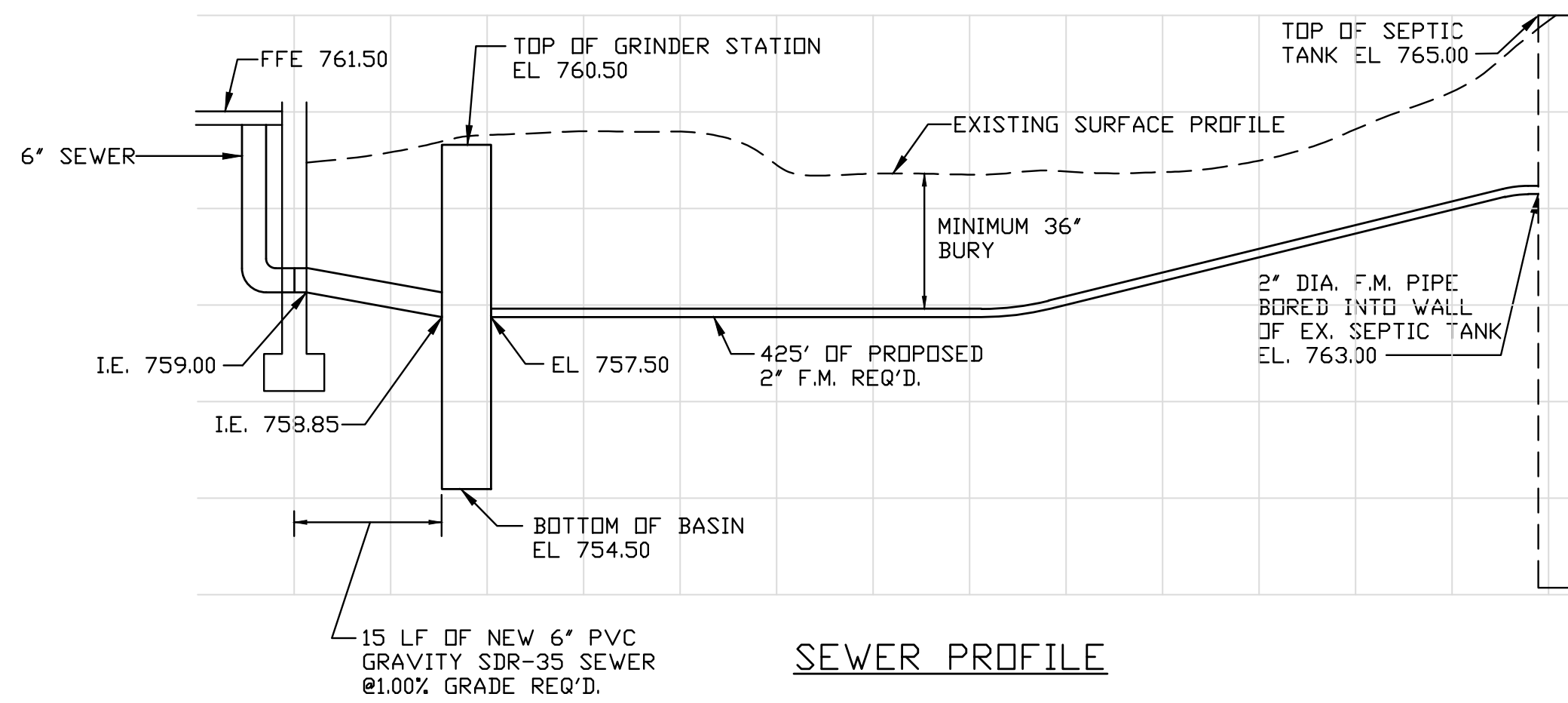
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Drawing Number:

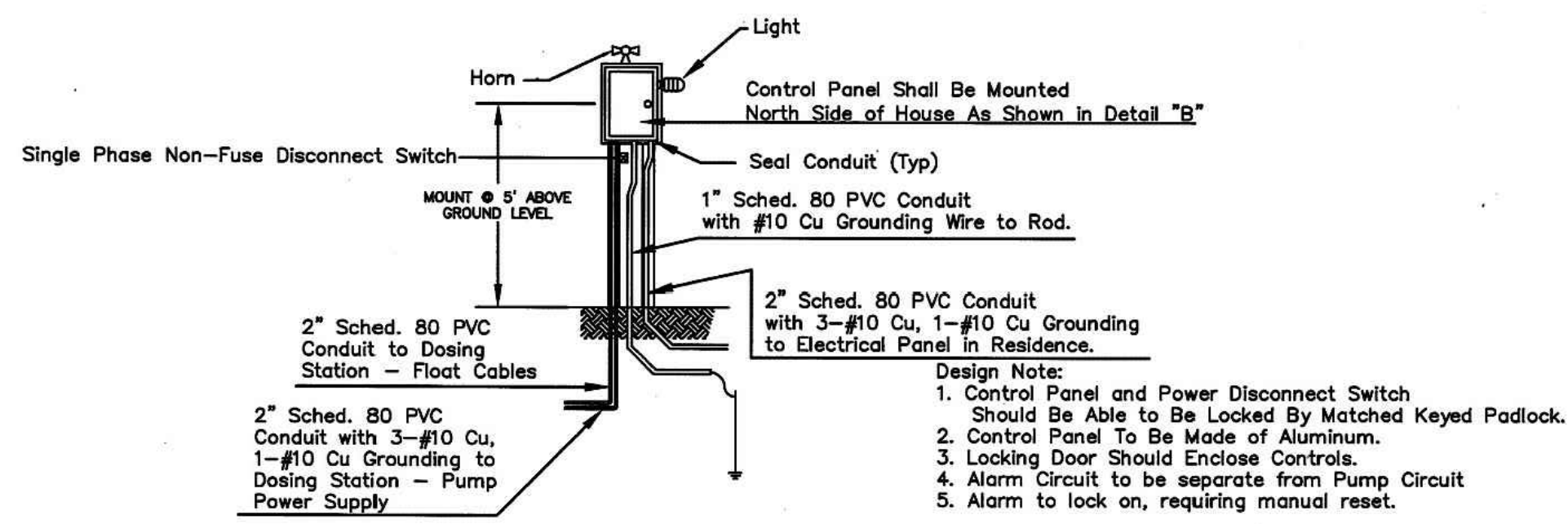
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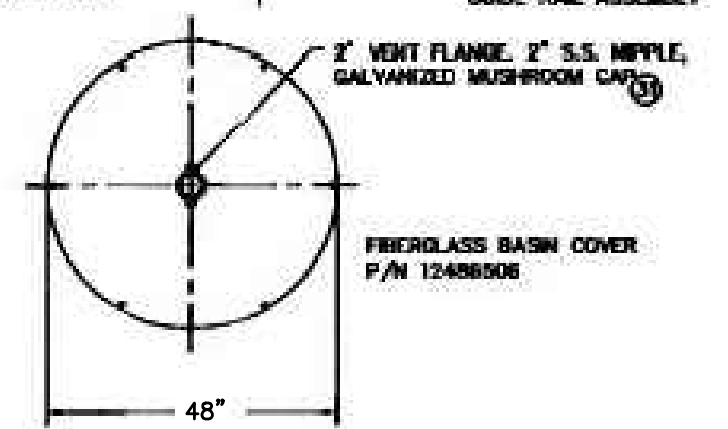
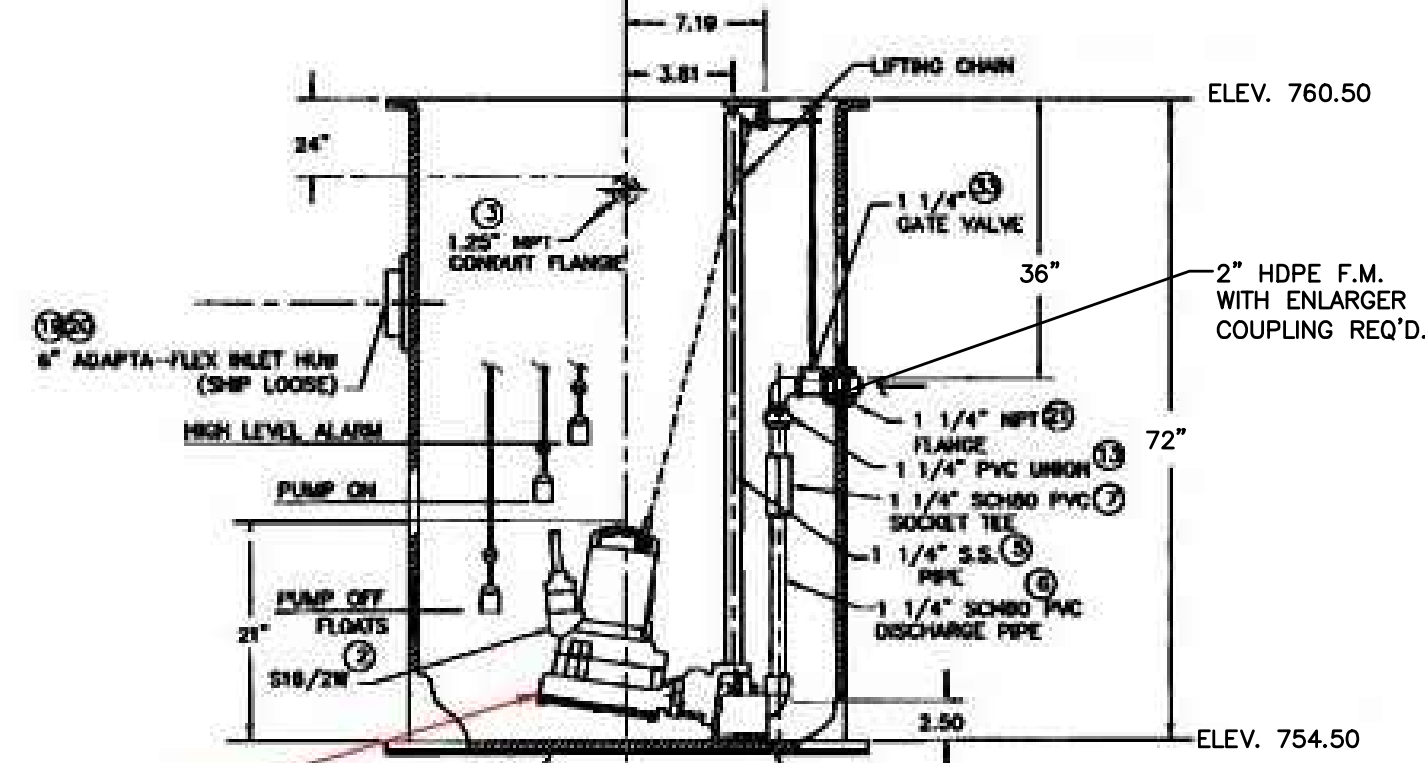
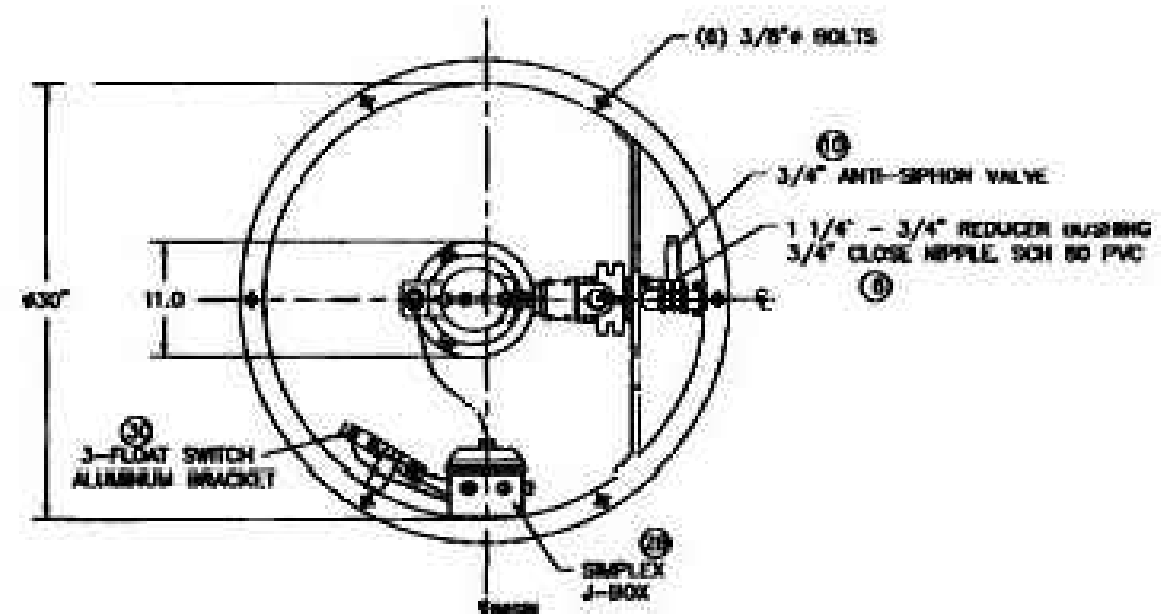


SEWER PROFILE

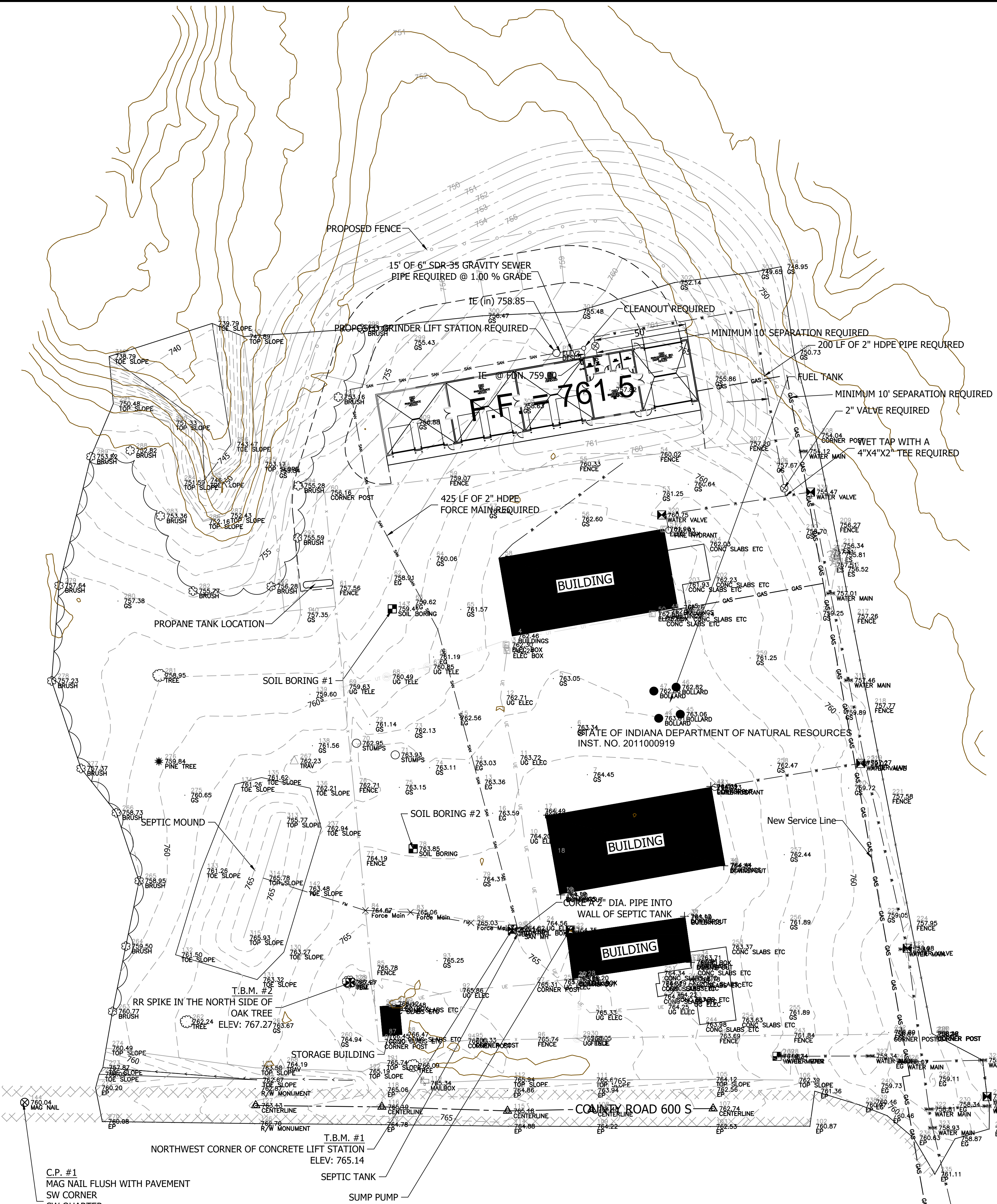


ELECTRICAL CONTROL PANEL

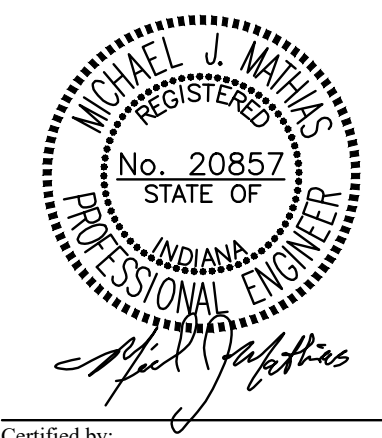
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- NOTES:
- 1) DIMENSIONS IN INCHES.
  - 2) CONTRACTOR TO LOCATE AND INSTALL ALIET HUB IN FIELD.
  - 3) OPTIONAL EQUIPMENT SHOWN



C.P. #1  
MAG NAIL FLUSH WITH PAVEMENT  
SW CORNER  
SW QUARTER  
SECTION 8,  
T13N, R4W



Certified by:

**F & W Maintenance Building - Deer Creek**  
Deer Creek Fish and Wildlife Area  
DEPT. OF NATURAL RESOURCES  
2001 W County Road 600 S  
Greencastle, IN 46135



STATE OF INDIANA  
DEPARTMENT OF NATURAL RESOURCES  
**DIVISION OF ENGINEERING**  
ROOM 2099 INDIANA GOVERNMENT CENTER SOUTH  
402 WEST WASHINGTON STREET  
INDIANAPOLIS, INDIANA 46204  
TEL 317-232-4150, FAX 317-233-1205

Revisions:

Project Number:	ENG2022905497
Requisition Number:	Requisition#
Designer:	M. J. M. Drawing Date: 5/24/2023
Drafter:	D. A. K. Drawing Scale: 1"=30'
DNR Approval:	
Client Approval:	
File Number:	File#
Drawing Number:	Drawing#
Sheet:	D-1 of ##

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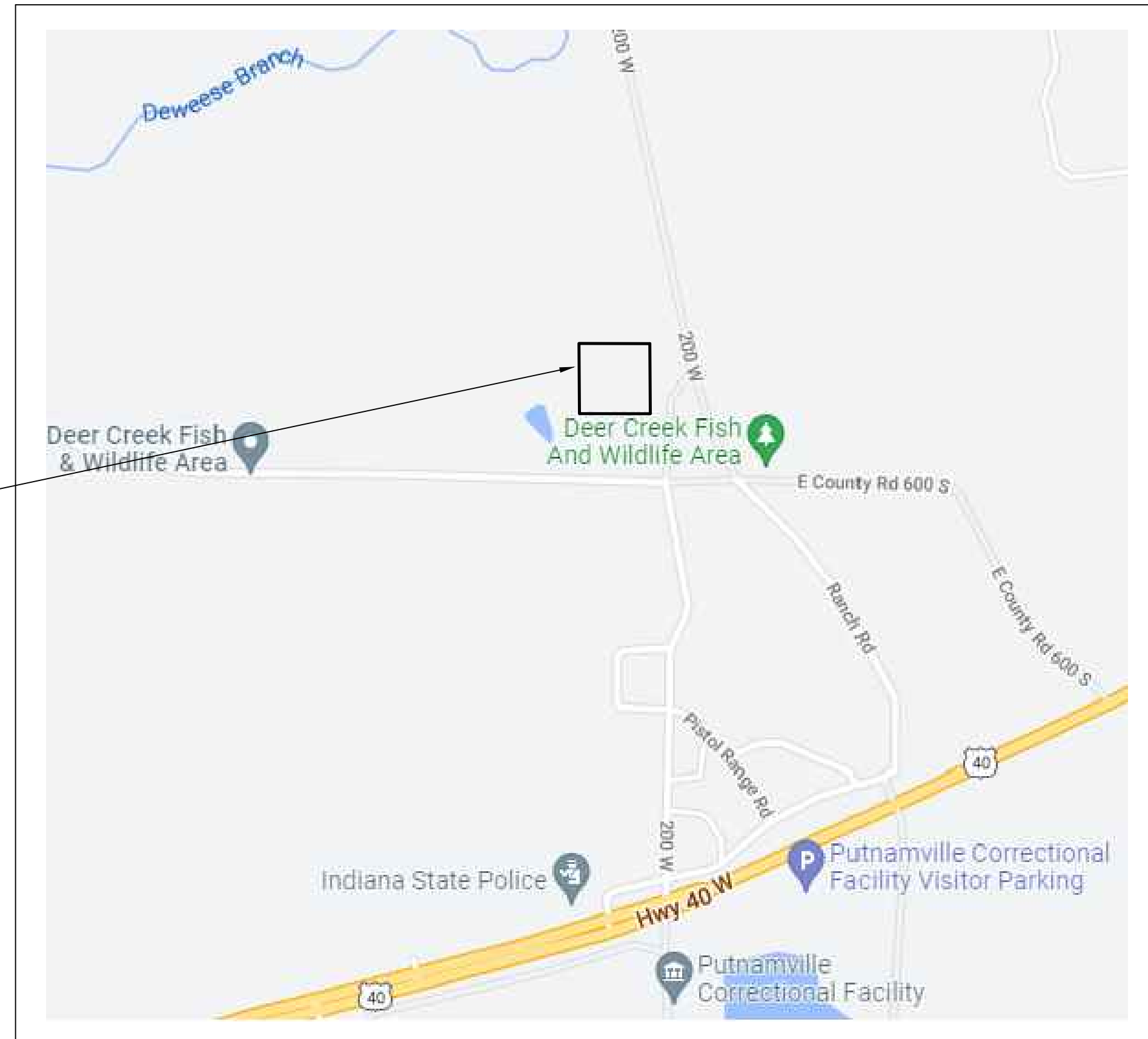


# DNR DEER CREEK MAINTENANCE BUILDING CONSTRUCTION STORMWATER GENERAL PERMIT PLANS

DNR PROJECT # ENG2002905497  
GREENCASTLE, PUTNAM COUNTY INDIANA  
MAY, 2023



PROJECT LOCATION



**PROJECT LOCATION**  
NOT TO SCALE

Sheet List Table	
Sheet Number	Sheet Title
1	TITLE SHEET
2	EROSION CONTROL INDEX
3	EROSION CONTROL REFERENCES
4	STORM WATER POLLUTION PREVENTION PLAN (SWPPP)
5	EROSION CONTROL DETAILS

INDIANA UNDERGROUND PLANT PROTECTION SERVICES, INC.



Per Indiana State Law IC-8-1-26-16, It is against the law to excavate without notifying the underground location service two full working days before commencing work.

INDIANA UNDERGROUND  
1-800-382-5544 OR CALL 811  
24 HOURS A DAY, 7 DAYS A WEEK

Note: Utility Locations are shown based upon information (maps and paint marks) supplied by others, and there is no guarantee of the accuracy or completeness of said locations.

## UTILITIES

### GAS

VECTREN  
1995 East Main St  
Danville, IN 46122  
(317)718-3604  
jmortan@vectren.com

### ELECTRIC

DUKE ENERGY  
1000 E Main St  
Plainfield, IN 46168  
(800)521-2232

### TELEPHONE

FRONTIER  
115 East Bow St.  
Thorntown, IN 46071  
(800)921-8102

### TELEPHONE

WINDSTREAM  
5020 Smythe Dr.  
Evansville, IN 47715  
(217)876-7194

### MARATHON

405 North Jackson St.  
Greencastle, IN 46135  
(765)653-4532

### WATER

Private

### ENDEAVOR COMMUNICATIONS

2 S. West St.  
Cloverdale, IN 46120  
(765)795-4261

PLANS PREPARED BY:



72 Henry Street, PO Box 47, North Vernon, Indiana 47265  
P: (812) 346-2045 F: (812) 346-8045  
Toll Free: 1-866-ENG-FPBH

www.fpbhonline.com



PREPARED FOR: INDIANA DEPARTMENT OF NATURAL RESOURCES  
PROJECT DESCRIPTION: DEER CREEK CONSTRUCTION STORMWATER GENERAL PERMIT  
FILE NUMBER: 2212516  
DATE: MAY 25, 2023  
DESIGN PHASE: PERMIT PLANS



## Construction Plan – General Plan Components (Section A)

A1 - Index of the location of required plan elements in the construction plan:

*This sheet is to act as the plan index. General Plan Components, Construction Components and Post Construction Components are all addressed on this sheet.*

A2 - A vicinity map depicting the project site location in relationship to recognizable local landmarks, towns, and major roads:

*A vicinity map showing the project location is provided on the Title Sheet. Project involves the construction of a maintenance facility in Putnam County at the current DNR Deer Creek property.*

A3 - Narrative of the nature and purpose of the project:

*The purpose of this project is to provide a maintenance facility for Deer Creek Fish & Wildlife Area. Stormwater Water quality measures are also being implemented as part of this project.*

A4 - Latitude and longitude to the nearest fifteen (15) seconds:

*Lat N 39 degrees, 34 minutes , 29 seconds. Long W 86 degrees, 53 minutes 12 seconds.*

A5 - Legal description of the project site:

*Part of the Southwest Quarter of Section 8, Township 13N, Range 4W, Greencastle Township, Putnam County*

A6 - 11 X 17-inch plat showing building lot numbers/boundaries and road layout/names:

*Site improvements, parcel, and layouts can be seen on the Proposed Plan Sheets for this site.*

A7 - Boundaries of the one hundred (100) year floodplains, floodway fringes, and floodways

*Not applicable for this site. This site is outside 100-year floodplains and floodways.*

A8 - Land use of all adjacent properties: This information provides information for the overall project including downstream impacts.

*This site is outside the city limits, primarily bordered by CR 600 S to the South, DNR property North , a quarry to the East, and rural residential to the West. This project provides water quality improvements which will improve drainage and downstream impacts.*

A9 - Identification of a U.S. EPA approved or established TMDL:

*HUC: 05120203050050 (Deweese Branch), Established TMDL for Deweese Branch (E-Coli)*

A10 - Name(s) of the receiving water(s): The plan should identify all named streams, or other water bodies that will potentially receive run-off from the project site. If the discharge is to a municipal storm sewer, the plan should identify the owner or operator of the storm drainage system as well as the ultimate receiving water for the storm drain system.

*This site will continue to drain North to the Deweese Branch, then South into Deer Creek and ultimately drain South into the Eel River.*

A11 - Identification of discharges to a water on the current 303(d) list of impaired waters and the pollutant(s) for which it is impaired:

*This site will continue to drain North to the Deweese Branch, then South into Deer Creek and ultimately drain South into the Eel River. (Deweese Branch, Deer Creek, Eel River - impairment E. coli)*

A12 - Soils map of the predominate soil types:

*Soils map for this site is provided on Erosion Control References sheet.*

A13 - Identification and location of all known wetlands, lakes, and water courses on or adjacent to the project site :

*US Fish and Wildlife Mapper provided on Erosion Control References sheet, shows there are not any known wetlands or US Waters on site.*

A14 - Identification of any other state or federal water quality permits or authorizations that are required for construction activities:

*No state or federal water quality permits are required for this project. No work is being done within a US Waterway.*

A15 - Identification and delineation of existing cover, including natural buffers:

*The existing site was previously a field and is currently covered in grass vegetation.*

A16 - Existing site topography at an interval appropriate to indicate drainage patterns:

*Existing site topography is shown as contour lines on the SWPPP sheet.*

A17 - Location(s) where run-off enters the project site: Identify areas where stormwater flows onto the project site. This includes both concentrated flow and areas where sheet flow enters the project site. These areas, including drainage acreage must be considered to properly design the stormwater management system for the project site.

*Existing contours and flowlines are provided on the SWPPP sheet for the site. Drainage patterns are being maintained.*

A18 - Location(s) where run-off discharges from the project site prior to land disturbance:

*Runoff discharge locations are shown on the SWPPP sheet and are being maintained post-construction.*

*This site is located in the Deweese Branch drainage basin.*

A19 - Location of all existing structures on the project site:

*The existing buildings are shown on the SWPPP sheet in addition to all existing infrastructure.*

A20 - Existing permanent retention or detention facilities, including manmade wetlands, designed for stormwater management:

*There are not any existing detention basins on the site.*

A21 - Locations where stormwater may be directly discharged into ground water, such as abandoned wells, sinkholes, or karst features:

*There are no known Karst or sinkholes located on-site.*

A22 - Size of the project area expressed in acres:

*The project site is approximately 3.43 acres.*

A23 - Total expected land disturbance expressed in acres:

*The project site is approximately 3.43 acres with 1.30 acres to be disturbed.*

A24 - Proposed final topography:

*Proposed final topography, including contours is on the SWPPP sheet.*

A25 - Locations and approximate boundaries of all disturbed areas:

*Construction Limits and contours are shown on the SWPPP sheet.*

## Construction Plan – General Plan Components (Section A continued)

A26 - Locations, size, and dimensions of all stormwater drainage system:

*No stormwater infrastructure is anticipated for this project. What little runoff is created from the proposed structure is handled by grassed swales.*

A27 - Locations of specific points where stormwater and non-stormwater discharges will leave the project site: Topographic or drainage system information can be used to identify the location of the discharges. If the location is not easily discernable then note for clarity.

*Contours and drainage arrows shown on the SWPPP sheet show where stormwater discharges from the site.*

A28 - Location of all proposed site improvements, roads, utilities, lot delineation, proposed structures, and common areas:

*The SWPPP sheet shows where the proposed structure, drive, and water quality measures that are being constructed.*

A29 - Location of all on-site and off-site soil stockpiles and borrow areas:

*Excavated soils will be placed on-site and surrounded with silt fence until they are redistributed across the site.*

A30 - Construction support activities that are expected to be part of the project:

*N/A - All excavated material will be redistributed on-site.*

A31 - Location of any in-stream activities that are planned for the project including, but not limited to, stream crossings and pump arounds:

*N/A - No work within US waterways.*

## Stormwater Pollution Prevention - Construction Component (Section B)

B1 - Description of the potential pollutant generating sources and pollutants, including all potential non-stormwater discharges:

*Expected on-site pollutants include Gasoline, Diesel Fuel, vehicular oils and lubricants, greases, coolants, hydrocarbons and hydraulic fuels from construction equipment. Eroded soils may also be present on-site. Refer to "Material Handling" Specifications on the Details sheet.*

B2 - Stable construction entrance locations and specifications:

*Construction Entrance is mandatory for construction traffic entering and leaving all sites. Details for the construction entrance are shown on Details sheets. Construction Entrance location is shown on the SWPPP sheet.*

B3 – Specifications for temporary and permanent stabilization:

*Temporary seeding is to be used on all areas disturbed which will remain undisturbed for 7 days or more. Permanent Mulch seeding Type U is to be used on all final graded lawn areas. Prepare soil (loosen soil to 3" depth) prior to seeding, top 6 inches of soil shall be topsoil. Perform final grading and stabilize with permanent seed mixture type 'u'. Type 'u' seed mix shall be applied at 200lb/acre consisting of 100lb/acre 4-way blend of turf type tall fescue, 50lb/acre creeping red fescue, 45 lb/acre of 230 perennial rye grass and 5 lb/acre white dutch clover. Apply fertilizer at a rate of 800lb/acre. Mulch shall be applied at a rate of 2 ton/acre. Mulch shall be punched into the soil so that it is partially covered. Warranty bond required for seeding done between October 16 and January 31.*

B4 - Sediment control measures for concentrated flow areas: This item is intended to address areas of the site where run-off will occur in a concentrated flow condition. The plan preparer should evaluate these areas and design the stormwater control measures to ensure that the proposed measures are adequate for the site characteristics and drainage area. Each proposed measure must include the location accompanied by construction details and specifications.

*Temporary check dams will be used to capture sediments in all concentrated flow areas. Location is shown on the SWPPP and corresponding details are shown on the erosion control details sheet.*

B5 - Sediment control measures for sheet flow areas: This item is intended to identify the areas of the site where run-off will primarily be discharged under a sheet flow condition. The plan preparer should evaluate these areas and select adequate sediment control measures that are properly sized for site characteristics and the expected drainage area. It may also be necessary to evaluate if concentrated flow measures might be more applicable rather than just relying on sheet flow measures. Each proposed measure must include the location and accompanied by construction details and specifications.

*All grassed areas are to be stabilized with permanent seed stabilization per B3 and silt fence will be utilized to prevent silt from migrating off - site. All slopes that are 4:1 or steeper shall receive erosion control blanket per details on the erosion control details sheet.*

B6 – Run-off control measures: This item refers to measures that are utilized to manage and direct run-off. Run-off control measures include but are not limited to diversions, rock check dams, and slope drains.

*This site will utilize silt fence, check dams, erosion control blanket, and grassed swales to control Run-off.*

B7 - Stormwater outlet protection location and specifications: All stormwater discharge locations need to be adequately protected to prevent scour erosion. The plan should specify protection measures appropriate for site characteristics. Each proposed measure must include the location and be accompanied by construction details and specifications.

*Stormwater discharge created from the improvements to this site is considered minimal and can be effectively handled with grassed swales. No storm sewer piping is anticipated for this project.*

B8 - Grade stabilization structure locations and specifications: This item includes but is not limited to measures such as rock chutes, toe wall, and drop structures. These types of measures may not be necessary on every project but should be considered during the plan development stage. Proposed measures must include the location and be accompanied by construction details and specifications.

*Grades shall be stabilized by placing topsoil to final grade and establishing with seed. Erosion control blanket shall be used in addition on slopes exceeding 4:1.*

B9 - Dewatering applications and management methods: If dewatering activities are anticipated appropriate measures should be identified and included on the plans. This plan element is primarily associated with activities that include pumping of accumulated water associated with excavated areas.

*Dewatering is not needed for this project. No work within waterway or excavation within water table required.*

B10 - Measures utilized for work within waterbodies: The plan should identify the type of measure(s) that are proposed for any in-stream activities.

*No work within Waters of US is proposed.*

B11 - Maintenance guidelines for each proposed stormwater quality measure: Each proposed temporary measure must be accompanied by criteria/standards and instructions for evaluating the measure for maintenance once installed. While permanent measures are considered long-term it will also be necessary to have criteria/standards in the plan while the permanent measures are being constructed or until final stabilization of the measure is achieved.

*Self monitoring shall be provided in accordance with CSGP requirements, after 1/2" or larger rain events and weekly.*

*See detail sheets for maintenance requirements for construction entrance, silt fence, and check dams.*

B12 - Planned construction sequence that describes the implementation of stormwater quality measures in relation to land disturbance:

*A complete construction sequence is required and should reflect what measures will be implemented on the project site and when these measures will be installed in relation to land disturbance and construction activities.*

*Erosion Control Sequence is provided on the SWPPP sheet.*

B13 - Provisions for erosion and sediment control on individual residential building lots regulated under the proposed project:

*N/A*

B14 - Material handling and spill prevention and spill response plan meeting the requirements in 327 IAC 2-6.1:

*Refer to Material Handling and Spill Prevention special provision specs provided on the Erosion Control Details sheet.*

B15 - Material handling and storage procedures associated with construction activity:

*Refer to Material Handling and Spill Prevention special provision specs provided on the Erosion Control Details sheet.*

## Stormwater Pollution Prevention - Post-construction Component (Section C)

C1 - Description of pollutants and their sources associated with the proposed land use:

The plan should include a narrative description of the final land use and the expected pollutants that will typically be generated by this type of land use. The description should also discuss the sources of these pollutants within the completed project site. Common pollutants include, oil, grease, antifreeze, brake fluid, brake dust, rubber fragments, gasoline, diesel fuel and other hydrocarbons, metals from vehicular and other sources, grit (sediment) from wearing of the road surface and falling or washing off of vehicles, trash (including bacteria and other biological agents contained in the trash) from littering and other types of improper disposal or storage, and elevated receiving water temperatures from stormwater run-off contact with impervious surfaces.

*Possible post construction pollution could include things such as minor soil erosion due to disturbed soils or grass/stabilization that fails. The site will be used by vehicles, therefore, vehicular related pollutants such as oil, grease, antifreeze, brake fluid, brake dust and rubber fragments, as well as, grit sediments shall be expected.*

*The proposed building will also have a washing bay; an oil separator and holding tank will be installed as a measure to properly handle those pollutants.*

C2 - Description of proposed post-construction stormwater measures:

The plan should include a description of how the project was designed to minimize the generation of post-construction pollutants, and how the proposed post-construction stormwater measures will manage the quality and quantity of stormwater discharges from the completed project. It may be feasible for a project to comply with the postconstruction requirements without installing elaborate and expensive treatment systems. Reducing impervious surfaces and increasing vegetative surfaces to trap pollutants may be sufficient. Post-construction measures may include but are not limited to stormwater retention and detention, bio-retention, vegetated swales, and infiltration systems. Low impact development and green infrastructure strategies are encouraged to enhance water quality and to reduce stormwater run-off. Generally, these strategies are designed to mimic natural processes, minimize land disturbance, reduce surface imperviousness, and maximize green space.

*The additional runoff created by the improvements to this site is considered negligible. Post construction pollutants have been addressed by including a grassed swale and the use of large areas of grassed buffers around the proposed structure and aggregate drive.*

C3 – Plan details for each stormwater measures:

All proposed post-construction stormwater measures should be clearly located on the plan, and include dimensions, specifications, and construction details.

*Post-construction stormwater measures have been shown on the SWPPP and corresponding specifications and requirements can be found on the SWPPP and erosion control details sheet.*

C4 - Sequence describing stormwater measure implementation.

The plan should provide a sequence of when the proposed post-construction stormwater quality measures will be installed. Consider post-construction measures, like basins or ponds that can be utilized during construction for sediment control. If a measure serves a dual purpose this should be identified in the sequencing for construction and how and when it will be modified for use as a post-construction measure.

If a post-construction measure that does not tolerate sediment impacts is installed early in the construction phase, sediment control measures and management practices should be implemented to ensure that it is not inundated with construction phase sedimentation.

*An erosion control sequence is provided on the SWPPP sheet.*

C5 - Maintenance guidelines for proposed post-construction stormwater measures:

Provide an operation manual and where applicable a narrative description of the maintenance guidelines for all post-construction stormwater measures to facilitate their proper long-term function. This documentation must be made available to future parties who will assume responsibility for the operation and maintenance of the postconstruction stormwater measures. All proposed measures must be accompanied by guidelines for monitoring and maintenance. If manufactured products are utilized, the manufacturers operation and maintenance manual/guidance may be referenced and is acceptable.

*Owner shall maintain site by ensuring grass is maintained, kept alive and mowed.*

*Owner shall restabilize any side slopes that erode with topsoil and stabilize with mulch seeding.*

*Owner shall be aware and maintain swale by removing any sediments that accumulate over time.*

C6 - Entity that will be responsible for operation and maintenance of the postconstruction stormwater measures:

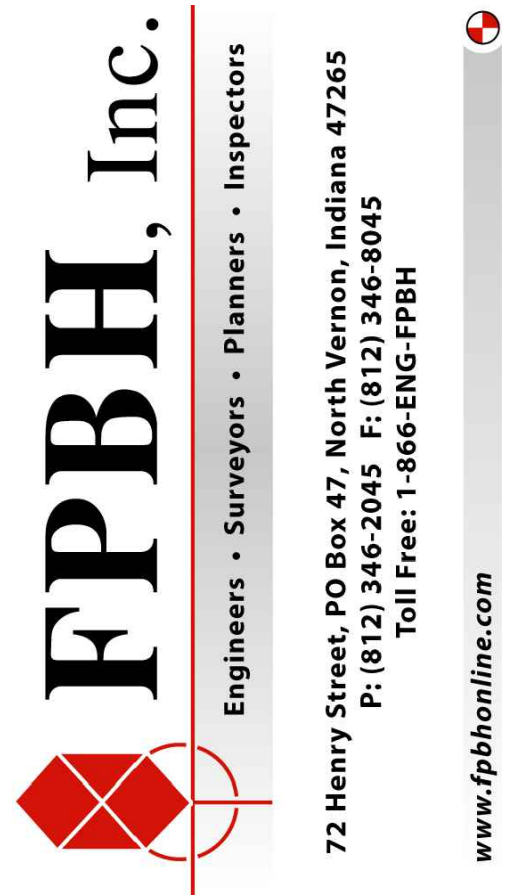
*The property owner DNR (Division of Fish & Wildlife) will be responsible for operation and maintenance of post construction measures.*

GENERAL NOTE:

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NOTES:

1. This sheet is to be: ANS I 22" X 34"



5-25-2023



SCALE: N/A

DRAWN BY: ARC

CHECKED BY: CLK

DATE: MAY 25, 2023

Revision	Drawn By	Date

FILE NO: 2212516

CLIENT NAME:  
INDIANA DEPARTMENT OF  
NATURAL RESOURCES

PROJECT DESCRIPTION:  
DEER CREEK CONSTRUCTION  
STORMWATER GENERAL PERMIT

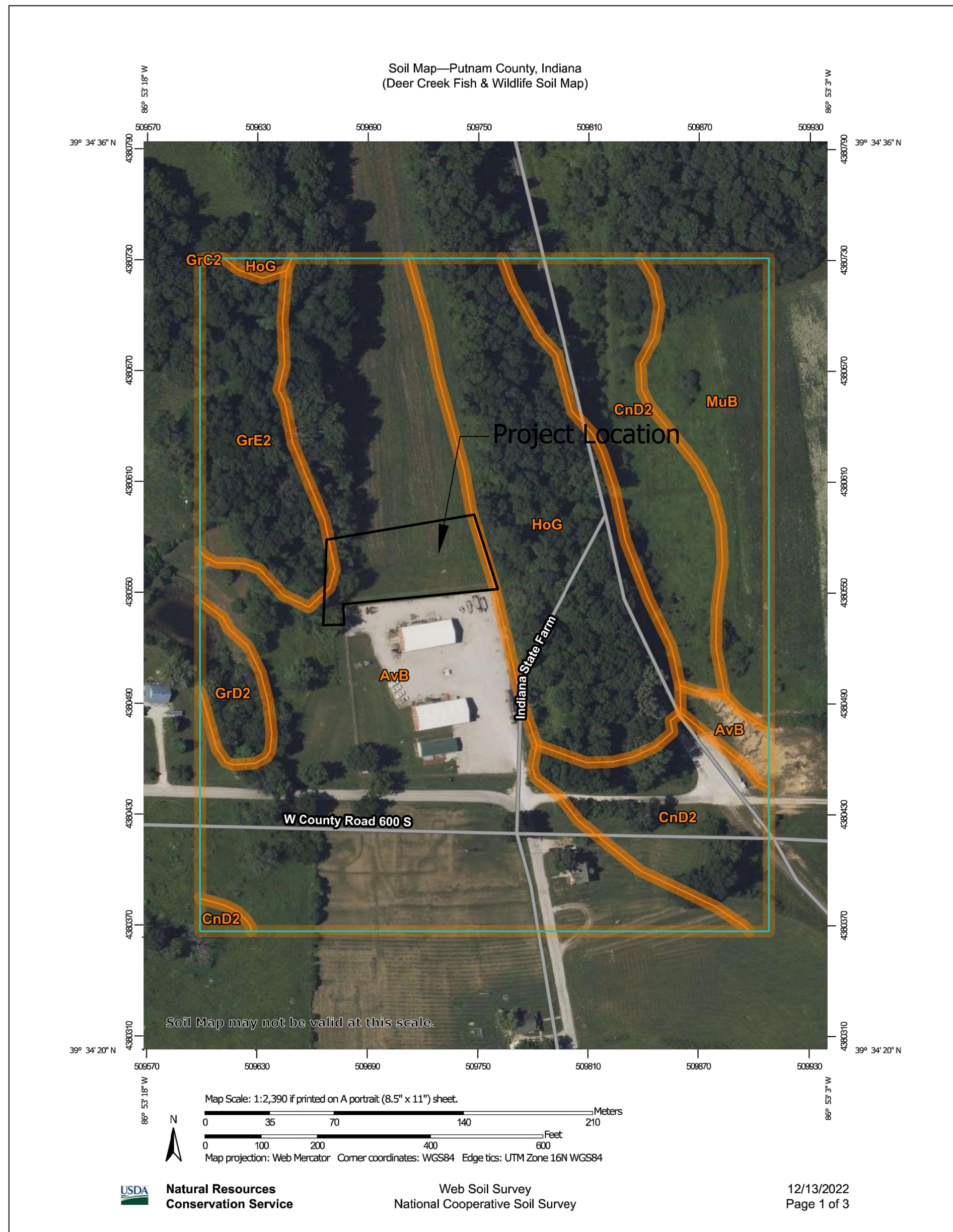
SHEET TITLE:  
EROSION CONTROL INDEX

DESIGN PHASE:  
PERMIT PLANS

SHEET NUMBER:

2

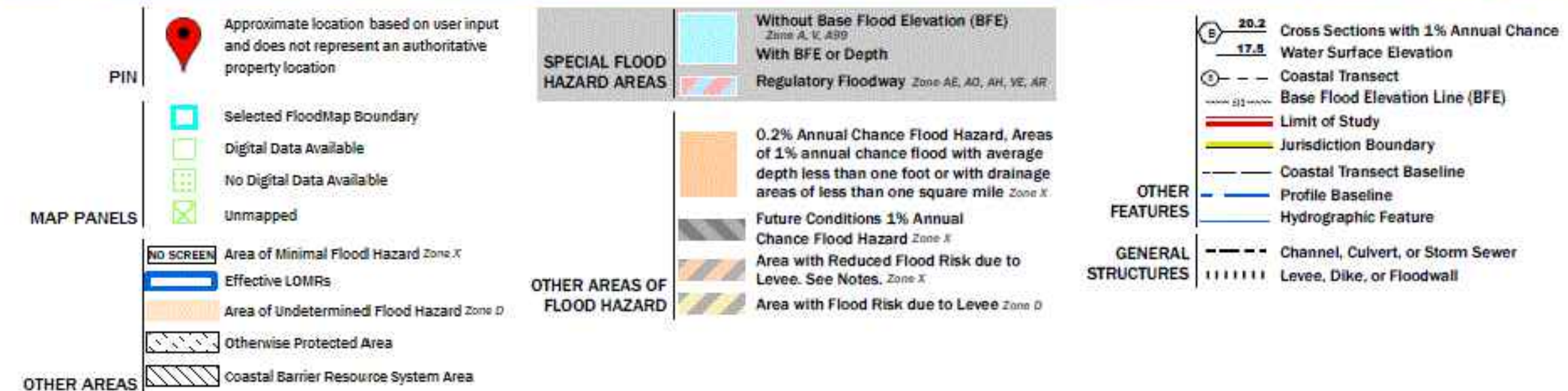




**Map Unit Legend**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AvB	Ava silt loam, 1 to 4 percent slopes	12.6	45.0%
CnD2	Cincinnati silt loam, 12 to 18 percent slopes, eroded	4.9	17.5%
GrC2	Grayford silt loam, 6 to 12 percent slopes, eroded	0.0	0.0%
GrD2	Grayford silt loam, 12 to 18 percent slopes, eroded	0.6	2.1%
GrE2	Grayford silt loam, 18 to 25 percent slopes, eroded	2.2	8.1%
HoG	Hickory loam, 25 to 70 percent slopes	5.0	18.0%
MuB	Muren silt loam, 2 to 6 percent slopes, eroded	2.6	9.4%
<b>Totals for Area of Interest</b>		<b>27.9</b>	<b>100.0%</b>

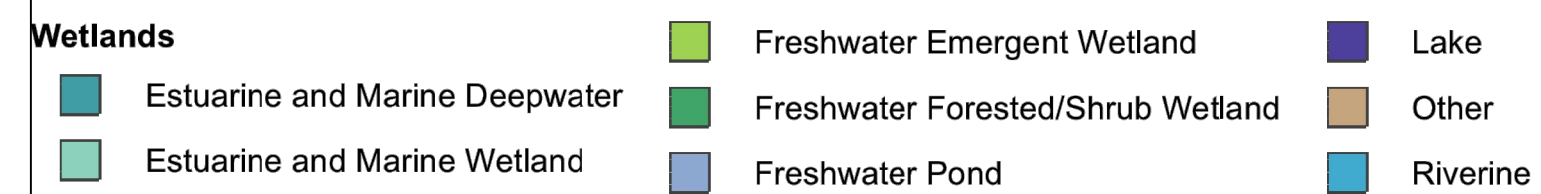
**USDA SOIL MAP - PROJECT SITE**  
NOT TO SCALE



**FEMA FLOODPLAIN MAP - PROJECT SITE**  
NOT TO SCALE



December 13, 2022



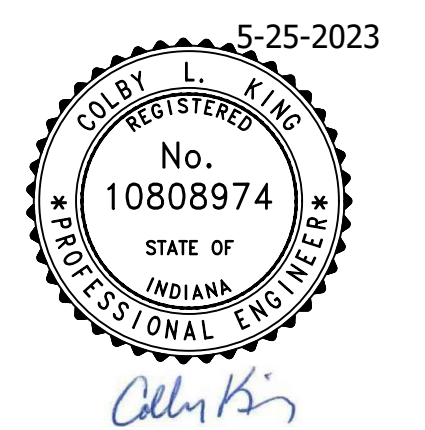
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

**USFW WETLAND MAP - PROJECT SITE**  
NOT TO SCALE

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Toll Free: 1-866-ENG-FPBH  
www.fpbhonline.com



SCALE: N/A  
DRAWN BY: ARC  
CHECKED BY: CLK  
DATE: MAY 25, 2023

Revision	Drawn By	Date

FILE NO: 2212516  
CLIENT NAME:  
DEER CREEK CONSTRUCTION  
STORMWATER GENERAL PERMIT

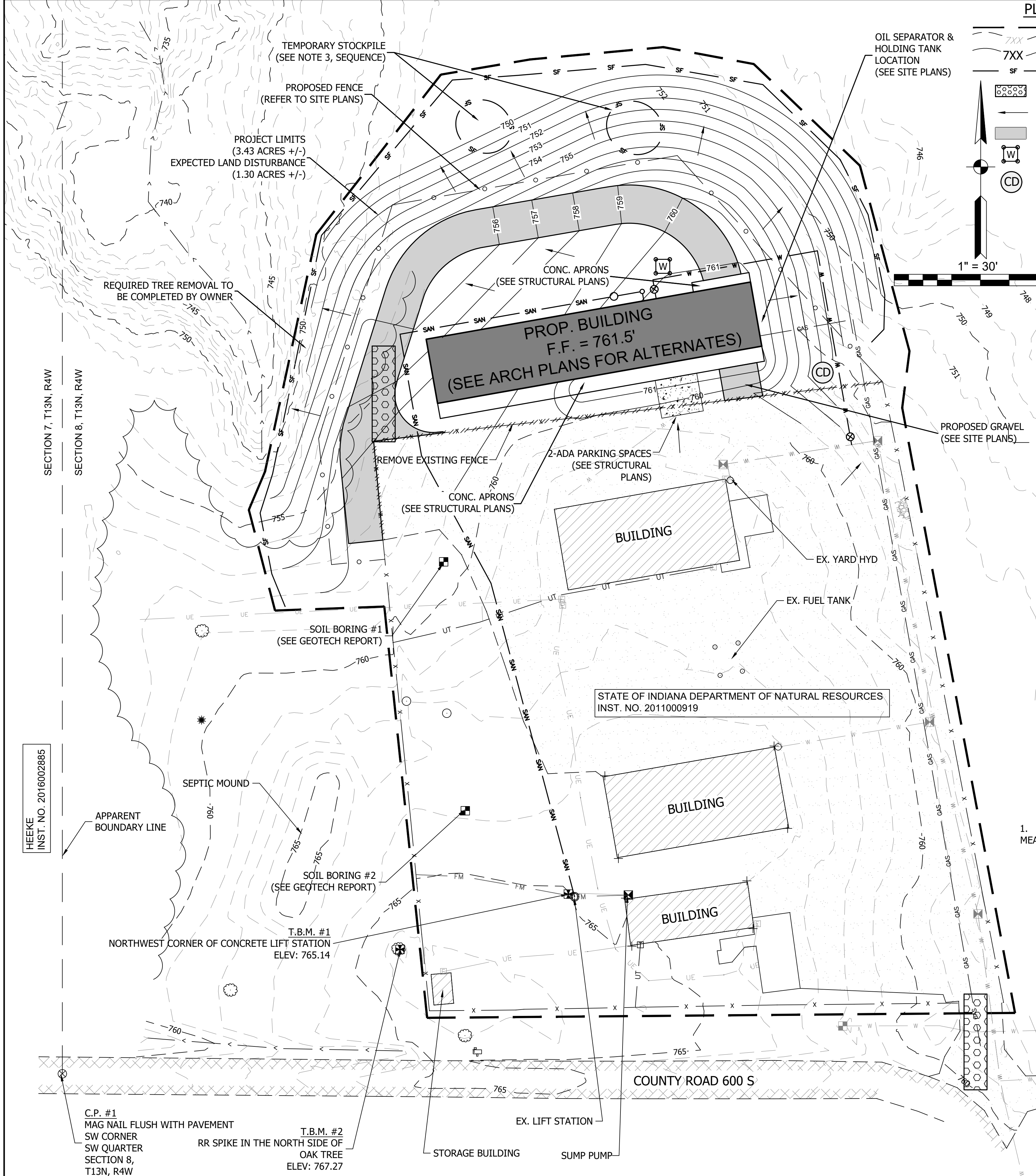
PROJECT DESCRIPTION:  
DEER CREEK CONSTRUCTION  
STORMWATER GENERAL PERMIT

SHEET TITLE:  
EROSION CONTROL REFERENCES

DESIGN PHASE:  
PERMIT PLANS

SHEET NUMBER:  
**3**





**PLAN LEGEND**

- PROJECT LIMITS
- EXISTING CONTOUR
- PROPOSED CONTOUR (design by others)
- PROPOSED SILT FENCE
- TEMPORARY CONSTRUCTION ENTRANCE
- PROPOSED DRAINAGE FLOW
- PROPOSED GRAVEL DRIVE
- CONCRETE WASHOUT
- TEMPORARY CHECK DAM

**EX. FEATURES LEGEND**

- EX. GRAVEL
- EX. BUILDING
- FORCE MAIN
- UNDERGRND. ELEC.
- UNDERGRND. TELE.
- FLOWLINE
- BRUSH LINE
- CHAINLINK
- WATER MAIN

**EX. FEATURES LEGEND**

- BOLLARD
- STUMP
- DOWNSPOUT
- SANITARY MH
- ELECTRIC BOX/METER
- TELEPHONE BOX
- MAILBOX

**EX. FEATURES LEGEND**

- WATER HYDRANT
- WATER VALVE
- WATER METER
- DECIDUOUS TREE
- CORNER POST
- BENCHMARK
- MAG NAIL FND.
- EVERGREEN

**CONTROL POINT & BENCHMARK SUMMARY**

PT. #	Description	Northing	Easting	Elevation
T.B.M. #1	Northwest Corner of Concrete Lift Station	1575534.45	3008104.72	765.14
T.B.M. #2	RR Spike in North Side of Oak Tree	1575505.57	3008016.76	767.27
C.P. #1	Mag Nail Flush With Road	1575440.62	3007840.45	760.04

HORIZONTAL DATUM = NAD83 STATE PLANE COORDINATES (INDIANA WEST)  
 VERTICAL DATUM = NAVD 88, TIED TO NGS MONUMENT S70 BRONZE DISK  
 TOPOGRAPHIC SURVEY AS INDICATED BY FIELD WORK COMPLETED ON JULY 26, 2021.  
 THIS PLAN SHALL NOT BE CONSIDERED A BOUNDARY OR RETRACEMENT SURVEY, BOUNDARY LINES SHOWN ARE BASED ON GIS INFORMATION ONLY.

