

# IOWA DEPARTMENT OF NATURAL RESOURCES

# CONSTRUCTION DRAWINGS FOR ARCHERY BUILDING AND COURTYARD IMPROVEMENTS AT DNR FAIRGROUNDS POLK COUNTY, IOWA

PROJECT # 24-05-77-01  
PLANS PREPARED BY  
LAND AND WATERS BUREAU  
CONSERVATION AND RECREATION DIVISION



BID ITEMS		
ITEM #	ITEM DESCRIPTION	ESTIMATED QUANTITY
1	MOBILIZATION	1 LS
2	DEMOLITION	1 LS
3	CONSTRUCTION STAKING	1 LS
4	CLASS 10 EXCAVATION, COMMON EXCAVATION	150 CY
5	CLASS 10 EXCAVATION, WASTE	50 CY
6	SUBGRADE PREPARATION	328 SY
7	BIORETENTION CELL SOIL MEDIA, 18" LAYER	25 CY
8	CHOKER AGGREGATE, 3" LAYER	8 TONS
9	AGGREGATE SUBBASE, 12" LAYER	29 TONS
10	6" SUBDRAIN	261 LF
11	8" SUBDRAIN	34 LF
12	STORM SEWER, TRENCHED 8" HDPE	22 LF
13	SUBDRAIN CLEANOUT, TYPE A-1, 6"	4 EA
14	SUBDRAIN CLEANOUT, TYPE A-2, 8"	1 EA
15	SW-512 CIRCULAR AREA INTAKE, 18" W/ SW-604 TYPE 3A CASTING	1 EA
16	SW-512 CIRCULAR AREA INTAKE, 24" WITH SOLID CASTING	1 EA
17	8" TRENCH DRAIN	17 LF
18	TRENCH DRAIN PCC CHANNEL	3 CY
19	CORTEN STEEL CHANNEL, 12"	1 LS
20	6" PCC WITH DECORATIVE FINISHES, 6" THICKNESS	3 SY
21	PERMEABLE PAVERS	280 SY
22	BEDDING/JOINT FILLER AGGREGATE, 2" LAYER	29 TONS
23	FILTER AGGREGATE SUBBASE, 4" LAYER	59 TONS
24	STORAGE AGGREGATE SUBBASE, 8" LAYER	109 TONS
25	PCC EDGE, PERMEABLE PAVER EDGE RESTRAINT	504 LF
26	SOIL SEPARATION FABRIC	315 SY
27	METAL LANDSCAPE EDGING	101 LF
28	PERMANENT SEEDING, FERTILIZING, AND MULCHING	3,191 SF
29	NATIVE PLUGS	332 EA
30	SHRUBS, 3 GAL CONTINUOUS	36 EA
31	PERENNIALS, 1 GAL CONTINUOUS	226 EA
32	TREES, 2" CALIPER B&B	4 EA
33	DOUBLE SHREDDED HARDWOOD MULCH, 3" LAYER	35 CY
34	LIMESTONE BENCHES	10 EACH
35	LIMESTONE CUBES	10 EACH
36	SALVAGED BOLDERS	15 EA
37	2" RIVER ROCK	3 CY
38	4"-5" RIVER ROCK	2 CY
39	FLAGSTONE STEPPERS	2 TONS
40	BOARDWALK, 25'x6"	1 LS
41	FILTER SOCK AND INLET PROJECTION, 12"	317 LF
42	TREE PROTECTION FENCE	200 LF
43	ELECTRICAL - COURTYARD SITE, ARCHERY BUILDING, AND STAGE	1 LS
44	WOODFORD 5-3 YARD HYDRANT AND ALL ASSOCIATED ITEMS	1 EA
45	STAGE BUILDING AND ALL ASSOCIATED ITEMS	1 LS
46	ARCHERY/STORAGE BUILDING AND ALL ASSOCIATED ITEMS	1 LS
47	SITE RESTORATION	1 LS
	ALTERNATE #1	
48	LEAD ENCAPSULATION - DNR PAVILION UPSTAIRS	1 LS
49	ATTIC SCUTTLE STAIR	1 EA

### PROJECT NARRATIVE

The contractor shall be responsible for providing and installing all items within this narrative, the drawings, and project manual unless specifically noted. This narrative is not meant to be a comprehensive account of all items to be covered by the contract, review all documents. The contractor is responsible for field verifying all dimensions and establishing all quantities that are dictated as "lump sum".