**EROSION CONTROL NOTES/SEQUENCE**

- PRIOR TO LAND DISTURBANCE, INSTALL SEDIMENT CONTROL MEASURES (CONSTRUCTION ENTRANCE, SILT FENCE, ETC.) AS SHOWN TO PREVENT SEDIMENT DISCHARGE OFF THE SITE PER DETAILS ON EROSION CONTROL DETAILS SHEET.
- CONTRACTOR SHALL STRIP TOPSOIL FROM BLDG AND AGGREGATE AREAS PRIOR TO PLACING ANY FILL MATERIALS. STRIPPED TOPSOIL SHALL BE REDISTRIBUTED OVER CONSTRUCTION AREA AFTER GRADING IS COMPLETE AND PRIOR TO SEEDING/PLANTING. CONTRACTOR SHALL FIELD VERIFY TOPSOIL THICKNESS AND PROVIDE 4" - 6" MINIMUM.
- STOCKPILE CUT MATERIAL ONSITE AND SURROUNDED WITH SILT FENCE IF LEFT UNDISTURBED FOR MORE THAN 7 DAYS. TEMPORARILY SEED/MULCH IN ACCORDANCE WITH INDOT TYPE 'U' SPECS. SEE EROSION CONTROL INDEX B3 FOR SEED SPEC.
- COMPLETE GRADING AND FILLING. PLACE FILL AND SPOILS IN 6" MAX LIFTS AND COMPACT. INSTALL DRAINAGE SWALES AS SHOWN. PROVIDE TEMPORARY CHECK DAMS ALONG FLOW LINE AFTER SWALE INSTALLATION. SEE DETAILS ON EROSION CONTROL DETAILS SHEET.
- PERFORM FINAL GRADING AND REFER TO PLANTING/SEEDING SCHEDULE ON EROSION CONTROL INDEX B3 FOR PERMANENT SEED STABILIZATION MIX. ALL SIDE SLOPES 4:1 OR GREATER SHALL RECEIVE EROSION CONTROL BLANKET, REFER TO DETAIL ON EROSION CONTROL DETAILS SHEET.

**MONITORING AND MAINTENANCE PLAN**

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MONITOR AND MAINTAIN ALL EROSION CONTROL PRACTICES AND STRUCTURES. CONTRACTOR TO FOLLOW THE FOLLOWING GUIDELINES AS WELL AS THE GUIDELINES SHOWN ON THE DETAILS. PER CSGP REQUIREMENTS SECTION 3.6 MONITORING AND PROJECT MANAGEMENT, ALL PERSONS INSPECTING EROSION CONTROL SHALL MAINTAIN WRITTEN EVALUATIONS OF THE ENTIRE SITE AND BE PERFORMED BY A TRAINED INDIVIDUAL.

- SILT FENCE SHALL BE MONITORED ON A WEEKLY BASIS AND AFTER EVERY 1/2 INCH RAINFALL EVENT. DAMAGED SILT FENCE IS TO BE REPLACED. SILT FENCE WHICH HAS BEEN KNOCKED OVER SHALL BE ERRECTED AND MAINTAINED PROPERLY. REMOVE TRAPPED SEDIMENT WHEN IT REACHES HALF THE HEIGHT OF THE FENCE.
- CONTRACTOR TO FOLLOW ANY ADDITIONAL MAINTENANCE AND GUIDELINES ESTABLISHED PER INDOT STANDARDS AND SPECIFICATIONS.
- SEDIMENT SHALL BE REMOVED FROM SEDIMENT TRAPPING DEVICES SUCH AS SILT FENCE AND OTHER EROSION CONTROL MEASURES WHICH TRAP SEDIMENT. SEDIMENT FROM ALL EROSION CONTROL MEASURES SHALL BE REMOVED WHEN IT BECOMES HALF FULL OF SEDIMENT OR AS NEEDED TO ENSURE THAT THE EROSION CONTROL MEASURE FUNCTIONS PROPERLY. EROSION CONTROL MEASURES WHICH TRAP SEDIMENT SHOULD BE AT A MINIMUM MONITORED ON A WEEKLY BASIS AND AFTER EVERY 1/2 INCH RAINFALL EVENT.
- MONITOR CONSTRUCTION ENTRANCE TO ENSURE THAT STONE IS NOT WASHED OR TRACKED OFF. REPLACE STONE THAT IS WASHED OFF OR TOO DIRTY TO BE FUNCTIONAL.

**POST CONSTRUCTION EROSION CONTROL SEQUENCE**

- AFTER PERMANENT EROSION CONTROL MEASURES (i.e. PERMANENT SEEDING) ARE WELL ESTABLISHED THE TEMPORARY EROSION CONTROL MEASURES (i.e. SILT FENCE, ETC.), SHALL BE REMOVED. CONTRACTOR SHALL THEN SUBMIT (NOT) NOTICE OF TERMINATION FOR THE CSGP.

**GENERAL NOTES**

- PROTECT ALL SITE AMENITIES THAT ARE NOT LABELED TO BE REMOVED. COORDINATE WITH ENGINEER/OWNER BEFORE REMOVING ANY SITE AMENITIES.
- REFER TO CONSTRUCTION SITE PLANS FOR BUILDING, UTILITY, AND OTHER REQUIREMENTS. REFER TO GEOTECH REPORT FOR SOIL BORINGS. SITE, GRADING, UTILITY, STRUCTURAL, AND ARCHITECTURAL PLANS COMPLETED BY OTHERS.
- EROSION CONTROL MEASURES SHALL BE IMPLEMENTED THROUGHOUT CONSTRUCTION TO PREVENT SEDIMENT DISCHARGE OFF-SITE. REFER TO EROSION CONTROL NOTES AND SEQUENCE FOR REQUIREMENTS.
- CONTRACTOR SHALL FIELD VERIFY ALL UTILITIES AS NEEDED FOR CONSTRUCTION. UTILITIES SHOWN ARE BASED UPON INFORMATION (MAPS AND/OR FIELD PAINT MARKINGS) SUPPLIED BY OTHERS AND THERE IS NO GUARANTEE OF THE ACCURACY OR COMPLETENESS OF SAID LOCATIONS.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION, SIZE AND MATERIAL OF THE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- TOPSOIL SHALL BE STRIPPED AND REDISTRIBUTED AFTER GRADING IS COMPLETED. FIELD VERIFY EXISTING TOPSOIL THICKNESS.
- CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE THROUGHOUT PROJECT LIMITS.
- ALL EXCESS STOCKPILE MATERIAL TO BE REDISTRIBUTED ON-SITE.
- BUILDING, ELECTRIC, TELEPHONE, AND ALL OTHER UTILITIES DESIGN AND LAYOUT BY OTHERS.
- PROPOSED CONTOURS SHOWN ARE BASED ON DESIGN BY OTHERS; ENSURE SIDE SLOPES DO NOT EXCEED 3:1.

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www.fpbhonline.com

5-25-2023

CALY L. KING  
 REGISTERED  
 No. 10808974  
 STATE OF INDIANA  
 PROFESSIONAL ENGINEER

*Caly King*

SCALE: 1" = 30'

DRAWN BY: ARC

CHECKED BY: CLK

DATE: MAY 25, 2023

Revision	Drawn By	Date

FILE NO: 2212516  
 CLIENT NAME: INDIANA DEPARTMENT OF NATURAL RESOURCES

PROJECT DESCRIPTION: DEER CREEK CONSTRUCTION STORMWATER GENERAL PERMIT

SHEET TITLE: STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

DESIGN PHASE: PERMIT PLANS

SHEET NUMBER:  
4

HEEKE  
 INST. NO. 2016002885

STATE OF INDIANA DEPARTMENT OF NATURAL RESOURCES  
 INST. NO. 2011000919

C.P. #1  
 MAG NAIL FLUSH WITH PAVEMENT  
 SW CORNER  
 SW QUARTER  
 SECTION 8,  
 T13N, R4W

T.B.M. #2  
 RR SPIKE IN THE NORTH SIDE OF  
 OAK TREE  
 ELEV: 767.27



### MATERIAL HANDLING AND SPILL PREVENTION PLAN

REGARDLESS OF THE REPORTING REQUIREMENTS, ALL SPILLS OF SUCH FLUIDS AND HAZARDOUS MATERIALS SHALL BE PROPERLY CLEANED UP AND ACTIONS SHALL INCLUDE THE FOLLOWING:

1. CONTAIN THE SPILLED MATERIAL OR BLOCK/RESTRICT ITS FLOW USING ABSORBENTS, DIRT, SAND, OR OTHER AVAILABLE MEANS TO PREVENT THE SUBSTANCE FROM DRAINING FURTHER.
2. CORDON OFF THE AREA OF THE SPILL AS REQUIRED.
3. CORRECTLY IDENTIFY THE MATERIAL FROM A SAFE DISTANCE.
4. DENY ENTRY TO THE CORDONED OFF AREA TO ALL BUT RESPONSE PERSONNEL.
5. CONTACT IDEM AS NOTED BELOW IF APPLICABLE.
6. RESPOND TO THE SPILL IN ACCORDANCE WITH PROPER PROCEDURES REQUIRED FOR THE SUBSTANCE.

IN ADDITION TO THE LISTED SPILL RESPONSE, REFUELING OPERATIONS AND THE ADDITION OF VEHICULAR FLUIDS SHALL NOT OCCUR WITHIN 50 FEET OF ROADSIDE DITCHES AND INSTALLED STORM SYSTEMS. MEASURES SHALL BE TAKEN TO ENSURE THAT OIL PANS OR OTHER ACCEPTABLE SECONDARY CONTAINMENT CONTAINERS ARE PLACED SO AS TO CATCH ANY SPILLED FLUIDS AND PREVENT THEIR DISPERSAL ONTO THE SURROUNDING SOIL DURING SUCH OPERATIONS.

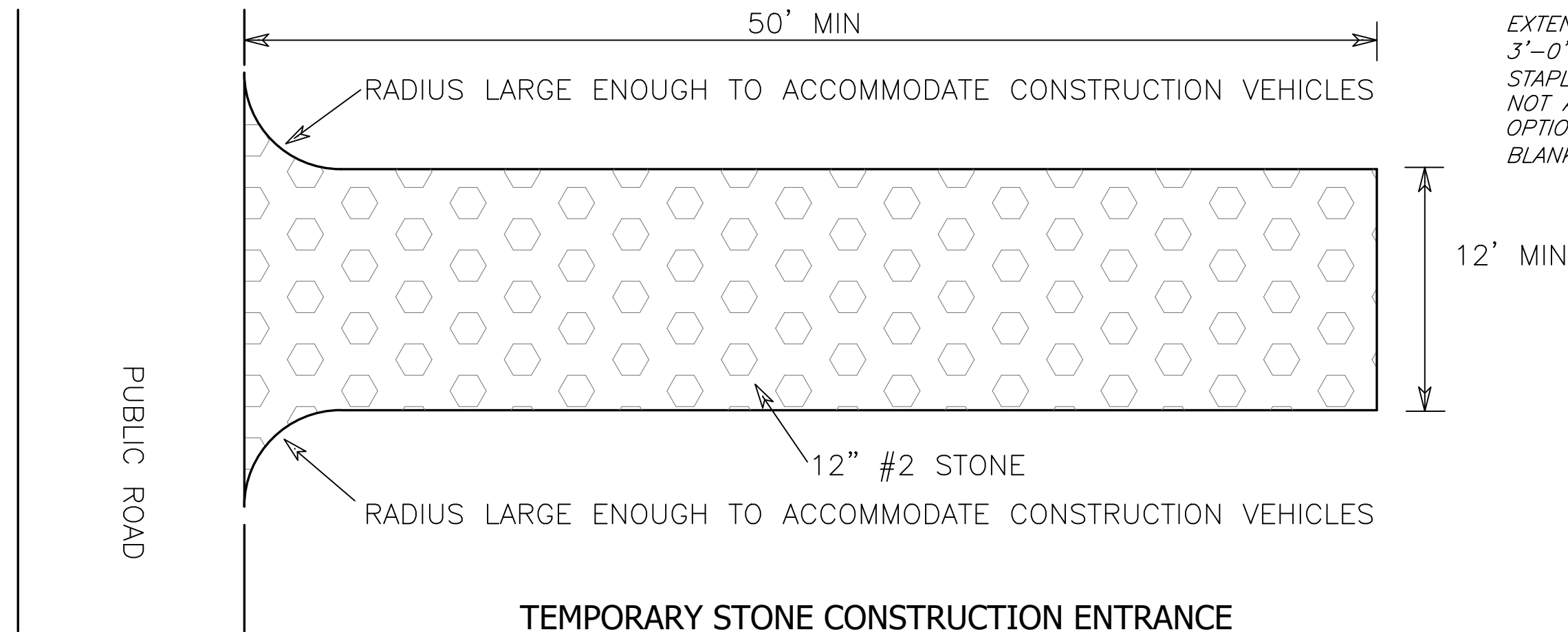
SPILLS OF THESE FLUIDS AND MATERIALS SHALL NOT BE WASHED OFF INTO SIDE DITCHES OR WATERWAYS, BUT MUST BE CONTAINED AT THE SITE OF THE SPILL AND REMOVED BY ABSORBENTS OR OTHER APPROVED METHODS FOR THEIR CLEANUP. SOILS WHICH HAVE ABSORBED THESE FLUIDS DUE TO SPILLS SHALL BE TREATED AS CONTAMINATED IN ACCORDANCE WITH THE FLUID FOR WHICH IT HAS BEEN CONTAMINATED AND SHALL BE PROPERLY REMOVED AND DISPOSED OF FROM THE SITE.

THE STORAGE OF SUCH FLUIDS AND MATERIALS SHALL BE IN MANUFACTURER PROVIDED CONTAINERS OR IN OTHER LEGAL CONTAINERS FOR THE RESPECTIVE SUBSTANCE. THE CONTAINERS SHALL BE PROPERLY MARKED IN ACCORDANCE WITH ANY STATE, LOCAL, OR FEDERAL REGULATORY REQUIREMENTS SO AS TO IDENTIFY THE SUBSTANCE. SUCH SUBSTANCES MAY ONLY BE LEFT ON SITE OVERNIGHT IF STORED IN VEHICLE LOCKERS WHICH ARE INTEGRAL PARTS OF THE VEHICLE OR THAT HAVE BEEN SECURELY FASTENED TO THE VEHICLE SO AS TO PREVENT REMOVAL OF THE LOCKER. SUCH LOCKERS SHALL REMAIN LOCKED WHEN CONSTRUCTION PERSONNEL ARE NOT ON SITE AND SHALL BE MARKED ACCORDING TO REGULATIONS AS TO THEIR CONTENTS.

ANTICIPATED POLLUTANTS WHICH MAY BE PRESENT ON THE SITE INCLUDE SEDIMENT, CONCRETE, GASOLINE, DIESEL FUEL, VEHICULAR OILS AND LUBRICANTS, VARIOUS HYDROCARBONS, HYDRAULIC FLUIDS AND PAINTS. THIS LIST IS NOT INTENDED TO BE ALL ENCOMPASSING. IF THE CONTRACTOR HAS ADDITIONAL TYPES OF POLLUTANTS DUE TO PROJECT REQUIREMENTS THEY SHALL ENSURE THAT THE SPILL OF THESE ADDITIONAL FLUIDS SHALL BE TREATED IN ACCORDANCE WITH ALL MSDS AND LOCAL STATE AND FEDERAL REGULATIONS. ALL LOCAL, STATE, AND FEDERAL REGULATIONS REGARDING THE SPILLS OF THESE FLUIDS AND CLEANUP PROCEDURES SHALL BE COMPLIED WITH BY THE CONTRACTOR. MSDS SHEETS FOR THESE MATERIALS SHALL BE ON SITE AND ACCESSIBLE BY WORK PERSONNEL DEALING WITH THESE MATERIALS. THE CONTRACTOR SHALL ENSURE THAT A USABLE SPILL CONTROL PLAN IS IN EXISTENCE TO ENSURE THAT PROPER RESPONSES ARE AVAILABLE FOR EACH OF THE SUBSTANCES WHICH WILL BE ON SITE DURING CONSTRUCTION.

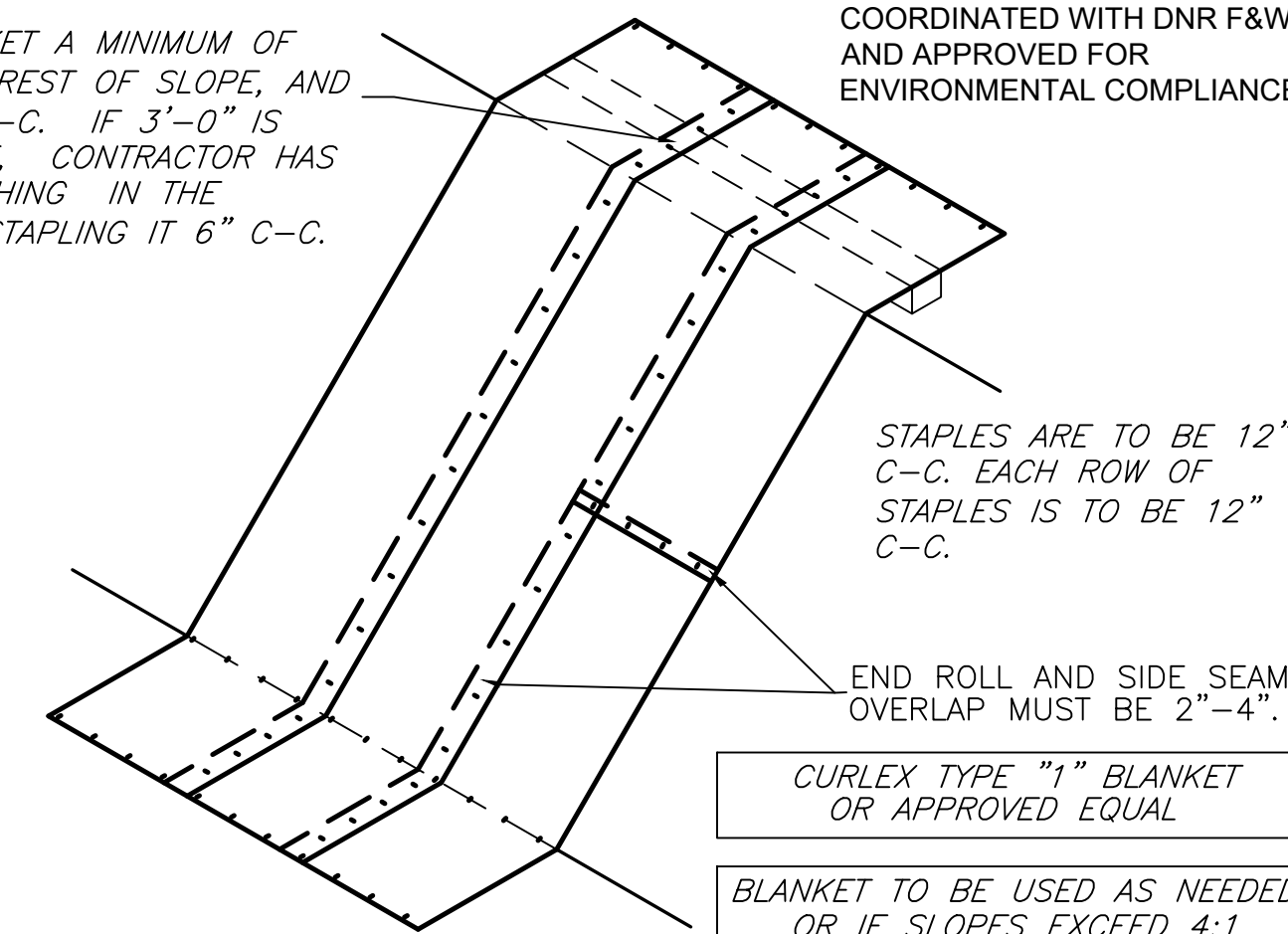
SEVERAL DIFFERENT UNEXPECTED FACTORS COULD CAUSE THE ANTICIPATED POLLUTANTS LISTED ABOVE TO ENTER STORM WATER RUNOFF VIA ROADSIDE DITCHES AND/OR STORM INFRASTRUCTURE. ACCIDENTS SUCH AS FUEL SPILLS, OIL LEAKS, PAINT SPILLS, ETC. ARE UNEXPECTED BUT MAY BE UNPREVENTABLE AND THEREFORE IT IS VERY IMPORTANT TO HAVE A PROPER SPILL PREVENTION PLAN IN PLACE.

THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE REPORTABLE QUANTITIES REQUIRED FOR THE FLUIDS WHICH HE WILL HAVE ON SITE AND AS DESIGNATED IN FEDERAL REGULATIONS, 40 CFR PART 110, PART 117, AND PART 302. ANY SPILLS IN THESE QUANTITIES SHALL BE HANDLED AS REQUIRED BY LOCAL STATE AND FEDERAL REGULATIONS. ADDITIONAL REFERENCE TO CORRECT SPILL RESPONSE MAY BE FOUND IN 327 IAC 2-6 FOR APPLICABLE QUANTITIES OF SPILLS WHICH MUST BE REPORTED. RELEASES OF HAZARDOUS SUBSTANCES IN THE REPORTABLE QUANTITIES SHALL BE REPORTED TO THE IDEM EMERGENCY RESPONSE SECTION AT (888)-233-7745 BY PROVIDING THE INFORMATION AS NOTED IN 327 IAC 2-6.1-4(17).



**TEMPORARY STONE CONSTRUCTION ENTRANCE**  
NOT TO SCALE

EXTEND BLANKET A MINIMUM OF 3'-0" OVER CREST OF SLOPE, AND STAPLE 12" C-C. IF 3'-0" IS NOT AVAILABLE, CONTRACTOR HAS OPTION TRENCHING IN THE BLANKET OR STAPLING IT 6" C-C.

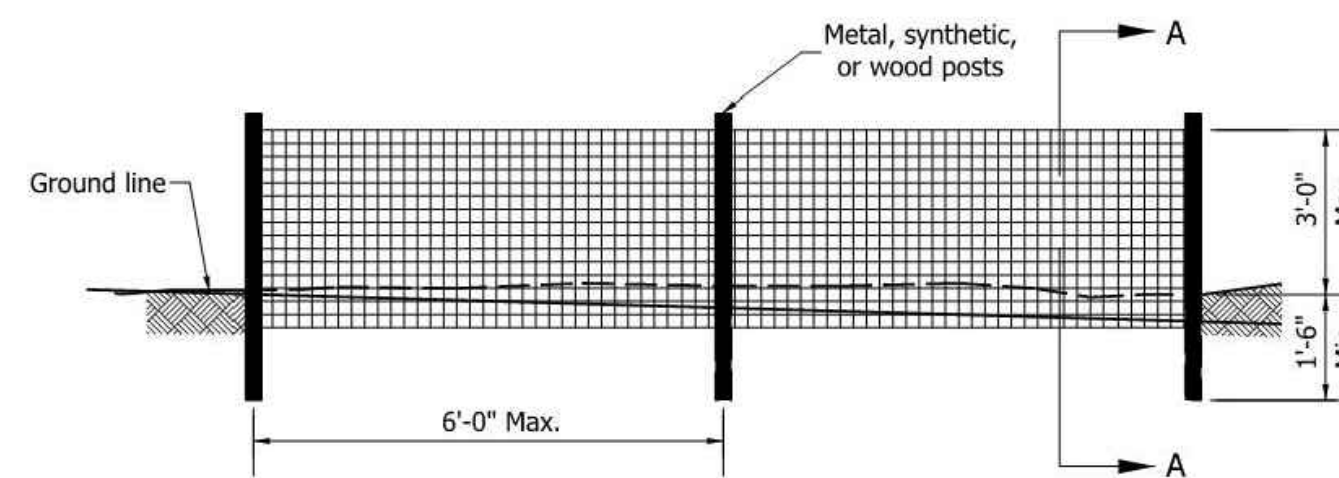


**EROSION CONTROL BLANKET**  
NOT TO SCALE

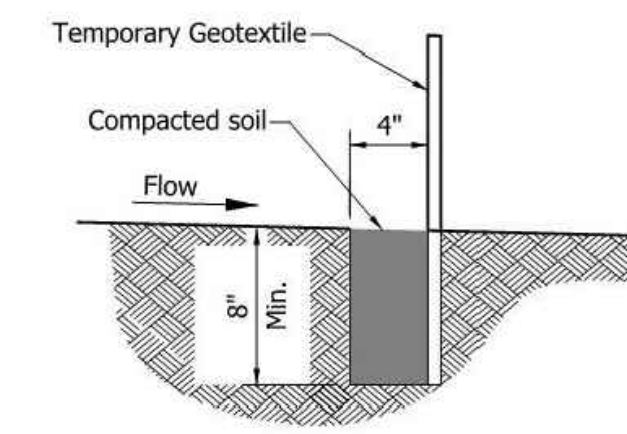
\*\*EROSION CONTROL BLANKET SUBSTITUTES SHALL BE COORDINATED WITH DNR F&W AND APPROVED FOR ENVIRONMENTAL COMPLIANCE

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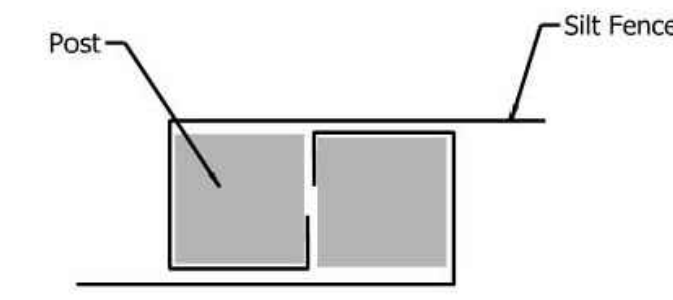
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**SILT FENCE ELEVATION**



**SECTION A-A**



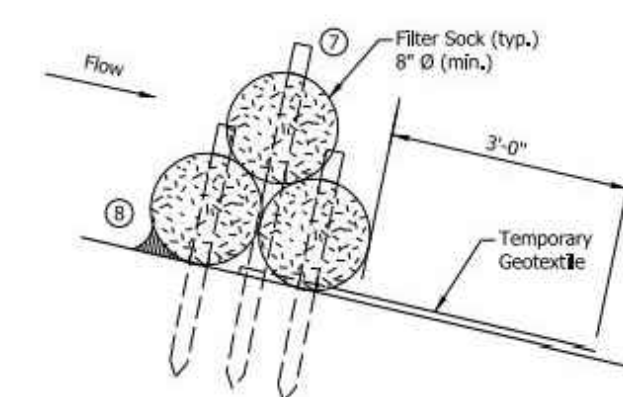
**JOINT DETAIL PLAN VIEW**

### \*\*SILT FENCE AND CHECK DAM MAINTENANCE & MONITORING REQUIREMENTS

1. Inspect within 24 hours of a rain event and at least once every seven calendar days when installed in a series at intervals on a slope, inspection should be done daily.
2. Remove accumulated sediment when it reaches one-half the height of the silt fence and check dam. Inspect to ensure that the fence and dam is maintaining its integrity and producing adequate flow.
3. Repair eroded and damaged areas. If ponding becomes excessive, fence and/or dam should be removed and either reconstructed or new product installed. Reseed, if applicable.

### \*\*TEMPORARY SILT FENCE (PER INDOT STD. DWG E205-TECD-11)

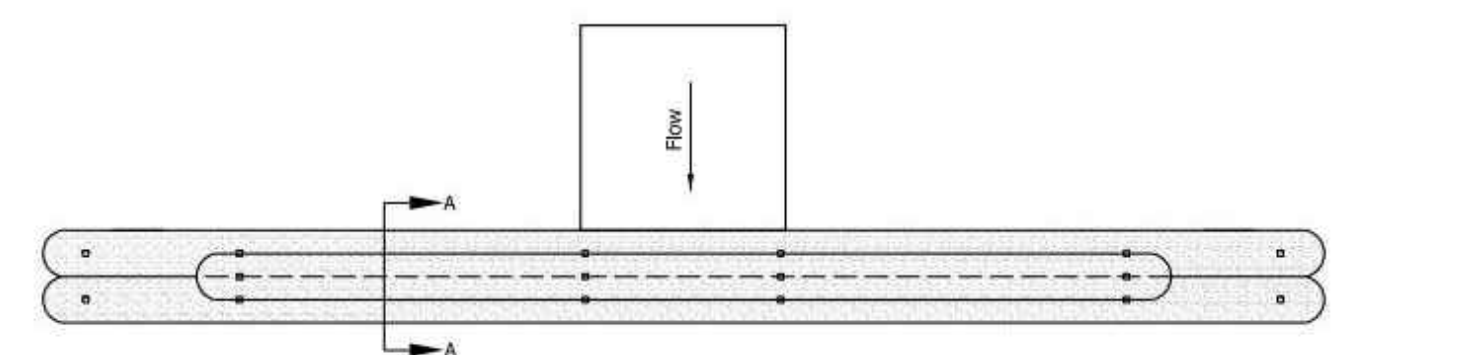
NOT TO SCALE



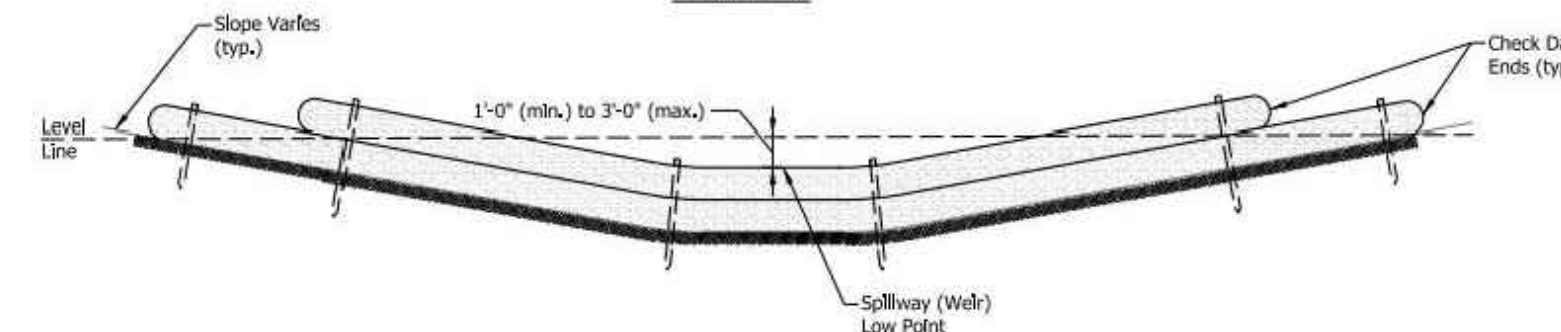
**SECTION A-A**

#### NOTES:

1. Filter roll may be substituted for filter sock.
2. Check dams shall be placed perpendicular to the flow of water.
3. Check dam ends shall be positioned as shown such that storm water flows over the weir low point and does not flow around the ends.
4. Check dams shall remain in place until all upstream areas become stable.
5. Check dams shall be spaced such that the top of the downstream check dam is at the same elevation as the toe of the adjacent upstream check dam.
6. Filter sock shall be placed as shown or in accordance with the manufacturer's instructions.
7. Stake length shall be sufficient to wedge filter sock to the ground to prevent movement and undercutting.
8. When undercutting is identified, compacted #5 or #8 stone shall be placed as shown.



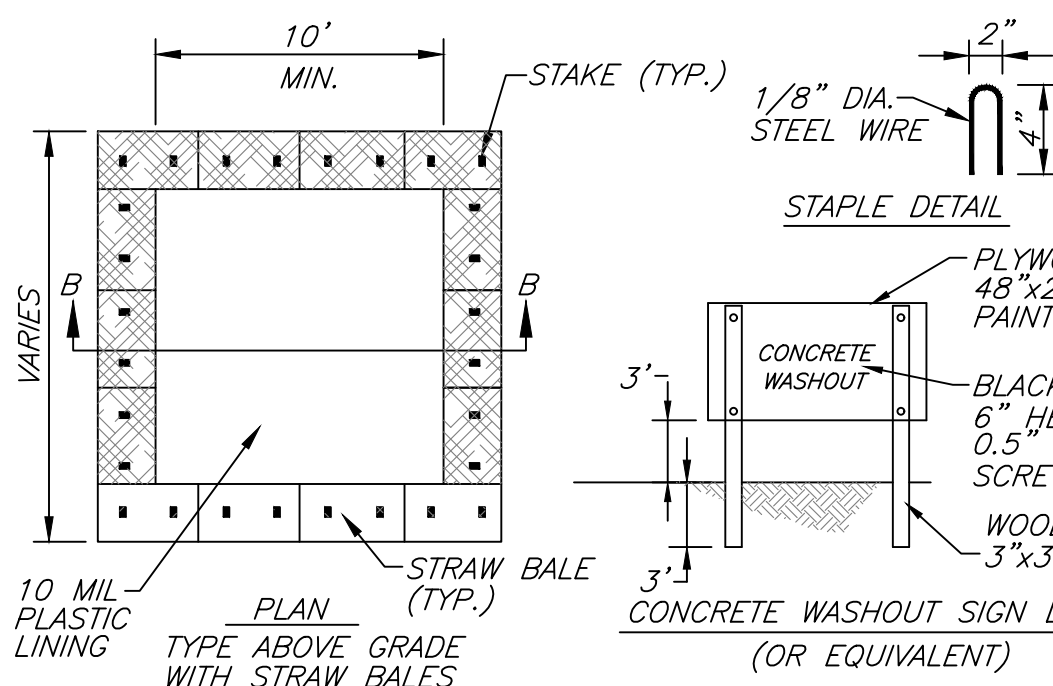
**TRAVERSABLE CHECK DAM PLAN VIEW**



**TRAVERSABLE CHECK DAM ELEVATION**

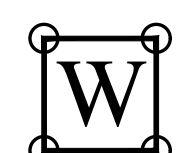
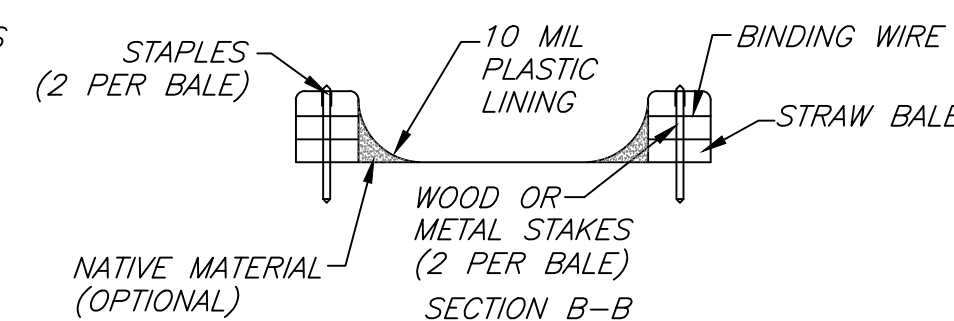
### \*\*TEMPORARY CHECK DAM (PER INDOT STD. DWG E205-TECD-08)

NOT TO SCALE



CONTRACTOR TO FIELD VERIFY EXACT LOCATION OF WASHOUT. WASHOUT SHALL BE KEPT AS FAR AWAY FROM WATERWAYS AND STORM SEWERS AS POSSIBLE.

- NOTES:**
- 1.) ACTUAL LAYOUT DETERMINED IN FIELD
  - 2.) THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONC. WASHOUT FACILITY.



**CONCRETE WASHOUT DETAIL**  
NOT TO SCALE



SCALE: 1" = 30'

DRAWN BY: ARC

CHECKED BY: CLK

DATE: MAY 25, 2023

Revision	Drawn By	Date

FILE NO: 2212516

CLIENT NAME:  
INDIANA DEPARTMENT OF  
NATURAL RESOURCES

PROJECT DESCRIPTION:  
DEER CREEK CONSTRUCTION  
STORMWATER GENERAL PERMIT

SHEET TITLE:  
EROSION CONTROL DETAILS

DESIGN PHASE:  
PERMIT PLANS

SHEET NUMBER:

**5**



# GENERAL NOTES

**DESIGN DATA:**

1. CODES AND STANDARDS: (ALL WORK SHALL CONFORM WITH THE FOLLOWING BUILDING CODES AND STANDARDS)
  - A.) GENERAL DESIGN: INTERNATIONAL BUILDING CODE, 2012 EDITION (IBC), IN ACCORDANCE WITH INDIANA 2014 BUILDING CODE WITH AMENDMENTS.
  - B.) DESIGN LOADS: ASCE'S "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" (ASCE/SEI 7-10).
  - C.) REINFORCED CONCRETE DESIGN: ACI'S "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" (ACI 318-11).
  - D.) STRUCTURAL STEEL DESIGN: AISC'S "STEEL CONSTRUCTION MANUAL, 14TH EDITION."
  - E.) WOOD DESIGN: AF&PA'S "2012 NATIONAL DESIGN SPECIFICATION (NDS) FOR WOOD CONSTRUCTION WITH SUPPLEMENT" AND "2008 SPECIAL DESIGN PROVISIONS FOR WIND AND SEISMIC (SDPWS)".
2. SOIL INFORMATION:
 

DEER CREEK:  
 ALLOWABLE NET BEARING PRESSURE, WALL FOOTING \_\_\_\_\_ 2500 PSF  
 SUB-GRADE REACTION [K30] \_\_\_\_\_ 100 PCI

SOILS REPORT PREPARED BY TERRACON (PROJECT NO. CJ215382, DATED 10-05-2021).
3. RISK CATEGORY (IBC TABLE 1604.5) \_\_\_\_\_ CATEGORY II
4. LIVE LOADS: (IBC TABLE 1607.1)
 

ROOF \_\_\_\_\_ 20 PSF  
 REST ROOM CEILING \_\_\_\_\_ 75 PSF
5. WIND LOADS: (IBC SECTION 1609 AND ASCE 7)
 

BASIC WIND SPEED / ULTIMATE DESIGN WIND SPEED \_\_\_\_\_ 115 MPH  
 NOMINAL DESIGN WIND SPEED (ASD) \_\_\_\_\_ 89 MPH  
 EXPOSURE \_\_\_\_\_ C  
 INTERNAL PRESSURE COEFFICIENT, GCPI: \_\_\_\_\_ +/- 0.55

COMPONENTS AND CLADDING  
 CORNER AND EDGE WIDTH \_\_\_\_\_ 3'-10"  
 ROOF:  
 SEE ROOF TRUSS WIND TABLE ON S-8  
 WALLS (EFFECTIVE AREA = 10FT<sup>2</sup>):  
 MAIN REGIONS \_\_\_\_\_ 42 PSF  
 CORNERS AND EDGES \_\_\_\_\_ 50 PSF
6. SEISMIC LOADS: FOR PRIMARY SYSTEMS (IBC SECTION 1613 AND ASCE 7)
 

DEER CREEK:  
 IMPORTANCE FACTOR (DETERMINED FROM RISK CATEGORY) \_\_\_\_\_ 1.00  
 SITE CLASS (USE CLASS 'D' UNLESS SOIL REPORT PROVIDES) \_\_\_\_\_ D  
 DESIGN SPECTRAL RESPONSE ACCELERATIONS  
 SHORT PERIOD, S<sub>0.2</sub> \_\_\_\_\_ 0.231  
 1-SECOND PERIOD, S<sub>0.7</sub> \_\_\_\_\_ 0.163  
 SEISMIC DESIGN CATEGORY \_\_\_\_\_ C
7. DEAD LOADS:
 

WEIGHT OF MATERIALS AS DETERMINED BY SYSTEMS SELECTED.  
 MINIMUM COLLATERAL LOAD FOR MECHANICAL, ELECTRICAL, SPRINKLERS, ETC. OF 5 PSF.  
 INCREASE TO A MINIMUM OF 10 PSF ABOVE CORRIDORS, MECHANICAL ROOMS AND PENTHOUSES.
8. SNOW DESIGN CRITERIA (IBC SECTION 1608 AND ASCE 7)
 

GROUND SNOW LOAD, PG \_\_\_\_\_ 20 PSF  
 IMPORTANCE FACTOR, I \_\_\_\_\_ 1.00  
 THERMAL FACTOR \_\_\_\_\_ 1.20  
 EXPOSURE FACTOR \_\_\_\_\_ 1.00  
 FLAT ROOF SNOW LOAD, PF \_\_\_\_\_ 20 PSF  
 DRIFTING AND UNBALANCED SNOW \_\_\_\_\_ PER IBC AND ASCE 7
9. DEFLECTION CRITERIA (IBC TABLE 1604.3)
 

ROOF SNOW LOAD \_\_\_\_\_ L / 360  
 ROOF DEAD AND LIVE LOAD \_\_\_\_\_ L / 240

**MATERIALS:**

1. CONCRETE:
 

PORTLAND CEMENT (GRAY) \_\_\_\_\_ ASTM C150 TYPE I OR III  
 WATER \_\_\_\_\_ CLEAN AND POTABLE  
 COARSE AGGREGATE \_\_\_\_\_ CRUSHED STONE, INDOT SIZE #8, ASTM C33  
 FINE AGGREGATE \_\_\_\_\_ SAND, INDOT SIZE #23, ASTM C33  
 AIR ENTRAINING ADMIXTURE \_\_\_\_\_ ASTM C260  
 HIGH RANGE WATER REDUCING ADMIXTURE \_\_\_\_\_ ASTM C494, TYPE F OR G  
 SYNTHETIC FIBER REINFORCING \_\_\_\_\_ 3/4" VIRGIN NYLON FIBERS, BY NYCON INC. OR APPROVED EQUAL

PATCHING MATERIAL:  
 FIVE STAR STRUCTURAL CONCRETE BY U.S. GROUT CORPORATION  
 EMACO S77 CI BY BASF CONSTRUCTION CHEMICALS  
 APPROVED EQUAL

VAPOR BARRIER \_\_\_\_\_ ASTM E1745, CLASS A PLASTIC SHEET VAPOR BARRIER WITH A MINIMUM THICKNESS OF 15 MILS

EXPANSION JOINT FILLER:  
 PROVIDE PREFORMED, LOW ABSORPTIVE, BITUMINOUS, CLOSED CELL RUBBER, OR CORK JOINT FILLER. JOINTS SHALL BE 1/2 INCH THICK BY THE FULL THICKNESS OF THE SLAB AND SHALL HAVE REMOVABLE PLASTIC CAPS WHERE JOINTS ARE EXPOSED TO VIEW OR ARE TO BE COVERED WITH SEALANT.

**MATERIALS (CONT.):**

CONCRETE SCHEDULE				
CLASS	28 DAY COMPRESSIVE STRENGTH	CONCRETE AIR CONTENT	PLACEMENT	REMARKS
A	3000 PSI	OPTIONAL	FILL UNDER FOOTINGS AND FILL FOR EQUIPMENT FRAMES	
B	4000 PSI	OPTIONAL	FOOTINGS, CURBS AND EQUIPMENT BASES	
C	4500 PSI	6% TO 8%	PIERS, WALLS, RETAINING WALLS, COLUMNS, ELEVATED SLABS AND BEAMS	AIR NOT PERMITTED FOR SLAB WITH A TROWEL FINISH
D	3500 PSI	NONE	INTERIOR SLABS-ON-GRADE	SYNTHETIC FIBERS, VAPOR BARRIER
E	5000 PSI	6% TO 8%	EXTERIOR DOOR STOOPS AND APRONS	

- NOTES:**
1. SEE SECTION 033000, CAST-IN-PLACE CONCRETE, FOR PROJECTS WITH SPECIFICATION MANUALS.
  2. ALL CONCRETE NOT INDICATED IN THE SCHEDULE SHALL BE CLASS "C".
2. REINFORCING STEEL:
 

STIRRUPS, TIES, AND MAIN REINFORCING BARS \_\_\_\_\_ ASTM A615, GRADE 60, F<sub>y</sub> = 60 KSI  
 WELDED WIRE FABRIC (SHEETS ONLY) \_\_\_\_\_ ASTM A1064
  3. WOOD FRAMING:
 

FRAMING MEMBERS \_\_\_\_\_ NO. 2 SPRUCE-PINE-FIR  
 WALL STUDS \_\_\_\_\_ NO. 2 SPRUCE-PINE-FIR  
 LVL HEADERS \_\_\_\_\_ MICROLAM 1.9E 2600 Fb
  4. POST INSTALLED ANCHORS:
    - A.) ALTERNATE ANCHORS SHALL BE SUBMITTED FOR APPROVAL BY THE ENGINEER.
    - B.) ADHESIVE:
      - 1.) HILTI HIT-HY 200 FOR CONCRETE
      - 2.) HILTI HIT-HY 70 FOR MASONRY
    - C.) THREADED RODS:
      - 1.) HILTI HAS-E
      - 2.) HILTI HIT-Z
      - 3.) ASTM A193, GRADE B7
      - 4.) ASTM F1554, GRADE 55
    - D.) MECHANICAL ANCHORS:
      - 1.) HILTI KWIK BOLT-TZ
      - 2.) HILTI KWIK BOLT HUS-EZ
      - 3.) HILTI HDA UNDERCUT ANCHOR
    - E.) ALL ANCHORS SHALL BE GALVANIZED

**SPECIAL NOTES:**

1. WHERE DISCREPANCY MAY OCCUR BETWEEN THE DRAWINGS AND A GENERAL NOTE OR TYPICAL DETAIL THE DRAWINGS SHALL PREVAIL.
2. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AFTER THE BUILDING IS COMPLETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCES TO ENSURE STABILITY AND SAFETY DURING CONSTRUCTION. THIS INCLUDES BUT IS NOT LIMITED TO, THE ADDITION OF SHEETING, SHORING, TEMPORARY BRACING, GUYS, AND TIE-DOWNS. THE CONTRACTOR SHALL PROVIDE SHORING AND BRACING NECESSARY TO PROTECT EXISTING AND ADJACENT STRUCTURES.
3. STRUCTURAL DOCUMENTS SHALL BE USED WITH OTHER CONSTRUCTION DOCUMENTS, INCLUDING ARCHITECTURAL, M.E.P., AND SITE DOCUMENTS. COORDINATE WITH THESE DOCUMENTS, ALL FLOOR AND ROOF OPENINGS, DEPRESSIONS, AND SLOPES, ETC. ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT / ENGINEER.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LIMITING CONSTRUCTION LOADS SUCH THAT THESE LOADS DO NOT EXCEED THE DESIGN LIVE LOADS NOTED ABOVE. THE CONTRACTOR SHALL PROVIDE TEMPORARY SHORING AS REQUIRED DURING CONSTRUCTION TO SUPPORT CONSTRUCTION LOADS UNTIL SUCH TIME THAT THE STRUCTURE IS ABLE TO SUPPORT THE DESIGN LIVE LOADS NOTED.

**EXISTING CONDITIONS:**

1. VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS AND CONDITIONS BEFORE PROCEEDING WITH NEW CONSTRUCTION. NOTIFY THE ARCHITECT / ENGINEER OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK IN THE AREA UNDER QUESTION.
2. PREVENT UNDERMINING OF EXISTING ROADWAYS AND THE FOUNDATIONS OF EXISTING STRUCTURES. TAKE PROTECTIVE MEASURES TO PREVENT DAMAGE TO THE EXISTING FACILITIES. DO NOT EXCAVATE BELOW THE BOTTOM OF EXISTING FOUNDATION WITHOUT FIRST UNDERPINNING THEM.

**COORDINATE WITH OTHER TRADES:**

1. THE GENERAL CONTRACTOR SHALL COORDINATE AND CHECK ALL DIMENSIONS RELATING TO ARCHITECTURAL FINISHES, MECHANICAL OPENINGS, EQUIPMENT, ETC. THE ARCHITECT / ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK IN THE AREA UNDER QUESTION.
2. THERE SHALL BE NO VERTICAL OR HORIZONTAL SLEEVES SET, OR HOLES CUT OR DRILLED IN ANY JOIST, BEAM OR COLUMN UNLESS IT IS SHOWN ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE ARCHITECT / ENGINEER IN WRITING.
3. MECHANICAL OPENINGS THROUGH CONCRETE SLABS AND WALLS LARGER THAN 8" IN DIAMETER, NOT SHOWN ON THE STRUCTURAL DRAWINGS, MUST BE APPROVED BY THE ARCHITECT / ENGINEER. ALL OPENINGS 8" IN DIAMETER OR LESS SHALL HAVE AT LEAST 1'-0" CLEAR BETWEEN THE OPENINGS UNLESS APPROVED BY THE ARCHITECT / ENGINEER.
4. DO NOT INSTALL ELECTRICAL CONDUIT IN ELEVATED SLABS, OR SLAB-ON-GRADE UNLESS APPROVED BY THE ENGINEER.

**FOUNDATIONS AND EARTHWORK:**

1. PREPARE ALL AREAS OF THE SITE SUPPORTING STRUCTURE BY REMOVING ALL TOP SOIL, EXISTING FILL, ORGANIC MATERIAL, OR FROZEN WET, SOFT, LOOSE OR OTHERWISE UNSUITABLE MATERIALS.
2. PROOF ROLL THE EXPOSED SUB-GRADE BELOW DRIVES, WALLS, AND BUILDING FLOOR SLABS WITH A MEDIUM WEIGHT ROLLER TO DETERMINE IF ANY POCKETS OF SOFT, UNSUITABLE MATERIAL EXIST BENEATH THE EXPOSED SUB-GRADE. REMOVE ANY UNSUITABLE MATERIAL ENCOUNTERED AND REPLACE WITH PROPERLY COMPACTED GRANULAR FILL MATERIAL. COMPACT SUB-GRADE TO 95% MODIFIED MAXIMUM DRY DENSITY (ASTM D1557).
3. COMPACT ALL GRANULAR FILL BENEATH SLAB-ON-GRADE, SIDEWALKS, AND PAVEMENT, OR OVER FOOTINGS TO 95% MODIFIED MAXIMUM DRY DENSITY (ASTM D1557). INCREASE THE COMPACTION REQUIREMENTS FOR ENGINEERED FILL SUPPORTING FOOTINGS TO 97% MODIFIED MAXIMUM DRY DENSITY (ASTM D1557). COMPACT ALL BACKFILL NOT SUPPORTING SLAB, PAVEMENT OR FOOTING TO 90% MODIFIED MAXIMUM DRY DENSITY (ASTM D1557). PLACEMENT, COMPACTION, AND MATERIAL USED FOR FILL SHALL BE APPROVED AND OVERSEEN BY THE TESTING AGENCY.
4. PLACE ALL FILL MATERIALS IN LAYERS NOT EXCEEDING 6" IN LOOSE THICKNESS AND NOT MORE THAN 4" IN LOOSE THICKNESS FOR MATERIAL COMPACTED BY HAND OPERATED TAMPERS. MECHANICALLY COMPACT EACH LAYER TO AT LEAST THE REQUIRED MINIMUM DRY DENSITY. FIELD DENSITY TESTS WILL BE PERFORMED ON EACH LIFT AS REQUIRED TO ENSURE ADEQUATE MOISTURE LEVELS AND COMPACTION ARE ACHIEVED. PLACEMENT, COMPACTION, AND MATERIAL USED FOR FILL SHALL BE APPROVED AND OVERSEEN BY THE TESTING AGENCY.
5. SEE PROJECT SPECIFICATIONS AND SOILS REPORT FOR ADDITIONAL REQUIREMENTS FOR PLACEMENT AND COMPACTION OF FILL MATERIAL.
6. FOOTINGS SHALL BEAR ON FIRM, UNDISTURBED MATERIAL. IF UNSUITABLE MATERIAL IS ENCOUNTERED, RE-ESTABLISH THE BEARING ELEVATION OF THE FOOTING BY LOCALIZED UNDER-CUTTING AND FILLING WITH SUITABLE ENGINEERED FILL OR CONCRETE AS RECOMMENDED BY THE TESTING AGENCY.
7. A TESTING AGENCY SHALL VERIFY THAT THE SOIL BEARING CAPACITY IS ACCEPTABLE AT EACH COLUMN FOOTING AND AT 8'-0" INTERVALS ALONG WALL FOOTINGS AT THE INDICATED BEARING ELEVATIONS.
8. PLACE FOOTINGS THE SAME DAY EXCAVATIONS ARE OPENED. IF THIS IS NOT POSSIBLE, ADEQUATELY PROTECT THE EXPOSED MATERIAL IN THE BASES OF THE FOOTING EXCAVATIONS FROM ANY DETRIMENTAL CHANGE IN CONDITION SUCH AS FROM DISTURBANCE, RAIN, OR FREEZING. SURFACE RUNOFF SHALL NOT BE ALLOWED TO ENTER EXCAVATIONS.
9. PLACE ALL FOOTINGS IN WOOD FORMS (UNLESS SPECIFIC APPROVAL IS RECEIVED FROM THE ENGINEER OF RECORD).
10. CENTER ALL COLUMN AND WALL FOOTINGS UNDER THE COLUMN OR WALL ABOVE UNLESS OTHERWISE INDICATED.
11. TOP AND BOTTOM SUPPORTING SLABS FOR ALL CONCRETE WALLS RETAINING EARTH MUST BE PLACED AND HAVE REACHED 70% OF THEIR REQUIRED 28-DAY COMPRESSIVE STRENGTH BEFORE BACKFILLING OPERATIONS BEGIN.
12. ALL CONCRETE WALLS RETAINING EARTH MUST HAVE REACHED 70% OF THE REQUIRED 28-DAY COMPRESSIVE STRENGTH BEFORE BACKFILLING OPERATIONS BEGIN.
13. ALL BACKFILL PLACED AGAINST CONCRETE WALLS SHALL BE GRANULAR FILL MATERIAL.
14. PLACE SLAB-ON-GRADE ON 6" OF PROPERLY COMPACTED, GRANULAR FILL MATERIAL (U.O.N.).
15. ENGINEERED FILL SHALL BE CLEAN, WELL GRADED AND FREE DRAINING IN ITS COMPACTED STATE. THE MATERIAL SHALL BE APPROVED BY THE TESTING AGENCY. IN LIEU OF TESTING AGENCY RECOMMENDATIONS, PROVIDE ONE OF THE FOLLOWING MATERIALS FOR ENGINEERED FILL:
  - A.) CLASS 'A' CONCRETE.
  - B.) CERTIFIED "B" BORROW FROM AN APPROVED INDIANA DEPARTMENT OF TRANSPORTATION SOURCE.
  - C.) CERTIFIED TYPE 2 STRUCTURE BACKFILL FROM AN APPROVED INDIANA DEPARTMENT OF TRANSPORTATION SOURCE.
16. GRANULAR FILL SHALL BE CRUSHED STONE OR PIT RUN GRAVEL. MATERIAL MUST HAVE 100% PASSING A 1" SIEVE AND A MAXIMUM OF 5% PASSING THE 200 SIEVE. SEE PROJECT SOILS REPORT FOR ADDITIONAL OPTIONS AND REQUIREMENTS FOR GRANULAR FILL MATERIAL PLACED BELOW THE BUILDING SLAB-ON-GRADE.
17. IF CONSTRUCTION OCCURS WITH THE COOLER, WETTER MONTHS, IT SHOULD BE ANTICIPATED THAT A COMBINATION OF SOIL AND SEASONAL WEATHER CONDITIONS WILL BE PRESENT DURING CONSTRUCTION THAT WILL RESULT IN SUB-GRADE THAT IS EXCESSIVELY WET, SOFT OR YIELDING. THIS CONDITION MAY BE MITIGATED BY SCARIFYING AND DRYING, OR USING CHEMICAL STABILIZATION (WITH A SUITABLE LIME BY-PRODUCT).
  - A.) THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING WHETHER OR NOT TO EMPLOY SOIL STABILIZATION MEASURES, AND IF SO, FOR DETERMINING WHICH MEASURES ARE MOST APPROPRIATE FOR THIS PROJECT.
  - B.) THE COST OF ANY STABILIZATION MEASURES IS THE RESPONSIBILITY OF THE CONTRACTOR.
18. POSITIVE DRAINAGE OF SURFACE WATER, INCLUDING EXISTING AND NEW BUILDING DOWNSPOUT DISCHARGE, SHOULD BE MAINTAINED AWAY FROM STRUCTURE FOUNDATIONS TO AVOID WETTING AND WEAKENING OF FOUNDATION SOILS BOTH DURING CONSTRUCTION AND AFTER CONSTRUCTION IS COMPLETE. THE CONTRACTOR IS RESPONSIBLE FOR THE IMPLEMENTATION OF ANY APPROPRIATE DEWATERING NEEDED.

**POST INSTALLED ANCHORS:**

1. INSTALLERS OF DRILLED IN ADHESIVE ANCHORS SHALL BE CERTIFIED BY AN ACI OR CRSI ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM OR SHALL BE TRAINED ON SITE BY THE ADHESIVE ANCHOR MANUFACTURER SPECIFICALLY FOR THE PROJECT.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ANCHOR LOCATIONS AT ALL MASONRY WALLS. MASONRY WALLS SHALL BE GROUTED SOLID AT ALL ANCHOR LOCATIONS FOR A MINIMUM OF 12" IN ALL DIRECTIONS FROM ANCHOR CENTERLINE.
3. ALL ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE ANCHOR MANUFACTURERS SPECIFICATIONS.
4. UNLESS OTHERWISE NOTED ALL ANCHORS SHALL HAVE STANDARD EMBEDMENT DEPTH AS DEFINED BY THE ANCHOR MANUFACTURER.
5. WHERE ANCHORS ARE TO BE INSTALLED INTO EXISTING MASONRY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD TESTING THE ANCHORS PRIOR TO THE FABRICATION OF ANY MATERIALS TO VERIFY THAT THE ALLOWABLE LOADS AS PUBLISHED BY THE ANCHOR MANUFACTURER, OR THOSE INDICATED ON THE STRUCTURAL DRAWINGS, ARE OBTAINABLE. THE CONTRACTOR SHALL SUBMIT RESULTS OF THESE TESTS TO THE ENGINEER FOR REVIEW AND APPROVAL. THE ANCHOR SIZES AND SPACINGS AS SHOWN IN THESE DOCUMENTS ARE SUBJECT TO CHANGE BASED ON THE RESULTS OF THE FIELD TESTS.

**WOOD TRUSSES:**

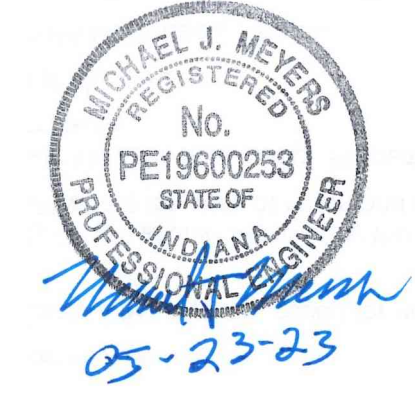
1. PREFABRICATED PANELS SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF THE TIMBER CONSTRUCTION MANUAL BY THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC), THE NATIONAL SPECIFICATION FOR WOOD CONSTRUCTION BY THE (AWC) AND IN ACCORDANCE WITH THE LATEST CRITERIA ESTABLISHED BY THE TRUSS PLATE INSTITUTE (TPI).
2. TEMPORARY BRACING OF WOOD TRUSSES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF RECOMMENDED DESIGN SPECIFICATION FOR TEMPORARY BRACING OF METAL PLATE CONNECTED WOOD TRUSSES BY THE TPI.
3. TRUSSES SHALL CONFORM TO THE GEOMETRY SHOWN. WEB MEMBER SIZE AND CONFIGURATION SHALL BE THE OPTION OF THE FABRICATOR, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
4. THE CONTRACTOR SHALL INSTALL ALL PERMANENT TRUSS BRACING AS SHOWN ON THE TRUSS MANUFACTURER'S SHOP DRAWINGS.

**LUMBER:**

1. STRUCTURAL LUMBER SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE TIMBER CONSTRUCTION MANUAL BY THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC) AND THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION BY THE AMERICAN WOOD COUNCIL (AWC).
2. UNLESS OTHERWISE SHOWN OR NOTED, BOLTS AND LAG SCREWS IN CONNECTIONS OF WOOD MEMBERS SHALL BE MADE WITH MATERIAL CONFORMING TO ASTM A307. STANDARD CUT WASHERS SHALL BE USED BETWEEN THE WOOD AND BOLT HEAD AND THE WOOD AND NUT.
3. NAILS AN OTHER WOOD FASTENINGS, UNLESS OTHERWISE NOTED, SHALL CONFORM TO THE LATEST EDITION OF THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION BY THE (AWC).

**PLYWOOD:**

1. PLYWOOD PANELS SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST CRITERIA ESTABLISHED BY THE AMERICAN PANEL ASSOCIATION (APA) INCLUDING THEIR EDITION OF THE PLYWOOD DESIGN SPECIFICATION. PLYWOOD PANELS SHALL BE IDENTIFIED WITH THE APPROPRIATE TRADEMARK OF THE APA AND SHALL MEET REQUIREMENTS OF THE LATEST EDITION OF THE U.S. PRODUCT STANDARDS PS-1 FOR CONSTRUCTION AND INDUSTRIAL PLYWOOD.
2. ROOF PANELS SHALL BE INSTALLED WITH THE LONG DIMENSION (FACE GRAIN) ACROSS THE SUPPORTS WITH PANELS CONTINUOUS OVER TWO OR MORE SUPPORTS (MINIMUM 3-SPAN CONDITION).
3. STAGGER PANEL END JOINTS. END JOINTS SHALL ONLY OCCUR OVER A SUPPORT UNLESS RECOMMENDED OTHERWISE BY THE PANEL MANUFACTURER. PROVIDE A 1/8" GAP BETWEEN PANEL ENDS AND EDGES.



**F&W Maintenance Building - Deer Creek**  
 Deer Creek Fish & Wildlife Area  
 DEPT. OF NATURAL RESOURCES  
 2001 W County Road 600 S  
 Greencastle, IN 46135

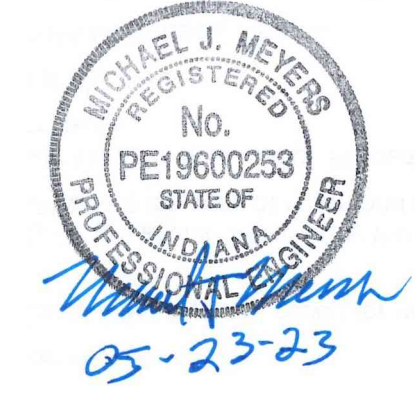


STATE OF INDIANA  
 DEPARTMENT OF NATURAL RESOURCES  
**DIVISION OF ENGINEERING**  
 ROOM W299, INDIANA GOVERNMENT CENTER SOUTH  
 402 WEST WASHINGTON STREET  
 INDIANAPOLIS, INDIANA 46204  
 TEL 317-232-4150, FAX 317-233-1205

Revisions:

Project Number: **ENG2002905497**  
 Requisition Number: **Requisition#**  
 Designer: \_\_\_\_\_ Drawing Date: **05/24/23**  
 Drafter: \_\_\_\_\_ Drawing Scale: **AS NOTED**  
 DNR Approval: \_\_\_\_\_  
 Client Approval: \_\_\_\_\_  
 File Number: **130-003**  
 Drawing Number: **S-0**  
 Sheet: **6** of **24**





Certified by:



3901 West 86th Street, Suite 200  
 Indianapolis, Indiana 46289  
 Phone: 317-334-1500  
 Fax: 317-334-1552  
 Project No. 2021-365-03

**F & W Maintenance Building - Deer Creek**  
 Deer Creek Fish & Wildlife Area  
 DEPT. OF NATURAL RESOURCES  
 2001 W County Road 600 S  
 Greencastle, IN 46135



STATE OF INDIANA  
 DEPARTMENT OF NATURAL RESOURCES  
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Designer: AS NOTED  
 Drawing Date: 05/24/23

Drafter: AS NOTED  
 Drawing Scale: AS NOTED

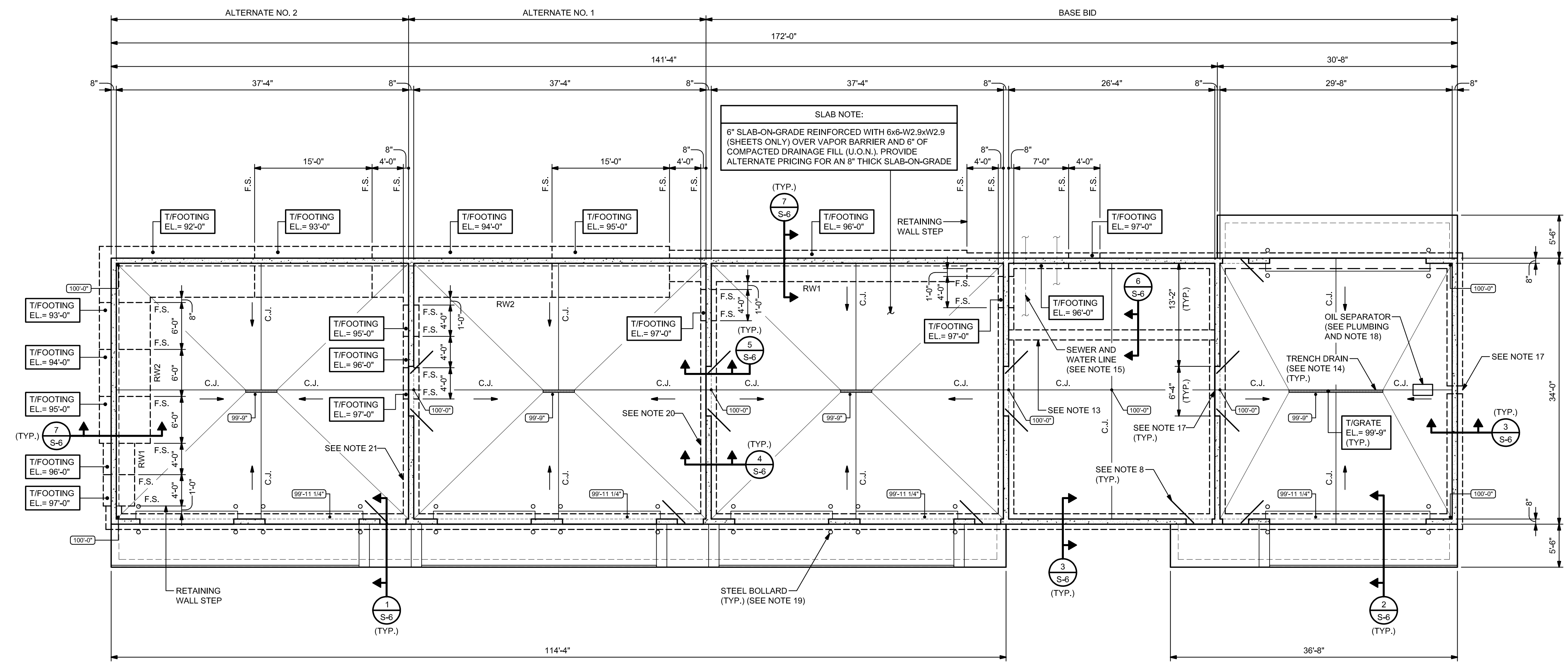
DNR Approval:

Client Approval:

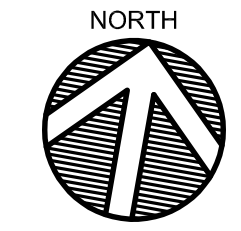
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Drawing Number:

Sheet: **S-1** of 24

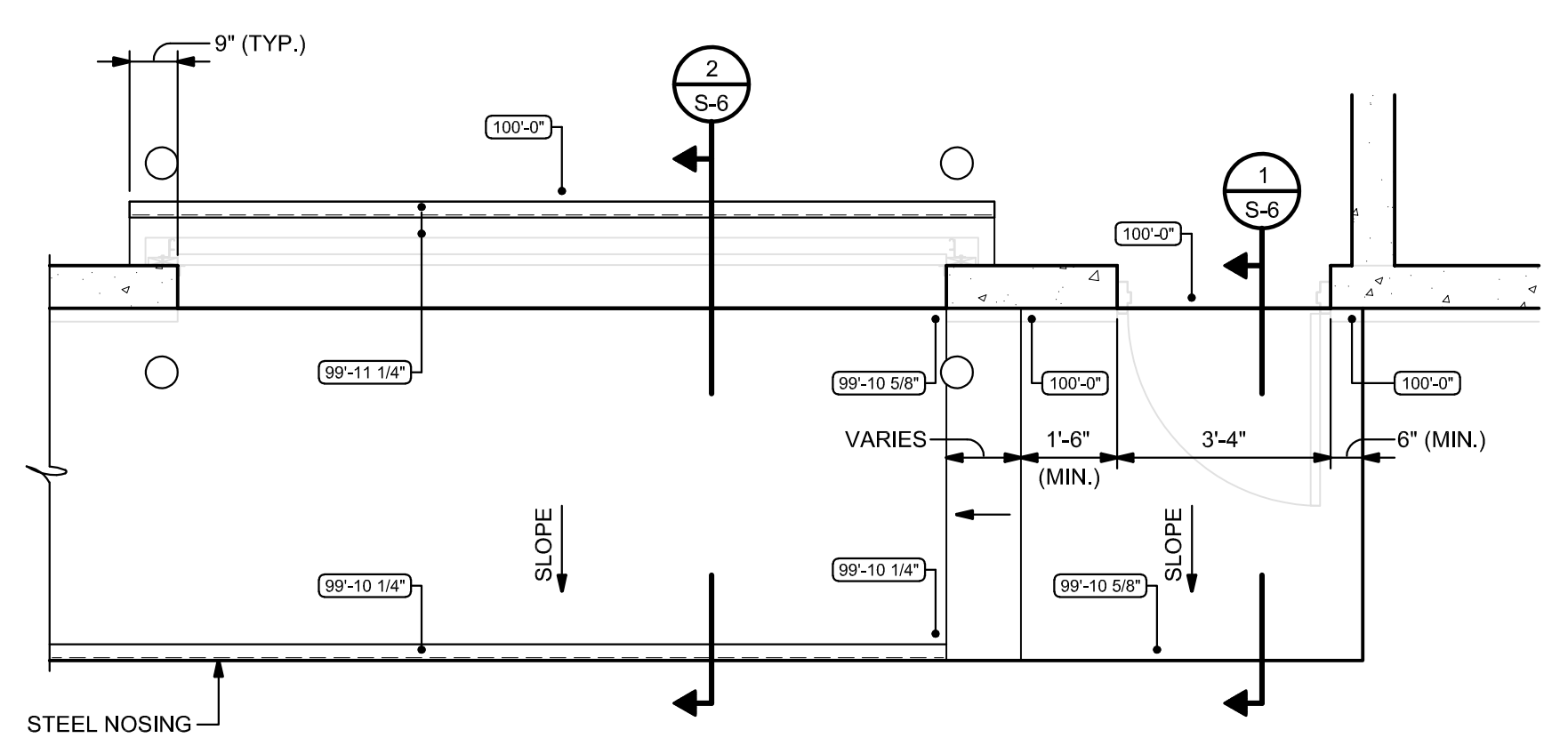


**FOUNDATION / SLAB PLAN**  
 1/8" = 1'-0"



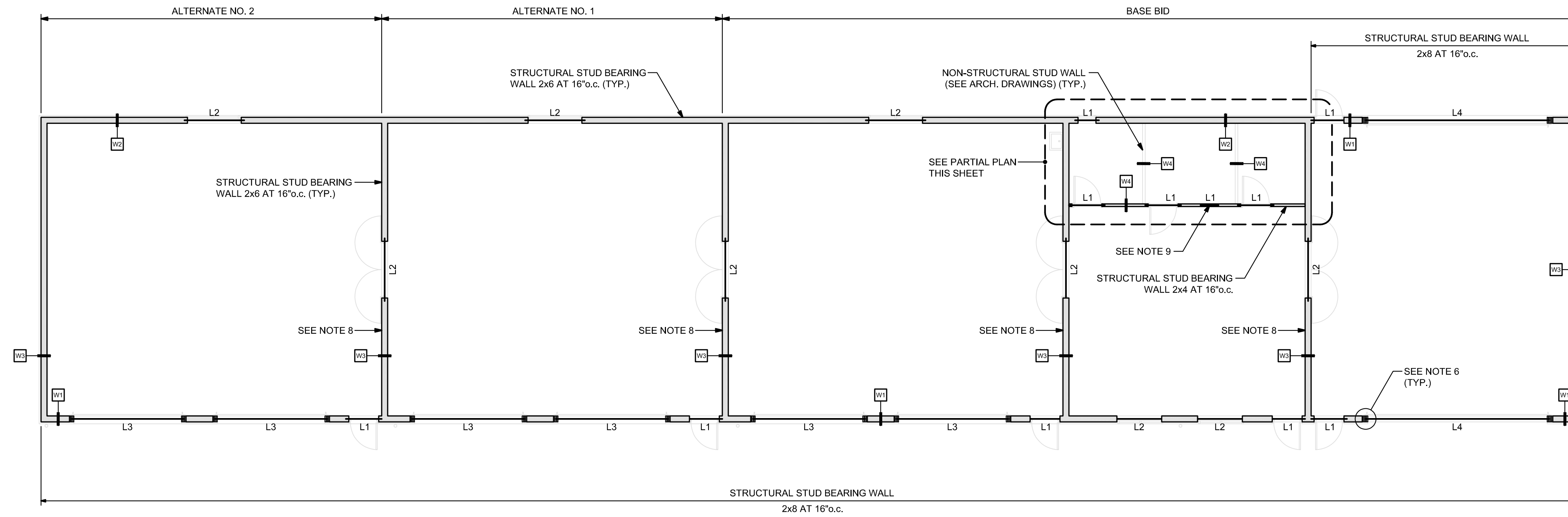
**PLAN NOTES:**

- REFERENCE FINISH FLOOR ELEVATION = 100'-0" (761.50' U.S.G.S.).
- TOP OF FOOTING (T/FOOTING) ELEVATION = 98'-0" (U.O.N.).
- TOP OF SLAB (T/SLAB) VARIES = (SEE PLAN).
- XXXXXX INDICATES TOP OF SLAB (T/SLAB) SPOT ELEVATION.
- TOP OF WALL (T/WALL) ELEVATION = 102'-0" (U.O.N.).
- REFER TO SHEET S-0 FOR GENERAL NOTES.
- REFER TO ARCHITECTURAL DRAWINGS FOR GENERAL LAYOUT, OPENING LOCATIONS, AND ADDITIONAL DETAILS.
- F.S. INDICATES FOOTING STEP. REFER TO SHEET S-4 FOR DETAIL.
- SLAB RECESS IF REQUIRED SHALL BE PER ARCHITECTURAL DRAWINGS.
- C.J. INDICATES CONTRACTION OR CONSTRUCTION JOINT. REFER TO TYPICAL DETAIL ON SHEET S-5.
- SEE TYPICAL DETAIL ON SHEET S-5 FOR SLAB BAR AT RE-ENTRANT CORNERS AND DOOR OPENINGS.
- COORDINATE LOCATION OF ALL FLOOR DRAINS, UNDER-SLAB PIPING, FLOOR BOXES AND OTHER EMBEDDED ITEMS PRIOR TO PLACING CONCRETE SLABS.
- PROVIDE THICKENED SLAB UNDER INTERIOR LOAD BEARING WALL. SEE SECTION 6 ON SHEET S-6.
- TRENCH DRAIN. SEE PLUMBING DRAWINGS.
- UNDERSLAB UTILITY THRU FOUNDATION WALL. SEE TYPICAL DETAILS ON SHEET S-4.
- RW"X" INDICATES RETAINING WALL TYPE. SEE DETAIL ON SHEET S-6.
- COORDINATE WALL FOUNDATIONS WITH UNDERSLAB SANITARY DRAIN PIPE. PROVIDE 12" GAP IN FOUNDATION WHERE PIPE INTERFERES WITH OR IS BELOW WALL FOUNDATION. SEE TYPICAL UNDERGROUND SERVICE PIPE DETAIL ON SHEET S-4 WHERE PIPE IS LOCATED ABOVE WALL FOUNDATION.
- OIL SEPARATOR SHALL HAVE TOP EXTENSIONS AND AN H-20 TRAFFIC RATED COVER. OIL SEPARATOR COVER SHALL BE FLUSH WITH SURROUNDING FLOOR SLAB.
- SEE TYPICAL PIPE BOLLARD DETAIL ON SHEET S-5. INSTALL PIPE BOLLARDS PRIOR TO POURING FLOOR SLAB AND EXTERIOR APRON.
- BASE BID:** WHERE ALTERNATES ARE SELECTED SUCH THAT INDICATED WALL IS THE BUILDING END WALL, BASE BID PRICE THE ENTIRE END WALL BEING RETAINING WALL RW1 WITH A TOP OF FOOTING ELEVATION OF 96'-0". SEE SECTION ON SHEET S-6 FOR END WALL DETAILS.
- ALTERNATE NO. 1:** WHERE ALTERNATES ARE SELECTED SUCH THAT THE INDICATED WALL IS THE BUILDING END WALL, BASE ALTERNATE BID ON THE ENTIRE END WALL BEING RETAINING WALL RW2 WITH A TOP OF FOOTING ELEVATION OF 94'-0". SEE SECTION 7 ON SHEET S-6 FOR END WALL DETAILS.



**DOOR STOOP AND APRON - PARTIAL PLAN**  
 3/8" = 1'-0"





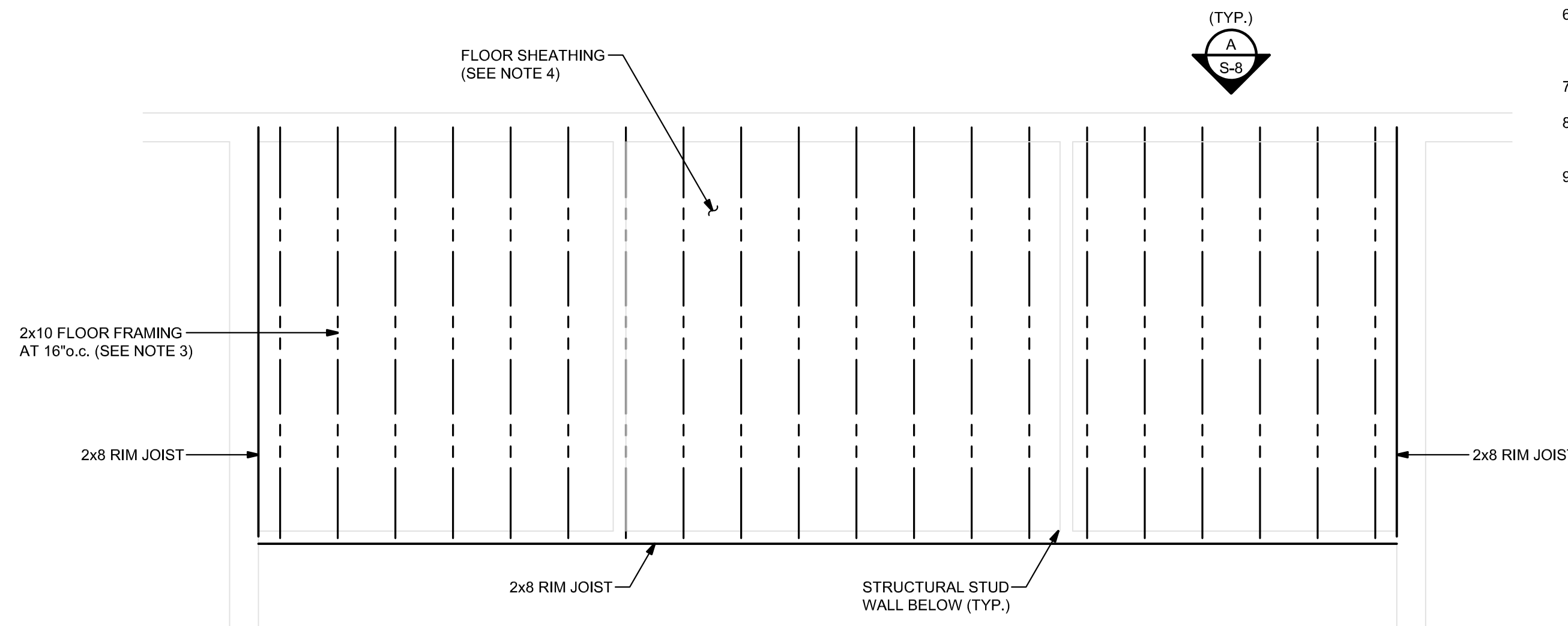
**WALL TYPE AND LINTEL PLAN**

1/8" = 1'-0"



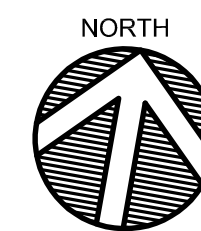
**PLAN NOTES:**

1. REFERENCE FINISH FLOOR ELEVATION = 100'-0" (761.50' U.S.G.S.).
2. BOTTOM OF LINTEL (BLINTEL) ELEVATION = VARIES (SEE PLAN).
3. REFER TO SHEET S-0 FOR GENERAL NOTES.
4. INDICATES WALL TYPE. SEE WALL SCHEDULE ON SHEET S-7.
5. L"x" INDICATES LINTEL TYPE. SEE OPENING SCHEDULE AND TYPICAL DETAILS ON SHEET S-7.
6. SEE TYPICAL WALL OPENING DETAIL AND OPENING SCHEDULE ON SHEET S-7 FOR JAMB STUD FRAMING REQUIREMENTS AT EACH SIDE OF WALL OPENINGS.
7. REFER TO ARCHITECTURAL DRAWINGS FOR OPENING LOCATIONS.
8. SEE TYPICAL SHEAR WALL CONNECTION TO ROOF TRUSS DETAILS ON SHEET S-7 FOR TOP OF WALL DETAILS.
9. PROVIDE LINTEL WHERE DUCTWORK PENETRATES WALL. COORDINATE WITH MECHANICAL INSTALLER FOR SIZE AND LOCATION.



**RESTROOM AND MECHANICAL ROOM CEILINGS - PARTIAL PLAN**

3/8" = 1'-0"

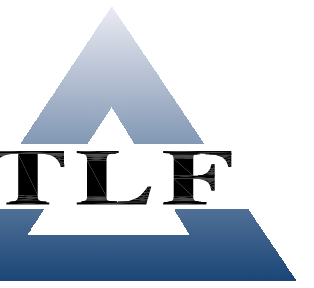


**PLAN NOTES:**

1. REFERENCE FINISH FLOOR ELEVATION = 100'-0" (448.60' U.S.G.S.).
2. TOP OF FLOOR (1/FLOOR) ELEVATION = SEE ARCHITECTURAL.
3. SEE ELEVATION A/S-8 FOR FRAMING AT EXTERIOR WALL. SEE ARCHITECTURAL DRAWINGS FOR BALANCE OF GEOMETRY.
4. FLOOR PANEL TO BE 23/32" STRUCTURAL 1 PLYWOOD TONGUE AND GROOVE SUB-FLOOR GLUED AND FASTENED TO FLOOR FRAMING WITH 10d NAILS AT 6"o.c. AT EDGES AND 12"o.c. AT INTERMEDIATE SUPPORTS. SPAN RATING NOT LESS THAN 24.
5. POST \*MAXIMUM FLOOR LOADING = 75 POUNDS PER SQUARE FOOT\*.

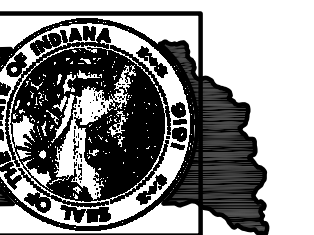


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 Project No. 2021-365-03

**F&W Maintenance Building - Deer Creek**  
 Deer Creek Fish & Wildlife Area  
 DEPT. OF NATURAL RESOURCES  
 2001 W County Road 600 S  
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STATE OF INDIANA  
 DEPARTMENT OF NATURAL RESOURCES  
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Revisions:

Project Number: ENG2002905497

Requisition Number: Requisition#

Designer: Drawing Date: 05/24/23

Drafter: Drawing Scale: AS NOTED

DNK Approval:

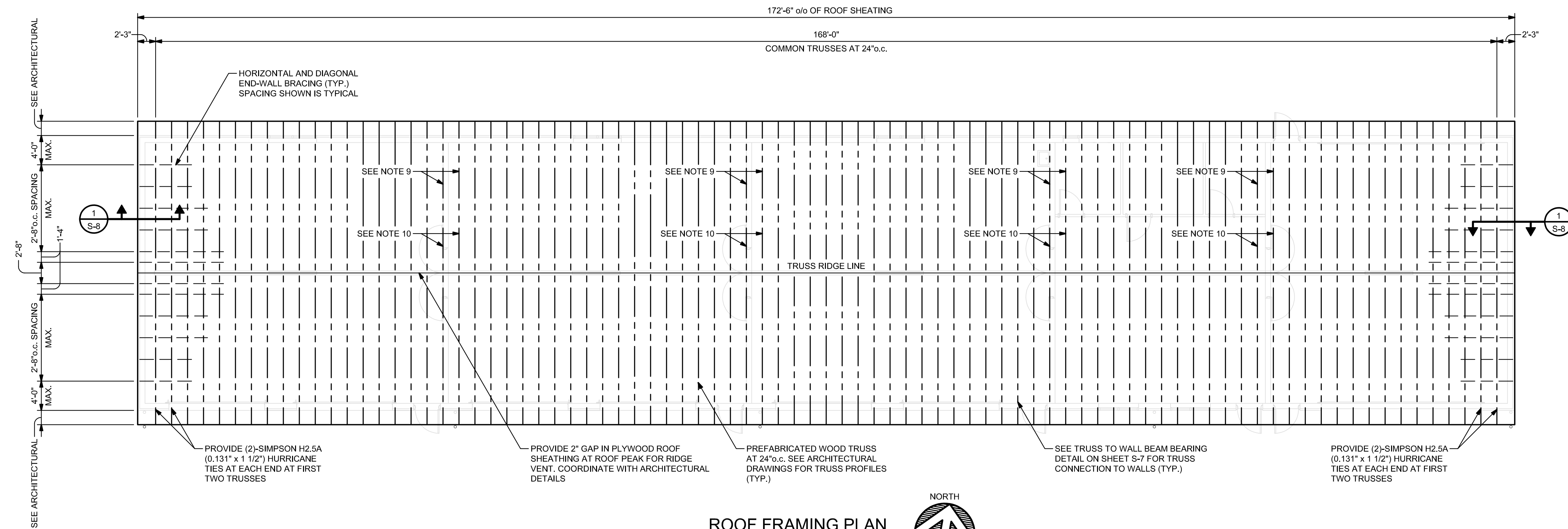
Client Approval:

File Number: 130-003

Drawing Number:

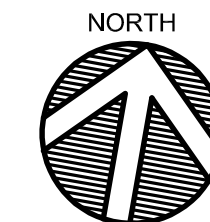
Sheet: **S-2** of 24





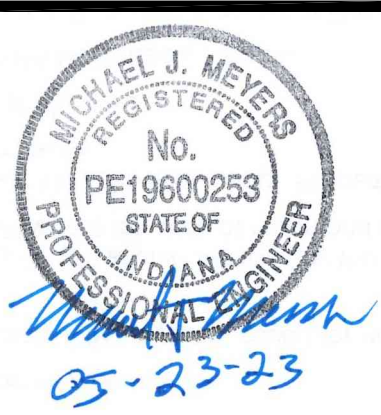
**ROOF FRAMING PLAN**

1/8" = 1'-0"

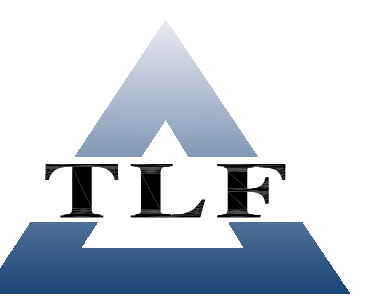


PLAN NOTES:

1. REFERENCE FINISH FLOOR ELEVATION = 100'-0" (761.50' U.S.G.S.).
2. TRUSS BEARING ELEVATION = 114'-0" (U.O.N.).
3. REFER TO SHEET S-0 FOR GENERAL NOTES.
4. REFER TO ARCHITECTURAL DRAWINGS FOR GENERAL LAYOUT, OPENING LOCATIONS, ROOF SLOPE, AND ADDITIONAL DETAILS.
5. TRUSS MANUFACTURER SHALL SUBMIT TRUSS DESIGNS AND ERECTION DRAWINGS CERTIFIED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF INDIANA.
6. ALL CLIPS AND UPLIFT FASTENERS SHALL BE INSTALLED PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
7. ROOF SHEATHING SHALL BE EXTERIOR, STRUCTURAL 1 PLYWOOD SHEATHING NOT LESS THAN 19/32" THICK WITH A SPAN RATING NOT LESS THAN 32/16 NAILED AT 6" o.c. AT EDGES AND TRUSSES INDICATED ON PLAN TO TRANSFER WIND FORCE TO SHEAR WALL AND 12" o.c. AT INTERMEDIATE SUPPORTS USING 0.131" x 2 1/2" NAILS.
8. ROOF PANELS SHALL BE INSTALLED WITH THE LONG DIMENSION ACROSS THE SUPPORTS AND WITH STAGGERED END JOINTS.
9. DESIGN TRUSSES WHERE INDICATED TO TRANSFER 475 PLF OF HORIZONTAL WIND LOAD FROM THE ROOF DECK DOWN TO THE SHEAR WALL BELOW. SEE TYPICAL SHEAR WALL CONNECTION TO ROOF WITH TRUSS PARALLEL DETAIL ON SHEET S-7.
10. DESIGN TRUSSES WHERE INDICATED FOR ADDITIONAL DEAD LOAD OF 3PSF OF TRUSS AREA FOR ADDITION OF GYPSUM BOARD ON SIDE OF TRUSS. SEE ARCHITECTURAL DETAILS.



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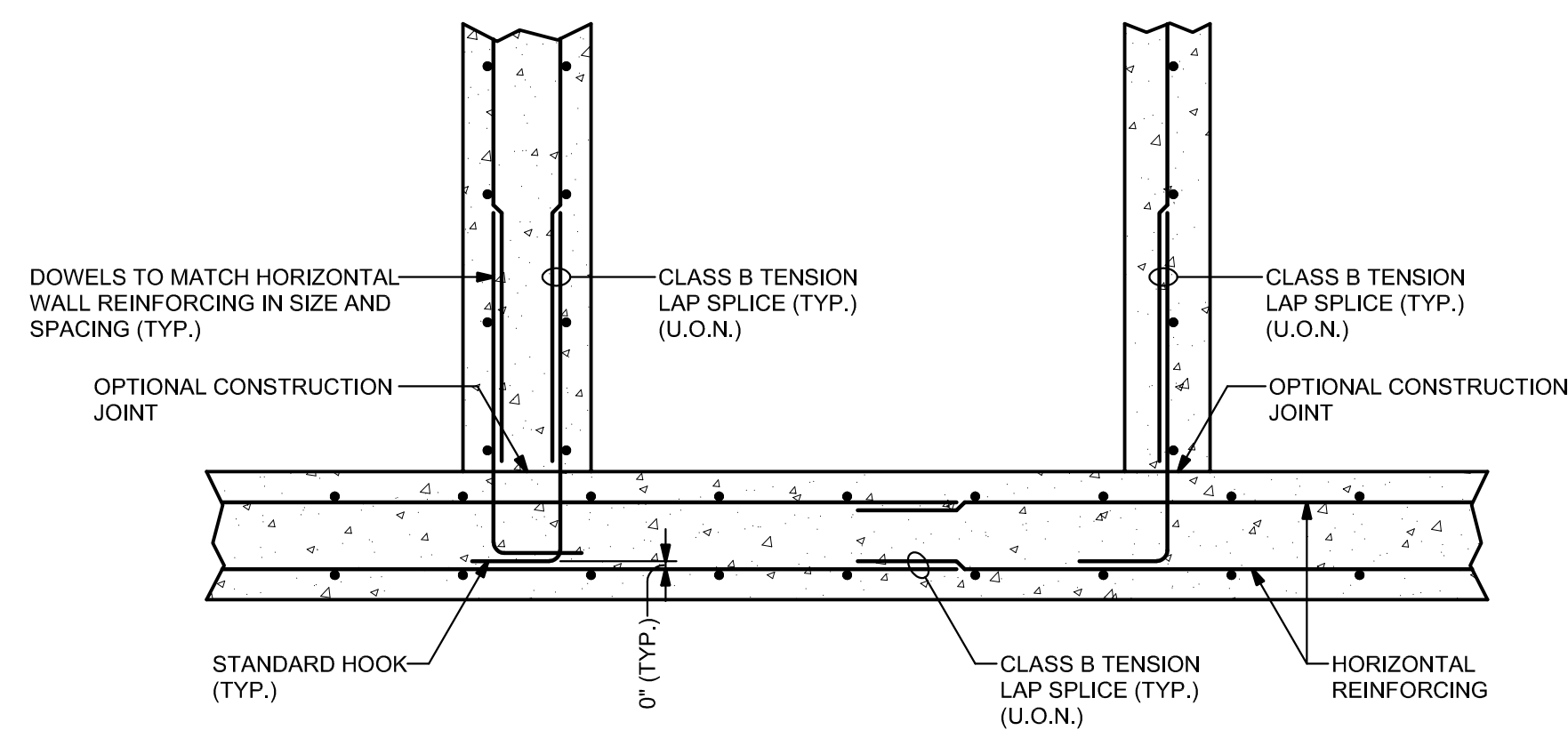
DNR Approval:

Client Approval:

File Number:  
**130-003**

Drawing Number:  
**S-3**  
 Sheet: **9** of **24**





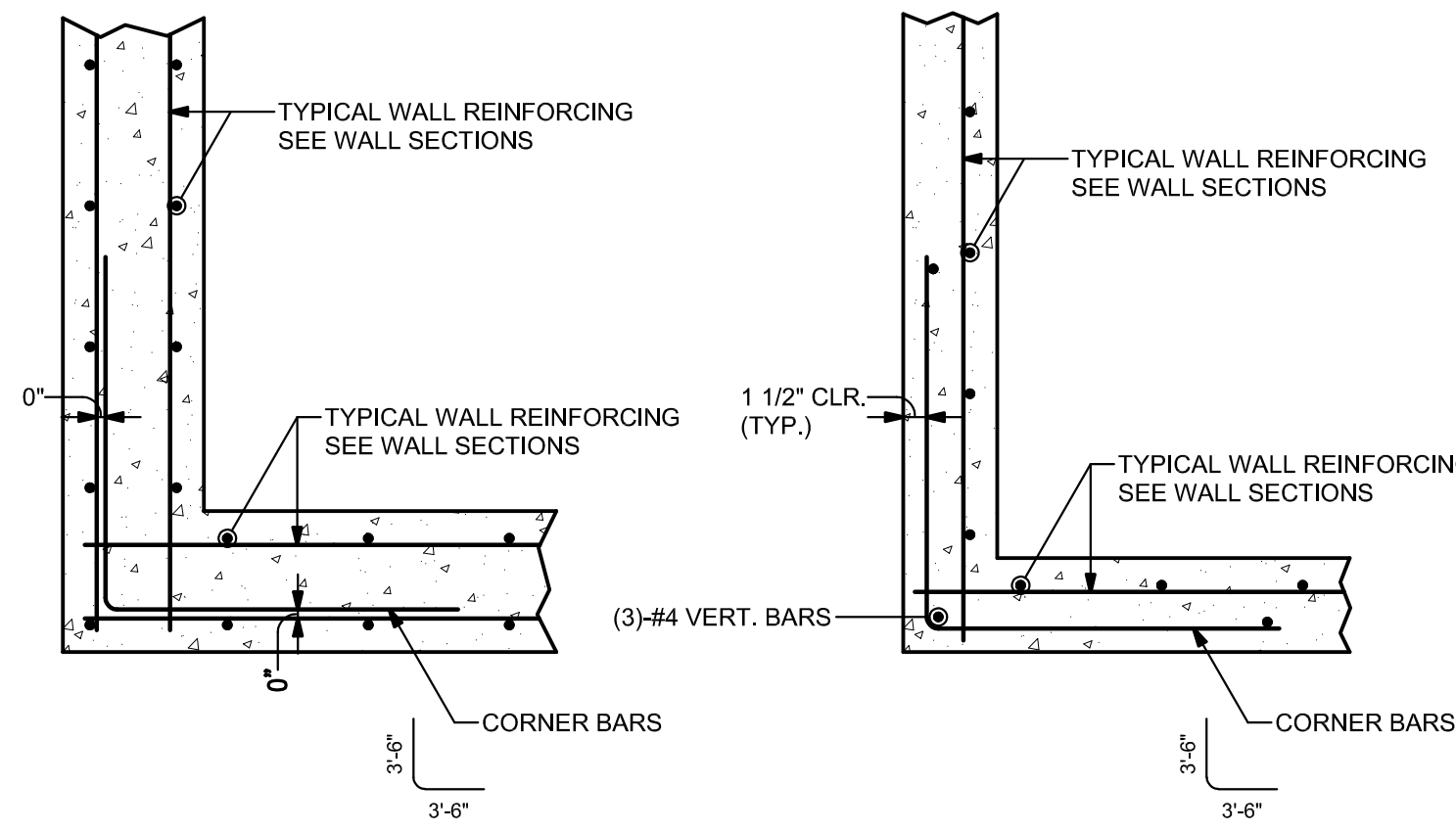
**WALL REINFORCING**  
(BOTH FACES)

**WALL REINFORCING**  
(MIDDLE)

**NOTES:**

1. SEE WALL SECTIONS FOR TYPICAL WALL REINFORCING (SIZE AND SPACING).
2. SEE GENERAL NOTES AND WALL SECTIONS FOR REINFORCING STEEL CLEARANCES.