This project, DNR Fairgrounds - Archery Building and Courtyard Improvements, shall commence after the contract is executed and shall be completed no later than July 15, 2024.

The contractor shall clear the ground of all vegetation and grade for new Archery Building. The contractor shall coordinate with MidAmerican and the State Fair to reroute existing electrical line (State Fair) and gas line (MidAm) around the proposed building. Both State Fair and MidAm shall perform the reroute of their own respective utilities but the Contractor shall perform any probing, exploratory, or otherwise assisting to complete this work.

The Contractor shall route electric to the new building, stage, and site as shown on the plans. Contractor shall build a new unconditioned Archery/Storage building with large, decorative truss and stone column bases, as shown on the plans.

The Contractor shall also build a triangular deck platform (Stage) with a large decorative truss and roof structure, as shown on the plans. The Contractor shall run electric to the Stage as well as around the Courtyard as detailed in the electrical designs. The Contractor shall then build the Courtyard site improvements as shown on the plans.

In addition to the work previously stated, as an alternate, the Contractor shall spray paint and back-roll all walls in the DNR pavilion up-stairs level. The DNR is aware of paint in the upstairs level containing lead and this portion of the work is to be encapsulated in two (2) coats of Sherwin Williams Exterior Acrylic Latex Duration paint or approved equal. Also part of the alternate, the Contractor shall also remove a portion of the existing drop ceiling in the upper level of the DNR pavilion and install a new 30 x 60 heavy-duty steel attic stair as specified on sheet A-500. Final location to be determined by DNR Inspector.

	<p>I hereby certify that this architectural document was prepared by me or under my direct personal supervision and that I am a duly Licensed Professional Architect under the laws of the State of Iowa.</p> <p><b>Ryan E Richey</b> DATE: 2023.11.07 16:28:10-06'00'</p> <p>RYAN E. RICHEY DATE</p> <p>My license renewal date is June 30, 2025.</p> <p>Pages or sheets covered by this seal: A-001 - A-600</p>
	<p>I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Iowa.</p> <p><i>Luis T. Leon</i> 11-07-2023 LUIS T. LEON DATE</p> <p>My license renewal date is DECEMBER 31, 2023.</p> <p>Pages or sheets covered by this seal: C0.1 - C5.0</p>
	<p>I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly Licensed Professional Landscape Architect under the laws of the State of Iowa.</p> <p><i>Aaron Thacker</i> 11/7/23 AARON E. THACKER DATE</p> <p>My license renewal date is JUNE 30, 2024.</p> <p>Pages or sheets covered by this seal: L6.0 - L6.2</p>
	<p>I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Iowa.</p> <p><i>James R. Deeds IV</i> 11/7/23 JAMES R. DEEDS IV DATE</p> <p>My license renewal date is DECEMBER 31, 2024.</p> <p>Pages or sheets covered by this seal: E-000 - E-200</p>

### SHEET INDEX

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### PROJECT DESCRIPTION

The DNR building at the Iowa State Fairgrounds hosts thousands of visitors annually during the fair. The fish building, DNR pavilion and courtyard are a favorite of fair visitors and the current operations have temporary facilities for the air rifle and archery demonstrations. This project will provide a permanent solution for this activity, making it safer, easier to access, and more enjoyable for everyone. While relocating this portion to the north side of the courtyard, the stage where presentations are delivered will have to be moved to the south-west corner of the courtyard. This move will provide accessibility to all and will also reduce noise from adjacent activities at the fair.

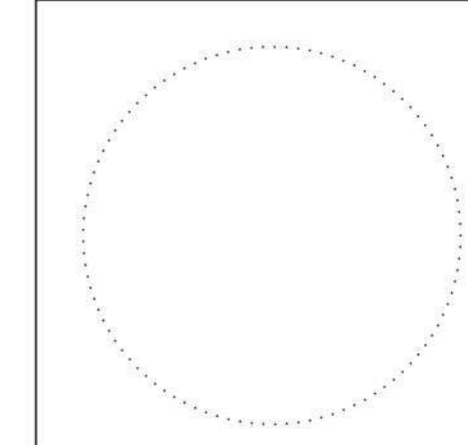
### AUTHORIZATION TO BID

<p><b>Lori L. McDaniel</b> Digitally signed by Lori L. McDaniel Date: 2023.11.07 16:08:54 -06'00'</p> <p>AUTHORIZED - WATER QUALITY BUREAU DATE</p>	<p><b>Tammie Krausman</b> Digitally signed by Tammie Krausman Date: 2023.11.07 15:13:01 -06'00'</p> <p>AUTHORIZED - COMMUNICATIONS BUREAU DATE</p>
<p><b>Travis Baker</b> Digitally signed by Travis Baker Date: 2023.11.07 16:16:06 -06'00'</p> <p>LAND AND WATERS BUREAU CHIEF DATE</p>	