**TYPICAL REINFORCEMENT AT WALL INTERSECTION - PLAN VIEW**



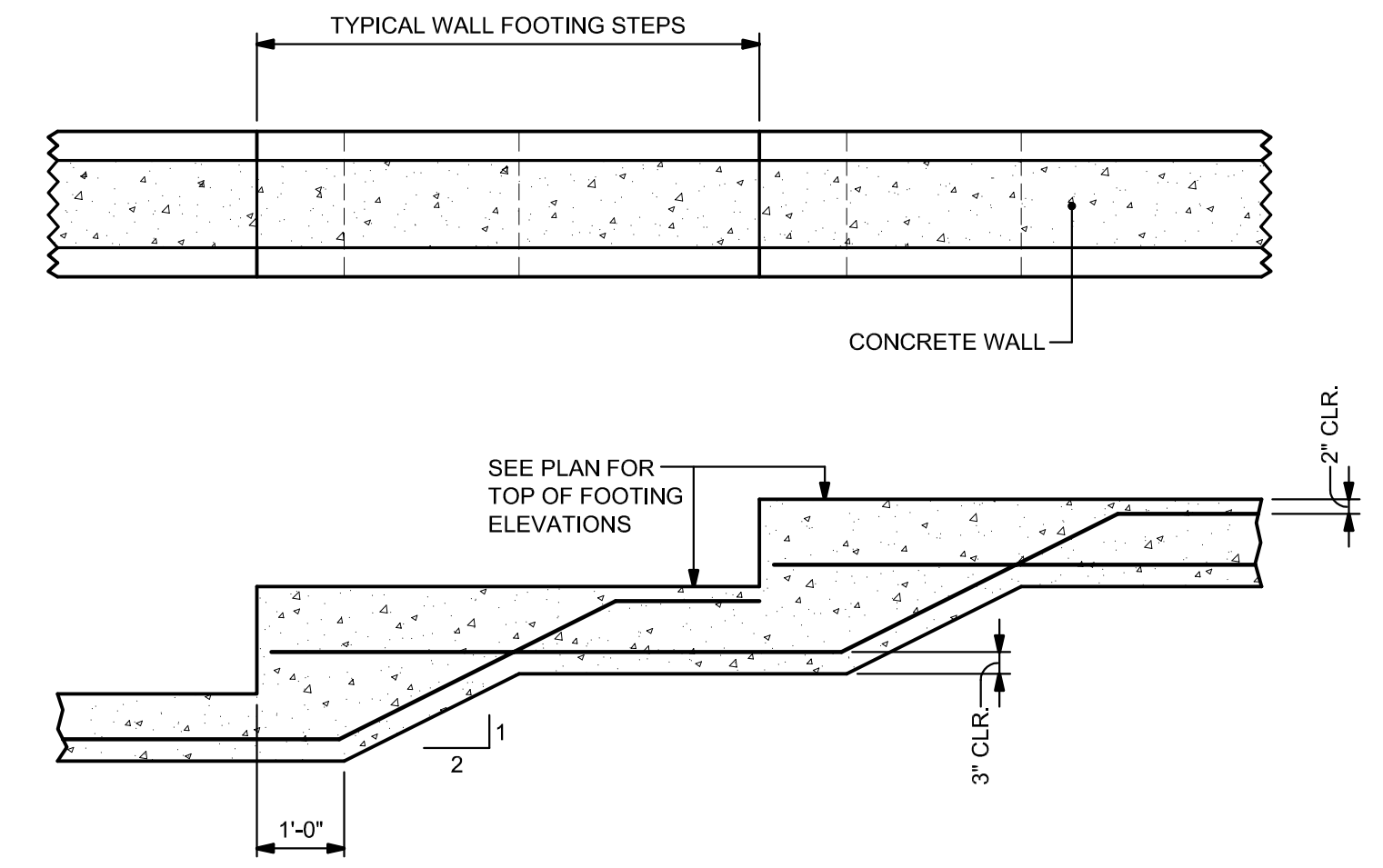
**WALL REINFORCING**  
(BOTH FACES)

**WALL REINFORCING**  
(MIDDLE OR INSIDE FACE)

**NOTES:**

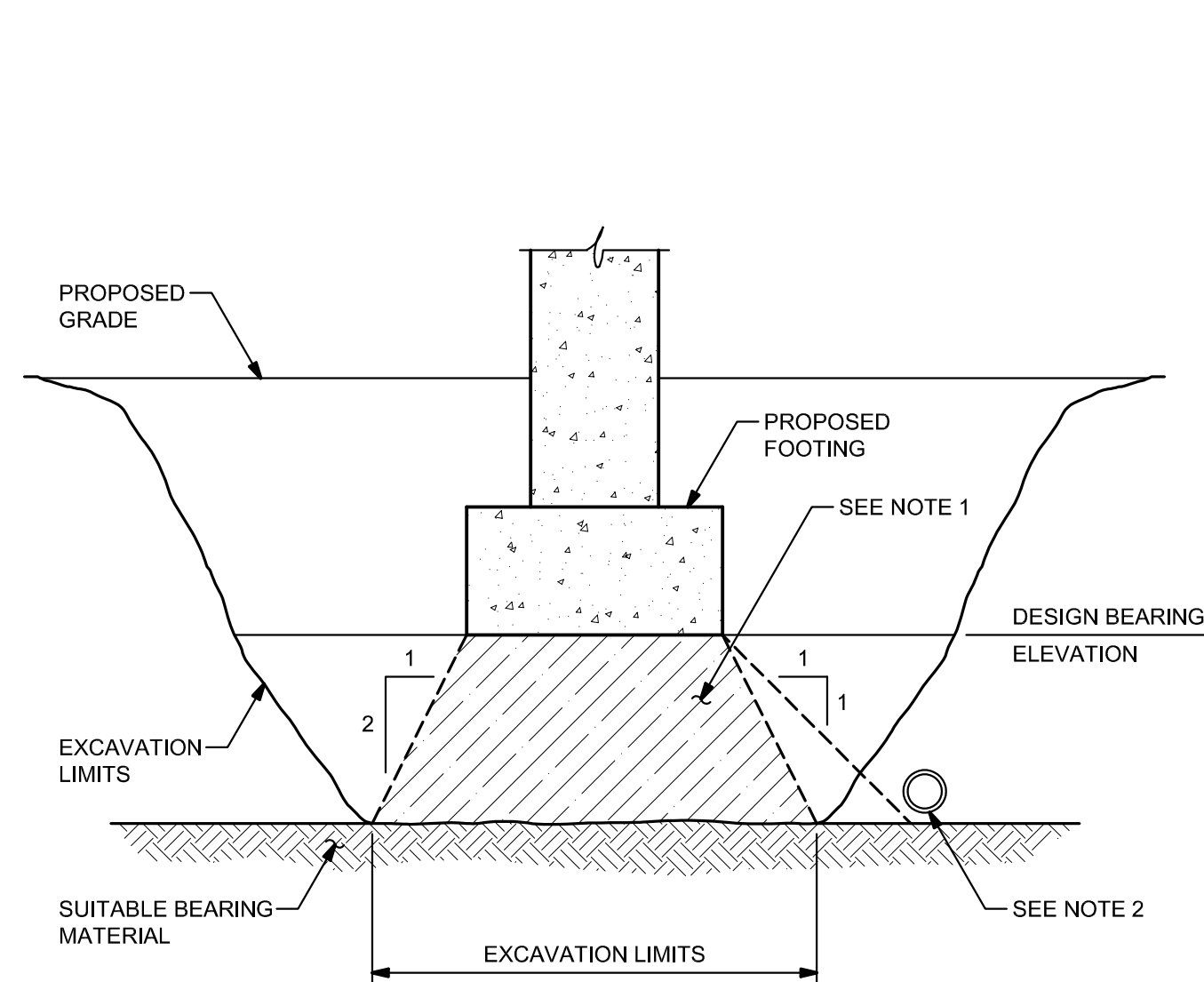
1. PROVIDE CORNER BARS AS SHOWN, MATCH HORIZONTAL WALL REINFORCING (SIZE AND SPACING).
2. TERMINATE HORIZONTAL WALL REINFORCING 1 1/2" CLEAR FROM END OF WALL (TYP.) (U.O.N.).

**TYPICAL CORNER REINFORCEMENT FOR WALLS - PLAN VIEW**



**ELEVATION**

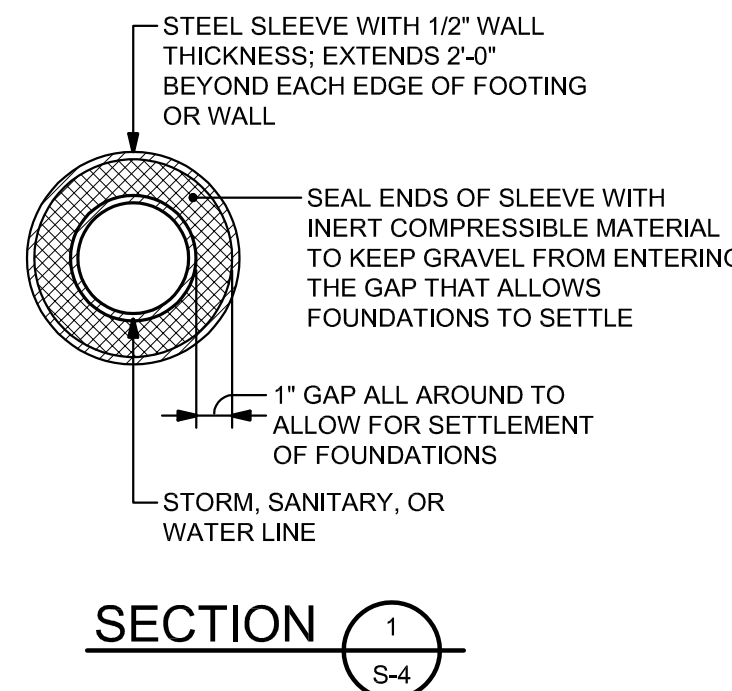
**TYPICAL WALL FOOTING STEP DETAIL**



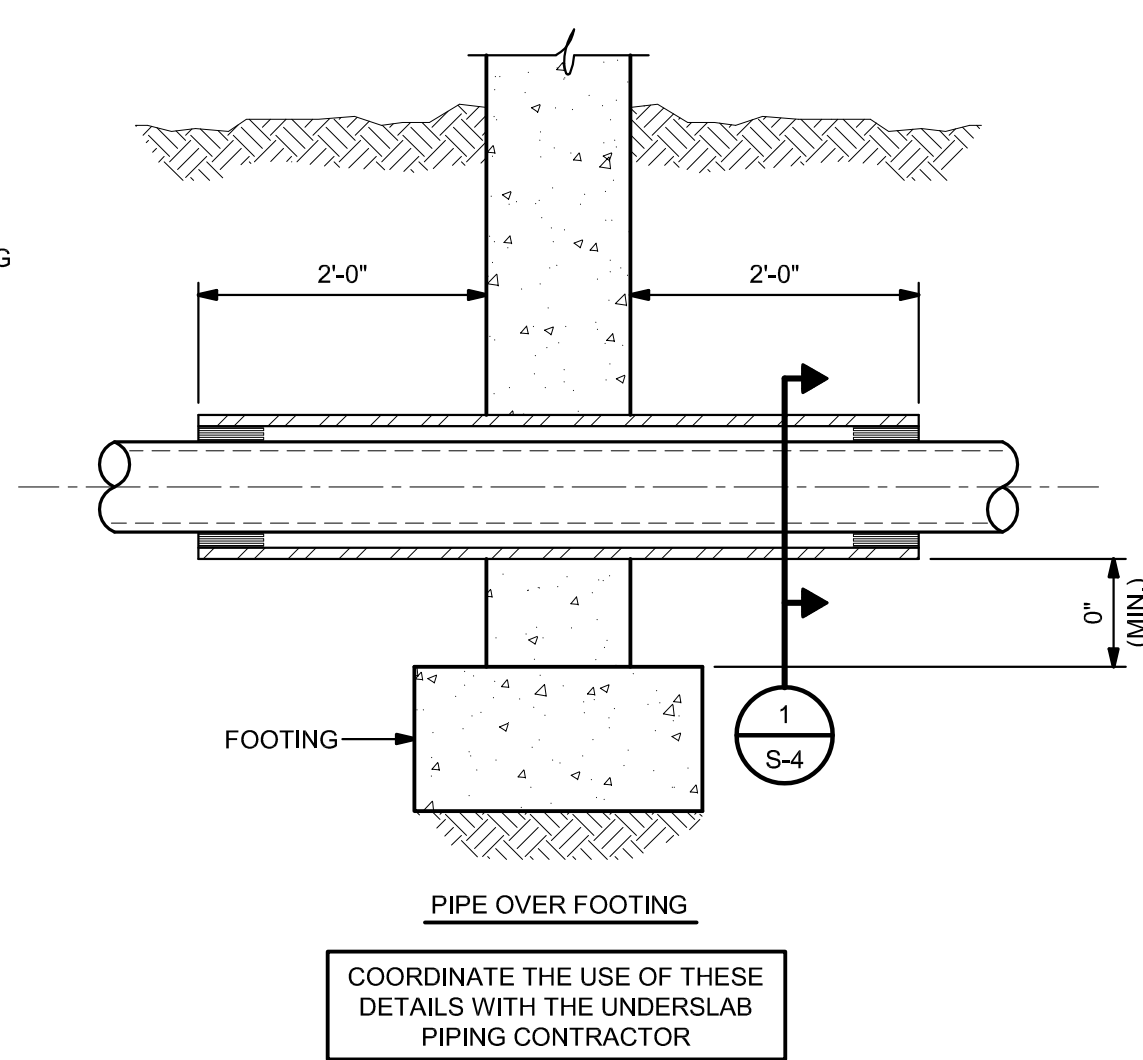
**NOTE:**

1. BACKFILL BELOW FOOTINGS WITH FLOWABLE FILL, CLASS 'A' CONCRETE, OR COMPACTED ENGINEERED FILL THAT HAS BEEN APPROVED BY THE GEOTECHNICAL ENGINEER. SEE PROJECT SPECIFICATIONS AND GENERAL NOTES.
2. ALL NEW AND EXISTING UTILITIES SHALL BE OUTSIDE OF 1:1 ZONE OF INFLUENCE BELOW ALL NEW OR EXISTING FOUNDATIONS. INCREASE ZONE OF INFLUENCE TO 1 1/2 HORIZONTAL TO 1 VERTICAL IN GRANULAR SOILS INCLUDING SAND AND GRAVEL AND IN SUBMERGED SOILS OR SOILS SATURATED WITH GROUND WATER.

**TYPICAL UNDERCUTTING DETAIL**



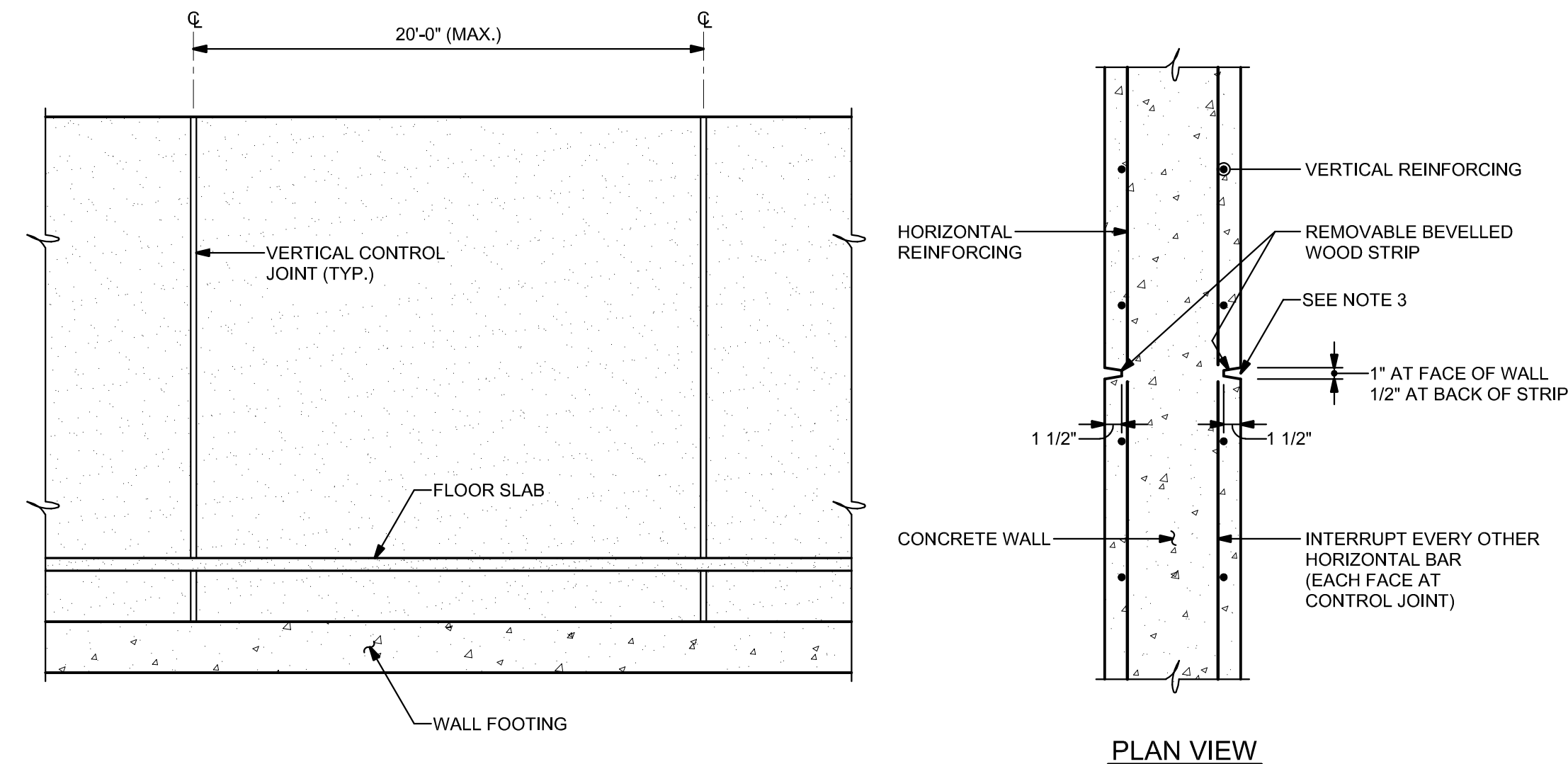
**SECTION S-4**



**NOTES:**

1. DO NOT LOCATE SERVICE PIPE TRANSITIONS AT COLUMN FOUNDATIONS.
2. SERVICE PIPE TRANSITIONS SHALL BE PERPENDICULAR TO WALL FOUNDATIONS.
3. DO NOT INTERRUPT WALL FOOTINGS AT SERVICE PIPES. STEP WALL FOOTINGS DOWN TO BE BELOW SERVICE PIPES IF AN ELEVATION CONFLICT EXISTS.
4. PIPE SLEEVE EXTENSIONS MAY BE REDUCED IF THE PIPE TURNS VERTICALLY TO RUN UP THE FACE OF THE WALL. IN THIS CASE THE PIPE SLEEVE SHOULD BE TERMINATED AS CLOSE TO THE PIPE ELBOW AS POSSIBLE.

**TYPICAL UNDERGROUND SERVICE PIPE DETAIL AT WALL FOUNDATIONS**

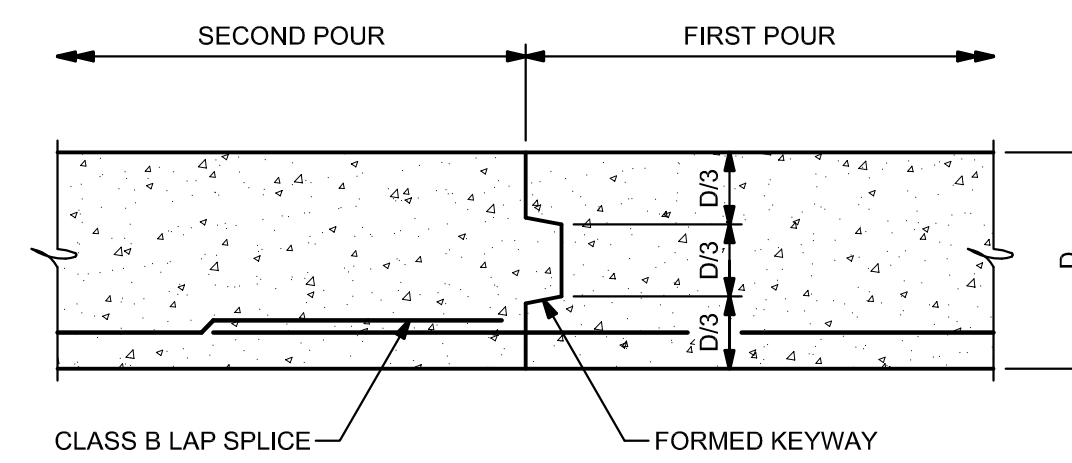


**PLAN VIEW**

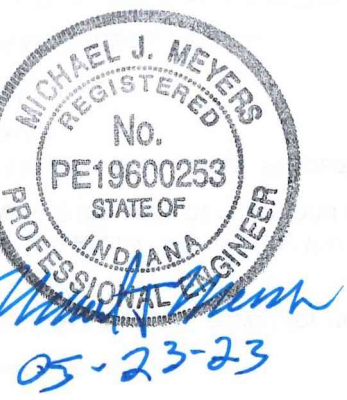
**NOTES:**

1. VERTICAL CONSTRUCTION JOINTS MUST BE LOCATED AT VERTICAL CONTROL JOINTS.
2. CONSTRUCTION JOINTS MUST HAVE THE APPEARANCE OF A CONTROL JOINT. (I.E. BEVELLED JOINT)
3. SEAL ALL CONTROL JOINTS LOCATED ON THE EXPOSED FACE.

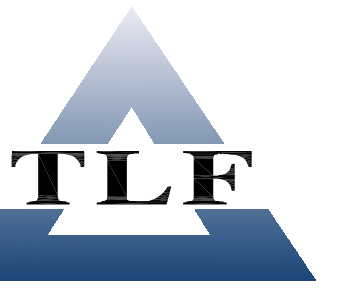
**VERTICAL CONTROL JOINT IN WALL (V.C.J.)**



**TYPICAL WALL FOOTING CONSTRUCTION JOINT**



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Revisions:

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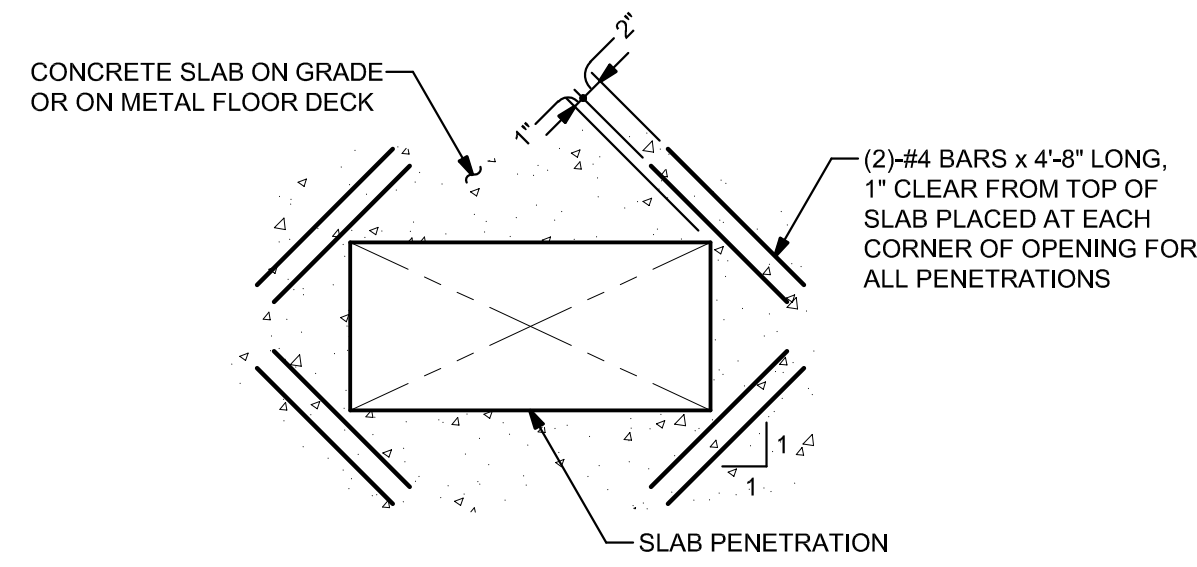
DNR Approval:

Client Approval:

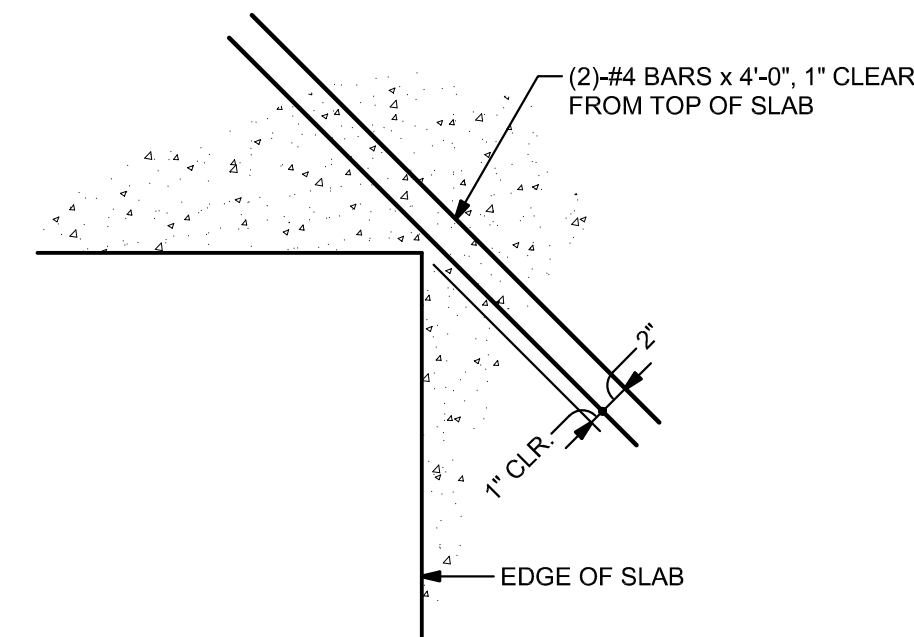
File Number: 130-003

Drawing Number: S-4  
Sheet: 10 of 24

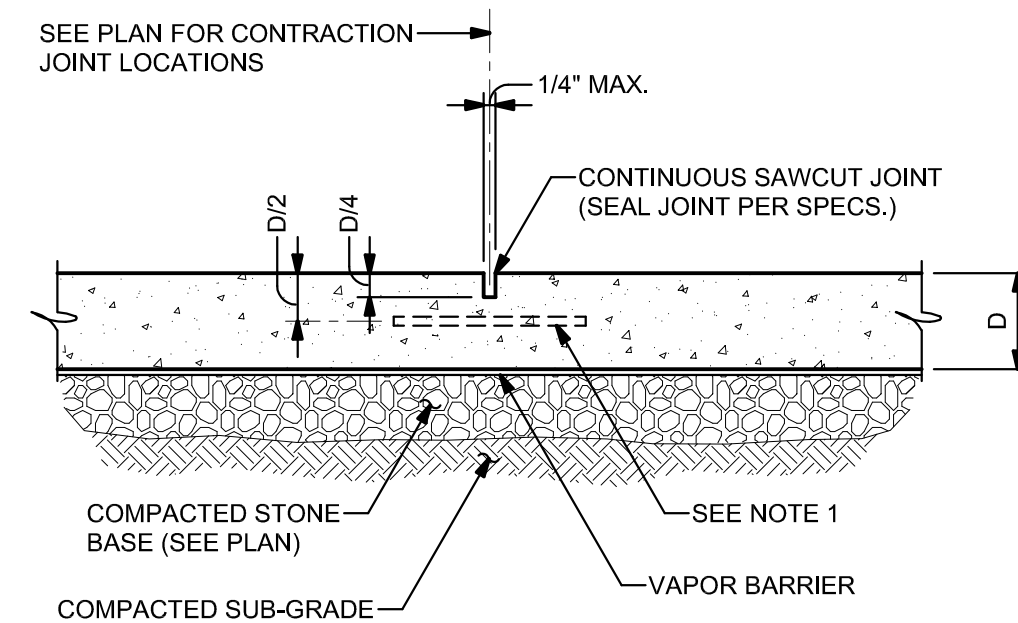




**TYPICAL REINFORCING AT CONCRETE SLAB PENETRATIONS AND TRENCH DRAINS**

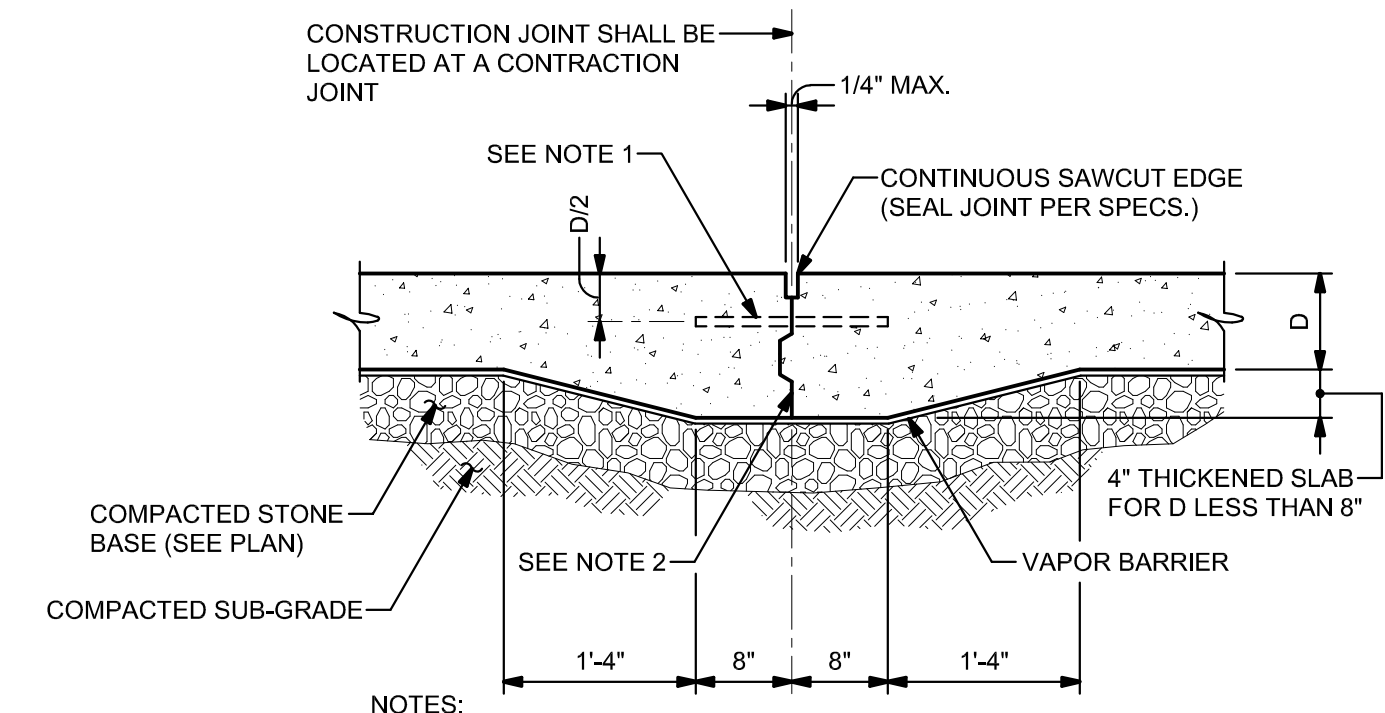


**TYPICAL SLAB-ON-GRADE INTERIOR CORNER REINFORCING DETAIL**



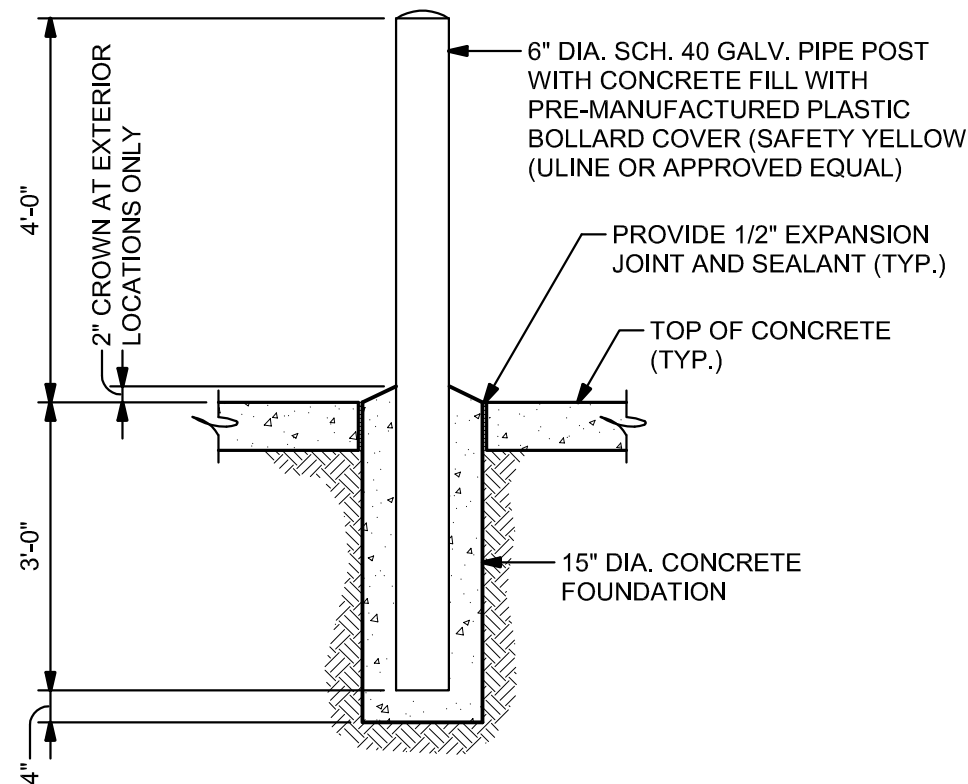
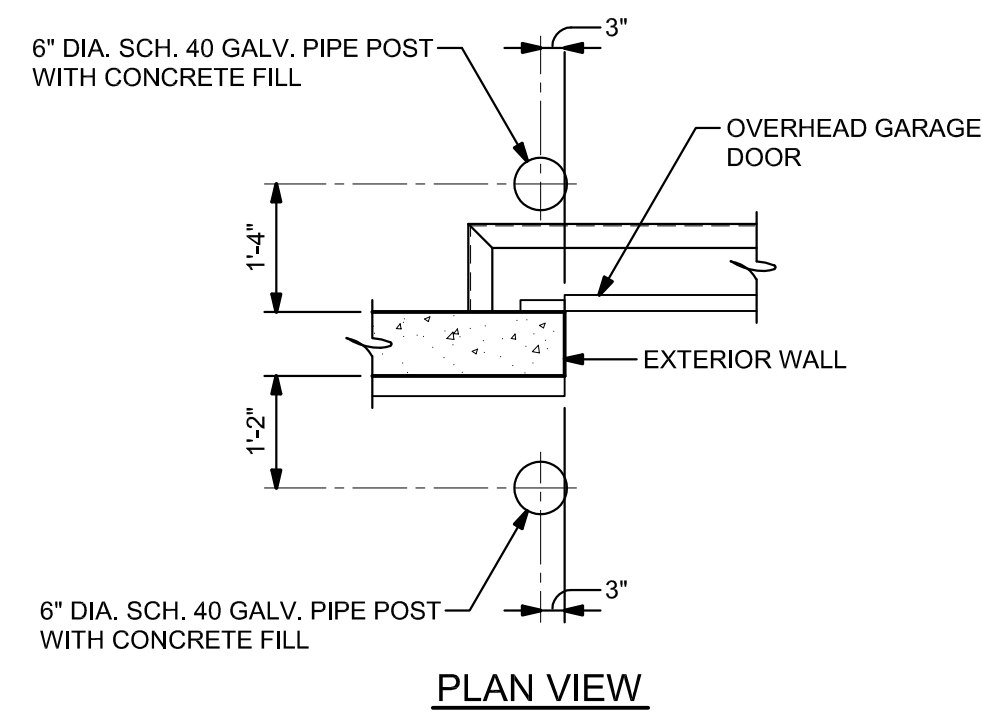
- NOTES:**
- 3/4" DIA. SMOOTH, GREASED EPOXY COATED DOWELS (NO BURRS) 1'-4" LONG AT 12" o.c.
  - SAWCUT JOINT AS SOON AS POSSIBLE WITHOUT RAVELING THE EDGE OF CONCRETE.
  - AT REINFORCED SLABS, INTERRUPT REINFORCING AT SLAB CONTRACTION JOINTS.

**TYPICAL SLAB-ON-GRADE CONTRACTION JOINT**

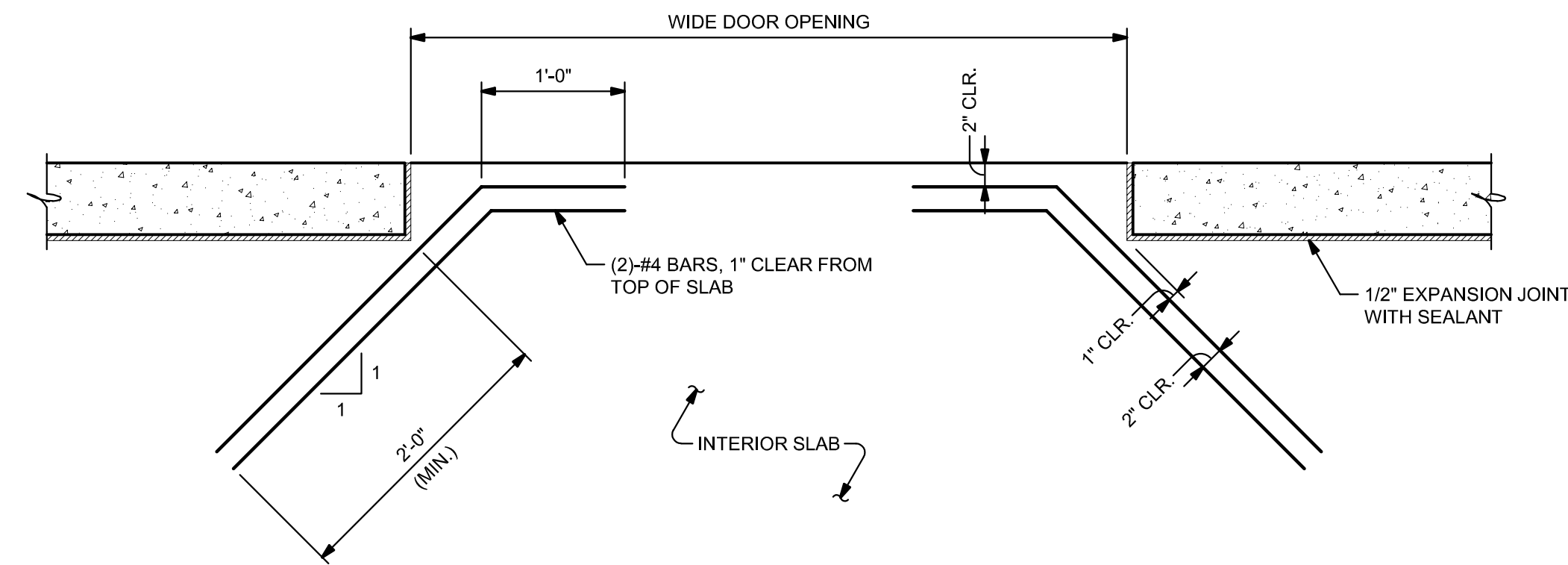


- NOTES:**
- 3/4" DIA. SMOOTH, GREASED EPOXY COATED DOWELS (NO BURRS) 1'-4" LONG AT 12" o.c. MAY BE PROVIDED IN PLACE OF 2"x4" KEYWAY.
  - PAINT JOINT WITH BOND BREAKER.
  - AT REINFORCED SLABS, INTERRUPT REINFORCING AT SLAB CONTRACTION JOINTS.

**TYPICAL SLAB-ON-GRADE CONSTRUCTION JOINT**

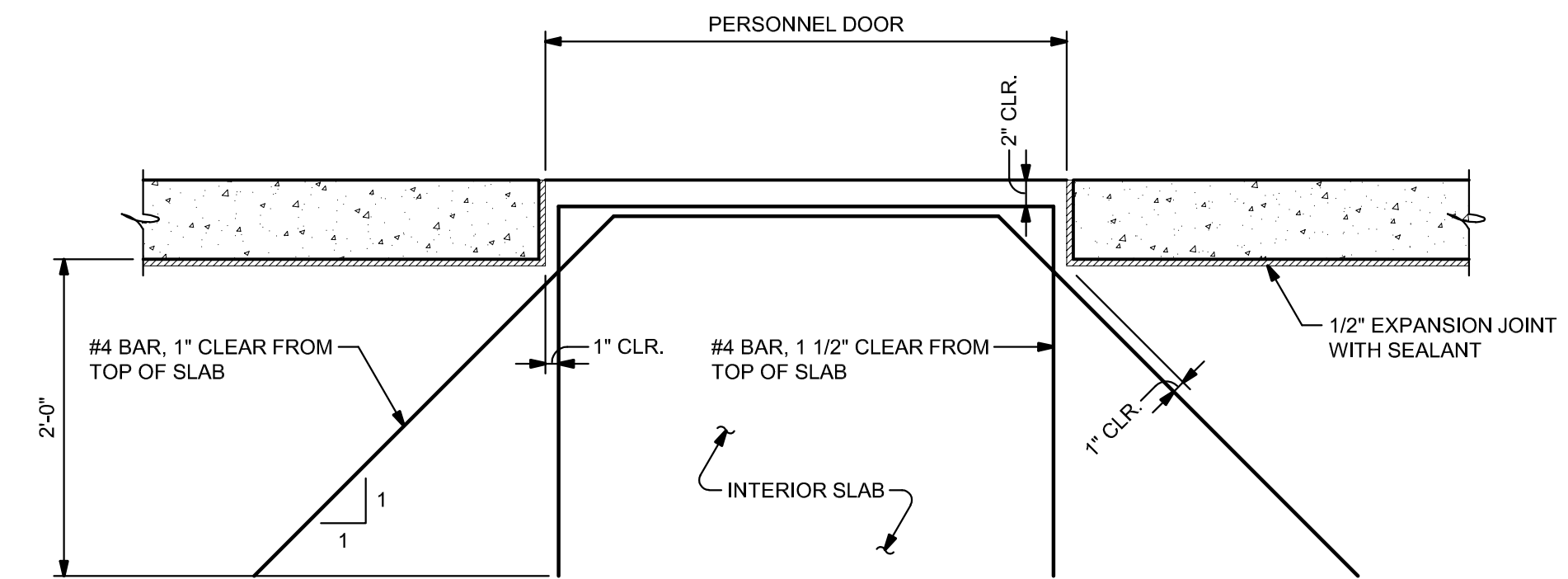


**TYPICAL PIPE BOLLARD DETAIL**  
1/2" = 1'-0"



- NOTES:**
- SEE PLAN FOR EDGE OF SLAB LOCATION.
  - SEE EXTERIOR STOOP DETAILS FOR ADDITIONAL REQUIREMENTS.

**TYPICAL SLAB REINFORCEMENT AT EXTERIOR OVERHEAD DOOR**

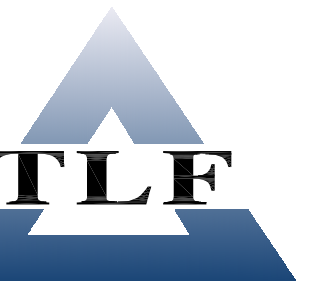


- NOTES:**
- SEE PLAN FOR EDGE OF SLAB LOCATION.
  - SEE EXTERIOR STOOP DETAILS FOR ADDITIONAL REQUIREMENTS.

**TYPICAL SLAB REINFORCEMENT AT EXTERIOR DOORS**

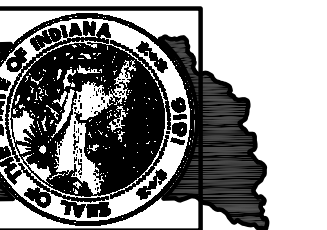


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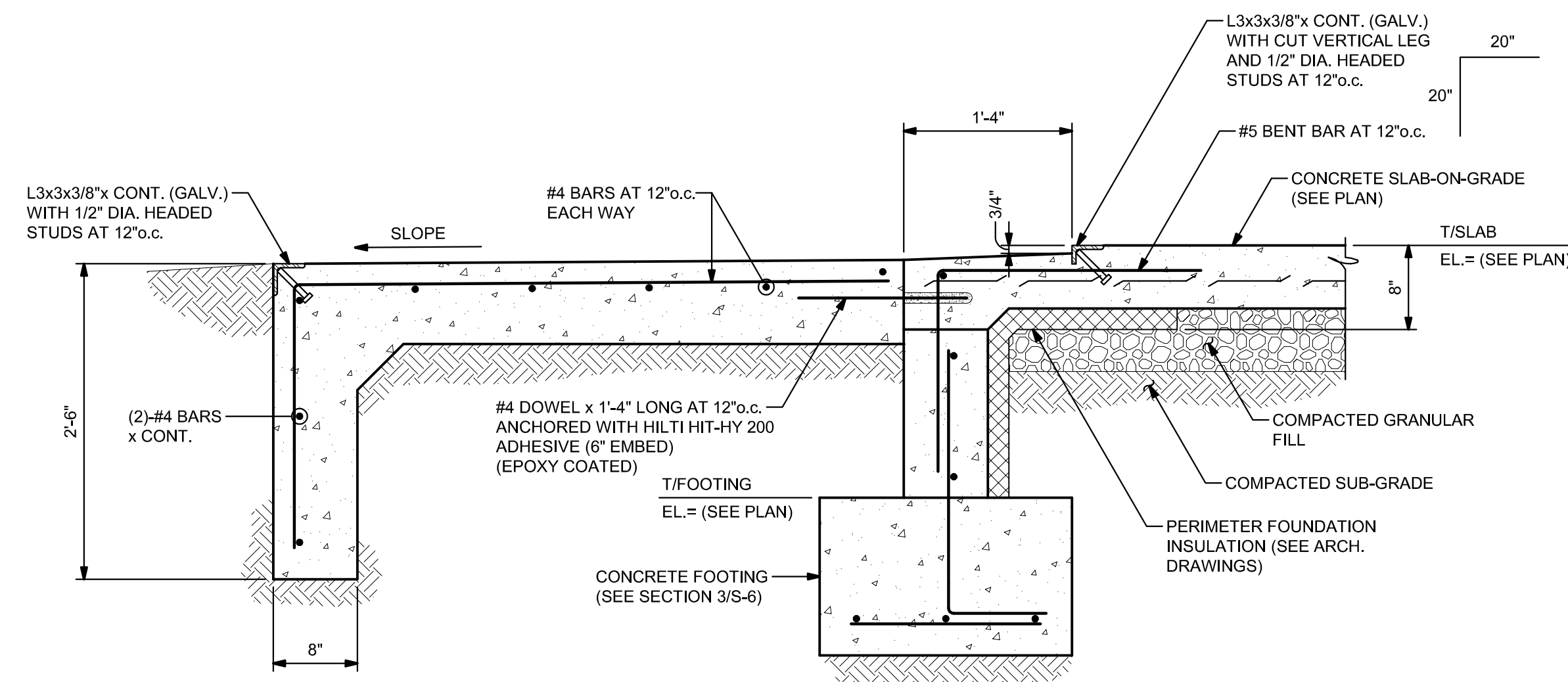
DNR Approval:

Client Approval:

File Number:  
**130-003**

Drawing Number:  
**S-5**  
Sheet: **11** of **24**

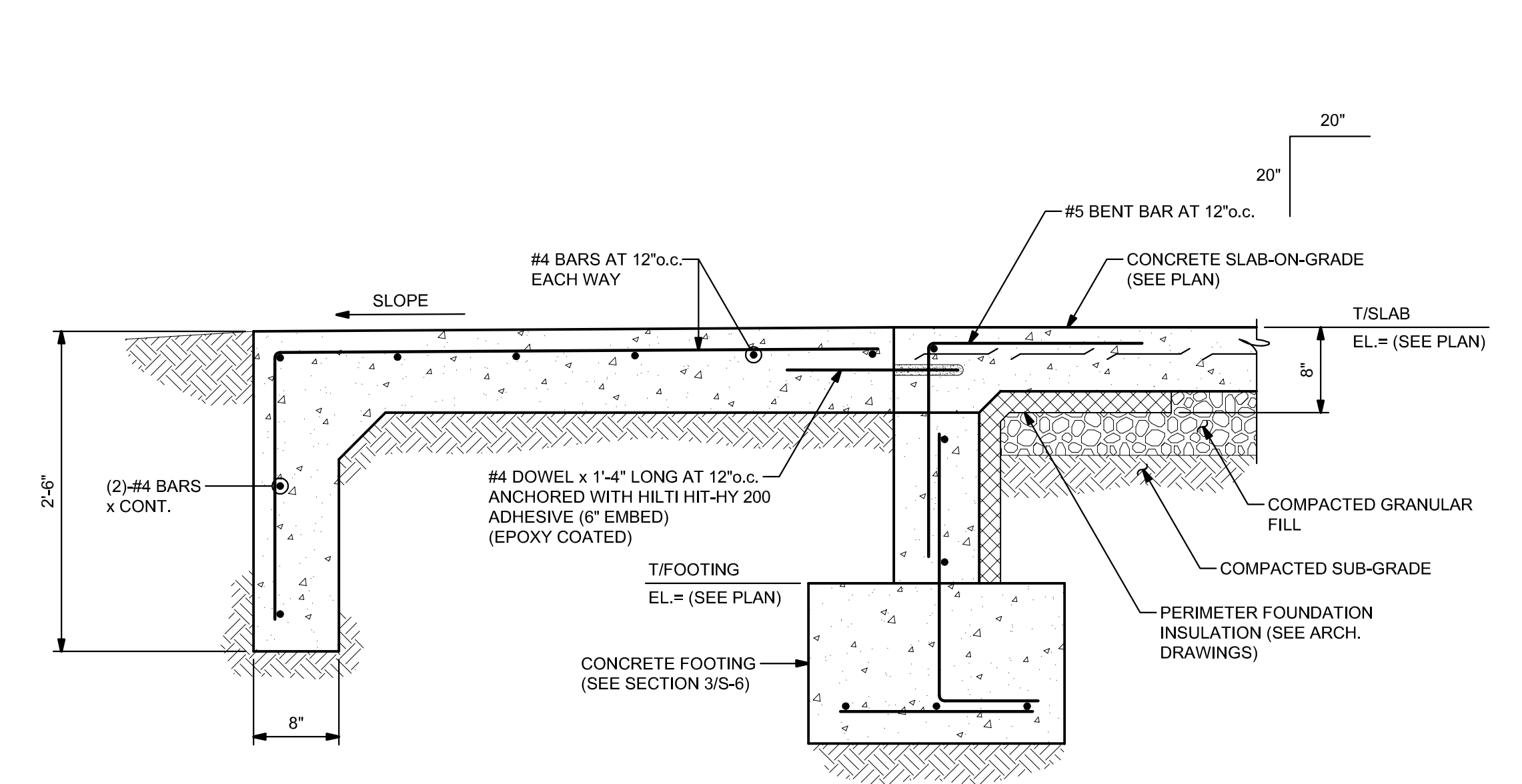




**NOTE:**  
1. SEE PLAN FOR PIPE BOLLARD LOCATIONS. INSTALL BOLLARDS PRIOR TO FLOOR SLAB AND EXTERIOR CONCRETE APRON.

**AT OVERHEAD DOOR**

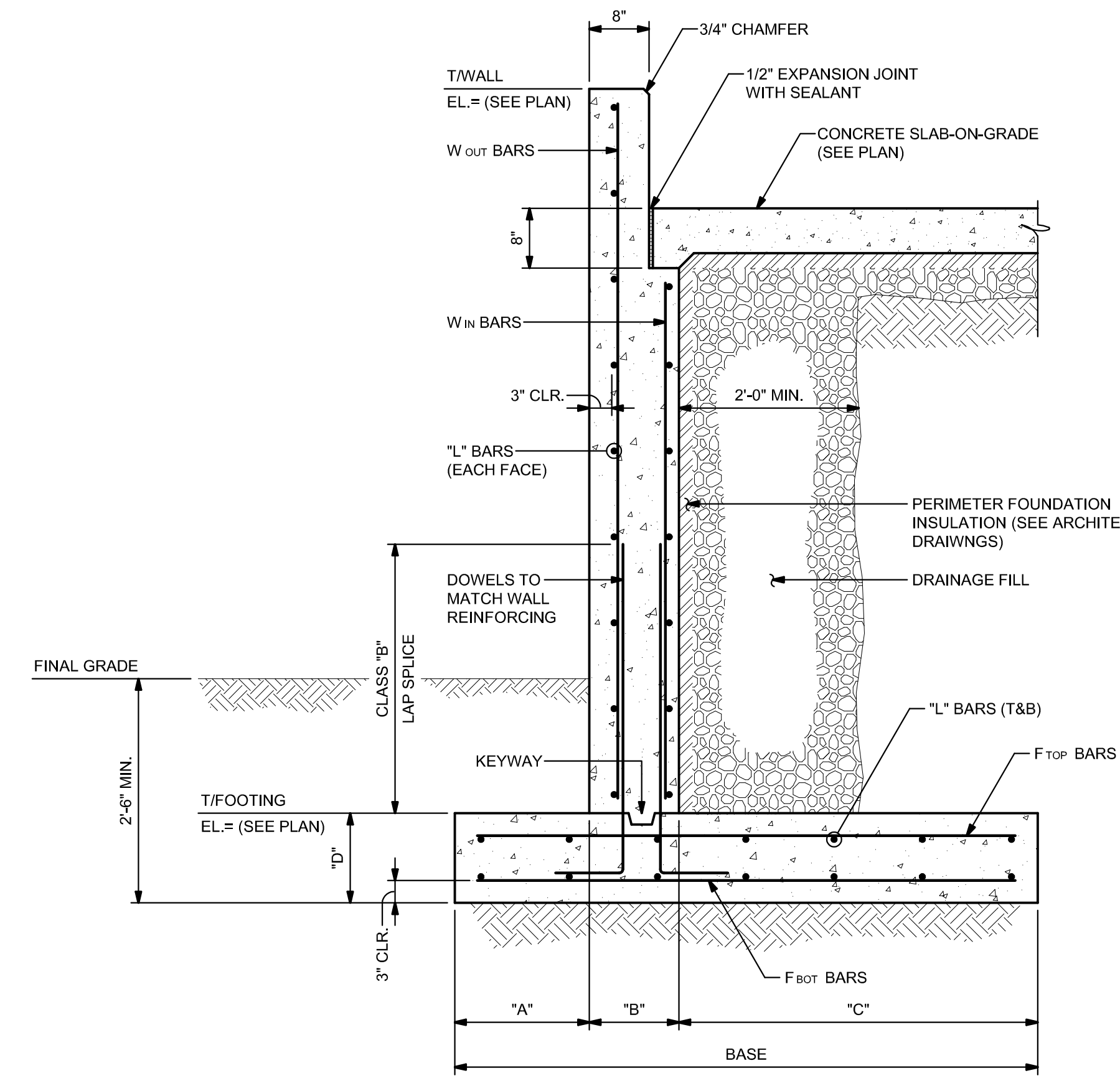
**SECTION 2**  
1" = 1'-0"