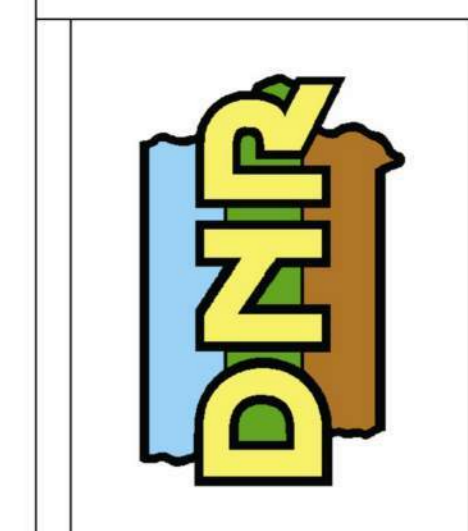
### DIRECTORY

OWNER		DISTRICT INSPECTOR	
COMPANY	IOWA DEPARTMENT OF NATURAL RESOURCES	COMPANY	IOWA DEPARTMENT OF NATURAL RESOURCES
ADDRESS	502 E. 9TH. ST.	ADDRESS	
CITY, STATE, ZIP	DES MOINES, IA 50319	CITY, STATE, ZIP	INDIANOLA, IA
CONTACT	N/A	CONTACT	JASON KRUSE
TELEPHONE	515.725.8200	TELEPHONE	515.250.3707
FAX	515.725.8202	FAX	-
EMAIL	N/A	EMAIL	JASON.KRUSE@DNR.IOWA.GOV
ARCHITECT		ELECTRICAL DESIGNER	
COMPANY	IOWA DEPARTMENT OF NATURAL RESOURCES	COMPANY	KCL ENGINEERING
ADDRESS	502 E. 9TH. ST.	ADDRESS	300 4TH STREET
CITY, STATE, ZIP	DES MOINES, IA 50319	CITY, STATE, ZIP	WEST DES MOINES, IA 50265
CONTACT	RYAN RICHEY	CONTACT	JON LACROIX
TELEPHONE	515.979.0107	TELEPHONE	515-344-2960
FAX	-	FAX	-
EMAIL	RYAN.RICHEY@DNR.IOWA.GOV	EMAIL	JLACROIX@KCLENGINEERING.COM
CIVIL ENGINEER		LANDSCAPE ARCHITECT	
COMPANY	LT LEON ASSOCIATES	COMPANY	LT LEON ASSOCIATES
ADDRESS	500 E. LOCUST STREET, SUITE 400	ADDRESS	500 E. LOCUST STREET, SUITE 400
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CONTACT	LUIS LEON	CONTACT	AARON THACKER
TELEPHONE	515-422-7016	TELEPHONE	515-422-7016
FAX	-	FAX	-
EMAIL	LLEON@LTLEON.COM	EMAIL	ATHACKER@LTLEON.COM

CONSULTANT:



IOWA DEPARTMENT OF  
NATURAL RESOURCES  
ENGINEERING SERVICES - WALLACE BUILDING  
502 E. 9TH ST., DES MOINES, IA 50319-0034  
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COVER SHEET  
ARCHERY BUILDING AND COURTYARD IMPROVEMENTS FOR:  
DNR FAIRGROUNDS  
DES MOINES, IA 50317  
3000 EAST GRAND AVE.

NO.	BY DATE	REVISION
DRAWN BY:	PROJECT NUMBER: 24-05-77-01	
CHK'D BY:	DATE: 11.07.2023	

SHEET NO: **A-001**



DIMENSION NOTES

- IN INTERIOR SPACES THE ACTUAL DIMENSIONS MAY BE LESS IMPORTANT THAN IF AT TWO ELEMENTS IN THE BUILDING WERE TO BE EQUAL. IN THESE CASES, THE WORD "EQUAL OR EQ" IS USED IN LIEU OF THE ACTUAL DIMENSIONS.
- WHEN A ROOM CENTERLINE IS INDICATED ONLY ONE SIDE OF THE ROOMS ELEMENTS MAY BE DIMENSIONED.
- COLUMN IDENTIFICATION: DETAILS WILL GOVERN ALL DIMENSIONS AND NO DIMENSIONS WILL BE SHOWN ON SMALL SCALE PLANS.
- PARTITION CENTERED ON COLUMN OR GRID LINES WILL NOT BE DIMENSIONED ON SMALL SCALE PLANS.
- PARTITION WITH A FINISHED FACE FLUSH WITH FINISH FACE OF COLUMN WILL NOT BE DIMENSIONED ON SMALL SCALE PLANS.
- PARTITION FINISH FACE ON COLUMN OR GRID LINE WILL NOT BE DIMENSIONED ON SMALL SCALE PLANS.
- WHEN ONE JAMB OCCURS AT A COLUMN OR GRID LINE NO DIMENSIONS WILL BE SHOWN ON THE SMALL SCALE PLANS. THE OPENING WIDTH WILL BE GOVERNED BY CRITERIA OR SCHEDULES.
- WHEN NEITHER JAMB OCCURS AT A COLUMN OR GRID LINE ONE JAMB WILL BE DIMENSIONED.
- DOOR LOCATIONS ARE TO BE LOCATED BY ONE OF FOLLOWING:
  - ONE JAMB FACE LOCATED BY A PARTITION AT RIGHT ANGLE. 4" TYPICAL UNLESS INDICATED ON PLAN.
  - OR AS DIMENSIONED ON PLAN.
- PARTITIONS ARE DIMENSIONED TO FACE OF CMU OR FACE OF STUD UNLESS OTHERWISE NOTED.
- DIMENSIONS ARE INDICATED IN THE DOCUMENTS. THE DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS.

MATERIAL LEGEND

EARTH	CONCRETE MASONRY UNIT	GYPSUM / STUCCO	MASONRY
COMPACTED EARTH	METAL STUD	GROUT	CONCRETE
GRASS	PARTICLE BOARD	TURF	CRUSHED STONE/SAND
GRAVEL	PLYWOOD	FOAM INSULATION	CAST STONE/STONE
CLAY	BATT INSULATION	RIGID INSULATION	STONE
FENCE	ACOUSTICAL CEILING TILE	ALUMINUM	GLASS
TURF BLOCK	PLASTIC	STEEL	WOOD BLOCKING
PAVERS	CARPET	FINISHED WOOD	CONTINUOUS WOOD

SYMBOL LEGEND

NORTH ARROW	ROOM/SPACE IDENTIFICATION
DRAWING / DETAIL IDENTIFICATION	DOOR TAG
SECTION REFERENCE	WINDOW TAG
DETAIL REFERENCE	WALL TYPE REFERENCE KEYNOTE NUMBER - NEW C.S.I. DIVISION/KEY
EXTERIOR ELEVATION	KEYNOTE - DEMOLITION
INTERIOR ELEVATION	KEYNOTE - NEW/RENOVATION
ELEVATION TARGET ELEVATION : 0'-0" DESCRIPTION	KEYNOTE - FINISH/ACCESSORY
COLUMN GRID	PROPERTY LINE REFERENCE
LEVEL CHANGE REFERENCE	CENTER LINE REFERENCE
DETAIL CUT LINE	REVISION NUMBER AND CLOUD
MATCH LINES	