**AT MAN DOOR**

**SECTION 1**  
1" = 1'-0"

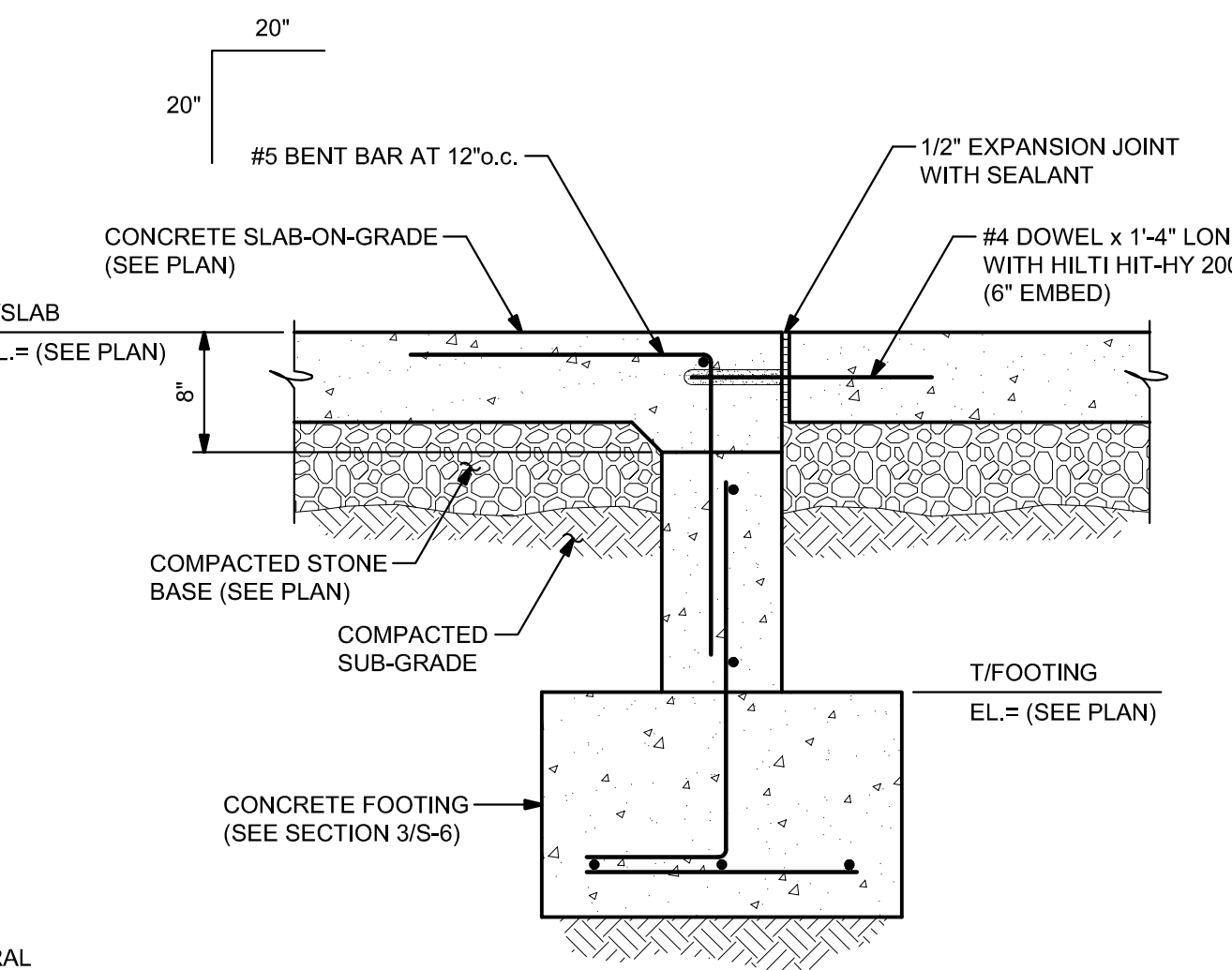
RETAINING WALL SCHEDULE										
SECTIONS	BASE	"A"	"B"	"C"	"D"	"L" BARS	W <sub>in</sub> BARS	W <sub>out</sub> BARS	F <sub>TOP</sub> BARS	F <sub>BOT</sub> BARS
RW1	4'-0"	1'-0"	1'-0"	2'-0"	1'-3"	#5 AT 12"	#5 AT 12"	#5 AT 18"	#5 AT 12"	#5 AT 12"
RW2	6'-6"	1'-6"	1'-0"	4'-0"	1'-3"	#5 AT 12"	#6 AT 12"	#5 AT 18"	#5 AT 12"	#5 AT 12"



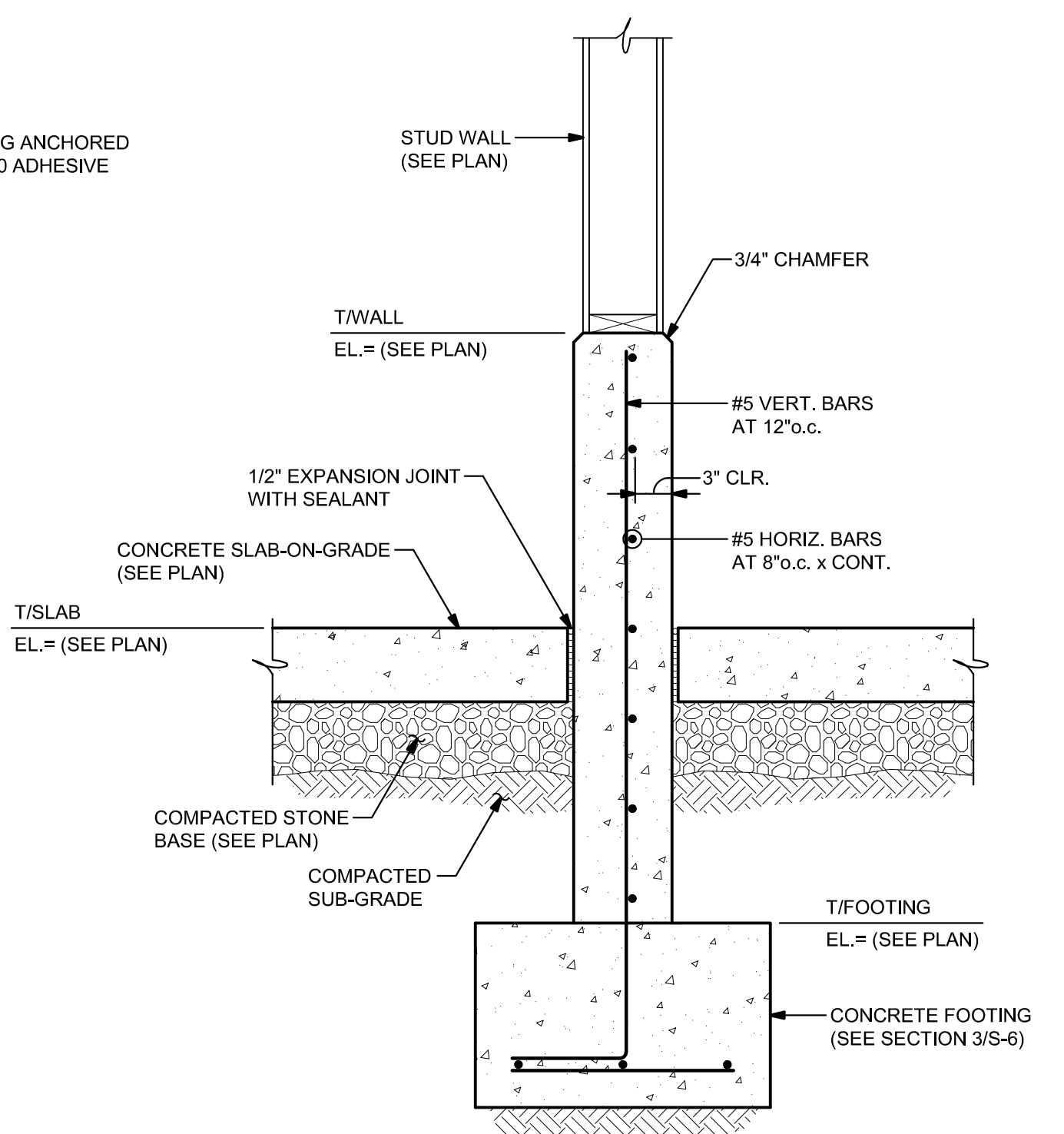
**NOTE:**  
1. PROVIDE 2 INCHES OF CLEAR COVER U.O.N.

**TYPICAL RETAINING WALL**

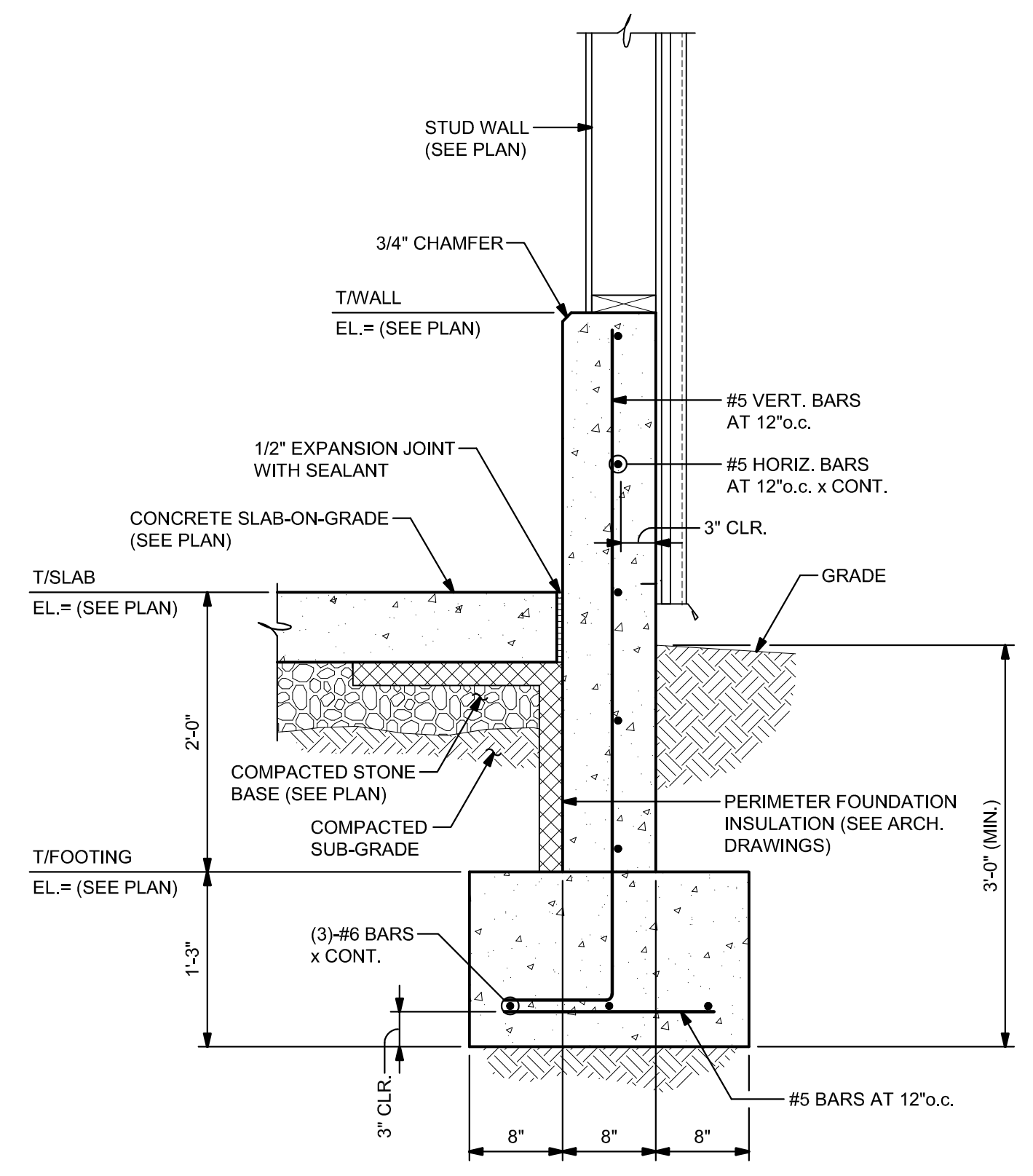
**SECTION 7**  
3/4" = 1'-0"



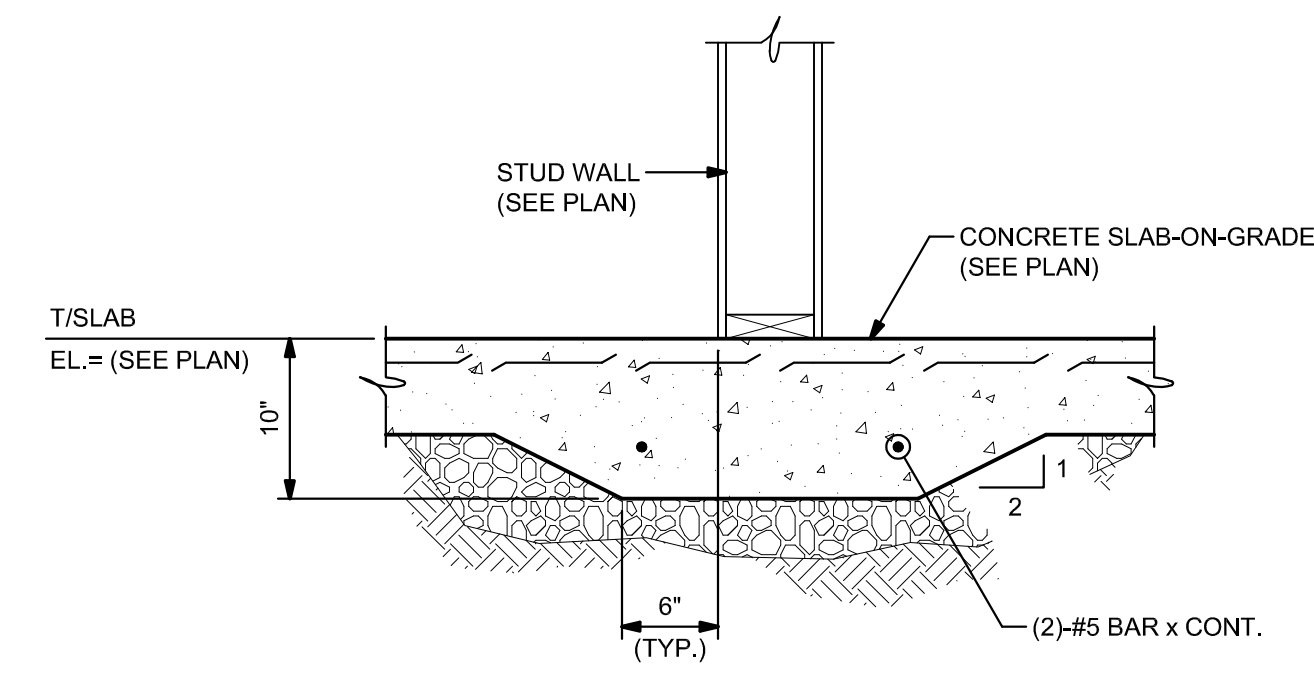
**SECTION 5**  
1" = 1'-0"



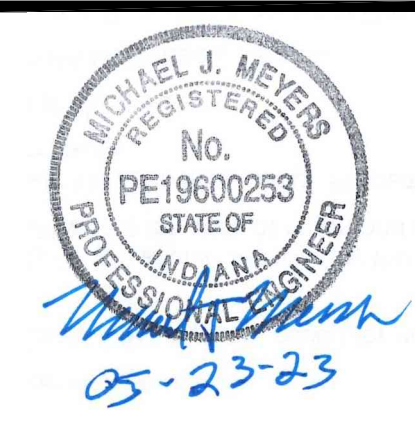
**SECTION 4**  
1" = 1'-0"



**SECTION 3**  
1" = 1'-0"



**SECTION 6**  
1" = 1'-0"



Certified by:



3901 West 86th Street, Suite 200  
Indianapolis, Indiana 46268  
Phone: 317-334-1500  
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Project No. 2021-365-03

**F & W Maintenance Building - Deer Creek**  
Deer Creek Fish & Wildlife Area  
DEPT. OF NATURAL RESOURCES  
2001 W County Road 600 S  
Greencastle, IN 46135



STATE OF INDIANA  
DEPARTMENT OF NATURAL RESOURCES  
**DIVISION OF ENGINEERING**  
ROOM W299, INDIANA GOVERNMENT CENTER SOUTH  
402 WEST WASHINGTON STREET  
INDIANAPOLIS, INDIANA 46204  
TEL 317-232-4150, FAX 317-233-1205

Revisions:

Project Number: ENG2002905497

Requisition Number: Requisition#

05/24/23

AS NOTED

DNR Approval:

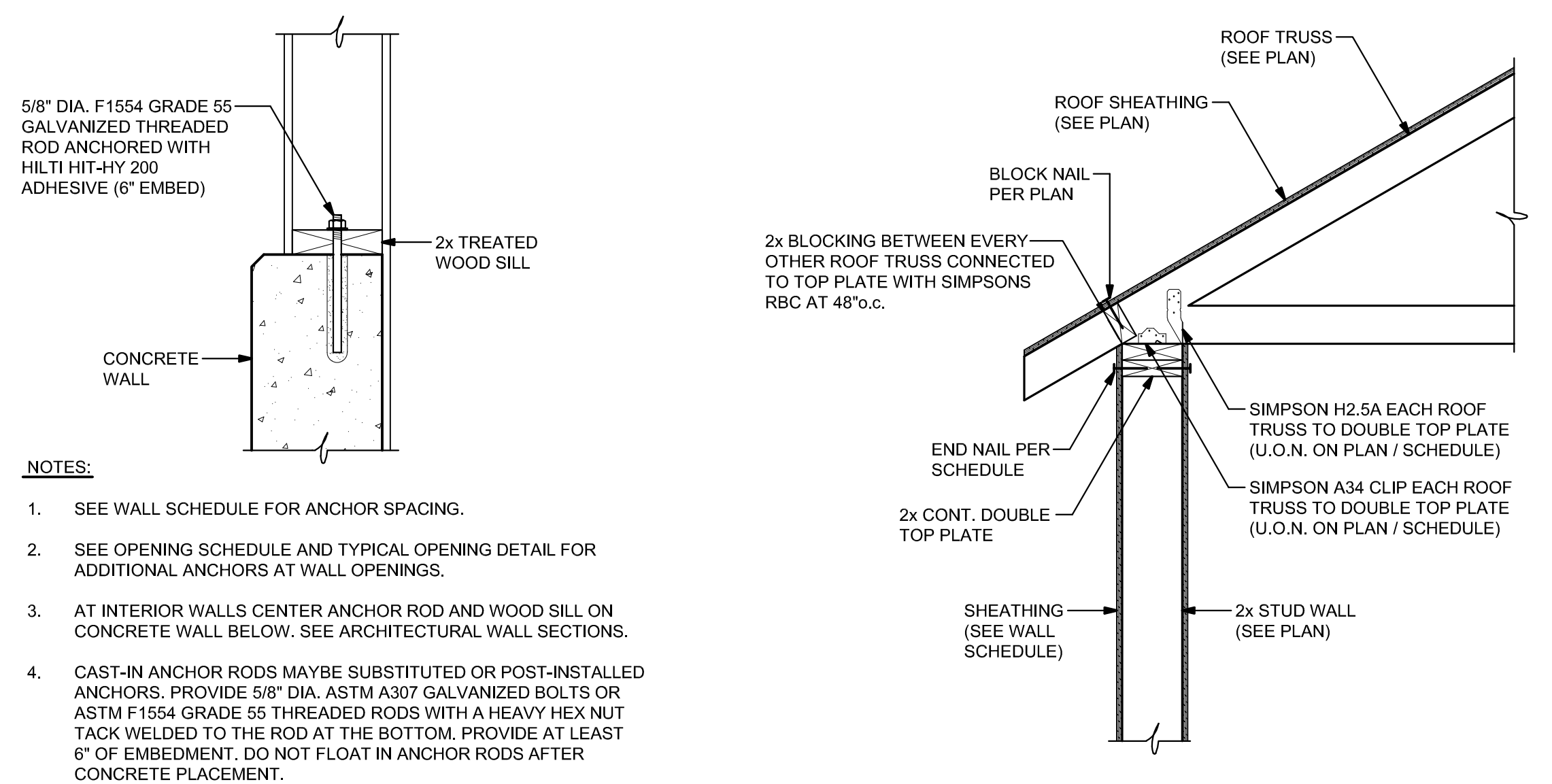
Client Approval:

File Number: 130-003

Drawing Number: S-6

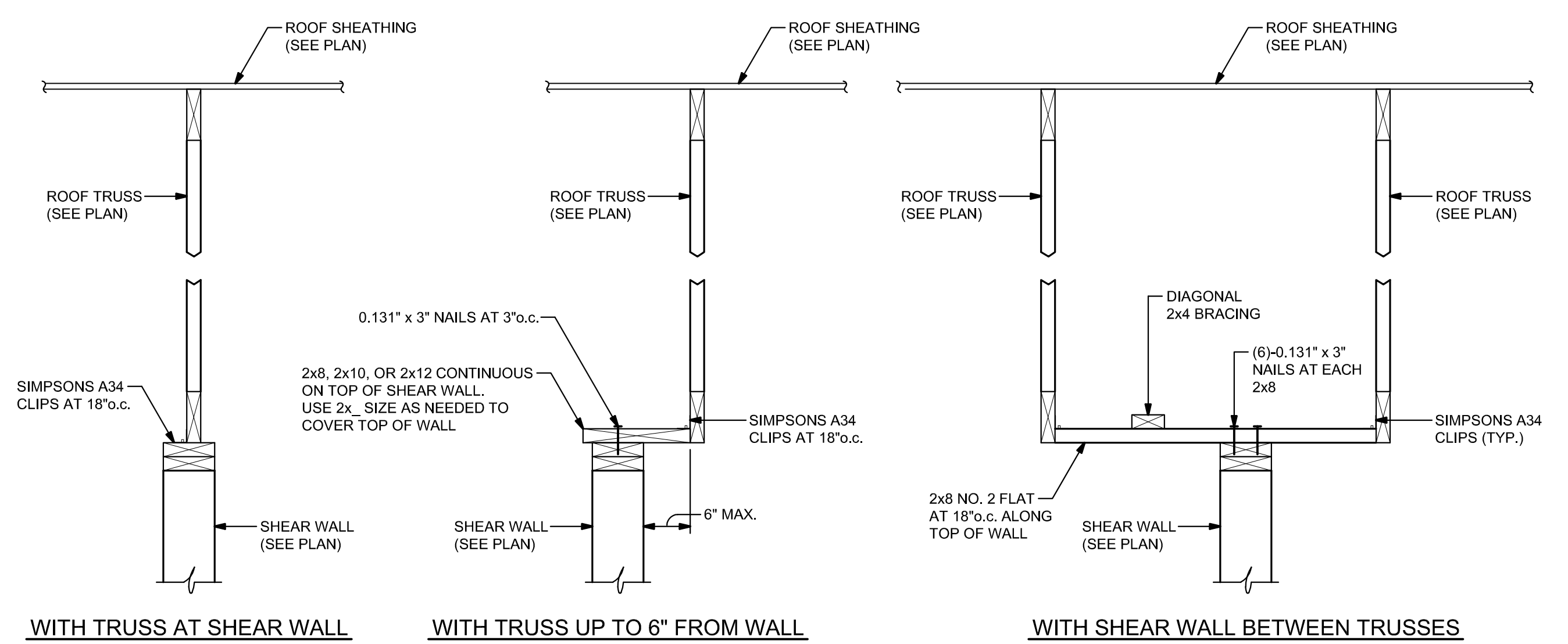
Sheet: 12 of 24





- NOTES:**
1. SEE WALL SCHEDULE FOR ANCHOR SPACING.
  2. SEE OPENING SCHEDULE AND TYPICAL OPENING DETAIL FOR ADDITIONAL ANCHORS AT WALL OPENINGS.
  3. AT INTERIOR WALLS CENTER ANCHOR ROD AND WOOD SILL ON CONCRETE WALL BELOW. SEE ARCHITECTURAL WALL SECTIONS.
  4. CAST-IN ANCHOR RODS MAYBE SUBSTITUTED OR POST-INSTALLED ANCHORS. PROVIDE 5/8" DIA. ASTM A307 GALVANIZED BOLTS OR ASTM F1554 GRADE 55 THREADED RODS WITH A HEAVY HEX NUT TACK WELDED TO THE ROD AT THE BOTTOM. PROVIDE AT LEAST 6" OF EMBEDMENT. DO NOT FLOAT IN ANCHOR RODS AFTER CONCRETE PLACEMENT.

**TYPE 'A' SILL ANCHOR**



- NOTES:**
1. THE TRUSS DESIGNER SHALL DESIGN THE TRUSSES AT SHEAR WALLS AS DRAG-STRUTS. SEE ROOF FRAMING PLAN FOR DRAG STRUT LOCATIONS AND FORCES.
  2. THIS DETAIL MUST BE USED FOR ALL SHEAR WALLS WITH ROOF TRUSSES PARALLEL TO THEM.

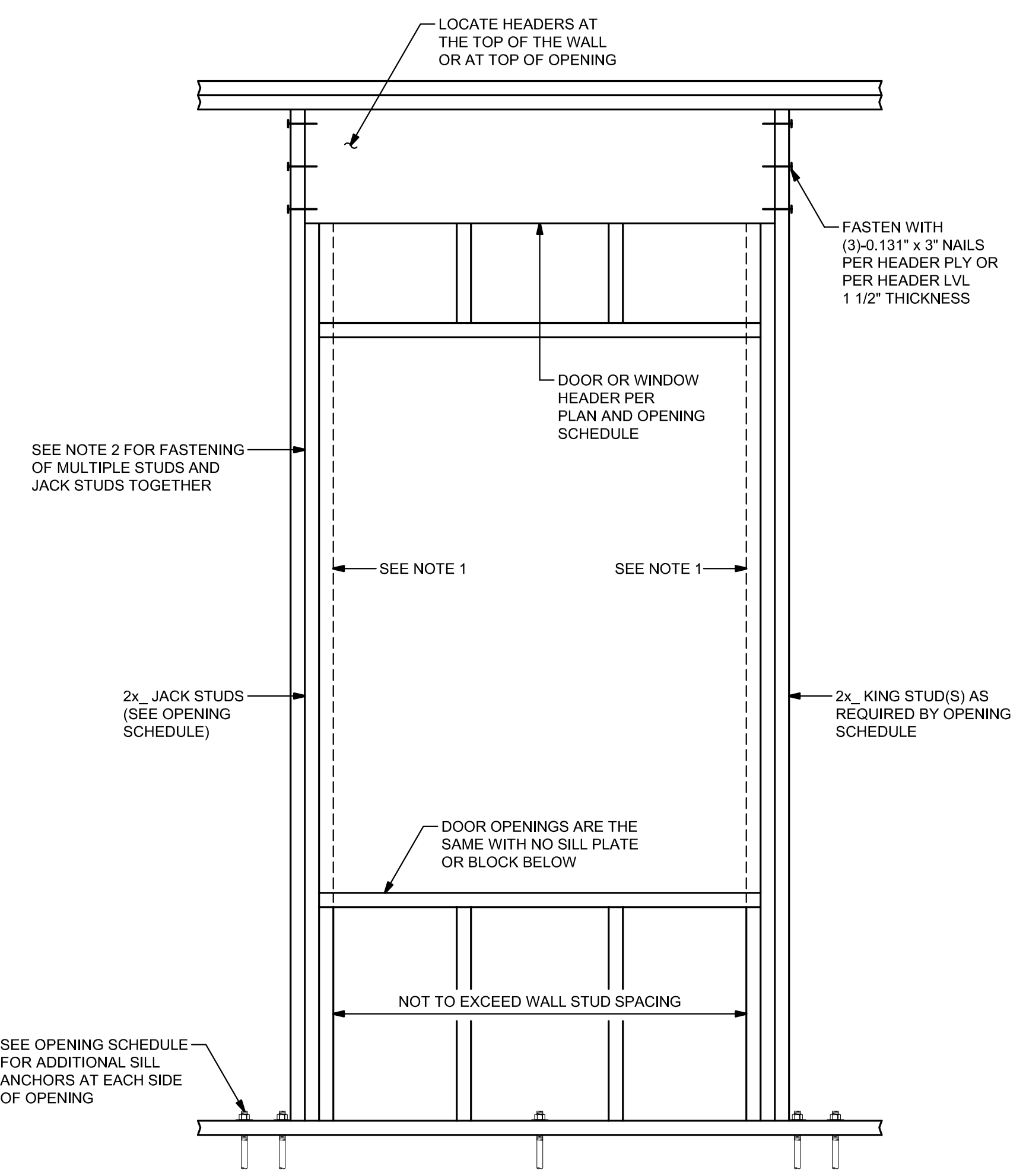
**TYPICAL SHEAR WALL CONNECTION TO ROOF WITH TRUSS PARALLEL**

MARK	STUDS				SHEATHING				NAILING				SILL ANCHORAGE (U.O.N.)		
	SIZE	MATERIAL	GRADE	SPACING (IN)	BLOCKED	SIDES	MATERIAL	THICKNESS (IN)	GRADE	EDGE / BOUNDARY	FIELD	TYPE	SPACING (IN)	TYPE	SPACING (IN)
W1	2x8	SPF	#2	16	BLOCK AT MIDSPAN	BOTH	WOOD STRUCTURAL PANEL - SEE NOTE 5	15/32	SHEATHING	10d COMMON NAILS AT 6"o.c.	10d COMMON NAILS AT 12"o.c.	A	48	A	SEE NOTE 4
W2	2x6	SPF	#2	16	BLOCK AT MIDSPAN	BOTH	WOOD STRUCTURAL PANEL - SEE NOTE 5	15/32	SHEATHING	10d COMMON NAILS AT 6"o.c.	10d COMMON NAILS AT 12"o.c.	A	48	A	SEE NOTE 4
W3	2x6	SPF	#2	16	BLOCK AT MIDSPAN	BOTH	WOOD STRUCTURAL PANEL - SEE NOTE 5	15/32	SHEATHING	10d COMMON NAILS AT 6"o.c.	10d COMMON NAILS AT 12"o.c.	A	48	A	SEE NOTE 4
W4	2x4	SPF	#2	16	UNBLOCKED		GYPSUM BOARD (SEE ARCHITECTURAL FOR BALANCE OF INFORMATION)			SEE ARCHITECTURAL		A	48		

- NOTES:**
1. EDGE BOUNDARY NAILS SHALL BE INSTALLED AT THE PERIMETER OF EACH SHEATHING PANEL.
  2. WALL PANEL SHEATHING PANEL JOINTS DO NOT NEED TO BE STAGGERED.
  3. SEE OPENING SCHEDULE FOR ADDITIONAL SILL ANCHOR.
  4. PROVIDE (2)-SILL ANCHORS AT 12"o.c. AT EACH END OF WALL WHERE INDICATED.
  5. BASE BID: PROVIDE PLYWOOD SHEATHING AT ALL WALL LOCATIONS. ALTERNATE NO. 3: PROVIDE OSB OR PLYWOOD SHEATHING. PLYWOOD SHEATHING IS REQUIRED AT THE FOLLOWING LOCATIONS.
    - a. ON EXTERIOR FACE OF ALL EXTERIOR WALLS.
    - b. ON INTERIOR FACE OF ALL WALLS IN THE DRIVE THROUGH WASH BAY.

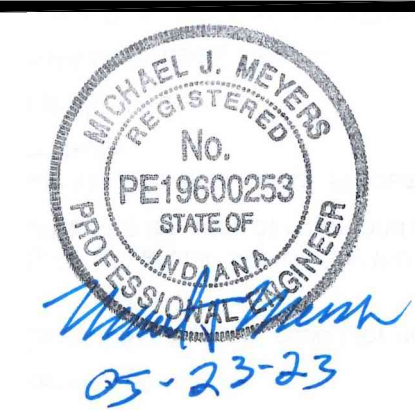
MARK	MAX SPAN (FT)	(QUANTITY) - SIZE	LINTELS		JACK STUDS		KING STUDS		SILL ANCHORS (EACH SIDE)		
			MATERIAL	GRADE	QUANTITY (EACH SIDE)	QUANTITY (EACH SIDE)	TYPE	QUANTITY	SPACING (IN)		
L1	3	(2) - 2x4	SPF	#2	1	1	-	-	-	-	-
L2	6	(2) - 2x10	SPF	#2	1	2	A	1	-	-	
L3	12	(1) - 5 1/2x12	LVL MICROLAM	1.9E 2600Fb	2	2	A	2	12	-	
L4	20	(1) - 5 1/2x16	LVL MICROLAM	1.9E 2600Fb	2	3	A	3	12	-	

- NOTE:**
1. SEE TYPICAL WALL OPENING DETAIL FOR ADDITIONAL DETAILS.

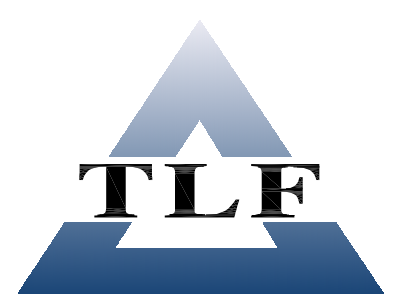


- NOTES:**
1. ADDITIONAL INSIDE JACK STUD AS REQUIRED BY OPENING SCHEDULE.
  2. FASTEN DOUBLE STUDS TOGETHER WITH 0.131" x 3" NAILS AT 6"o.c. UNLESS OTHERWISE NOTED. FOR MORE THAN TWO STUDS, FASTEN IN THE SAME WAY NAILING AS EACH STUD IS ADDED.

**TYPICAL WALL OPENING**

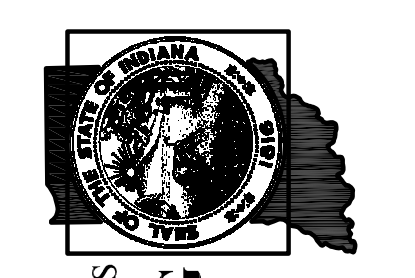


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Drawing Scale: **AS NOTED**

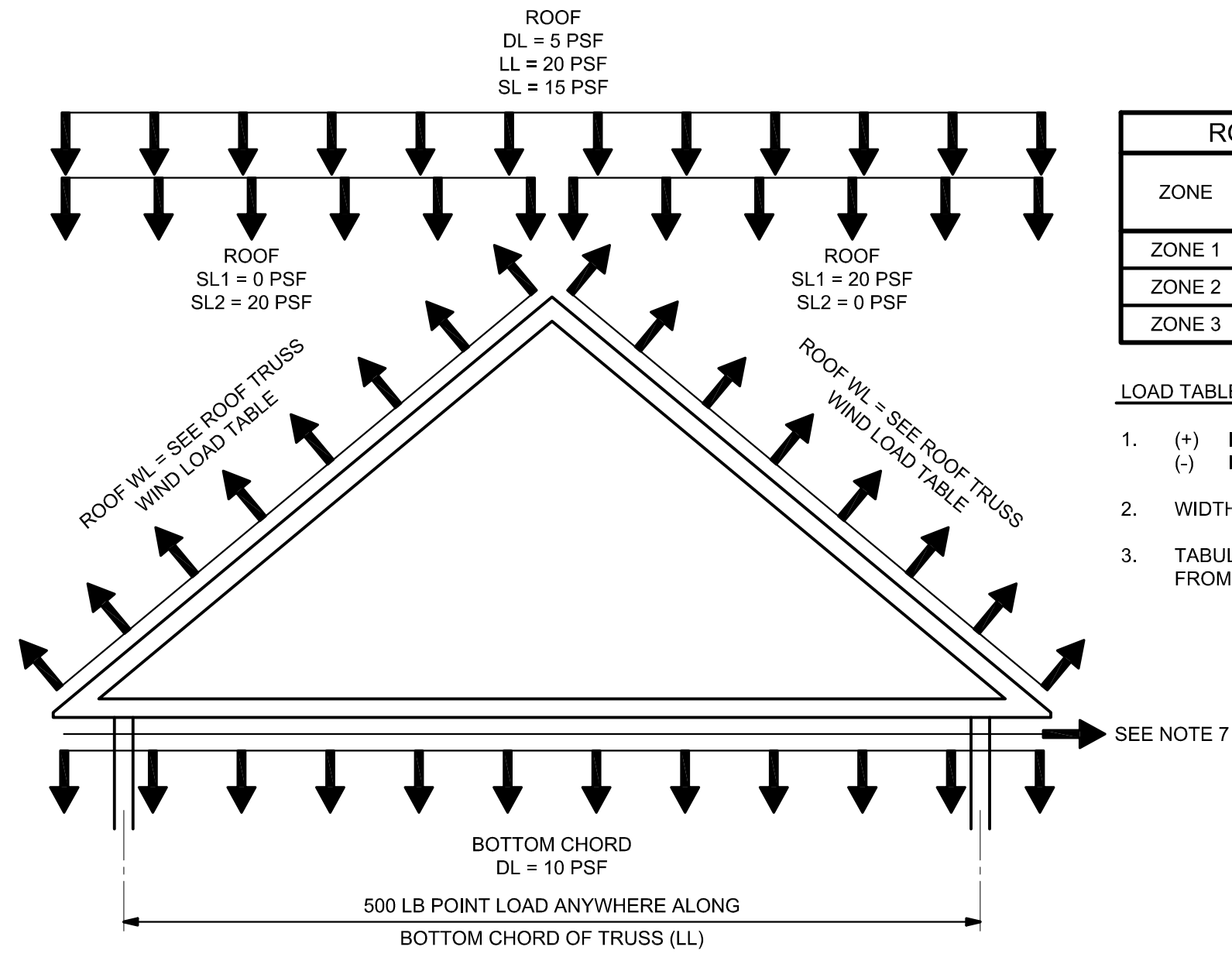
DNR Approval:

Client Approval:

File Number: **130-003**

Drawing Number: **S-7**



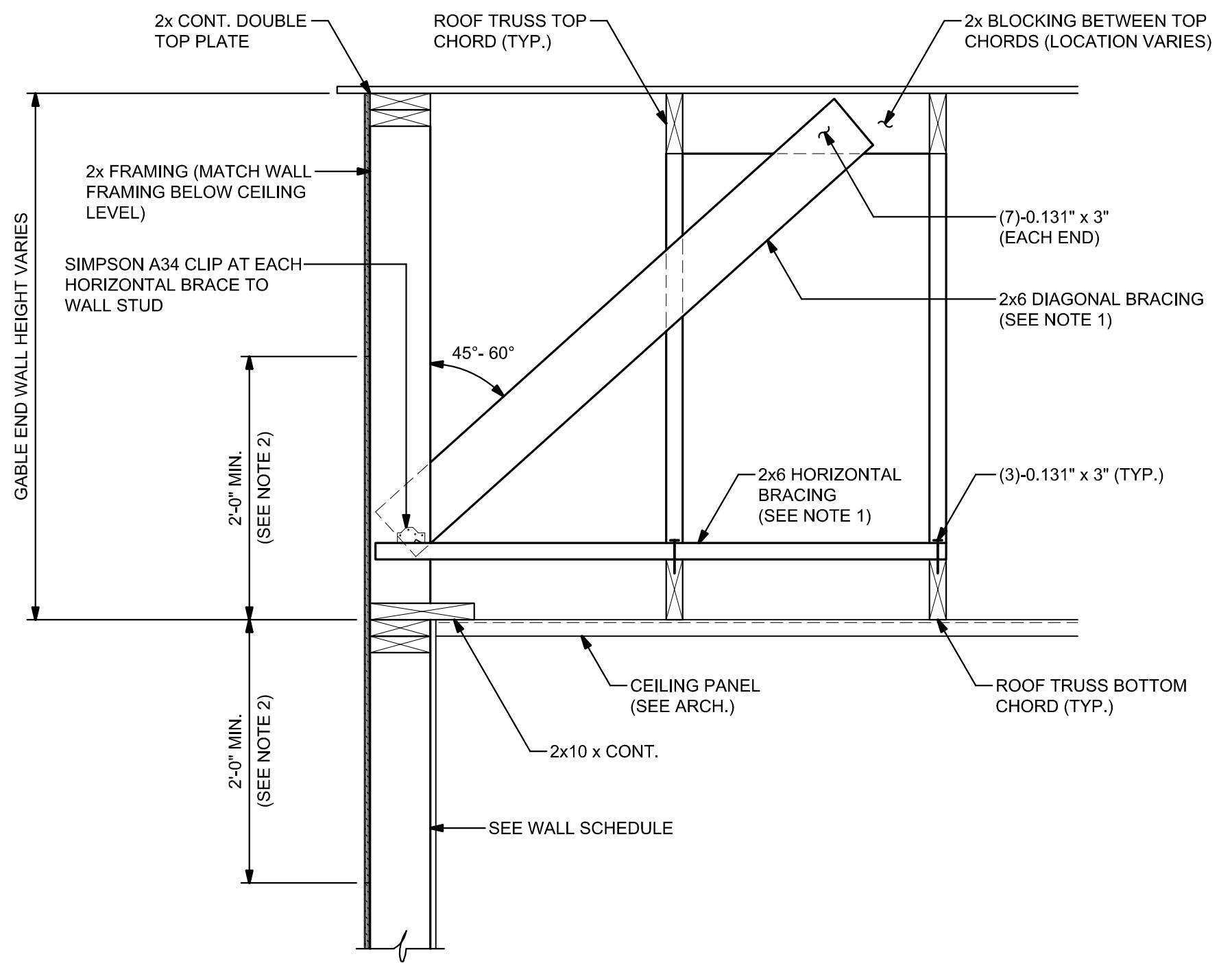


ROOF TRUSS WIND LOAD TABLE			
ZONE	POSITIVE PRESSURE (PSF)	NEGATIVE PRESSURE (PSF)	OVERHANG (PSF)
ZONE 1	27	-36	N/A
ZONE 2	27	-51	-71
ZONE 3	27	-73	-109

- LOAD TABLE NOTES:
- (+) INDICATES WIND LOADING INTO THE ROOF.  
(-) INDICATES UPLIFT WIND LOADING AWAY FROM THE ROOF.
  - WIDTH OF EDGE ZONE ("a") SHALL BE 3'-10".
  - TABULATE OVERHANG LOADS INCLUDE PRESSURE CONTRIBUTION FROM BOTH UPPER AND LOWER SURFACES.

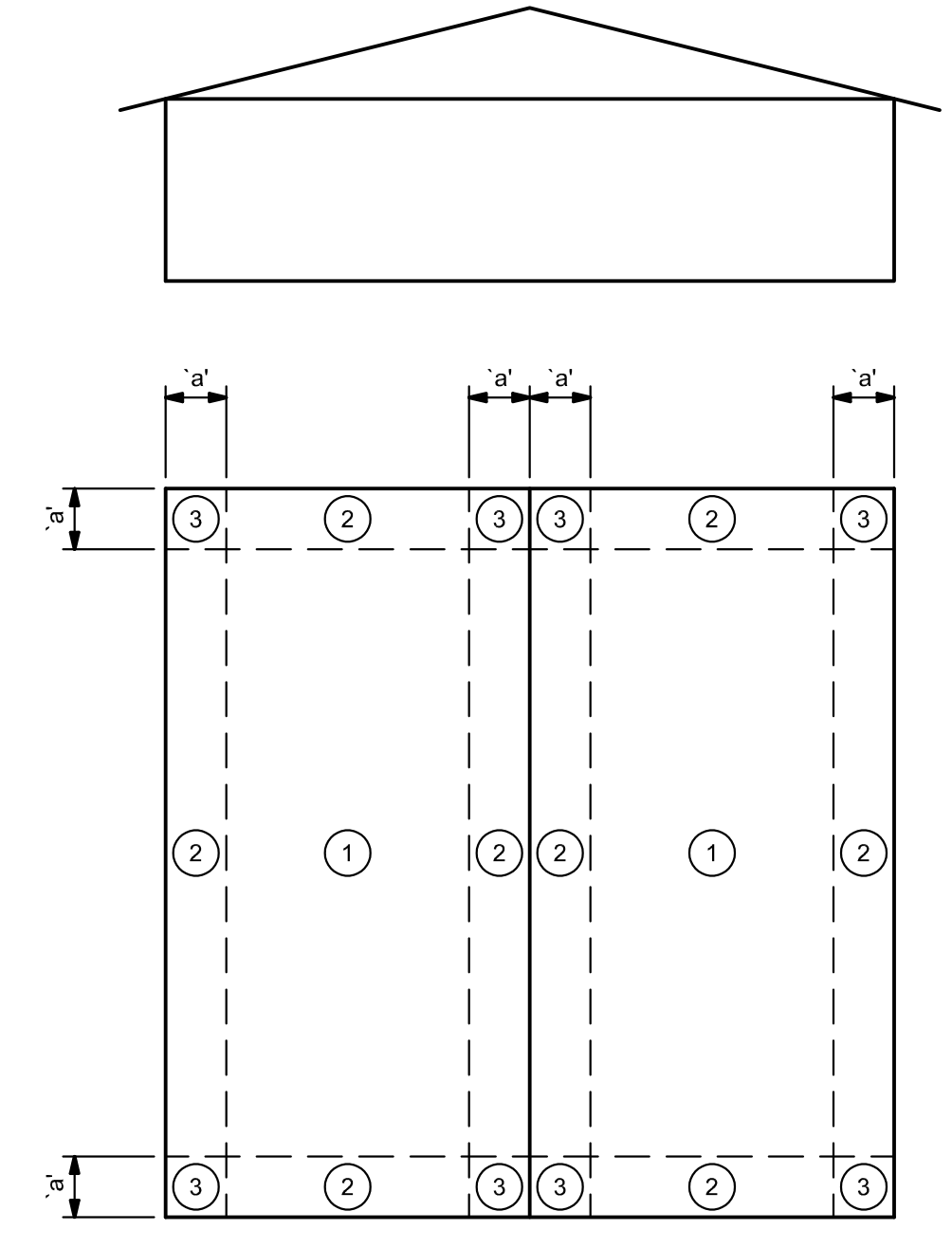
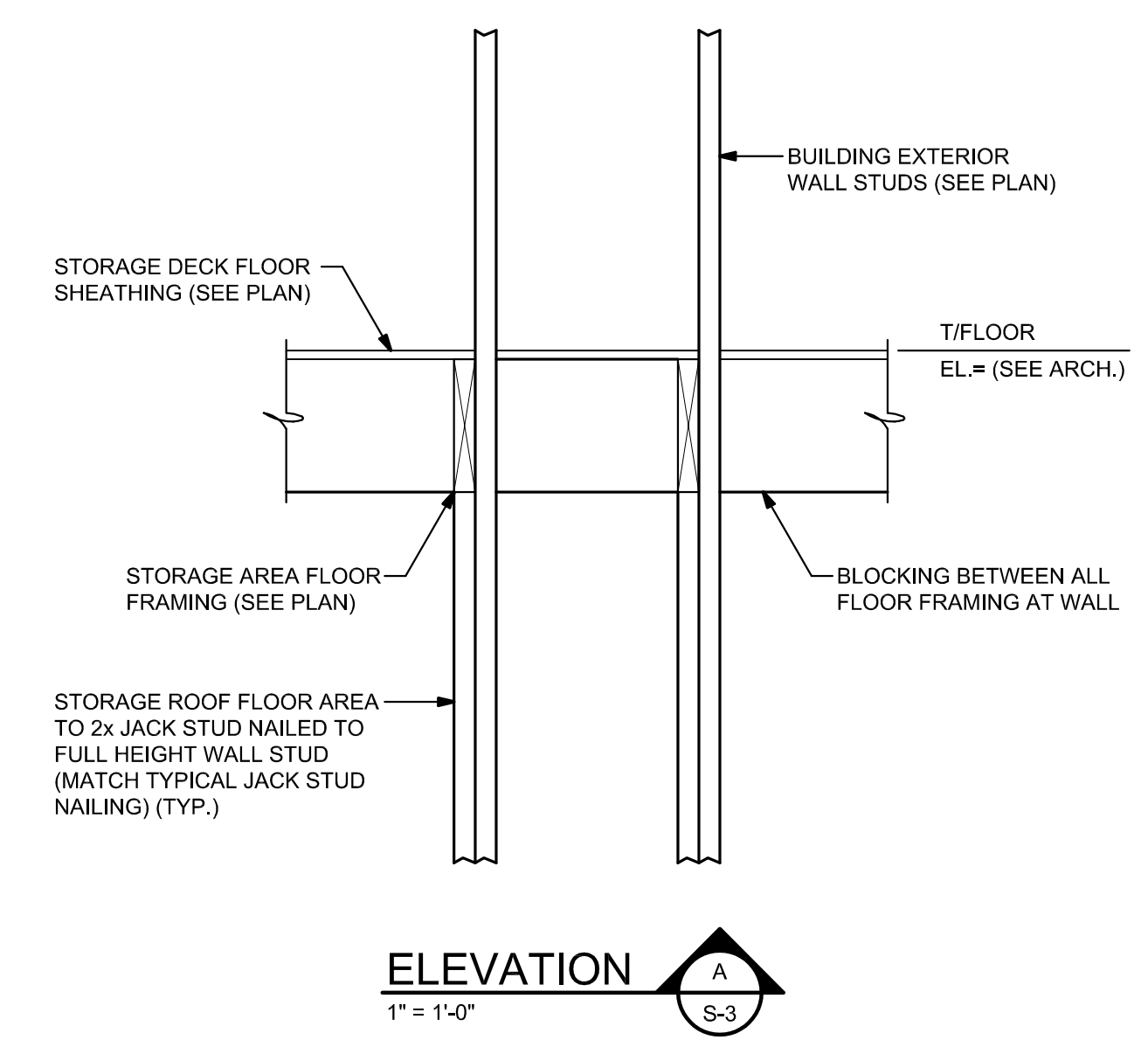
- NOTES:
- ALL LOADS UNFACTORED. WIND LOADS INDICATED ARE AT LRFD LEVELS AS CALCULATED IN ASCE 7.
  - INDICATED LOADS DO NOT INCLUDE TRUSS SELF-WEIGHT. TRUSSES SHALL BE DESIGNED FOR THE INDICATED LOADS PLUS THE WEIGHT OF THE TRUSS.
  - LIMIT LIVE LOAD DEFLECTIONS TO L/360 AND TOTAL LOAD DEFLECTIONS TO L/240.
  - DL INDICATES DEAD LOAD  
LL INDICATES LIVE LOAD  
SL INDICATES BALANCED ROOF SNOW LOAD  
SL1 INDICATES UNBALANCED ROOF SNOW LOAD CASE 1  
SL2 INDICATES UNBALANCED ROOF SNOW LOAD CASE 2  
WL INDICATES WIND LOAD
  - SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
  - AVAILABLE BEARING LENGTH ON WALL IS 5 1/2" OR GREATER WITH AN ALLOWABLE BEARING STRESS OF 425 PSI.
  - DESIGN TRUSSES WHERE INDICATED TO TRANSFER HORIZONTAL WIND LOAD FROM THE ROOF DECK DOWN TO THE SHEAR WALL BELOW. SEE ROOF FRAMING PLAN FOR LOCATIONS AND LOADING.
  - SEE ARCHITECTURAL DRAWINGS FOR TRUSS GEOMETRICAL REQUIREMENTS.
  - DESIGN TRUSS WHERE INDICATES FOR AN ADDITIONAL DEAD LOAD OF 3PSF OF TRUSS AREA FOR ADDITION OF GYPSUM BOARD ON SIDE OF TRUSS. SEE ARCHITECTURAL DETAILS.

**ROOF TRUSS LOADING DIAGRAM**

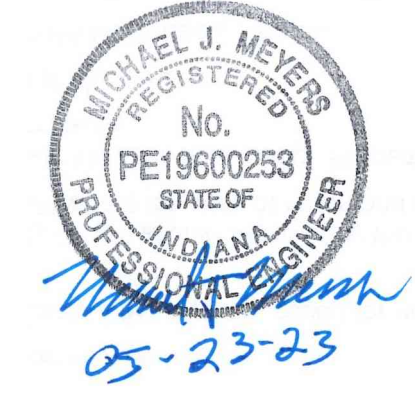


- NOTES:
- BRACING LENGTH VARIES WITH GABLE END WALL HEIGHT. HORIZONTAL BRACING TO MATCH GABLE END WALL HEIGHT (MINIMUM) AND TERMINATE AT NEXT TRUSS BOTTOM CHORD. SEE PLAN FOR LOCATIONS AND SPACING.
  - EXTERIOR WALL SHEATHING PANELS SHALL EXTEND A MINIMUM OF 2'-0" TO BOTH SIDES OF CEILING LEVEL.

**SECTION 1**  
1" = 1'-0"

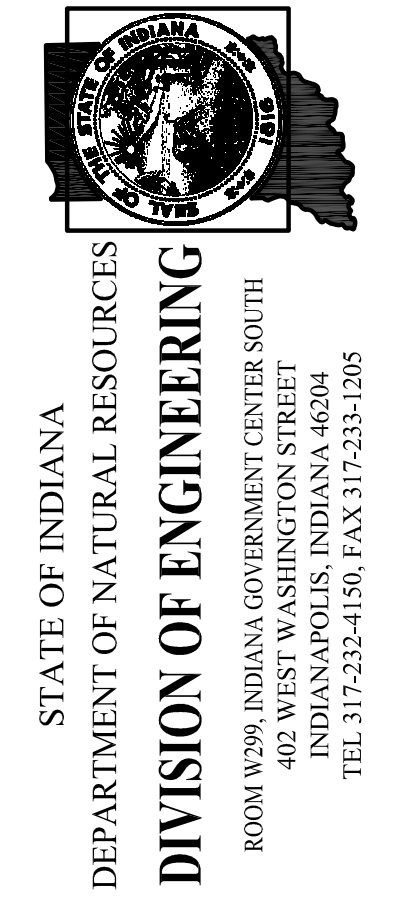


(FOR GABLE ROOFS <= 45° AND MONOSLOPE ROOF <= 60 FT.)  
**ROOF ZONES FOR BUILDING WITH h <= 60 FT.**



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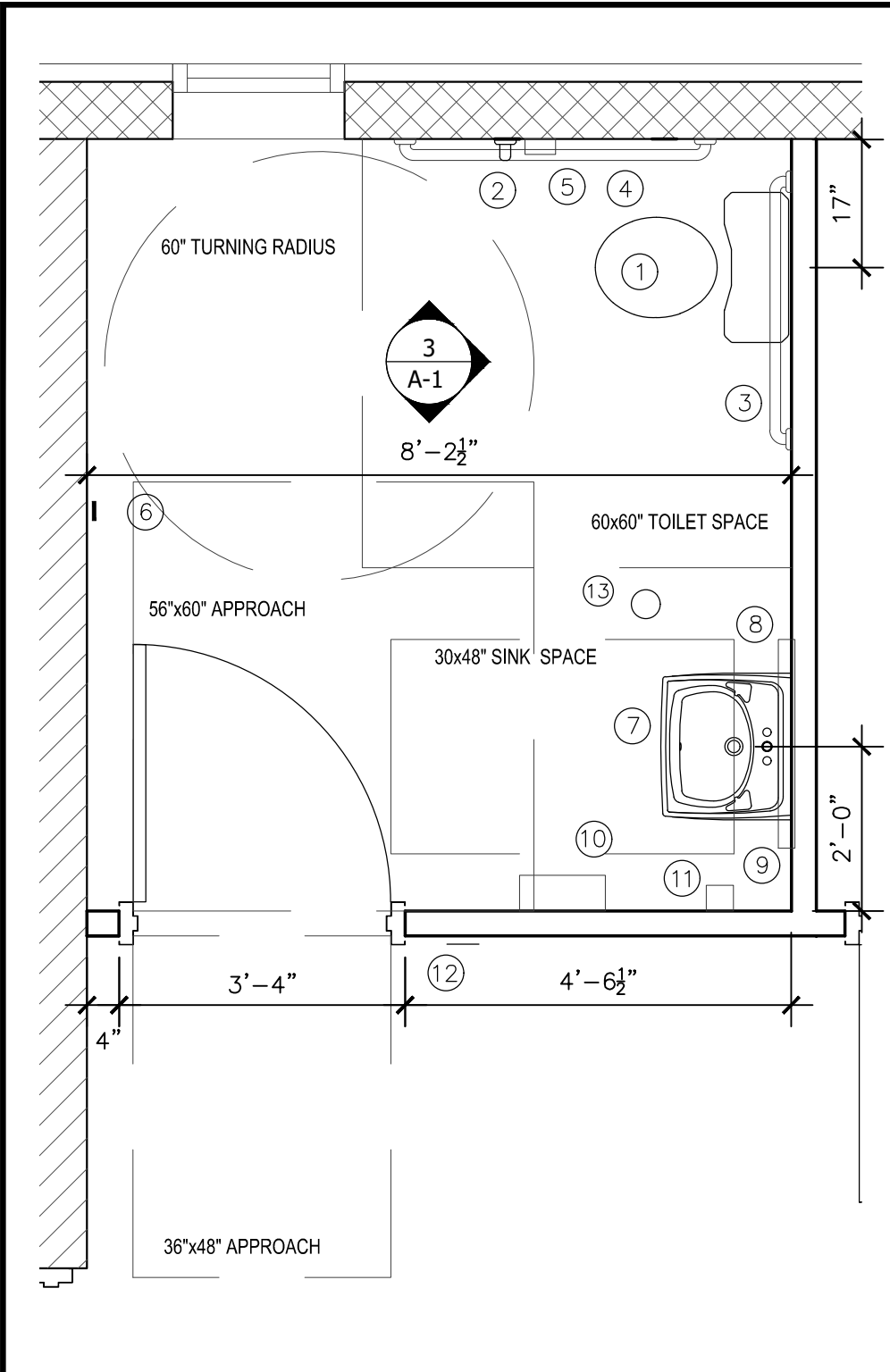
Client Approval:

File Number: **130-003**

Drawing Number: **S-8**

Sheet: **14** of **24**





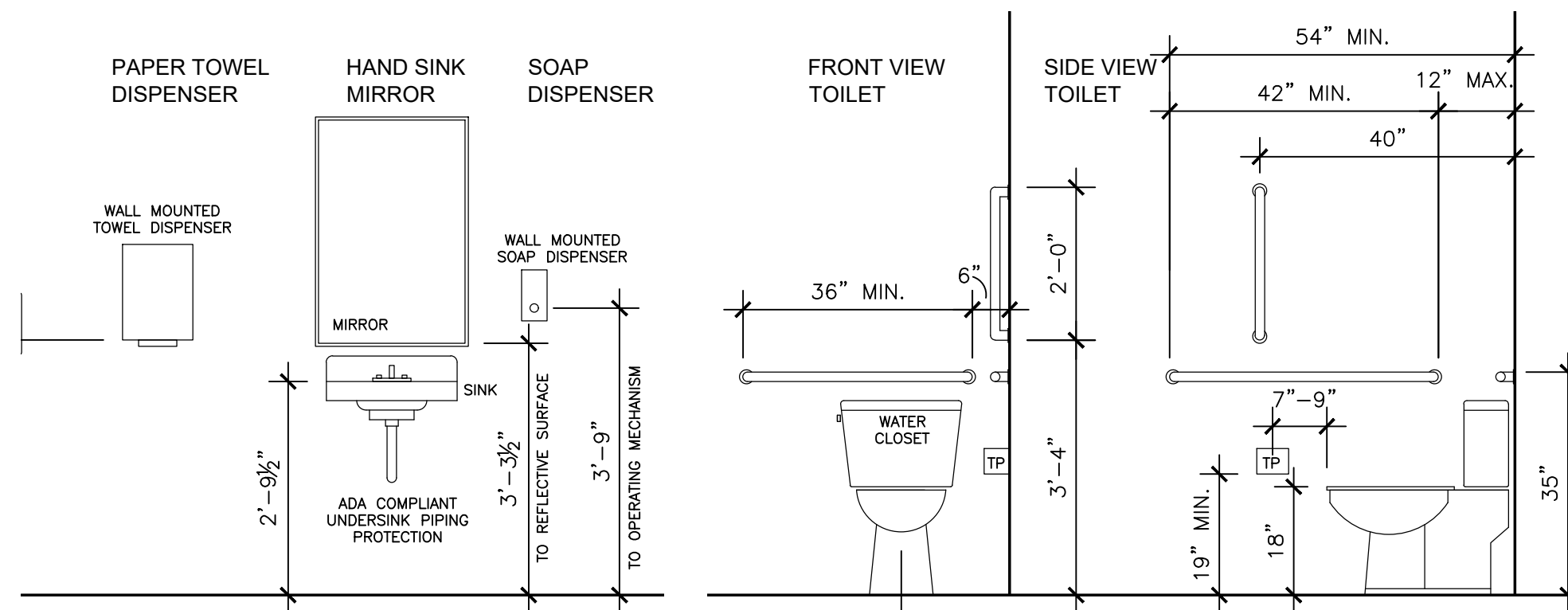
**ACCESSORY / EQUIPMENT INDEX**

- SEE P-1 FOR SPECIFIC FIXTURE INFORMATION MOUNTING LOCATIONS PER 3/A-1.
- ADA WATER CLOSET: SEAT TOP MOUNT AT 18" A.F.F.
  - VERTICAL GRAB BAR: 18" LONG, BOBRICK OR EQUAL.
  - HORIZONTAL GRAB BAR: 36" LONG, BOBRICK OR EQUAL.
  - HORIZONTAL GRAB BAR: 42" LONG, BOBRICK OR EQUAL.
  - TOILET TISSUE HOLDER: BOBRICK B-265 OR EQUAL.
  - STAINLESS STEEL HOOKS, MOUNT AT 44" A.F.F.
  - LAVATORY: TOP AT 2'-9 1/2" A.F.F.
  - GFCI RECEPTACLE LOCATED AT 38" A.F.F.
  - MIRROR, MOUNT REFLECTIVE SURFACE 39 1/2" A.F.F. MAXIMUM BOBRICK OR EQUAL 18"x36"
  - PAPER TOWEL DISPENSER, BY OWNER, MOUNT PER 3/A-1.
  - SOAP DISPENSER, BY OWNER, MOUNT PER 3/A-1.
  - ADA SIGNAGE, REFER TO 4/A-1.
  - FLOOR DRAIN, REFER TO PLUMBING.

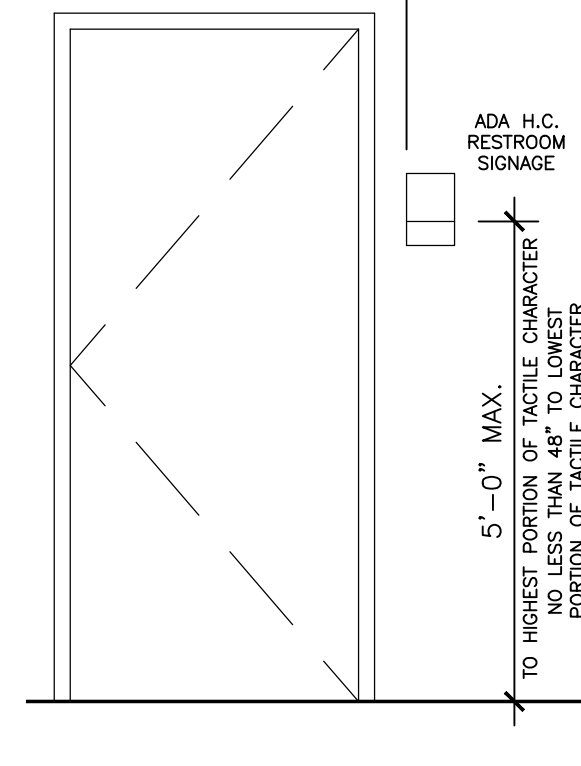
**DEER CREEK**  
ENLARGED RESTROOM PLAN  
SCALE: 1/2" = 1'-0"

**ADA NOTES:**

- 4.19 LAVATORIES AND MIRRORS
- 4.19.1 GENERAL: THE REQUIREMENTS OF 4.19 SHALL APPLY TO LAVATORY FIXTURES, VANITIES, AND BUILT-IN LAVATORIES
- 4.19.2 HEIGHT AND CLEARANCES: LAVATORIES SHALL BE MOUNTED WITH THE TOP OF THE COUNTER SURFACE NO HIGHER THAN 34" ABOVE FINISH FLOOR. PROVIDE A CLEARANCE OF AT LEAST 29" ABOVE THE FINISH FLOOR TO THE BOTTOM OF THE APRON. KNEE AND TOE CLEARANCE SHALL COMPLY WITH FIGURE 31.
- 4.19.3 CLEAR FLOOR SPACE: A CLEAR FLOOR SPACE 30" BY 48" COMPLYING WITH 4.2.4 SHALL BE PROVIDED IN FRONT OF A LAVATORY TO ALLOW FORWARD APPROACH. SUCH CLEAR FLOOR SPACE SHALL ADJOIN OR OVERLAP AN ACCESSIBLE ROUTE AND SHALL EXTEND A MAXIMUM OF 19" UNDERNEATH THE LAVATORY (SEE FIGURE 32)
- 4.19.4 EXPOSED PIPES AND SURFACES: HOT WATER AND DRAIN PIPES UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT AGAINST CONTACT. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES.
- 4.19.5 FAUCETS: FAUCETS SHALL COMPLY WITH 4.27.4. LEVER OPERATED, PUSH TYPE, AND ELECTRONICALLY CONTROLLED MECHANISMS ARE EXAMPLES OF ACCEPTABLE DESIGNS. IF SELF CLOSING VALVES ARE USED THE FAUCET SHALL REMAIN OPEN FOR AT LEAST 10 SECONDS.
- 4.19.6 MIRRORS: MIRRORS SHALL BE MOUNTED WITH THE BOTTOM EDGE OF THE REFLECTING SURFACE NO HIGHER THAN 39 1/2" ABOVE THE FINISH FLOOR.



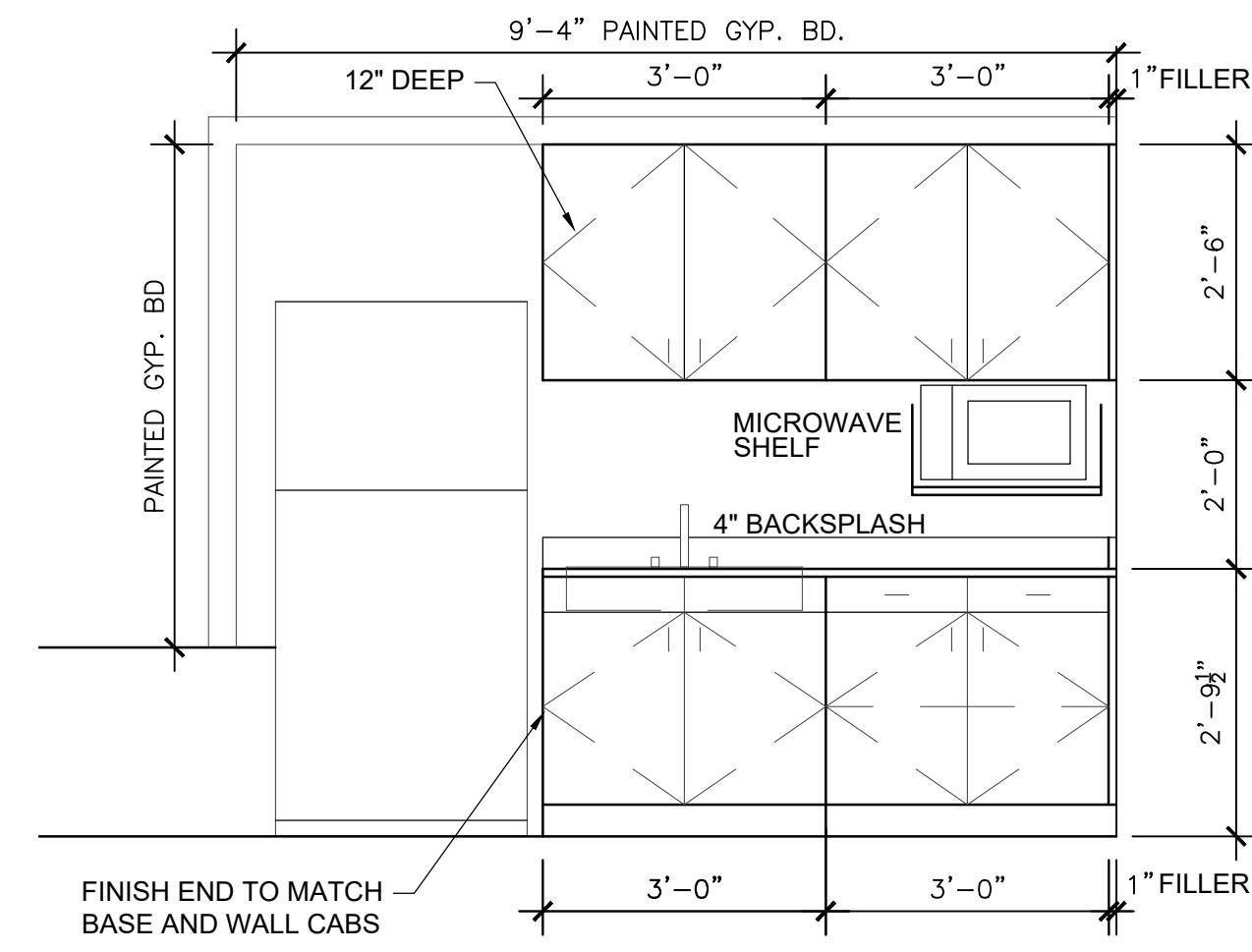
**DEER CREEK**  
RESTROOM ACCESSORIES  
SCALE: 1/2" = 1'-0"



**DEER CREEK**  
ADA SIGNAGE  
SCALE: 1/2" = 1'-0"

**BREAKROOM NOTES:**

- MICROWAVE AND REFRIGERATOR PROVIDED BY THE OWNER.
- REGENCY 24" X 18" STAINLESS STEEL MICROWAVE SHELF OR EQUAL.
- PLASTIC LAMINATE COUNTERS AND CABINETS. REFER TO SPECIFICATIONS.
- ADD 1/2" MR GYP. BD. IN AREA SHOWN TO PROVIDE FLUSH SURFACE WITH CONCRETE STUB WALL. ADD 1x4 PAINTED WOOD TRIM AROUND PERIMETER SIM. TO DETAIL 3/A-4.



**DEER CREEK**  
BREAK ROOM CABINETS  
SCALE: 1/2" = 1'-0"

**FLOOR PLAN KEYNOTES:**

- 6-INCH DIA STEEL PIPE BOLLARDS (4 PER DOOR TYP), REFER TO STRUCTURAL
- DOWNSPOUTS WITH SPLASH BLOCK.
- 6" TRENCH DRAIN. REFER TO PLUMBING. FLOOR SLAB TO SLOPE TO DRAINS. REFER TO STRUCTURAL.
- CONCRETE APRON. REFER TO STRUCTURAL.
- EYE WASH / SAFETY SHOWER. REFER TO PLUMBING
- MOP SINK. REFER TO PLUMBING
- CASEWORK. REFER TO DETAIL 5/A-1.
- 8' LONG WORK BENCH LOCATIONS. REFER TO DETAIL 7/A-5.
- LOCATIONS FOR OWNER PROVIDED FIRE EXTINGUISHER.
- ELECTRICAL PANELS. REFER TO ELECTRICAL
- WATER HEATER. REFER TO PLUMBING
- VINYL DOUBLE HUNG WINDOW. REFER TO SCHEDULE ON A-1.
- LOCATION OF OWNER PROVIDED LOCKERS.
- MECHANICAL UNIT. REFER TO MEP.
- AIR COMPRESSOR LOCATION. REFER TO MEP.
- AC CONDENSOR ON CONCRETE PAD
- SIGNAGE. REFER TO SCHEDULE

**SIGNAGE SCHEDULE:**

- TACTILE EXIT SIGNAGE @ ALL EXTERIOR MAN DOORS
- ADA RESTROOM
- MECHANICAL ROOM
- STORAGE ROOM
- HAZARDOUS MATERIALS AREA - EACH DOOR TO MAINTENANCE 106
- (2) EXTERIOR HAZARDOUS MATERIALS PLACARD
- WEIGHT LIMIT ON AREA ABOVE RESTROOM

**WALL LEGEND**

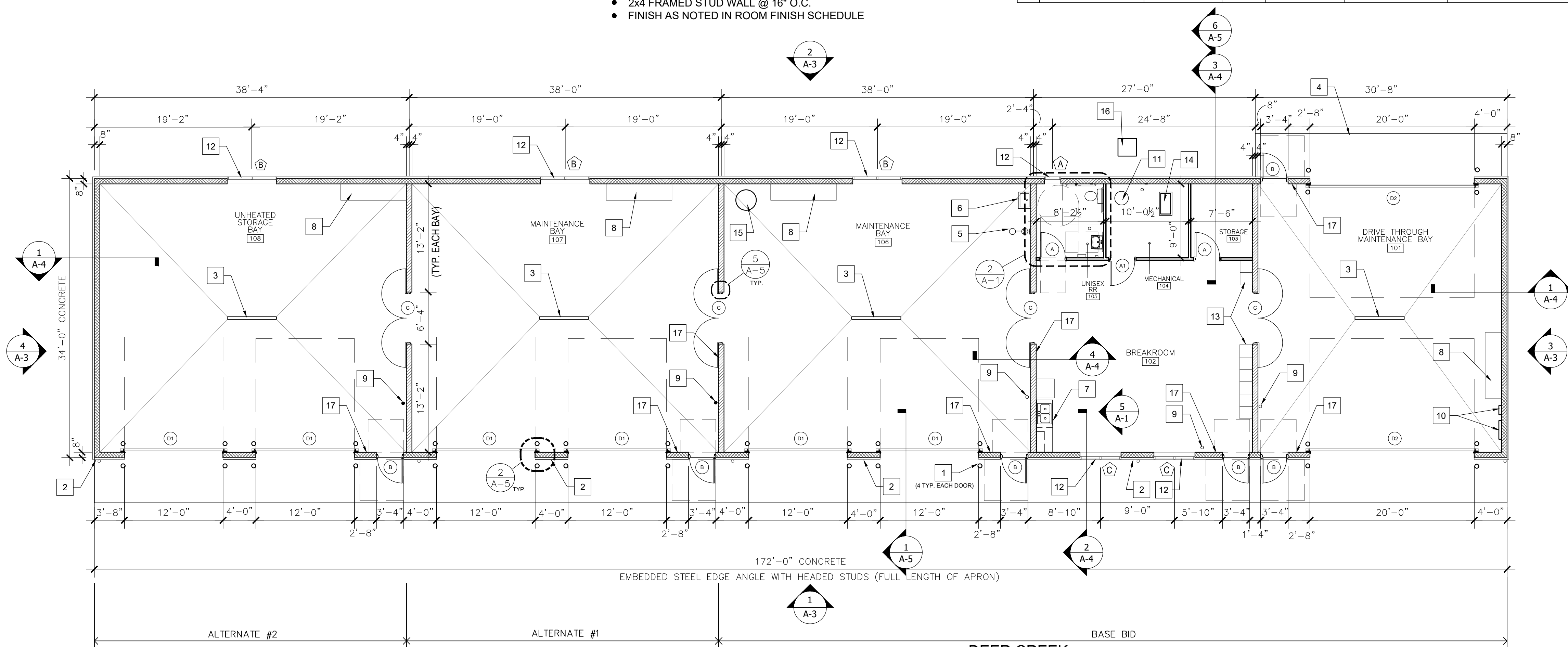
- NEW EXTERIOR WALL ASSEMBLY
  - 24" HIGH 8" POURED CONCRETE WALL (SEE STRUCTURAL)
  - W/ 2X6 OR 2X8 FRAMED WALL @ 16" O.C. ABOVE (SEE STRUCTURAL)
  - R-19 BATT INSULATION
  - SHEATHING BOTH SIDES OF FRAMING (SEE STRUCTURAL)
  - 1" RIGID INSULATION
  - WEATHER BARRIER
  - METAL SIDING
  - REFER TO ROOM FINISH SCHEDULE FOR INTERIOR SIDE FINISH
- NEW INTERIOR SHEAR WALL
  - 24" HIGH 8" POURED CONCRETE WALL (SEE STRUCTURAL)
  - W/ 2X6 FRAMED WALL @ 16" O.C. ABOVE
  - SHEATHING ON BOTH SIDES (SEE STRUCTURAL).
  - FINISH AS NOTED IN ROOM FINISH SCHEDULE
- NEW INTERIOR WALL
  - 2x4 FRAMED STUD WALL @ 16" O.C.
  - FINISH AS NOTED IN ROOM FINISH SCHEDULE

**WINDOW SCHEDULE**

- (A) SIZE: 2'-0" Wx 3'-0" H - SILL 4'-2"
- (B) SIZE: 6'-0" Wx 4'-6" H - SILL 3'-0"
- (C) SIZE: 5'-0" Wx 4'-6" H - SILL 3'-0"

**FINISH SCHEDULE**

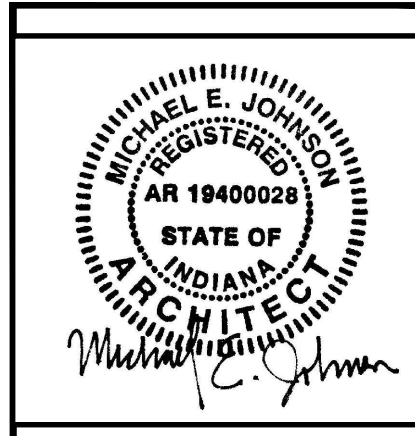
#	ROOM NAME	FLOOR	BASE	WALL	CEILING	REMARKS
101	D.T. MAINTENANCE BAY	SEALED CONCRETE	NONE	FRP	METAL LINER PANELS	
102	BREAKROOM	SEALED CONCRETE	NONE	PLYWOOD-PAINT	METAL LINER PANELS	
103	STORAGE	SEALED CONCRETE	NONE	PLYWOOD-PAINT	NONE	
104	MECHANICAL	SEALED CONCRETE	NONE	PLYWOOD-PAINT	NONE	NO FINISH SOUTH WALL, OPEN
105	UNSEX RESTROOM	SEALED CONCRETE	NONE	1/2" GYP. BD. PAINT	1/2" GYP. BD. PAINT	
106	MAINTENANCE BAY	SEALED CONCRETE	NONE	PLYWOOD-PAINT	METAL LINER PANELS	
107	MAINTENANCE BAY	SEALED CONCRETE	NONE	PLYWOOD-PAINT	METAL LINER PANELS	ALTERNATE #1
108	UNHEATED STORAGE BAY	SEALED CONCRETE	NONE	PLYWOOD-PAINT	NONE	ALTERNATE #2



**DEER CREEK**  
FLOOR PLAN  
SCALE: 1/8" = 1'-0"

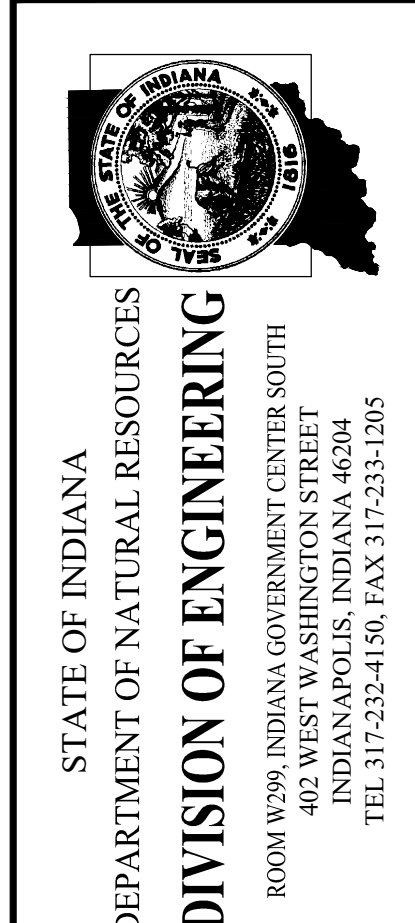
**LEGEND**

- (D) DOOR - REFER TO A-5
- (B) WINDOW - REFER TO A-1
- (A-3) ELEVATIONS
- (3 A-4) SECTIONS
- (3) KEYNOTES



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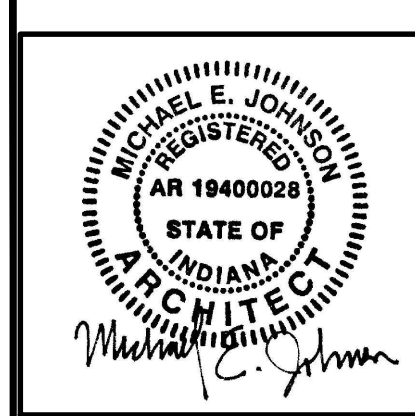
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Drafter: NS Drawing Scale: AS NOTED  
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Sheet: 15 of 24





Certified by: *Michael E. Johnson*

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Drawing Number:  
**A-2**

Sheet 16 of 24

**CEILING KEYNOTES:**

- 1 EXTERIOR LIGHTING (REFER TO ELECTRICAL)
- 2 EMERGENCY LIGHTING (REFER TO ELECTRICAL)
- 3 INTERIOR LIGHTING (REFER TO ELECTRICAL)
- 4 1/2" GYP. BD. CEILING - PAINTED (UNISEX RESTROOM)
- 5 METAL CEILING LINER PANELS (ALL BAYS). COLOR: WHITE PROVIDE MANUFACTURER'S STANDARD TRIM ON PERIMETER.
- 6 ATTIC ACCESS PANEL (22"x42") CENTERED IN TRUSS SPAN. 3/8" PLYWOOD LID WITH 2x4 TRIM AROUND OPENING. SET TRIM TO HOLD PLYWOOD LID. PAINT LID AND TRIM WHITE. REFER TO 4/A-2
- 7 DRAFTSTOPPING - 1/2" GYP. BD. ON SIDE OF TRUSS FROM ROOF DECK TO CEILING.
- 8 15/32" PLYWOOD ON SIDE OF TRUSS TO CLOSE OFF ATTIC FROM OPEN STORAGE BAY. ADD BULKHEAD IF NEEDED TO CLOSE OFF ATTIC COMPLETELY. ALTERNATE #2 ONLY.
- 9 NO CEILING
- 10 EXHAUST FAN. REFER TO MECHANICAL.
- 11 DUCTWORK EXTENDING UP FROM MECHANICAL ROOM BELOW. REFER TO MECHANICAL.
- 12 MECHANICAL DUCTWORK. REFER TO MECHANICAL.

**BUILDING CODE CEILING NOTES:**

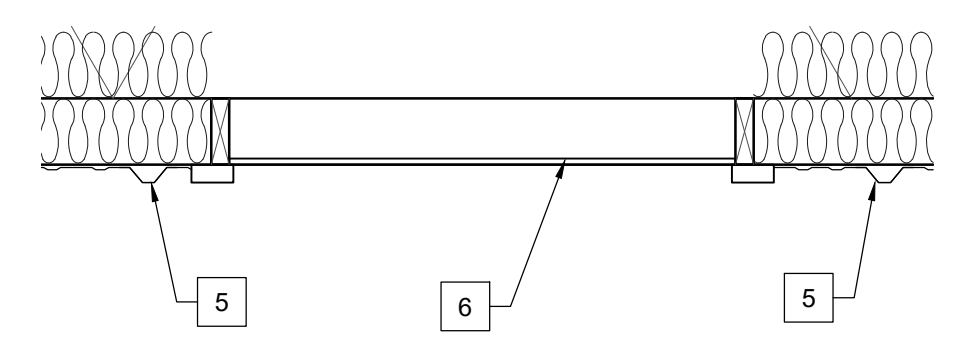
**SECTION 1209.2 ATTIC SPACES**  
 AN OPENING NOT LESS THAN 20"x30" SHALL BE PROVIDED TO AN ATTIC AREA HAVING A CLEAR HEIGHT OF OVER 30". CLEAR HEADROOM OF NOT LESS THAN 30" INCHES SHALL BE PROVIDED IN THE ATTIC SPACE AT OR ABOVE THE ACCESS OPENING.

**SECTION 718.4 DRAFTSTOPPING IN ATTICS**  
 IN COMBUSTIBLE CONSTRUCTION, DRAFTSTOPPING SHALL BE INSTALLED TO SUBDIVIDE ATTIC SPACES AND CONCEALED ROOF SPACES IN THE LOCATIONS PRESCRIBED IN SECTION 718.4.2 AND 718.4.3.

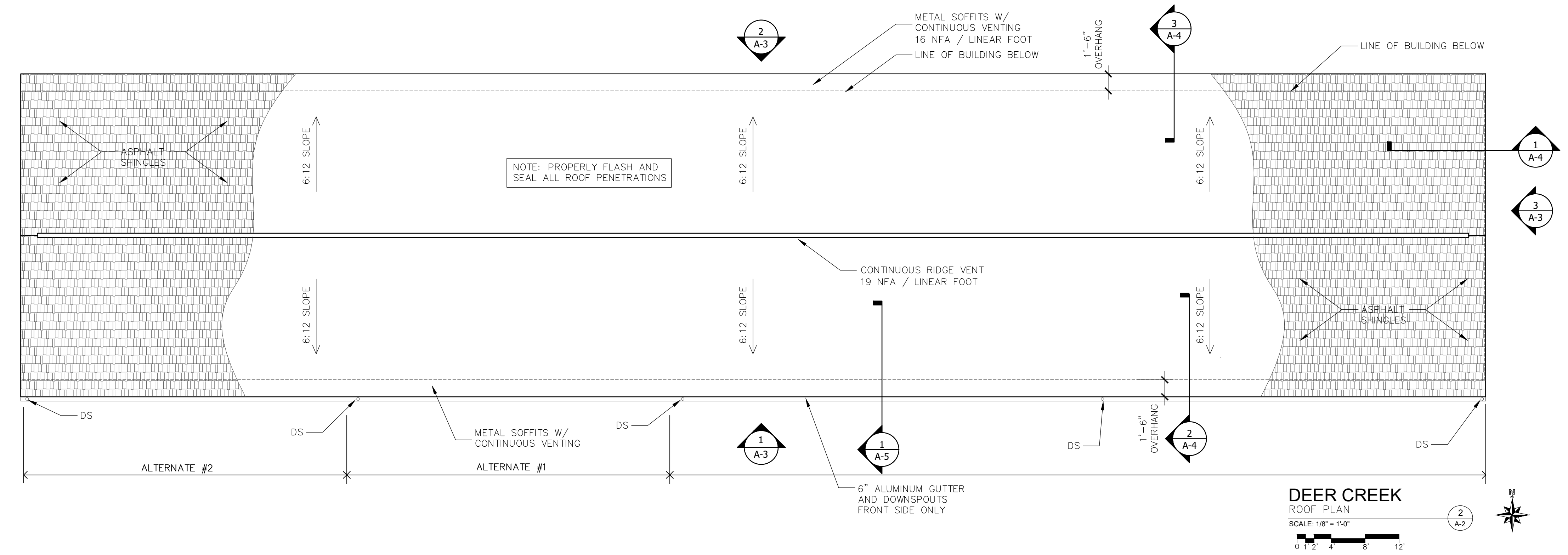
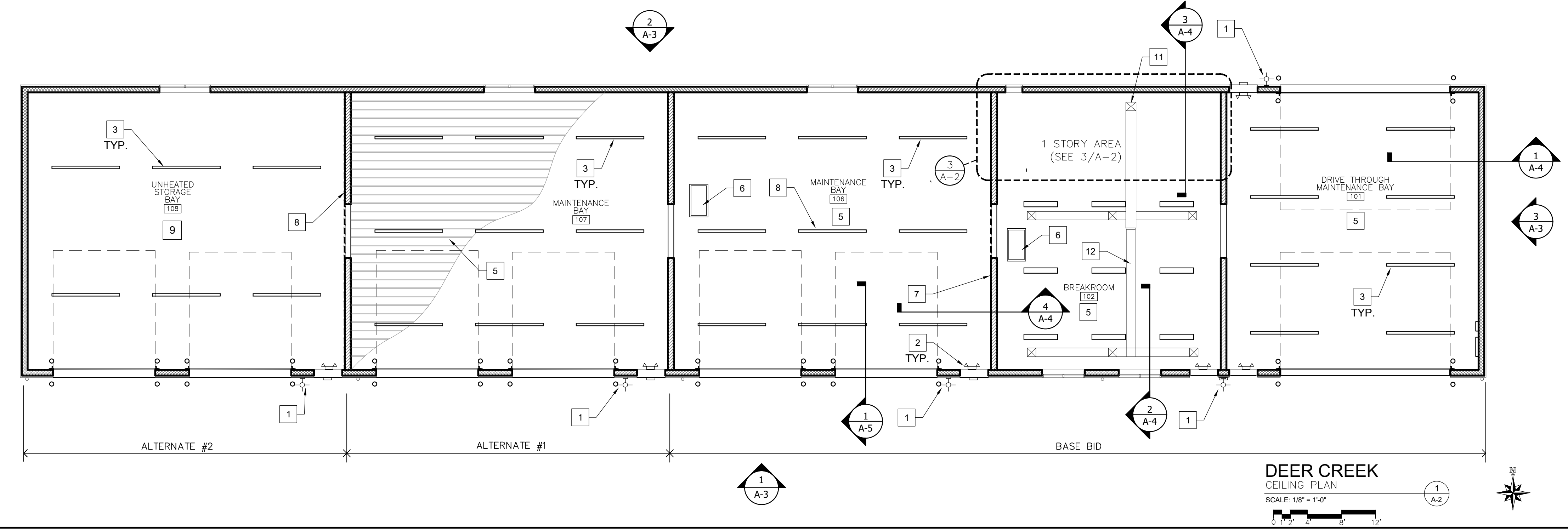
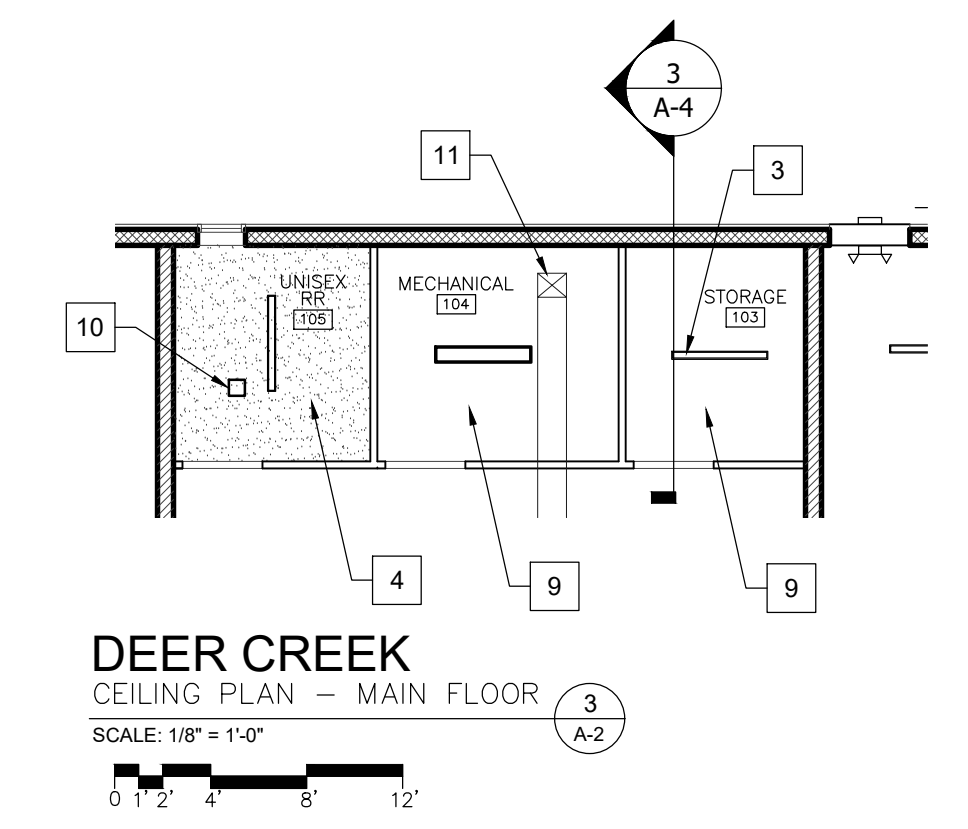
**718.4.1.1 OPENINGS:**  
 OPENINGS IN THE PARTITIONS SHALL BE PROTECTED BY SELF-CLOSING DOORS WITH AUTOMATIC LATCHES, CONSTRUCTED AS REQUIRED FOR THE PARTITIONS.

**718.4.3 OTHER GROUPS**  
 DRAFTSTOPPING SHALL BE INSTALLED IN ATTICS AND CONCEALED ROOF SPACES, SUCH THAT ANY HORIZONTAL AREA DOES NOT EXCEED 3,000 SQUARE FEET.

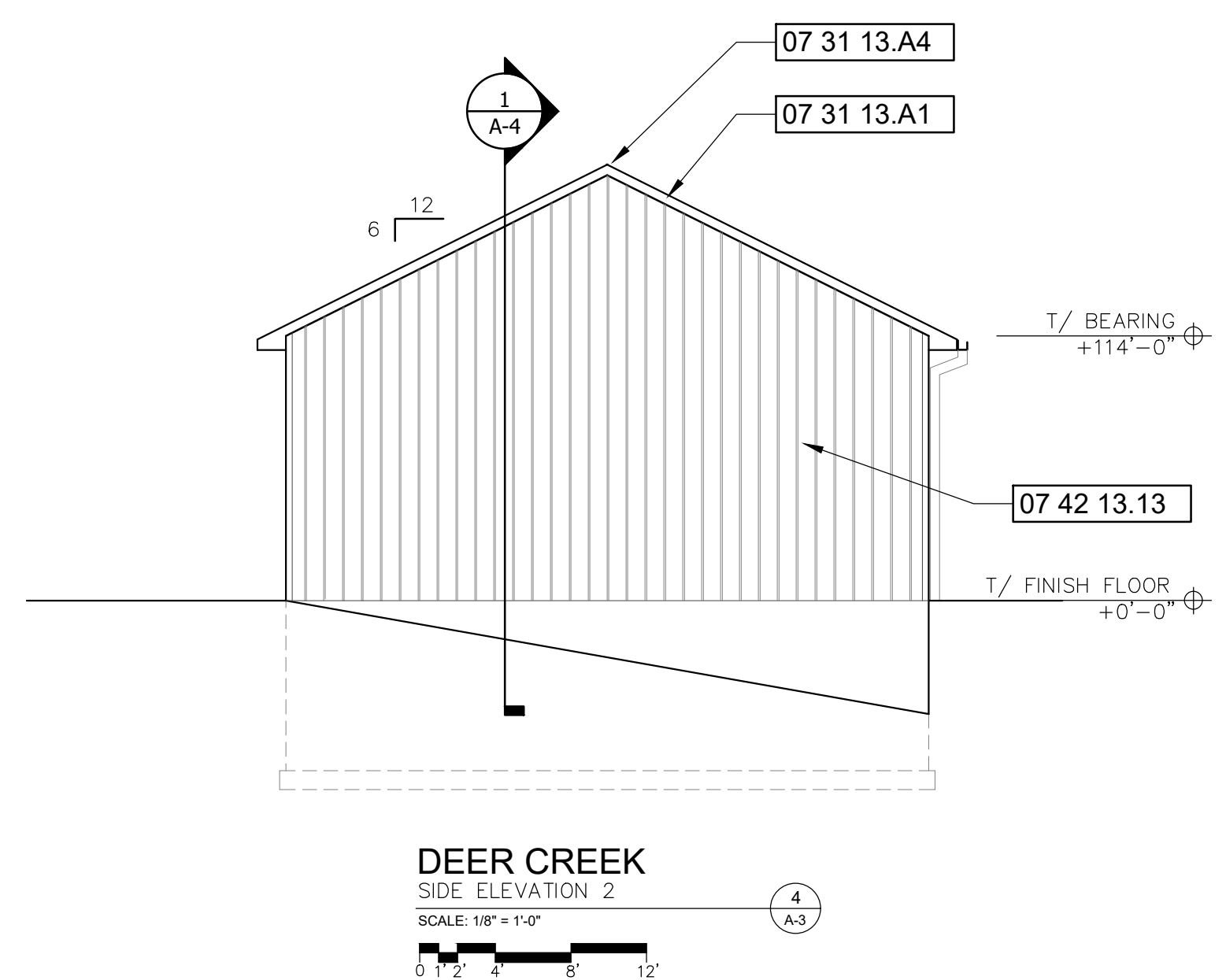
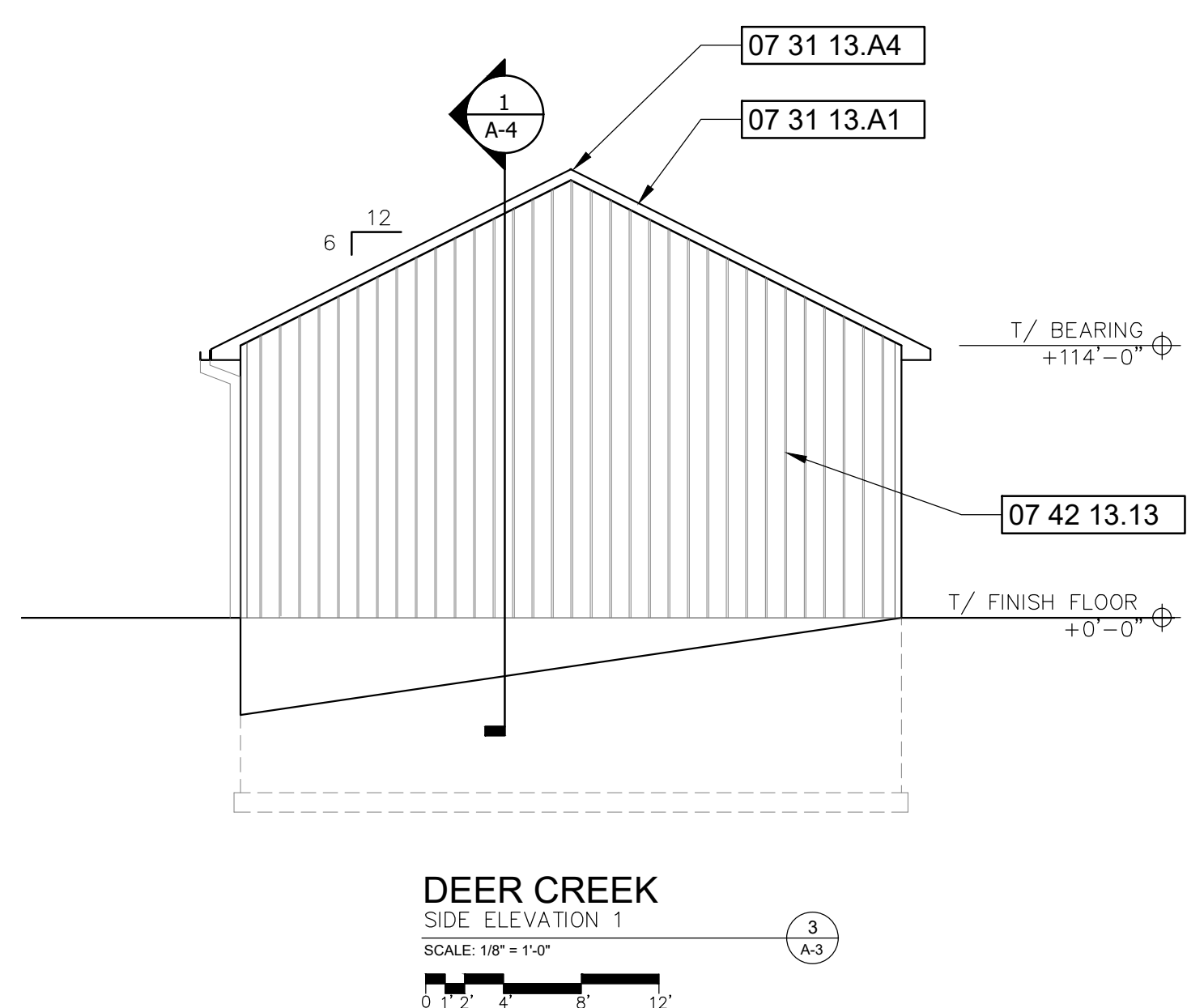
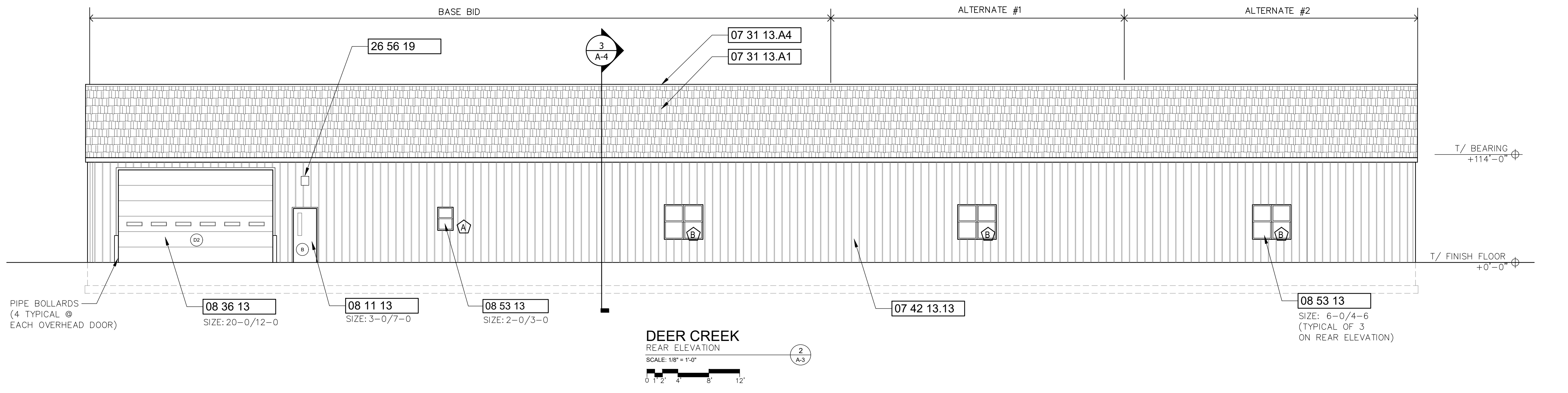
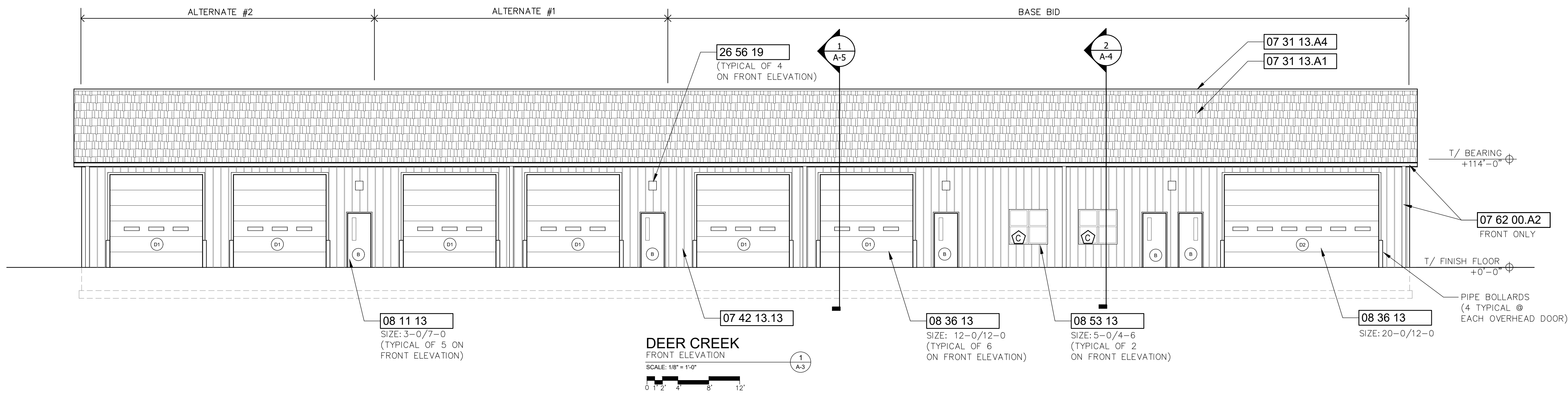
**718.3.1 DRAFTSTOPPING MATERIALS**  
 DRAFTSTOPPING MATERIALS SHALL NOT BE LESS THAN 1/2" GYPSUM BOARD, 3/8" WOOD STRUCTURAL PANEL, 3/8" PARTICLE BOARD, 1" NOMINAL LUMBER, CEMENT FIBERBOARD, BATTIS OR BLANKETS OF MINERAL WOOL OR GLASS FIBER, OR OTHER APPROVED MATERIALS ADEQUATELY SUPPORTED. THE INTEGRITY OF DRAFTSTOPS SHALL BE MAINTAINED.