GENERAL NOTES

- THE FOLLOWING GENERAL NOTES SHALL PERTAIN TO THE ENTIRE SET OF CONTRACT DOCUMENTS
- A GENERAL CONTRACTOR SHALL NOTE THAT THE ARCHITECTURAL DRAWINGS ARE ESTABLISHING A MINIMUM MATERIAL OR CONSTRUCTION METHOD STANDARD. THE GENERAL CONTRACTOR SHALL PROVIDE A BID PRICE BASED ON THE SPECIFIC MATERIALS NOTED.
  - DO NOT SCALE DRAWINGS. IF DIMENSIONS ARE IN QUESTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CLARIFICATION FROM THE ARCHITECT BEFORE CONTINUING WITH CONSTRUCTION.
  - GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL PERFORM THEIR WORK IN ACCORDANCE WITH ALL APPLICABLE CODES GOVERNING EACH TRADE.
  - THE CONTRACTOR SHALL MAINTAIN A CLEAN AND ORGANIZED JOB SITE, ACCEPTABLE TO THE OWNER.
  - THE CONTRACTOR SHALL COORDINATE THE SEQUENCE OF WORK WITH THE OWNER REPRESENTATIVE.
  - THERE SHALL BE NO DEVIATION BY THE GENERAL CONTRACTOR FROM THE CONSTRUCTION DOCUMENTS UNLESS APPROVED IN WRITING BY THE ARCHITECT.
  - EACH CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN THE FIELD PRIOR TO THE INITIATION OF WORK AND SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCIES OR CONDITIONS INTERFERING WITH THE ABILITY OF THE CONTRACTOR TO COMPLETE WORK AS OUTLINED ON THE CONSTRUCTION DRAWINGS.
  - ALL CONTRACTORS ARE REQUIRED TO COORDINATE THEIR WORK WITH OTHER TRADES. LACK OF THIS COORDINATION RESULTING IN ADDED COST TO THE CONTRACT WILL BE BORNE BY THE CONTRACTOR.
  - GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE EXISTING BUILDING WATER TIGHT DURING CONSTRUCTION.
  - THE CONTRACTOR WILL VERIFY THAT EXIT EGRESS IS MAINTAINED FOR ALL OCCUPIED AREAS OF THE BUILDING THROUGHOUT ALL PHASES OF CONSTRUCTION.
  - PLAN DIMENSIONS ARE GIVEN TO FACE OF STUD OR BLOCK WALL. "CLEAR" DIMENSIONS ARE GIVEN TO THE FACE OF THE CONTRACTOR TO COMPLETE WORK AS OUTLINED ON THE CONSTRUCTION DRAWINGS.
  - THEY MAKE TO CHANGE OR ALTER THE CONSTRUCTION DOCUMENTS WITHOUT THE ARCHITECT'S WRITTEN APPROVAL.
  - PROTECT ALL EXISTING FINISHES AND MATERIALS TO REMAIN, IN ACCORDANCE WITH ACCEPTABLE TRADE PRACTICES, MANUFACTURER, RECOMMENDATIONS, OR AS DIRECTED BY THE ARCHITECT.
  - CUTTING OF EXISTING CONSTRUCTION FOR THE INSTALLATION OF ALL NEW WORK BY ALL TRADES, AND THE SUBSEQUENT PATCHING THEREOF, SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR, WHETHER THE WORK IS DONE BY HIS OWN FORCES OR NOT. GRINDING OF MATERIALS FOR REMOVAL SHALL NOT BE PERMITTED. CUTTING SHALL BE TO STRAIGHT LINE. UNWORKMAN-LIKE CUTTING, DAMAGE RESULTING THEREFROM AND UNACCEPTABLE PATCHING SHALL BE REPAIRED AND/OR REPLACED TO AN ACCEPTABLE CONDITION APPROVED BY THE ARCHITECT. A OWNER PROJECT REPRESENTATIVE SHALL BE NOTIFIED PRIOR TO CUTTING OF ANY STRUCTURAL ITEM (I.E. CONCRETE FLOOR, MASONRY, WALL, ETC.) WITHIN THE EXISTING BUILDING. METHOD OF CUTTING SHALL BE APPROVED BY THE OWNER PROJECT REPRESENTATIVE.
  - PATCHING MATERIAL SHALL MATCH EXISTING ADJACENT MATERIALS AS CLOSELY AS POSSIBLE IN COLOR, PATTERNS, AND/OR TEXTURES.
  - ALL SALVAGE MATERIALS REMOVED SHALL REMAIN THE PROPERTY OF THE OWNER. ALL NON-SALVAGE CONSTRUCTION MATERIALS AND DEBRIS FROM DEMOLITION WORK SHALL BE REMOVED FROM THE SITE AS WORK PROGRESSES, UNLESS OTHERWISE NOTED.
  - ISOLATE ALL DISSIMILAR METALS. G SHALL REQUEST APPROVAL BY THE ARCHITECT FOR MATERIALS USED FOR THIS PURPOSE, PRIOR TO INSTALLATION.
  - SEALANTS SHALL BE COMPATIBLE WITH ADJACENT SURFACE(S) THAT ARE IN CONTACT. REFER TO SPECIFICATIONS FOR APPROVED MANUFACTURERS AND PROCEDURES.
  - CAULK JOINTS OF DISSIMILAR EXPOSED TO VIEW MATERIALS AS REQUIRED BY THE ARCHITECT.
  - ALL DOOR HARDWARE TO BE FL. ADA COMPLIANT.
  - ALL EXTERIOR WALLS, DOORS AND WINDOWS ARE EXISTING U.N.O.
  - ALL FINISHES TO BE PER CLASS INDICATED ON A-004
  - NO CONSTRUCTION SHALL OCCUR WITHOUT SHOP DRAWING APPROVAL. SHOP DRAWINGS TO BE PROVIDED TO ARCHITECT FOR REVIEW UPON BEING REVIEWED AND SIGNED/DATED BY THE GENERAL CONTRACTOR AND SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING ITEMS:
    - CABINERY MILLWORK
    - RUNNING TRIM AND CASING PROFILES
    - PAINT/LAMINATE COLOR SAMPLES
    - ACOUSTICAL CEILING AND GRID
    - TOILET ACCESSORIES
    - KITCHEN EQUIPMENT
    - ROOF PENETRATIONS
    - HVAC EQUIPMENT
    - PLUMBING EQUIPMENT AND FIXTURES
    - ELECTRICAL EQUIPMENT AND FIXTURES
  - PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL SUBMIT (2) COPIES OF MATERIAL SAFETY DATA SHEETS (MSDS) FOR ALL PRODUCTS USED TO PERFORM THE WORK.