**DEER CREEK**  
 ATTIC ACCESS  
 SCALE: 3/4" = 1'-0"  
 4 A-2





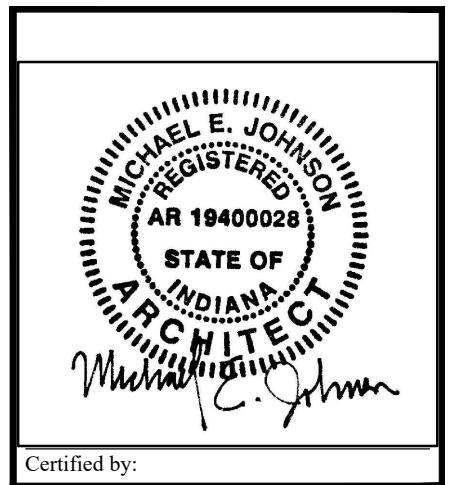


KEYNOTE LEGEND	
KEY VALUE	KEYNOTE TEXT
02 22 10	FILLING AND EXCAVATING
03 20 00	CONCRETE REINFORCING - REFER TO STRUCTURAL
03 30 00	CAST-IN-PLACE CONCRETE - REFER TO STRUCTURAL
04 20 00	ANCHOR BOLTS - REFER TO STRUCTURAL
05 50 00	METAL FABRICATIONS - REFER TO STRUCTURAL
06 10 00	ROUGH CARPENTRY - REFER TO STRUCTURAL
06 10 00.A1	WOOD BLOCKING
06 10 00.A2	WOOD FRAMING 2x8@ 16" O.C. - REFER TO STRUCTURAL
06 10 00.A3	WOOD FRAMING 2x6@ 16" O.C. - REFER TO STRUCTURAL
06 10 00.A4	WOOD FRAMING 2x4@ 16" O.C. - REFER TO STRUCTURAL
06 10 00.A5	2x8 FASCIA
06 10 00.A6	WOOD FRAMING 2x10@ 16" O.C. - REFER TO STRUCTURAL
06 16 00.A1	PLYWOOD SHEATHING - REFER TO STRUCTURAL
06 16 00.A2	15/32" PLYWOOD SHEATHING
06 17 53	SHOP FABRICATED WOOD TRUSSES - SEE STRUCTURAL
06 20 00	FINISH CARPENTRY
06 41 16	PLASTIC LAMINATE CABINETS
06 64 00	PLASTIC PANELING
07 21 00.A1	BATT INSULATION R-19
07 21 00.A2	BATT INSULATION R-38
07 21 13.A1	CONTINUOUS INSULATION R-3.8
07 21 13.A2	CONTINUOUS INSULATION R-15
07 25 00	WEATHER BARRIERS
07 31 13.A1	ASPHALT SHINGLES
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07 31 13.A3	SELF ADHERING SHEET UNDERLAYMENT
07 31 13.A4	RIDGE VENT
07 42 13.13	METAL SIDING (FORMED METAL WALL PANELS)
07 42 13.13.A	METAL CEILING LINER PANELS
07 42 93	METAL SOFFIT PANELS (VENTILATED)
07 62 00.A1	SHEET METAL FLASHING AND TRIM
07 62 00.A2	SHEET METAL GUTTERS AND DOWNSPOUTS
07 92 00	JOINT SEALANTS
08 11 13	HOLLOW METAL DOORS AND FRAMES
08 36 13	SECTIONAL OVERHEAD STEEL DOORS
08 53 13	ALUM CLAD WINDOWS
08 71 00	DOOR HARDWARE
09 29 00	GYPSUM BOARD
09 90 00	PAINTING
10 14 23.16	IDENTIFICATION PANEL SIGNAGE
12 38 23.13	PLASTIC LAMINATE CLAD COUNTERTOPS
26 56 19	EXTERIOR LIGHTING

NOTE: COORDINATE RECEPTALES WITH ELECTRICAL. MOUNT WITHIN FLAT PORTIONS OF SIDING TO BE WEATHER TIGHT

LEGEND	
(D2)	DOOR - REFER TO A-5
(B)	WINDOW - REFER TO A-1
(1/A-3)	ELEVATIONS
(3/A-4)	SECTIONS
(3)	KEYNOTES

NOTE: ELEVATION IS FOR BASE BID AND ALTERNATES. BUILDING TO HAVE FINISHED END IN ALL SCENARIOS.



Certified by:  
Michael E. Johnson

**F&W Maintenance Building - Deer Creek**  
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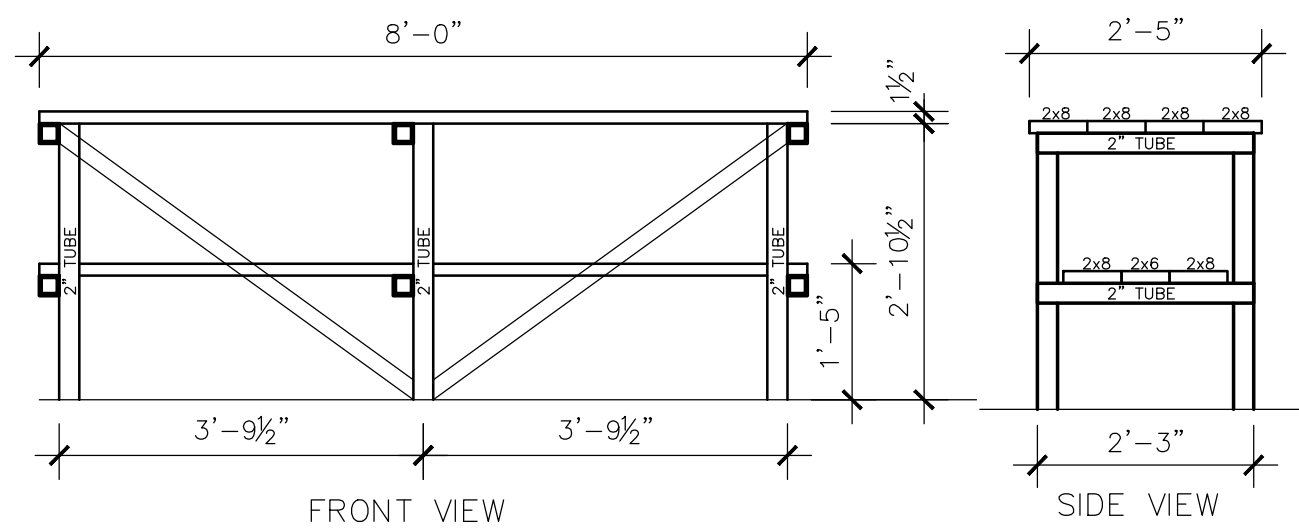
STATE OF INDIANA  
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DIVISION OF ENGINEERING  
ROOM W299, INDIANA GOVERNMENT CENTER SOUTH  
402 WEST WASHINGTON STREET  
INDIANAPOLIS, INDIANA 46204  
TEL 317-232-4150, FAX 317-231-1205

Project Number:	ENG2002905497
Requisition Number:	Requisition#
Designer:	MEJ
Drawing Date:	05/24/23
Drafter:	NS
Drawing Scale:	AS NOTED
DNR Approval:	
Client Approval:	
File Number:	130-003
Drawing Number:	A-3
Sheet:	17 of 24







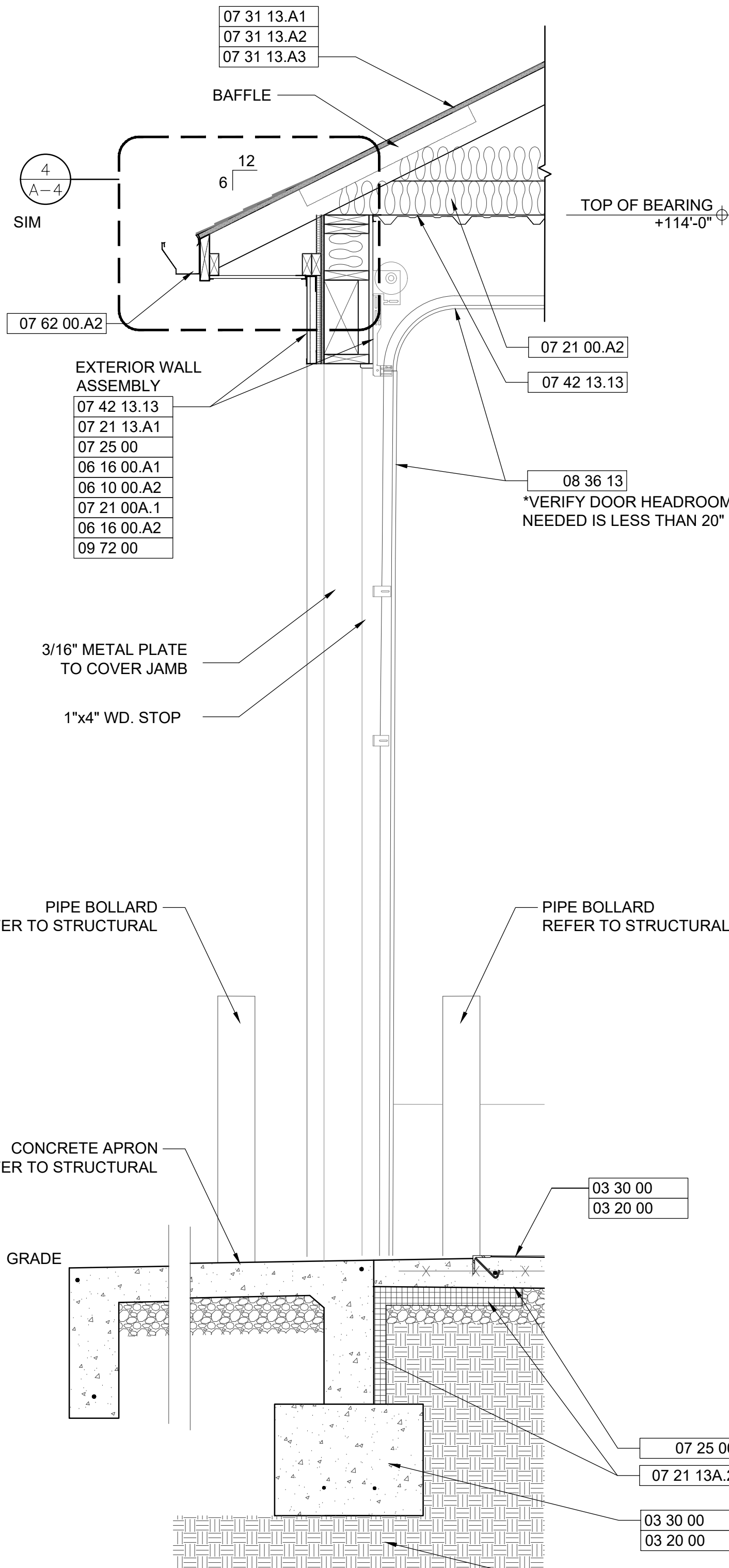


**BENCH NOTES:**

- ONE BENCH IN EACH MAINTENANCE BAY. REFER TO PLAN.
- 2" STEEL TUBE FRAMES. WELDED TOGETHER. HOLES DRILLED TO ALLOW FOR 2x8 ATTACHMENT.
- ATTACHED 2x8's TO STEEL FRAMING WITH CARRIAGE BOLTS @ 24" O.C. COUNTERSUNK INTO BOARDS TO ALLOW FOR A FLAT SURFACE. NUT AND WASHER ON UNDERSIDE.

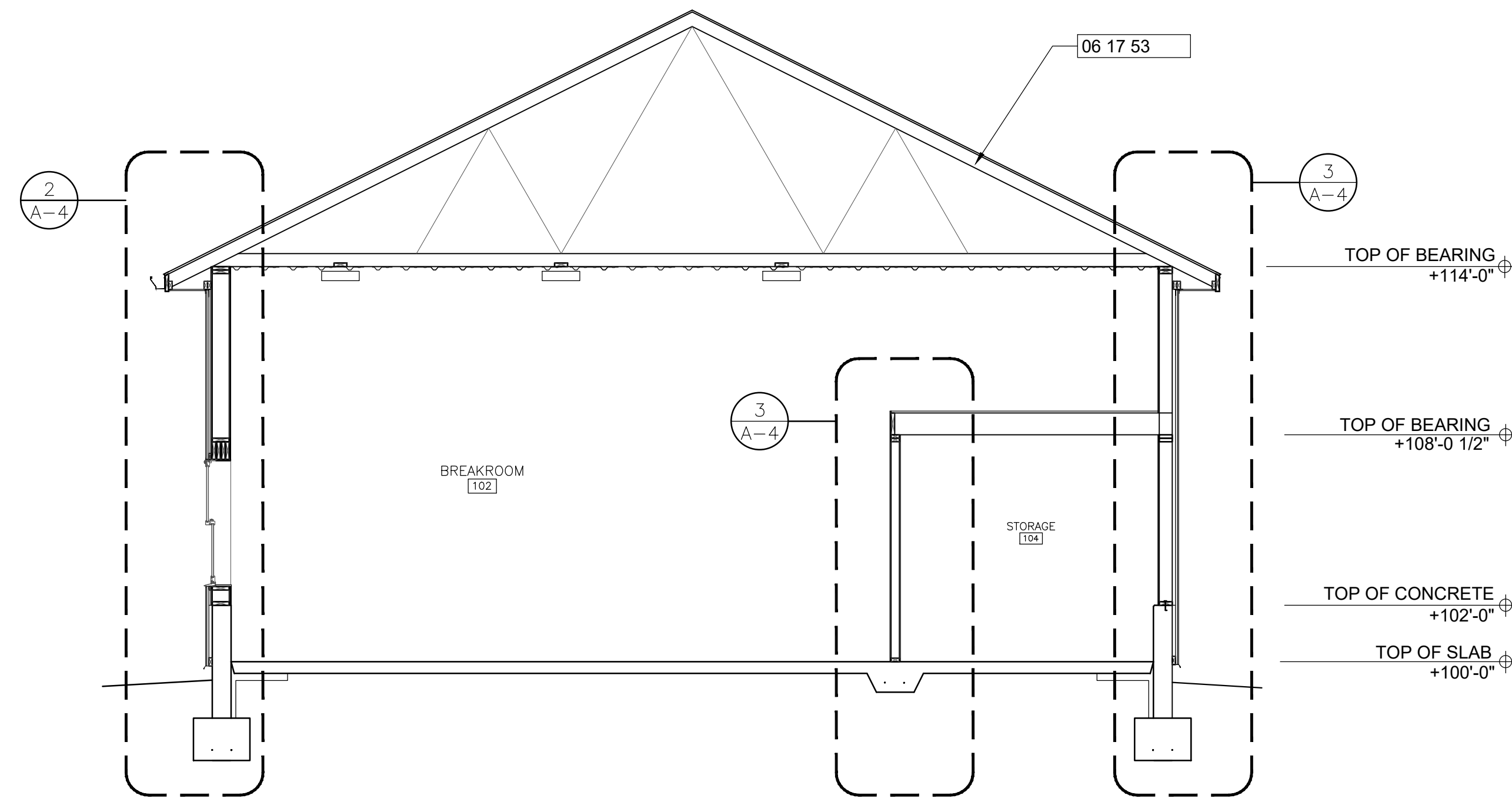
**WORK BENCHES**

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



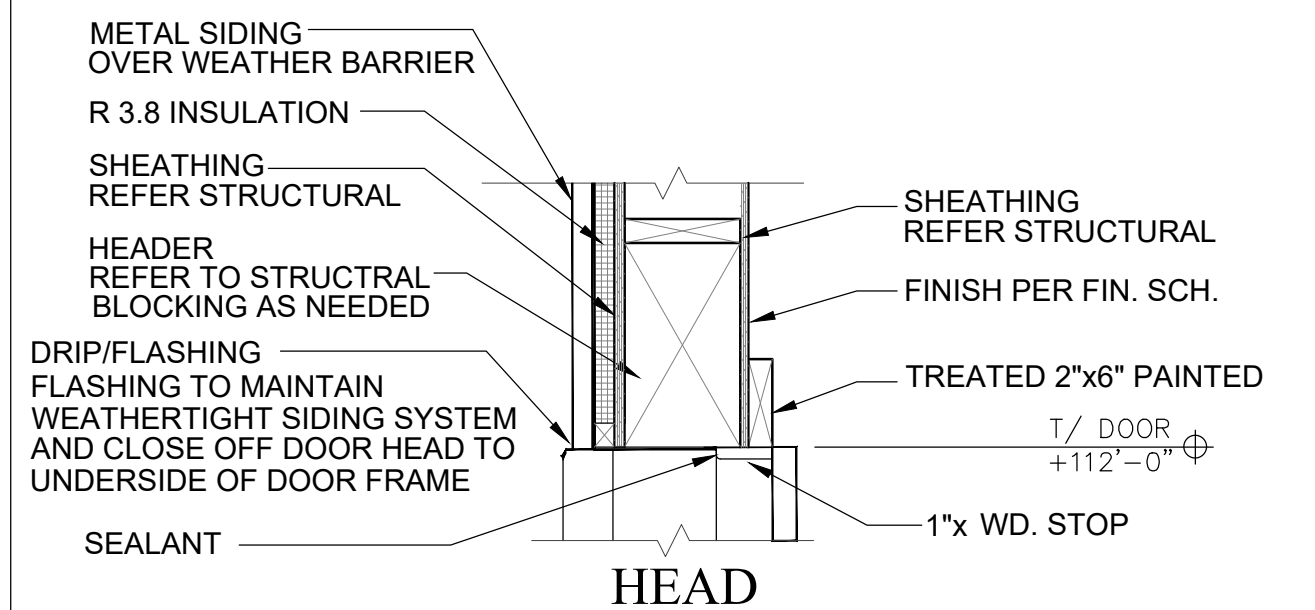
**WALL SECTION - OVERHEAD DOOR**

SCALE: 3/4" = 1'-0"



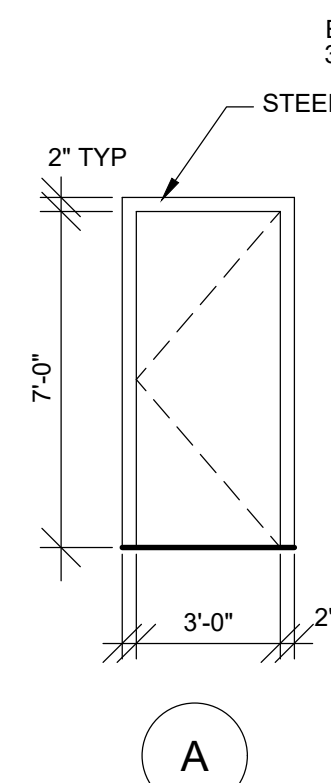
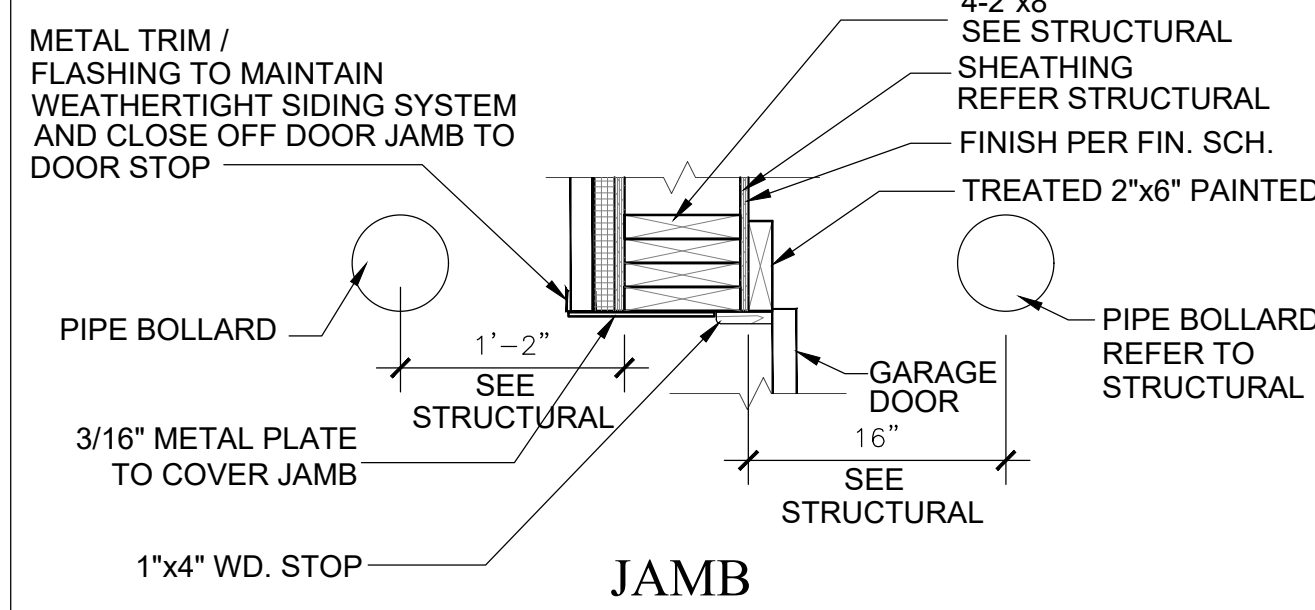
**BUILDING SECTION**

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

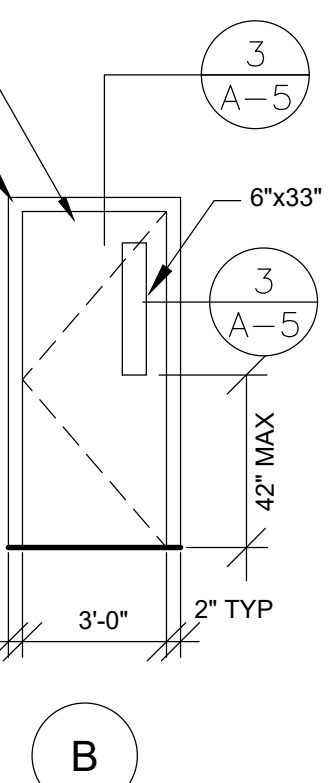


**OVERHEAD DOOR DETAILS**

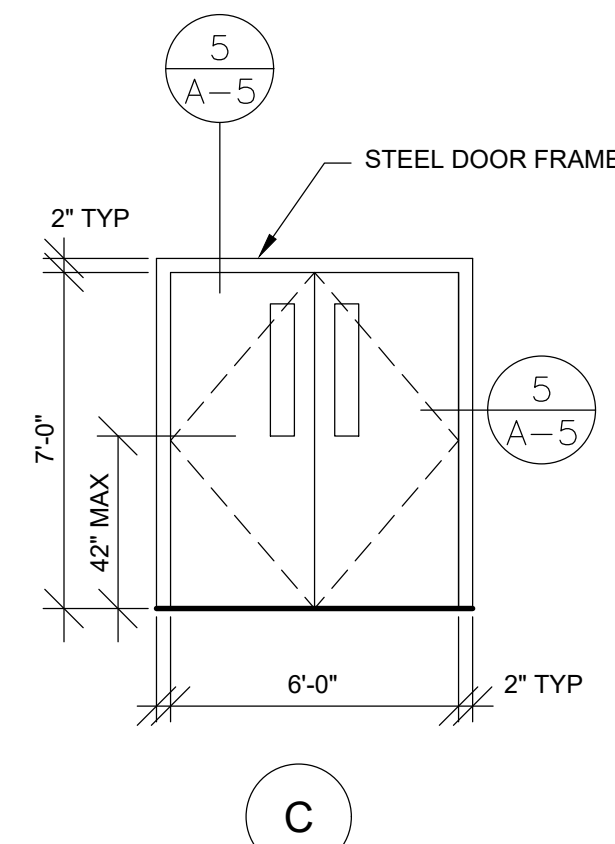
SCALE: 1" = 1'-0"



UN-INSULATED DOOR



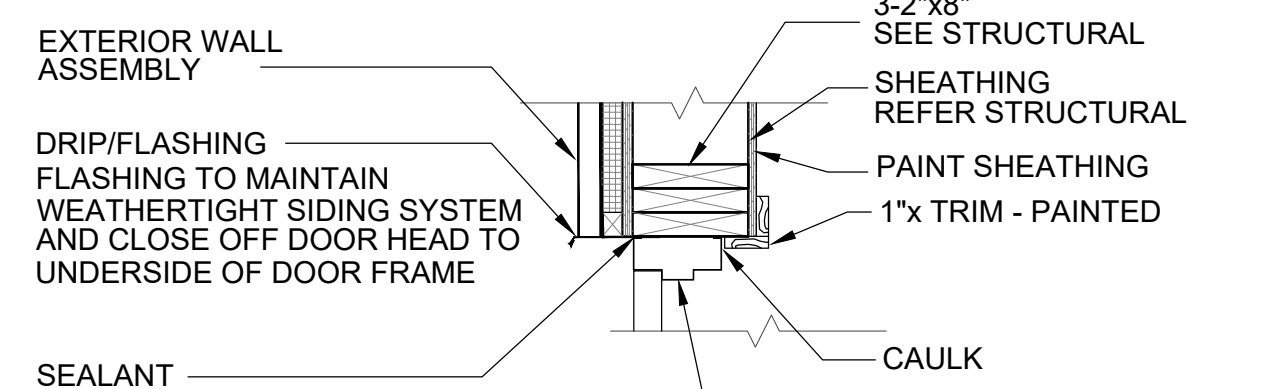
INSULATED STEEL DOOR WITH 1" LOW "E" GLASS



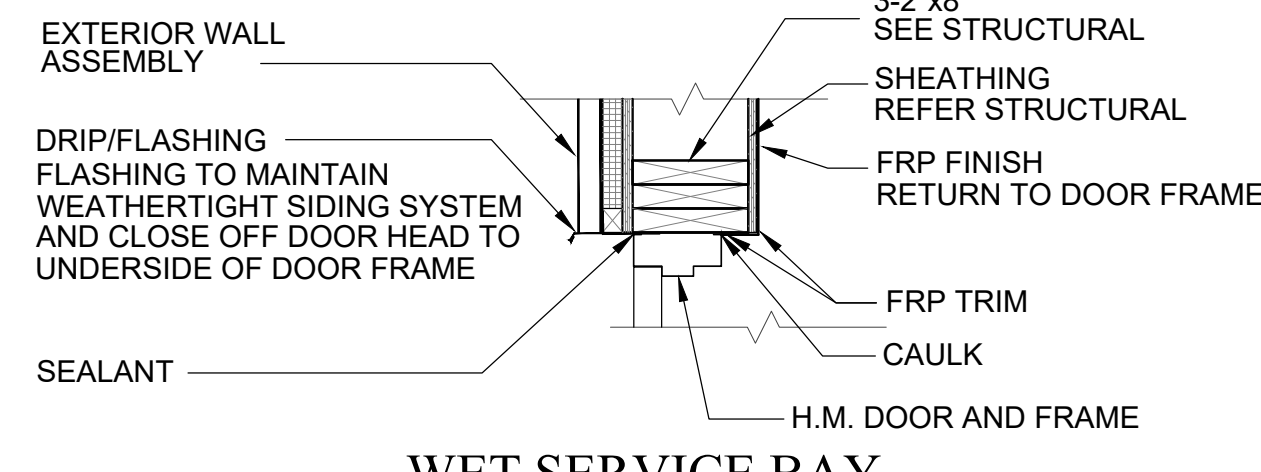
STEEL DOOR FRAME

**DOOR ELEVATIONS**

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



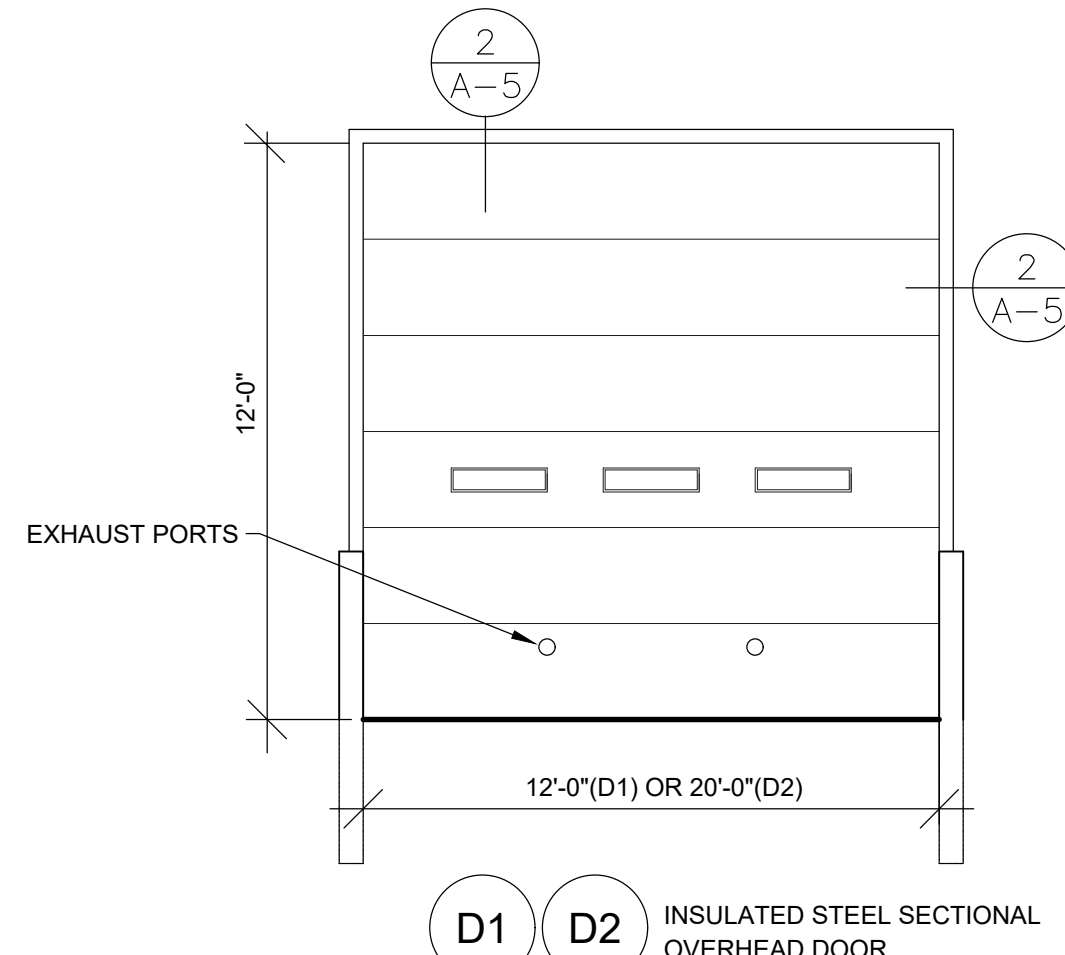
**BREAK ROOM / DRY BAYS**



**WET SERVICE BAY**

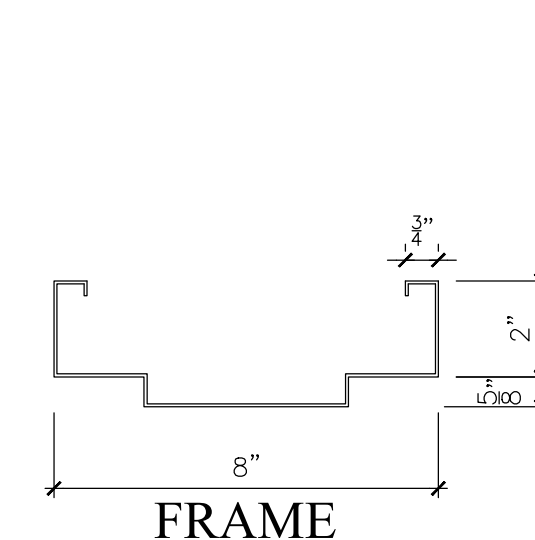
**MANDOOR HEAD/JAMB**

SCALE: 1" = 1'-0"

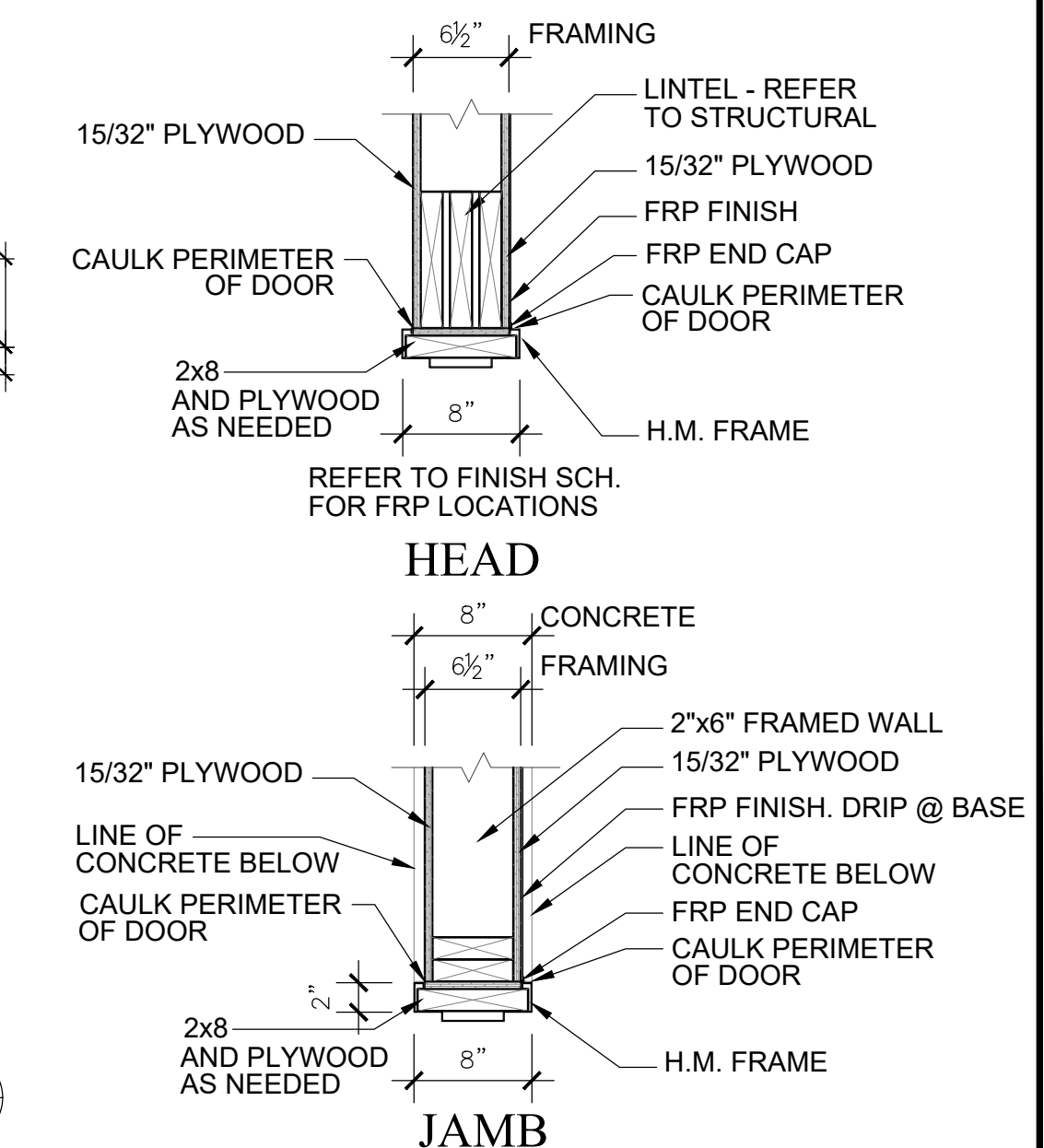


**DOUBLE BAY DOOR DETAILS**

SCALE: 1" = 1'-0"



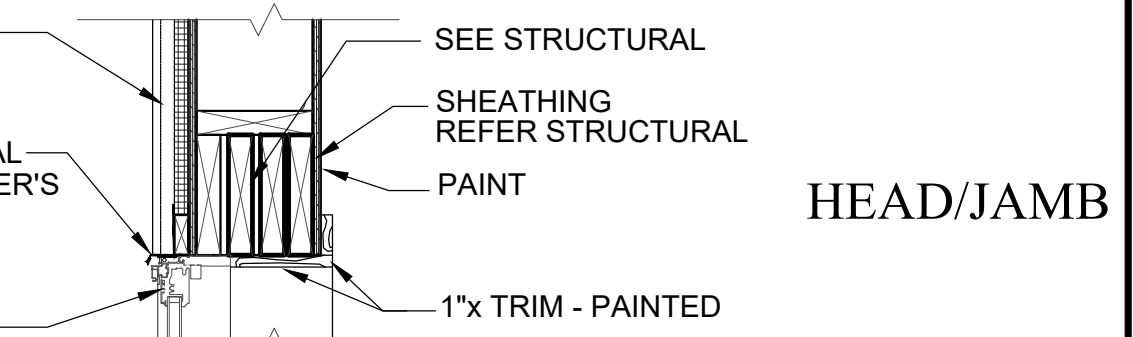
FRAME



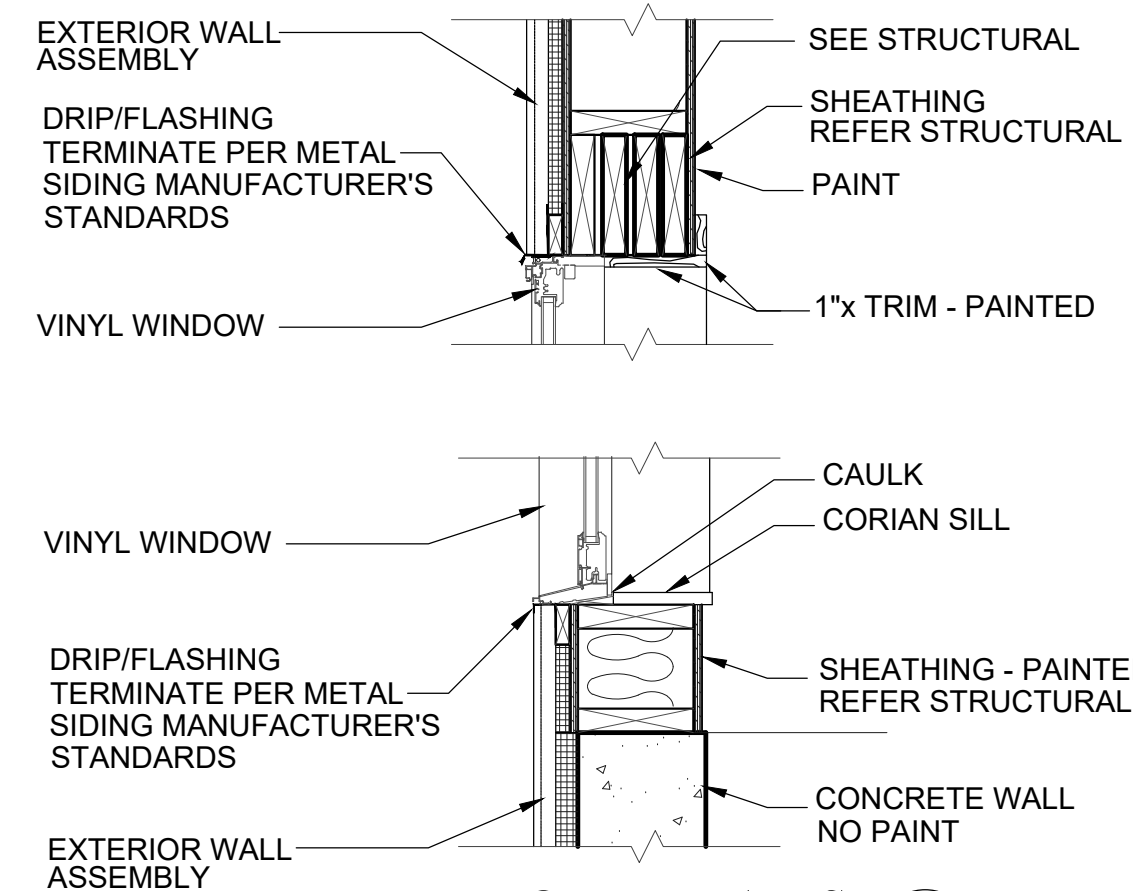
**WINDOW DETAILS**

SCALE: 1" = 1'-0"

SCALE: 1" = 1'-0"



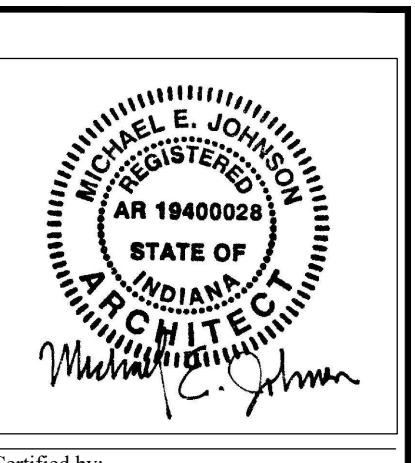
HEAD/JAMB



SILL

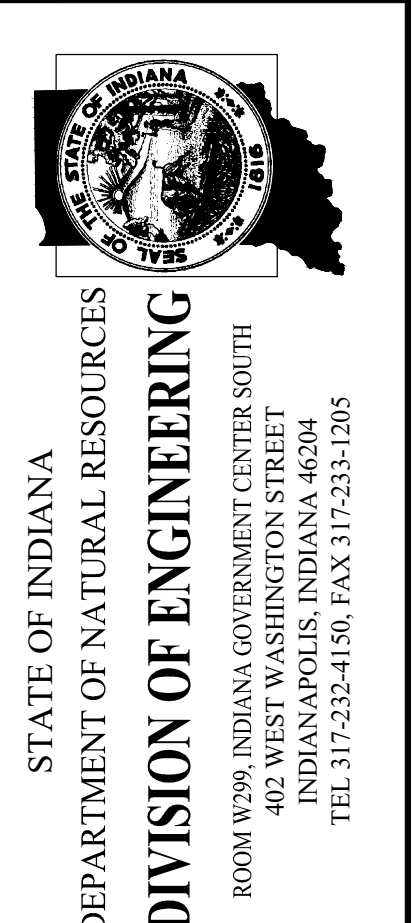
WINDOW TO BE FLASHED / SEALED PER MANUFACTURERS RECOMMENDATIONS

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Certified by:  
Michael E. Johnson  
Professional Engineer  
State of Indiana  
License No. AR 19400028

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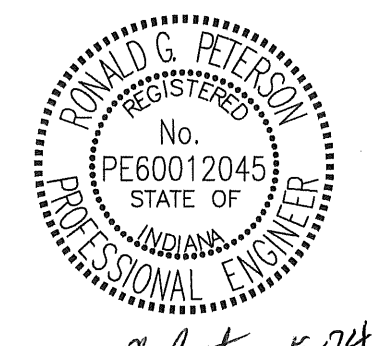


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TEL 317-232-4150, FAX 317-231-1205

Revisions:

Project Number: ENG2002905497  
Requisition Number: Requisition#  
Designer: MEJ Drawing Date: 05/24/23  
Draftsman: NS Drawing Scale: AS NOTED  
DNR Approval:  
Client Approval:  
File Number: 130-003  
Drawing Number: A-5  
Sheet: 19 of 24





Certified by: *Ronald G. Peterson* 5-24-23

**COMPRESSED AIR SYSTEM NOTES:**

- AIR COMPRESSOR SHALL BE EQUAL TO INGERSOLL RAND MODEL NUMBER 2475N5-P, 5 HORSEPOWER TWO-STAGE 230 VOLT/SINGLE PHASE RECIPROCATING COMPRESSOR. UNIT SHALL BE PERMANENTLY AFFIXED, BOLTED TO THE FLOOR, HARD WIRED, OR AT CONTRACTOR'S DISCRETION, CORD-AND-PLUG CONNECTED WITH ALL WIRING, PIPING, CONTROLS AND ALL NECESSARY APPURTENANCES FOR A COMPLETE AND FUNCTIONAL INSTALLATION PROVIDED BY THE CONTRACTOR.
- INSTALLATION SHALL INCLUDE COPPER PIPING MEETING THE PRESSURE REQUIREMENTS OF INSTALLED EQUIPMENT AND THE INDIANA MECHANICAL CODE.
- PROVIDE A PRESSURE-SENSOR SWITCH HARD WIRED TO THE COMPRESSOR TO SHUT-OFF THE COMPRESSOR IN EVENT OF OVER-PRESSURIZATION CAUSED BY CLOSED VALVE (S).
- PROVIDE TERMINAL DEVICES ON ALL END RUNS SUITABLE FOR USE WITH HOSE CONNECTIONS AND AIR TOOLS.
- PROVIDE DRAIN VALVES INSTALLED AT ALL PIPING LOW POINTS FOR MANUAL DRAINING OF WATER FROM THE PIPING SYSTEM.
- MINIMUM PIPE SIZE SHALL BE 3/4". LARGER PIPE SHALL BE INSTALLED WHERE CALLED OUT ON THE PLAN.
- SYSTEM SHALL INCLUDE ALL APPURTENANCES RECOMMENDED BY THE COMPRESSOR MANUFACTURER INCLUDING OIL COALESCER AND AIR FILTER ON THE DISCHARGE PIPING OF THE COMPRESSOR.
- PIPING SYSTEM SHALL INCLUDE OUTLETS AT THE FRONT OF ALL HEATED BAYS, AND AN ADDITIONAL OUTLET ON THE FRONT OF THE BUILDING NEAR THE BREAKROOM ENTRANCE.
- AIR LINES ARE TO BE RUN ALONG WALLS NEAR THE UNDER-SIDE OF THE CEILING.

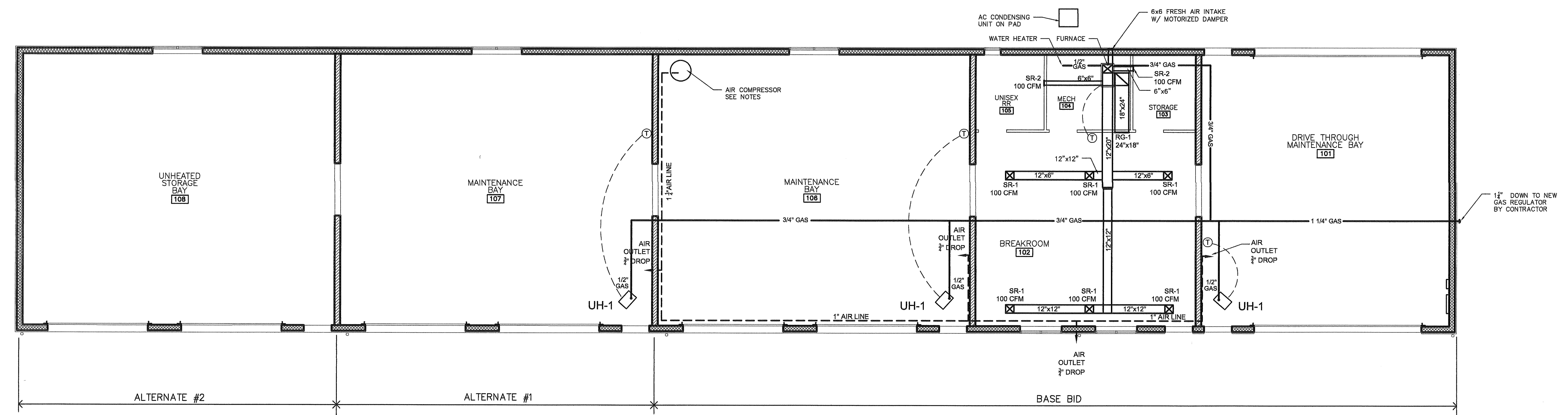
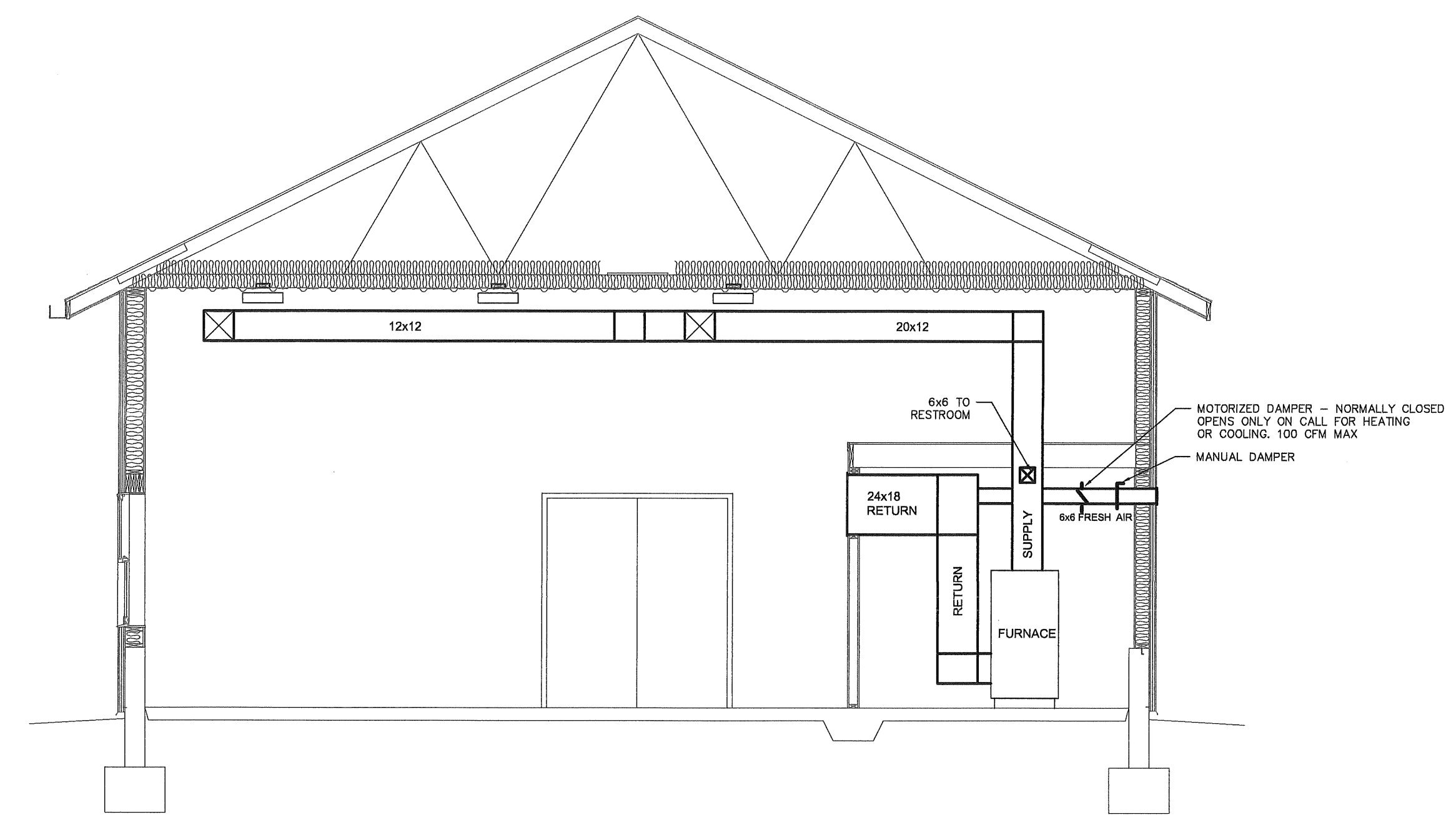
**MECHANICAL PLAN NOTES:**

- PROVIDE NEW COPPER REFRIGERANT PIPING, SIZED AND INSULATED PER MANUFACTURER'S INSTRUCTIONS, BETWEEN NEW INDOOR FURNACE AND OUTDOOR AC CONDENSING UNIT.
- CONTRACTOR TO PROVIDE 1 1/4" PIPING FROM THE LOCATION OF THE NEW NATURAL GAS SERVICE TO THE BUILDING.
- GAS LINES TO BE RUN IN ATTIC.

DIFFUSER, REGISTER AND GRILLE SCHEDULE				
MARK	USAGE	MANUFACTURER	MODEL #	NOTES
SR-1	SUPPLY DIFFUSER	HART AND COOLEY	A504 / 10"x10"	1,2
SR-2	SUPPLY REGISTER	HART AND COOLEY	92VHV / 6"x6"	1,2
RG-1	RETURN GRILLE	HART AND COOLEY	A672 / 18"Wx24"H	1

- NOTES:**
- WHITE ENAMEL FINISH
  - PROVIDE BALANCING DAMPER IN AN ACCESSIBLE LOCATION

**UNIT HEATERS**  
 UH-1 SHALL BE EQUAL TO REZNR MODEL NUMBER UDZ-45, CERTIFIED FOR COMMERCIAL HEATING APPLICATIONS. ALUMINIZED STEEL HEAT EXCHANGER; 115V / SINGLE PHASE/60HZ; NATURAL GAS FIRED; WALL-MOUNTED HEATING-ONLY THERMOSTAT; TOTALLY ENCLOSED FAN; UNIT MOUNTED DISCONNECT SWITCH; 37350 BTU MINIMUM NET OUTPUT. COORDINATE LOCATIONS WITH GARAGE DOORS, HARDWARE, AND OPENERS.



NOTES: CONTRACTOR IS RESPONSIBLE TO PROVIDE A COMPLETELY FUNCTIONAL SYSTEM INCLUDING ALL MATERIALS AND EQUIPMENT REQUIRED FROM THE UTILITY SOURCE TO THE NEW BUILDING.

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Revisions:

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Designer:	KH1 Drawing Date: 05/24/23
Drafter:	NS Drawing Scale: AS NOTED
DNR Approval:	
Client Approval:	
File Number:	130-003
Drawing Number:	M-1
Sheet:	20 of 24



PLUMBING FIXTURE SCHEDULE			
MARK	VENDOR / MOD. NO.	DESCRIPTION	NOTES
P-1	AMERICAN STANDARD / 2487.016 WHITE	ADA COMPLIANT WATER CLOSET--1.6 GPF	1
P-2	AMERICAN STANDARD / MOD. 0356.015	"LUCERNE"--RESTROOM LAVATORY--CONCEALED ARM	2,3,6
P-3	C.E.C.O. / MOD. 865	UTILITY DEEP SINK	4
P-4	HAWS / 7360BTWC	EYE WASH (EMERGENCY)	6
P-5	STATE / GS6 40 BCT	GAS-FIRED WATER HEATER, 40 GALLON.	7
P-6	JAY R. SMITH / MOD. 9816	TROUGH FLOOR DRAIN W/ HEAVY DUTY GRATING	
P-7	JAY R. SMITH / MOD. 8525	25 GPM OIL INTERCEPTOR	
P-8	RENSELAER	1000 GAL. CONCRETE HOLDING TANK	
P-9	WADE 8000-12	ADJUSTABLE FLOOR CLEANOUT	
P-10	JAY R. SMITH / MOD 2040	FLOOR DRAIN W/ CLEAN-OUT	
P-11	THERMXTROL ST-5	WATER HEATER EXPANSION TANK	
P-12	ELKAY / LUSTERTONE	SINK	5
P-13	WOODFORD COMMERCIAL GRADE	HOSE BIB - WALL FAUCET ROUGH BRASS 3/4" TUBE	
P-14	WOODFORD COMMERCIAL GRADE	FROST PROOF HOSE BIB 3/4" TUBE	
P-15	WOODFORD / U-200M-5	FREEZELESS YARD HYDRANT - 2 INCH	

NOTES:

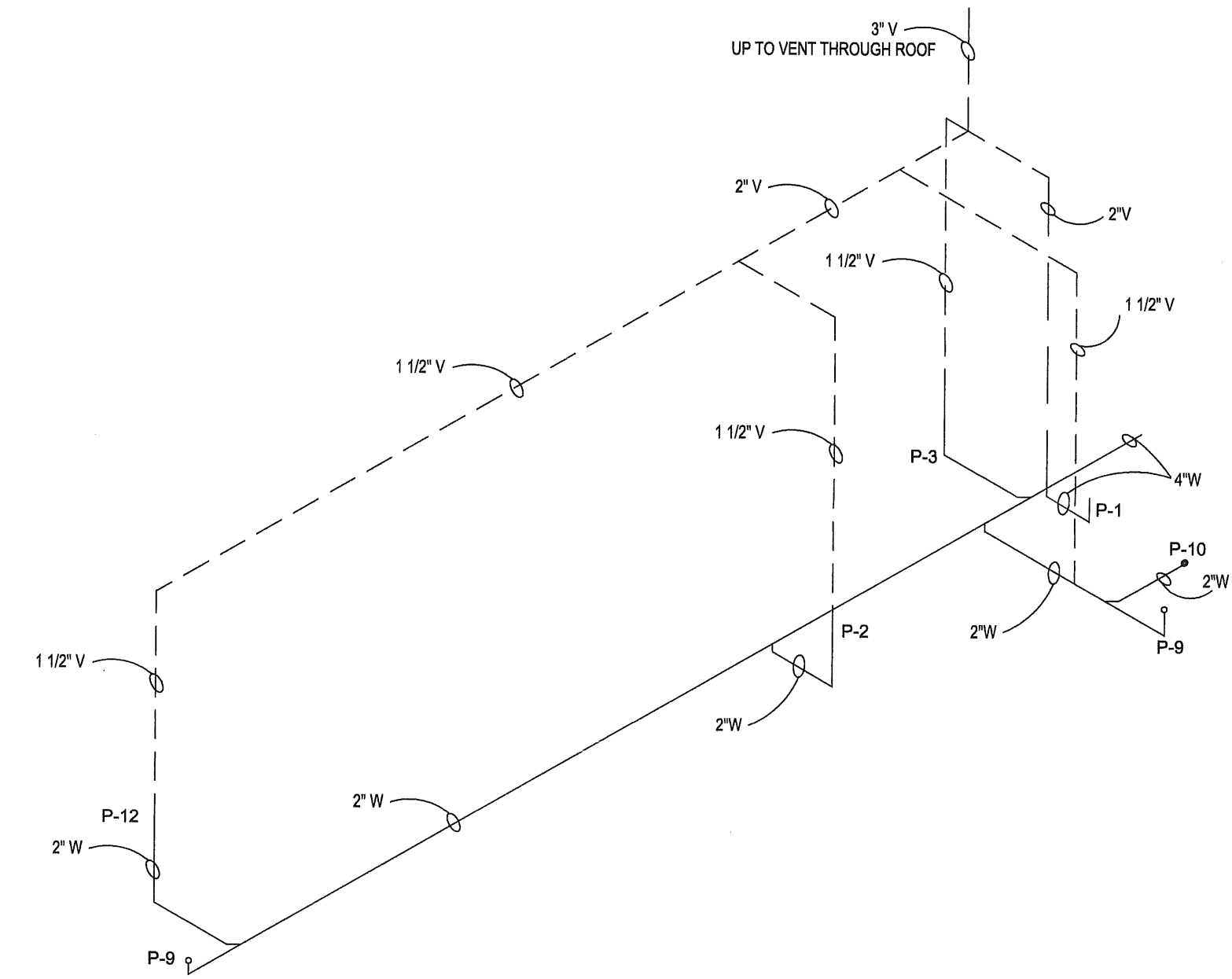
1. INSTALL W/BEMIS SEAT---OPEN FRONT W/ COVER ; COLOR: WHITE.
2. INSTALL W/ CHICAGO FAUCETS #404-317ABCP FAUCET, PROVIDE JAY R. SMITH CARRIER.
3. INSTALL W/ADA-COMPLIANT WRIST-BLADE HANDLES, STRAINER, AND INSULATED P-TRAP.
4. INSTALL W/ CHICAGO FAUCETS #540-218307 FAUCET AND CECO #870 TRAP/STAND/STRAINER.
5. ELKAY LUSTERTONE CLASSIC STAINLESS STEEL 37"x22"x5 1/2" DOUBLE BOWL ADA DROP-IN SINK. MODEL #LRAD372255 W/ MOUNTING HARDWARE; DRAINS; AMERICAN STANDARD MONTERREY KITCHEN FAUCET; ADA COMPLIANT.
6. ADA COMPLIANT
7. VENT PER MANUFACTURER'S INSTRUCTIONS.

PLUMBING SYMBOLS

MARK	DESCRIPTION
---	COLD WATER LINE
- - - -	HOT WATER LINE
→	DIRECTION OF FLOW ( VARIOUS LINES )
---	WASTE PIPING
- - - -	VENT PIPING
FD	FLOOR DRAIN W/ CLEAN OUT
CO	CLEAN OUT
⊥	SHUT-OFF VALVE
⊥	PIPING UNION ( FOR W/H )
⊥	HOSE BIBB

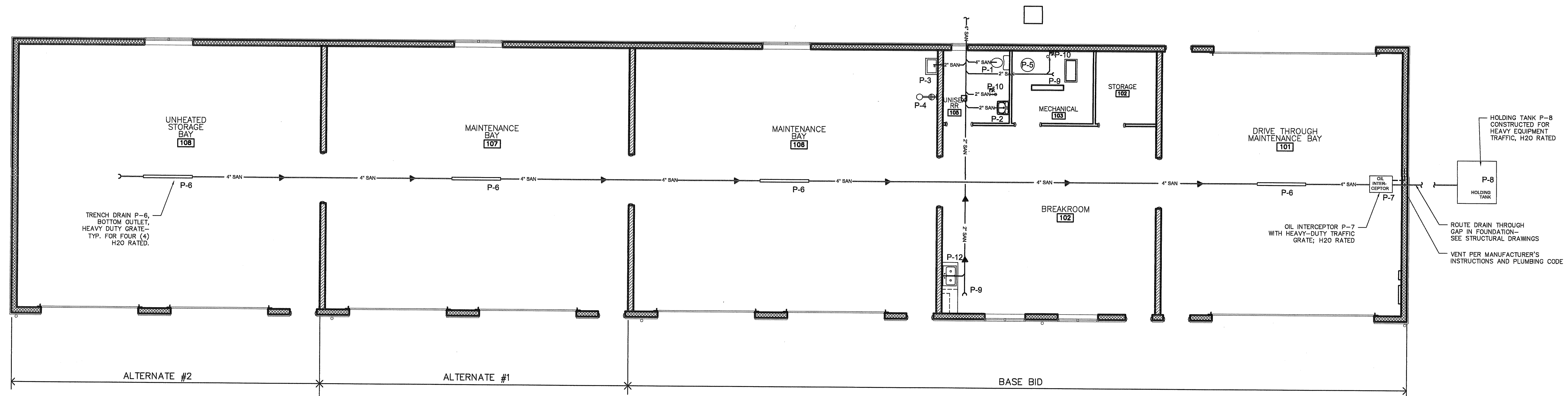
PLUMBING NOTES:

1. HOLDING TANK SHALL NOT DISCHARGE TO SANITARY SEWER.
2. ALL WORK SHALL CONFORM TO APPLICABLE STANDARDS INCLUDING THE LATEST EDITION OF THE INDIANA MECHANICAL CODE AND THE INDIANA PLUMBING CODE.
3. ALL PIPING MATERIAL (WATER, DRAINAGE, VENT AND GAS) SHALL CONFORM TO THE ASTM STANDARDS REQUIRED BY THE CODE AND LIMITED TO THE MATERIALS APPROVED IN THE SPECIFICATIONS.
4. ALL PIPING JOINTS AND CONNECTIONS SHALL CONFORM TO THE MANDATORY REFERENCED STANDARDS LISTED IN THE LATEST EDITION OF THE INDIANA PLUMBING CODE.
5. ALL PIPING SHALL BE THOROUGHLY TESTED PRIOR TO BURIAL OR CONCEALMENT.
6. STERILIZE PIPING ACCORDING TO THE REQUIREMENTS OF THE INDIANA DEPARTMENT OF HEALTH.



WASTE AND VENT ISOMETRIC

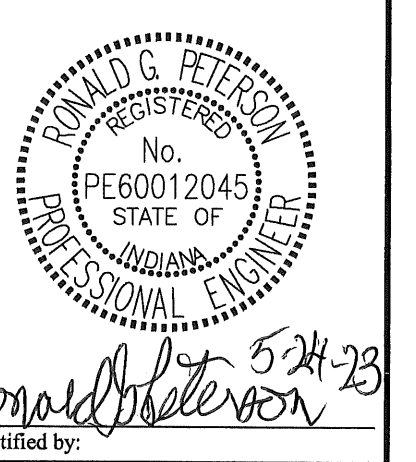
NTS 2 P-1



DEER CREEK SANITARY PLAN

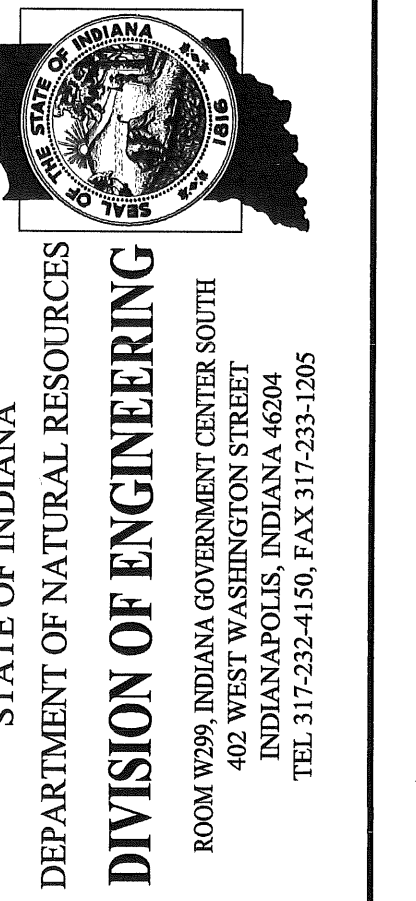
SCALE: 1/8" = 1'-0"

1 P-1



Certified by:  
Ronald G. Peterson

F&W Maintenance Building - Deer Creek  
Deer Creek Fish & Wildlife Area  
DEPT. OF NATURAL RESOURCES  
2001 W. County Road 600 S  
Greencastle, IN 46135



Revisions:

Project Number:	ENG2002905497
Requisition Number:	Requisition#
Designer:	KH
Drawing Date:	05/24/23
Drafter:	NS
Drawing Scale:	AS NOTED
DNR Approval:	
Client Approval:	
File Number:	130-003
Drawing Number:	P-1
Sheet:	21 of 24



PLUMBING FIXTURE SCHEDULE			
MARK	VENDOR / MOD. NO.	DESCRIPTION	NOTES
P-1	AMERICAN STANDARD / 2487.018 WHITE	ADA COMPLIANT WATER CLOSET--1.6 GPF	1
P-2	AMERICAN STANDARD / MOD. 0356.015	"LUCERNE"--RESTROOM LAVATORY--CONCEALED ARM	2,3,6
P-3	C.E.C.O. / MOD. 885	UTILITY DEEP SINK	4
P-4	HAWS / 7380BTWC	EYE WASH (EMERGENCY)	6
P-5	STATE / GS6 40 BCT	GAS-FIRED WATER HEATER; 40 GALLON;	7
P-6	JAY R. SMITH / MOD. 9816	TROUGH FLOOR DRAIN W/ HEAVY DUTY GRATING	
P-7	JAY R. SMITH / MOD. 8525	25 GPM OIL INTERCEPTOR	
P-8	RENSSELAER	1000 GAL. CONCRETE HOLDING TANK	
P-9	WADE 6000-12	ADJUSTABLE FLOOR CLEANOUT	
P-10	JAY R. SMITH / MOD 2040	FLOOR DRAIN W/ CLEAN-OUT	
P-11	THERMXTROL ST-5	WATER HEATER EXPANSION TANK	
P-12	ELKAY / LUSTERTONE	SINK	5
P-13	WOODFORD COMMERCIAL GRADE	HOSE BIB - WALL FAUCET ROUGH BRASS 3/4" TUBE	
P-14	WOODFORD COMMERCIAL GRADE	FROST PROOF HOSE BIB 3/4" TUBE	
P-15	WOODFORD / U-200M-5	FREEZELESS YARD HYDRANT - 2 INCH	

**NOTES:**

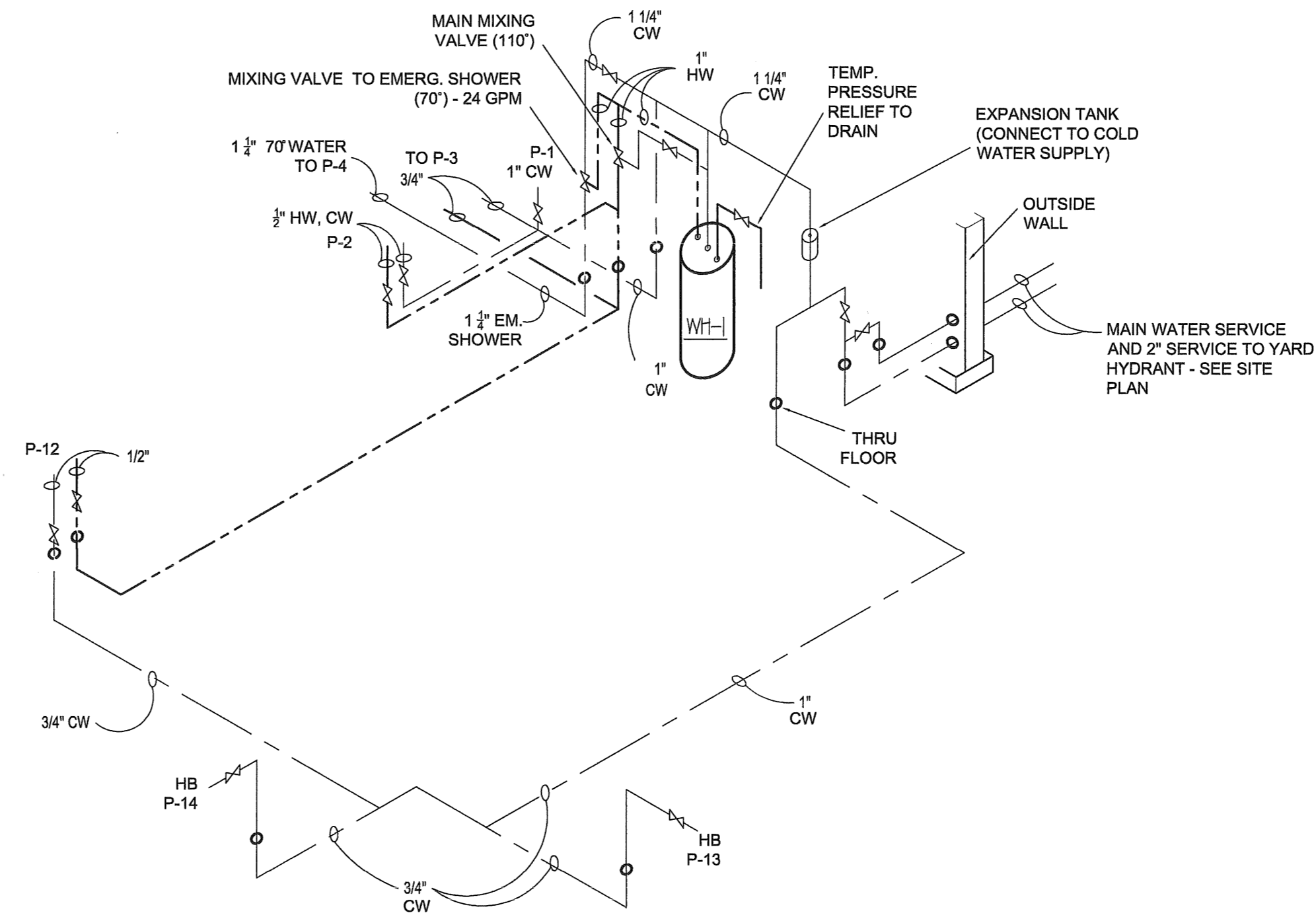
1. INSTALL W/BEMIS SEAT--OPEN FRONT W/ COVER ; COLOR: WHITE.
2. INSTALL W/ CHICAGO FAUCETS #404-317ABCP FAUCET. PROVIDE JAY R. SMITH CARRIER..
3. INSTALL W/ADA-COMPLIANT WRIST-BLADE HANDLES, STRAINER, AND INSULATED P-TRAP.
4. INSTALL W/ CHICAGO FAUCETS #540-218307 FAUCET AND CECO #870 TRAP/STAND/STRAINER.
5. ELKAY LUSTERTONE CLASSIC STAINLESS STEEL 37"x22"x5 1/2" DOUBLE BOWL ADA DROP-IN SINK. MODEL #LRAD372255 W/ MOUNTING HARDWARE; DRAINS; AMERICAN STANDARD MONTERREY KITCHEN FAUCET; ADA COMPLIANT.
6. ADA COMPLIANT
7. VENT PER MANUFACTURER'S STANDARDS.

**PLUMBING SYMBOLS**

MARK	DESCRIPTION
---	COLD WATER LINE
----	HOT WATER LINE
→	DIRECTION OF FLOW ( VARIOUS LINES )
---	WASTE PIPING
---	VENT PIPING
FD	FLOOR DRAIN W/ CLEAN OUT
CO	CLEAN OUT
SV	SHUT-OFF VALVE
U	PIPING UNION ( FOR WH )
H	HOSE BIBB

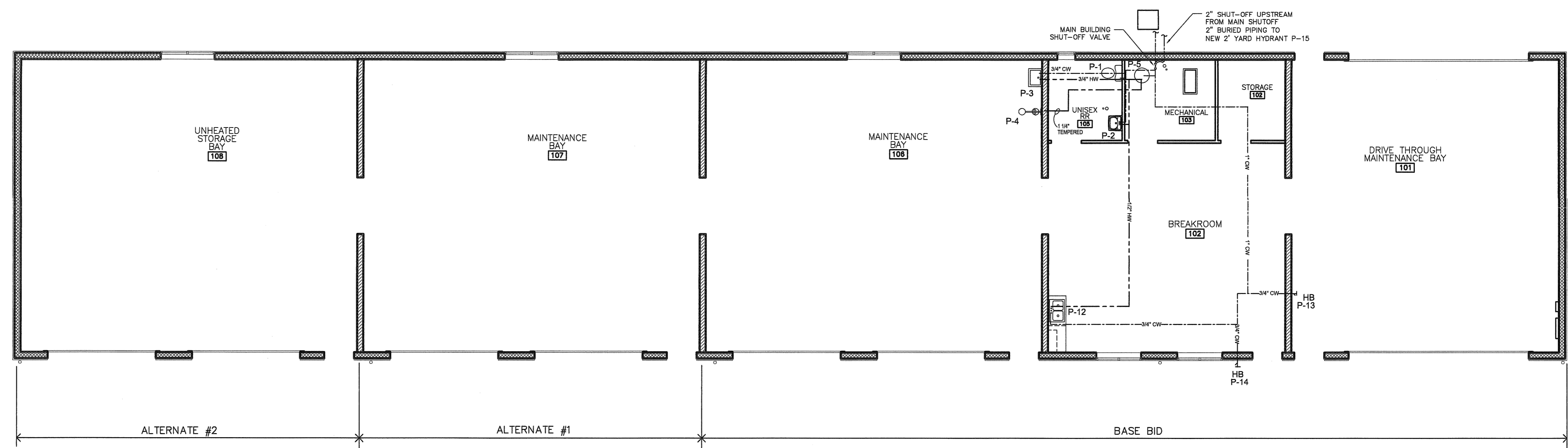
**PLUMBING NOTES:**

1. HOLDING TANK SHALL NOT DISCHARGE TO SANITARY SEWER.
2. ALL WORK SHALL CONFORM TO APPLICABLE STANDARDS INCLUDING THE LATEST EDITION OF THE INDIANA MECHANICAL CODE AND THE INDIANA PLUMBING CODE.
3. ALL PIPING MATERIAL (WATER, DRAINAGE, VENT AND GAS) SHALL CONFORM TO THE ASTM STANDARDS REQUIRED BY THE CODE AND LIMITED TO THE MATERIALS APPROVED IN THE SPECIFICATIONS.
4. ALL PIPING JOINTS AND CONNECTIONS SHALL CONFORM THE MANDATORY REFERENCED STANDARDS LISTED IN THE LATEST EDITION OF THE INDIANA PLUMBING CODE.
5. ALL PIPING SHALL BE THOROUGHLY TESTED PRIOR TO BURIAL OR CONCEALMENT.
6. STERILIZE PIPING ACCORDING TO THE REQUIREMENTS OF THE INDIANA DEPARTMENT OF HEALTH.



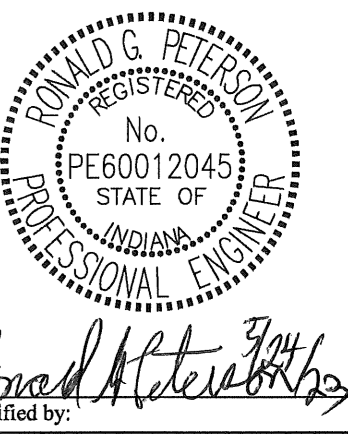
**HOT, COLD, & 70 F SHOWER/EYEWASH WATER ISOMETRIC**

NTS 2  
P-2



NOTES: CONTRACTOR IS RESPONSIBLE TO PROVIDE A COMPLETELY FUNCTIONAL SYSTEM INCLUDING ALL MATERIALS AND EQUIPMENT REQUIRED FROM THE UTILITY SOURCE TO THE NEW BUILDING.

**DEER CREEK PLUMBING SUPPLY PLAN**  
SCALE: 1/8" = 1'-0"  
1  
P-2



**F&W Maintenance Building - Deer Creek**  
Deer Creek Fish & Wildlife Area  
DEPT. OF NATURAL RESOURCES  
2001 W. County Road 600 S  
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STATE OF INDIANA  
DEPARTMENT OF NATURAL RESOURCES  
**DIVISION OF ENGINEERING**  
ROOM W309, INDIANA GOVERNMENT CENTER SOUTH  
402 WEST WASHINGTON STREET  
INDIANAPOLIS, INDIANA 46204  
TEL 317-232-4150, FAX 317-235-1205

Revisions:

Project Number: ENG2002905497

Requisition Number: Requisition#

Designer: KH Drawing Date: 05/24/23

Drafter: NS Drawing Scale: AS NOTED

DNR Approval:

Client Approval:

File Number: 130-003

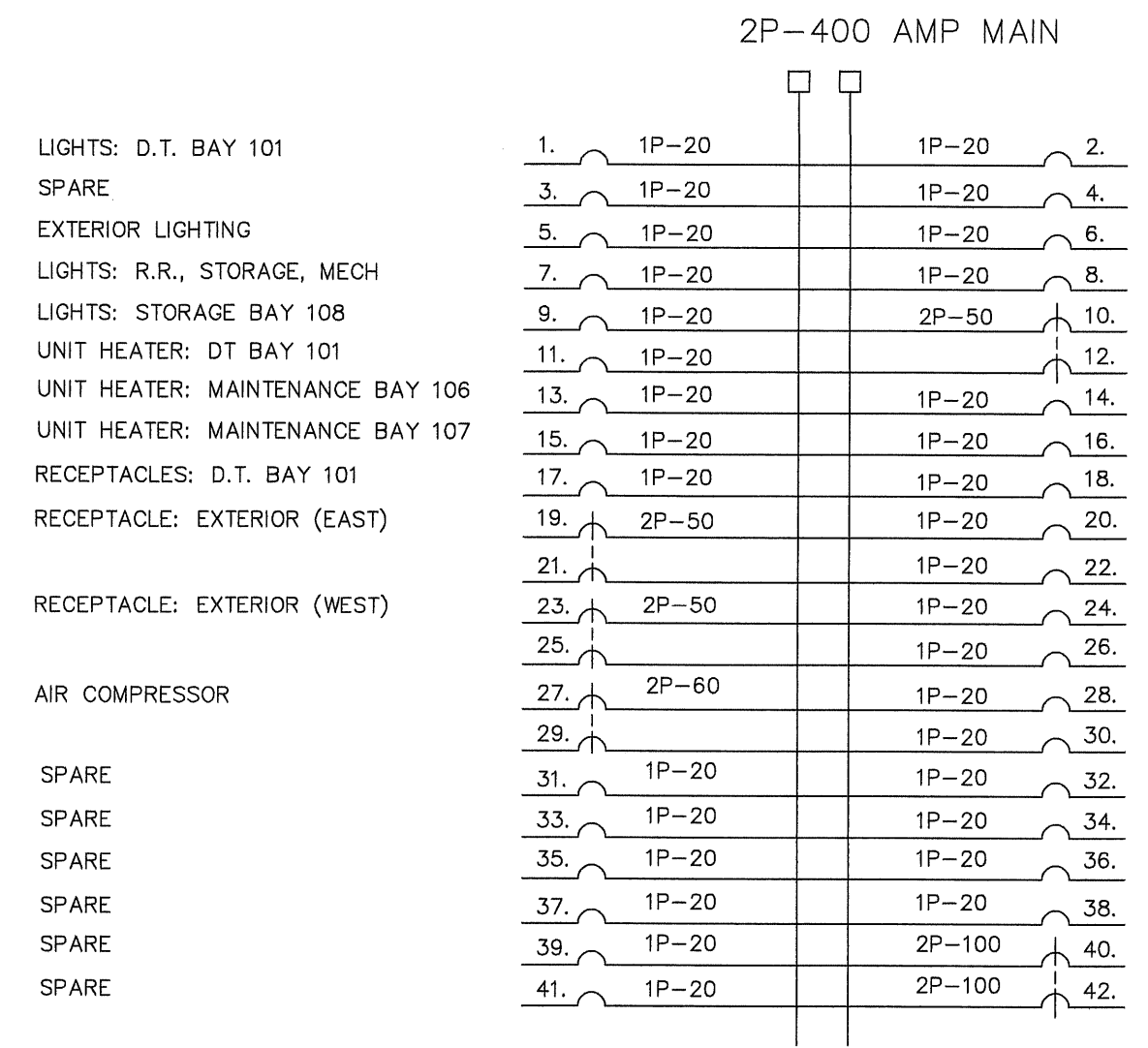
Drawing Number: P-2

Sheet 22 of 24



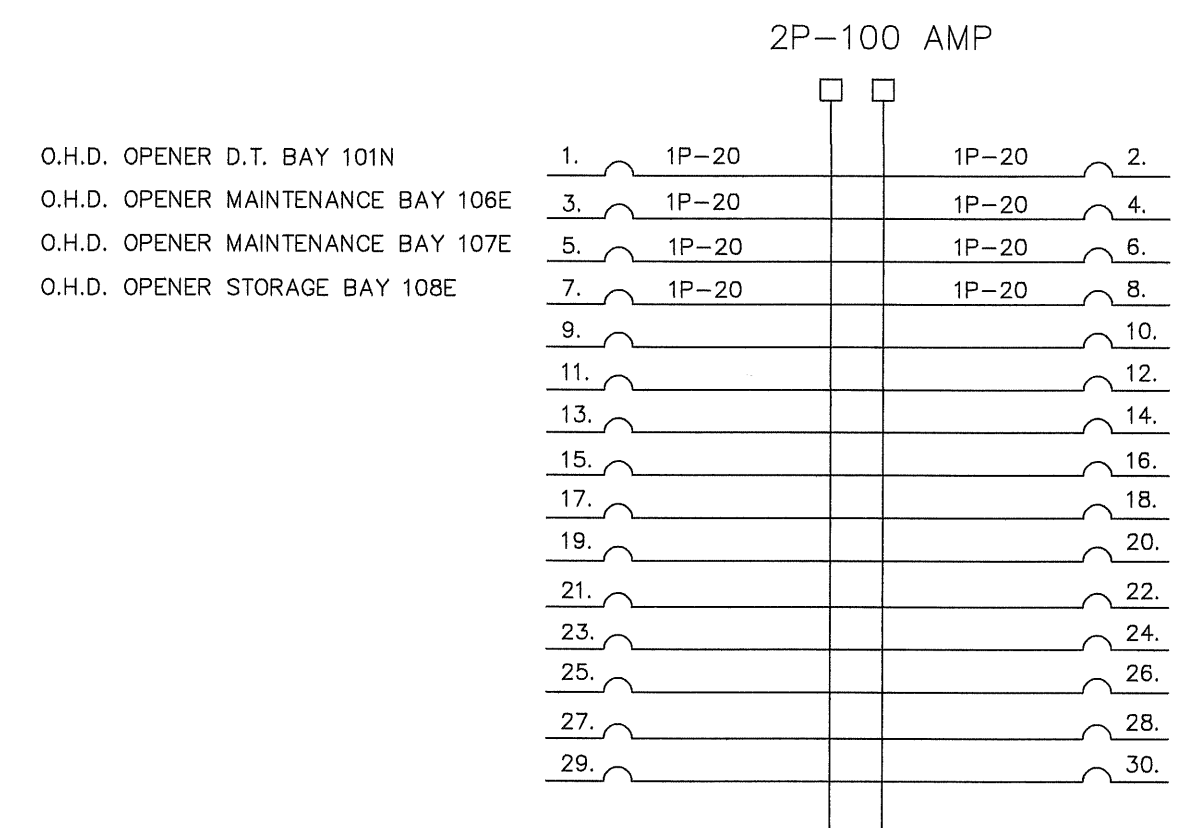


Certified by: *Donald G. Peterson*



- LIGHTS: D.T. BAY 101
- SPARE
- EXTERIOR LIGHTING
- LIGHTS: R.R., STORAGE, MECH
- LIGHTS: STORAGE BAY 108
- UNIT HEATER: DT BAY 101
- UNIT HEATER: MAINTENANCE BAY 106
- UNIT HEATER: MAINTENANCE BAY 107
- RECEPTACLES: D.T. BAY 101
- RECEPTACLE: EXTERIOR (EAST)
- RECEPTACLE: EXTERIOR (WEST)
- AIR COMPRESSOR
- SPARE
- SPARE
- SPARE
- SPARE
- SPARE
- SPARE

- LIGHTING: MAINTENANCE BAY 106
- EMERGENCY LIGHTING
- LIGHTING: BREAK ROOM 102
- LIGHTING: MAINTENANCE BAY 107
- AIR CONDITIONING
- AIR HANDLER
- RECEPTACLES: D.T. BAY 101
- RECEPTACLES: GFCI
- RECEPTACLES: BREAK ROOM
- RECEPTACLES: MAINTENANCE BAY 106
- RECEPTACLES: MAINTENANCE BAY 106
- RECEPTACLES: MAINTENANCE BAY 106
- RECEPTACLES: MAINTENANCE BAY 107
- RECEPTACLES: MAINTENANCE BAY 107
- RECEPTACLES: MAINTENANCE BAY 107
- RECEPTACLES: STORAGE BAY 108
- RECEPTACLES: STORAGE BAY 108
- RECEPTACLES: STORAGE BAY 108
- SUB-PANEL



- O.H.D. OPENER D.T. BAY 101N
- O.H.D. OPENER MAINTENANCE BAY 106E
- O.H.D. OPENER MAINTENANCE BAY 107E
- O.H.D. OPENER STORAGE BAY 108E

- O.H.D. OPENER D.T. BAY 101S
- O.H.D. OPENER MAINTENANCE BAY 106W
- O.H.D. OPENER MAINTENANCE BAY 107W
- O.H.D. OPENER STORAGE BAY 108W

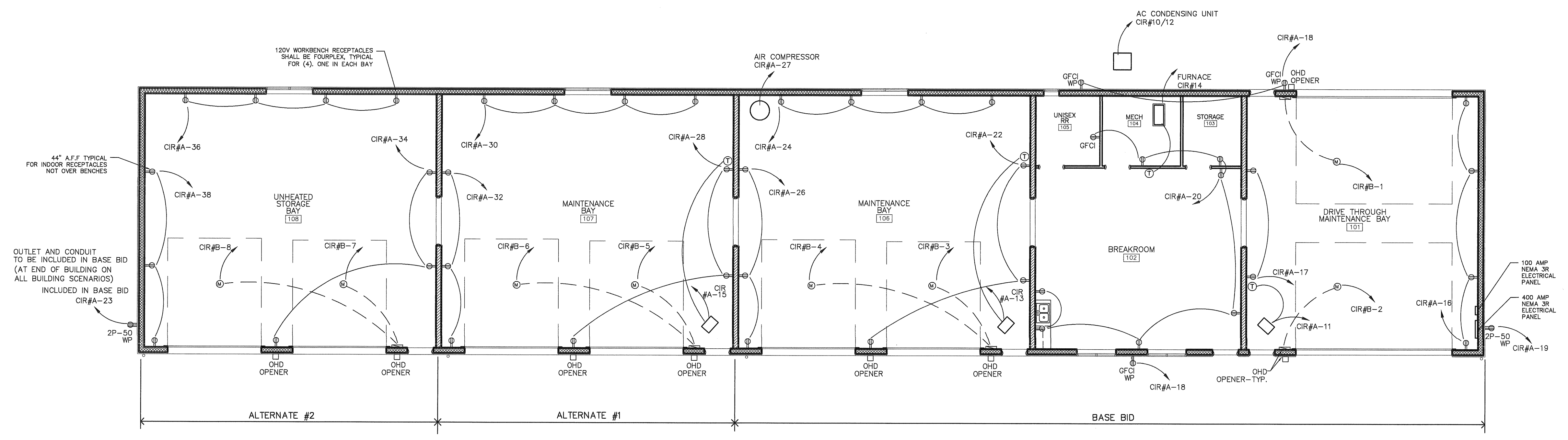
**ELECTRICAL SYMBOLS**

MARK	DESCRIPTION
	RECEPTACLE - 20AMP
	RECEPTACLE - 240V
	SINGLE POLE SWITCH - OCCUPANCY SENSOR
	THREE WAY SWITCH - OCCUPANCY SENSOR
	FOUR WAY SWITCH - OCCUPANCY SENSOR
	LED INTERIOR LIGHT FIXTURE
	SWITCH LEG WIRING FOR SINGLE POLE SWITCH
	SWITCH LEG WIRING FOR THREE POLE SWITCH
	FIXTURE WIRING
	EXTERIOR LIGHT FIXTURE
	EMERGENCY BATTERY PACK LIGHT
	O.H.D. OPENER
	THERMOSTAT
	WATER PROOF

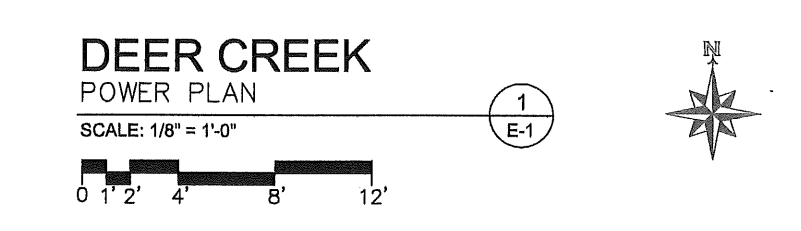
**NEW NEMA 3R 400AMP ELECTRICAL PANEL-"A"**  
SCALE: N.T.S.

NOTE: ALL RECEPTACLE CIRCUITS SHALL BE PROTECTED AT THE PANEL BY GROUND FAULT CIRCUIT INTERRUPTER BREAKERS

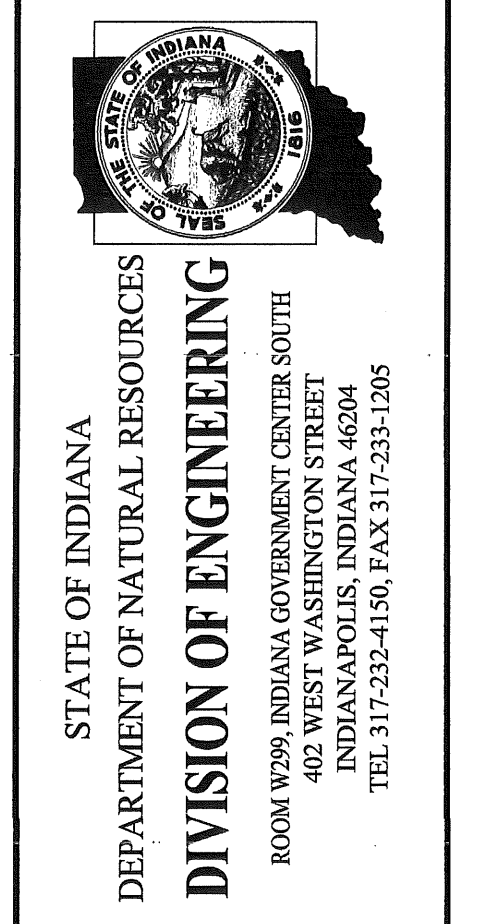
**ALTERNATE #2 ONLY**  
**NEW NEMA 3R 100AMP ELECTRICAL PANEL-"B"**  
SCALE: N.T.S.



NOTES: PAD MOUNTED TRANSFORMER TO BE INSTALLED TO SUPPORT 400A SERVICE. CONTRACTOR TO RUN 600KCMIL COPPER IN MIN. 3 1/2" CONDUIT FROM THE TRANSFORMER TO THE 400 AMP PANEL IN THE BUILDING. CONTRACTOR IS RESPONSIBLE TO PROVIDE A COMPLETELY FUNCTIONAL SYSTEM INCLUDING ALL MATERIALS AND EQUIPMENT REQUIRED FROM THE UTILITY SOURCE TO THE NEW BUILDING.



**F&W Maintenance Building - Deer Creek**  
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Revisions:	
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Designer: KH	Drawing Date: 05/24/23
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DNR Approval:	
Client Approval:	
File Number: 130-003	
Drawing Number: <b>E-1</b>	
Sheet: 23 of 24	



FIXTURE		SCHEDULE				
MARK	VENDOR / MODEL NO.	LAMPS	SIZE	MOUNTING	DESCRIPTION	NOTES
A.	HUBBELL #CRW4-LSCS	4000K 28W LED	9.7"x46"	SURFACE	ROUND WRAP; 4140 LUMENS	1&2
B.	HUBBELL #MPS4-40ML-CW-EDU	40W LED 4000K.	3"x48"	SURFACE	4' LENGTH LINEAR LED	1,2&4
C.	HUBBELL #MPS8-40XL-CW-EDU	133W LED 4000K	3'X96"	SURFACE	8' LENGTH LINEAR LED	1,2,4,5,&6
D.	HUBBELL #SG1-20-4K7-FT-BLT	21W; 2 LED'S	7.8"HX6.6"W	WALL	OCCUPANCY SENSOR/BATTERY	1&2
E.	NUTONE MOD # LP50100DC	NONE	13"x14"	CEILING	EXHAUST FAN	1,2&3
E.M.	DUAL-LITE EVC EXIT/EMERG. LT	LED	10"x12"	CEILING	DAMP LOCATION LISTED; BLACK	1.&2.

**FIXTURE SCHEDULE NOTES :**

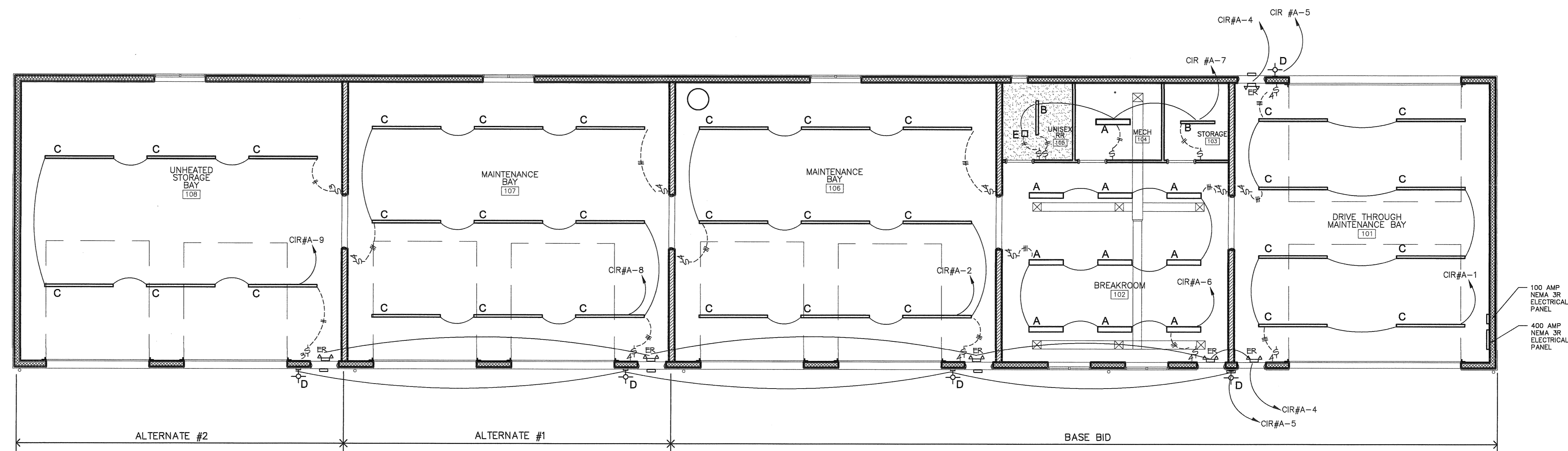
1. ALL FIXTURES SHALL BE 120 VOLTS
2. ONE FIXTURE PER SPACE SHALL HAVE EMERGENCY BATTERY PACK
3. VENT EXHAUST FAN TO OUTSIDE BETWEEN JOIST THRU WALL TO EXT. WALL CAP (NUTONE).
4. MODULAR REPLACEABLE LED BOARDS AND ACCESSIBLE DRIVERS.
5. LIGHTS SHALL EXTEND A MAXIMUM OF 5 INCHES BELOW THE CEILING. FIXTURES SHALL BE LABELED FOR USE IN A DAMP LOCATION.
6. LIGHTS IN UNHEATED STORAGE BAY 108 TO BE SUSPENDED - ALTERNATE #2

**ELECTRICAL NOTES :**

1. ALL WORK SHALL CONFORM TO THE LATEST EDITION OF THE INDIANA ELECTRICAL CODE.
2. ALL MATERIALS SHALL BE NEW.
3. ALL CONDUCTORS SHALL BE COPPER: 2-#12 WITH GROUND OR LARGER AS NOTED OR REQUIRED BY CODE.
4. WIRING SHALL BE TYPE THHN OR THWN-2 PROTECTED BY CONDUIT: MC OR IMC AS REQUIRED BY CODE.
5. FLEXIBLE METALLIC CONDUIT IS ALLOWED WHERE CONCEALED AND PERMITTED BY CODE.
6. LIGHT SWITCHES SHALL BE SINGLE POLE 20-AMP.
7. RECEPTACLES SHALL BE SINGLE POLE 20-AMP UNLESS NOTED OTHERWISE.
8. OMIT OCCUPANCY SENSORS ON LIGHTING IN MAINTENANCE BAYS.

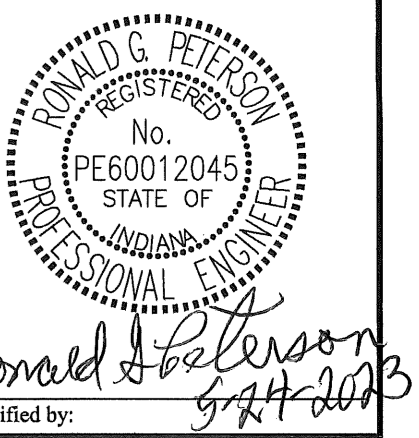
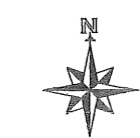
**ELECTRICAL SYMBOLS**

MARK	DESCRIPTION
	RECEPTACLE - 120V/20AMP
	RECEPTACLE - 240V / SINGLE PHASE
	SINGLE POLE SWITCH - OCCUPANCY SENSOR
	THREE WAY SWITCH - OCCUPANCY SENSOR
	FOUR WAY SWITCH - OCCUPANCY SENSOR
	LED INTERIOR LIGHT FIXTURE
	SWITCH LEG WIRING FOR SINGLE POLE SWITCH
	SWITCH LEG WIRING FOR THREE POLE SWITCH
	FIXTURE WIRING
	EXTERIOR LIGHT FIXTURE
	EMERGENCY BATTERY PACK LIGHT

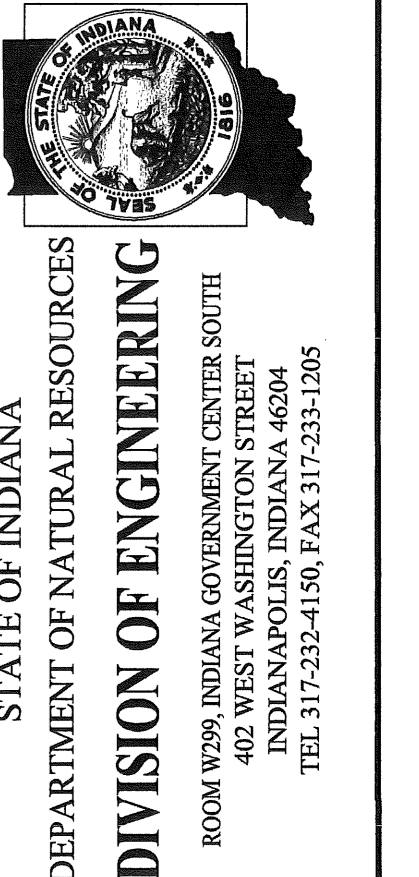


**DEER CREEK LIGHTING PLAN**

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



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File Number:	130-003
Drawing Number:	E-2
Sheet:	24 of 24