VERIFY ACTUAL LOCATIONS AND ELEVATIONS WITH DNR ENGINEER.

ALL WORK SHALL CONFORM TO AND BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE CODES AND ORDINANCES.

THE CONTRACTOR SHALL VISIT THE SITE AND INSPECT THE PROJECT AREA AND THOROUGHLY FAMILIARIZE THEMSELVES WITH THE ACTUAL JOB CONDITIONS PRIOR TO BIDDING AND THE START OF WORK. FAILURE TO VISIT THE PROJECT SITE SHALL NOT RELIEVE THE CONTRACTOR FROM PERFORMING THE WORK IN ACCORDANCE TO THE PLANS, SPECIFICATION, SPECIAL PROVISIONS AND CONTRACT.

THE CONTRACTOR SHALL VERIFY, AT THE SITE, ALL DIMENSIONS AND CONDITIONS SHOWN ON THE PLANS AND SHALL NOTIFY THE DNR ENGINEER OF ANY DISCREPANCIES, OMISSIONS, AND/OR CONFLICTS PRIOR TO PROCEEDING WITH THE WORK.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE WASTE AREAS OR DISPOSAL SITES FOR EXCESS MATERIAL (EXCAVATED MATERIAL OR BROKEN CONCRETE) WHICH IS NOT DESIRABLE TO BE INCORPORATED INTO THE WORK INVOLVED ON THIS PROJECT. NO PAYMENT FOR OVERHAUL WILL BE ALLOWED FOR MATERIAL HAULED TO THESE SITES. NO MATERIAL SHALL BE PLACED WITHIN THE RIGHT-OF-WAY, UNLESS SPECIFICALLY STATED IN THE PLANS OR APPROVED BY THE DNR ENGINEER.

THE CONTRACTOR SHALL NOT DISTURB DESIRABLE GRASS AREAS AND DESIRABLE TREES OUTSIDE THE CONSTRUCTION LIMITS. THE CONTRACTOR WILL NOT BE PERMITTED TO PARK OR SERVICE VEHICLES AND EQUIPMENT OR USE THESE AREAS FOR STORAGE OF MATERIALS. STORAGE, PARKING AND SERVICE AREAS WILL BE SUBJECT TO THE APPROVAL OF THE DNR ENGINEER.

WHERE UTILITIES AND FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE DNR ENGINEER OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL BE AFFORDED ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.

THE CONTRACTOR SHALL SHAPE GRADED AREA TO MAINTAIN SURFACE DRAINAGE. ALL ELEVATIONS ARE TO FINISH GRADE.

THE CONTRACTOR IS EXPECTED TO HAVE MATERIALS, EQUIPMENT, AND LABOR AVAILABLE ON A DAILY BASIS TO INSTALL AND MAINTAIN EROSION CONTROL FEATURES ON THE PROJECT. THIS MAY INVOLVE SEEDING, SILT FENCE, ROCK DITCH CHECKS, SILT BASINS OR SILT DIKES.

\*DIVISIONS 20-41 OF THE STANDARD SPECIFICATIONS FOR BRIDGE AND HIGHWAY CONSTRUCTION, CURRENT EDITION WITH GS-15011 SHALL APPLY TO THIS PROJECT.

ROOFING AND ROOF DECKING REQUIREMENTS

**ROOF SHINGLES AND UNDERLAYMENT**  
The Contractor shall install 5/8" OSB or plywood sheathing over the entire building, except the the canopy overhang with 3x6 T&G, and include "H" clips between all sheathing boards. The Contractor shall then install 40mil self-adhered water and ice barrier roofing underlayment over entire roof then shingle the entire roof with one of the following shingles:

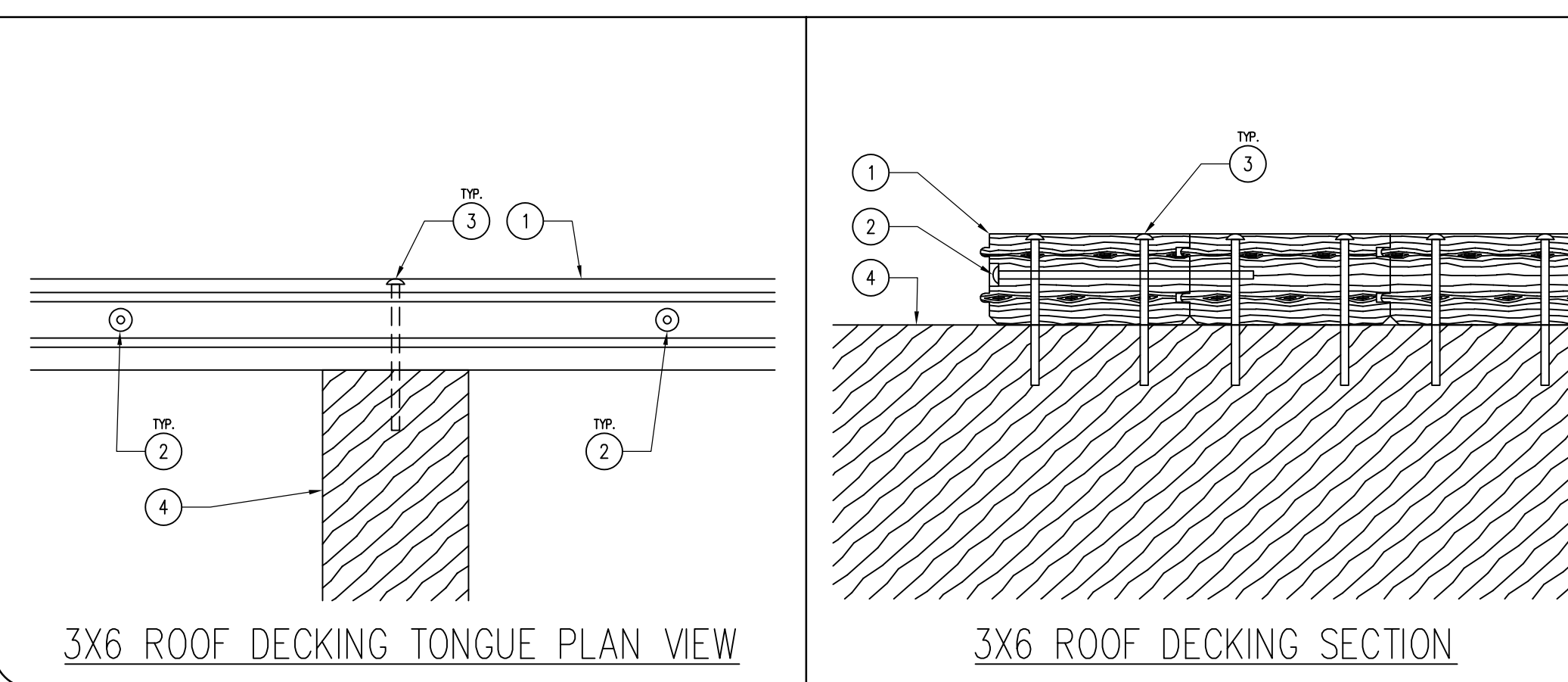
- Approved List of Shingles – Contractor must submit on the intended shingle to be used.  
Owens Corning – Duration Designer – Summer Harvest  
Atlas – Pinnacle Pristine – Majestic Shake  
Certainteed – Landmark Pro – Weathered Wood

Contractor shall follow manufacturer's installation instructions and shall follow all applicable codes and local ordinances regarding roofing.

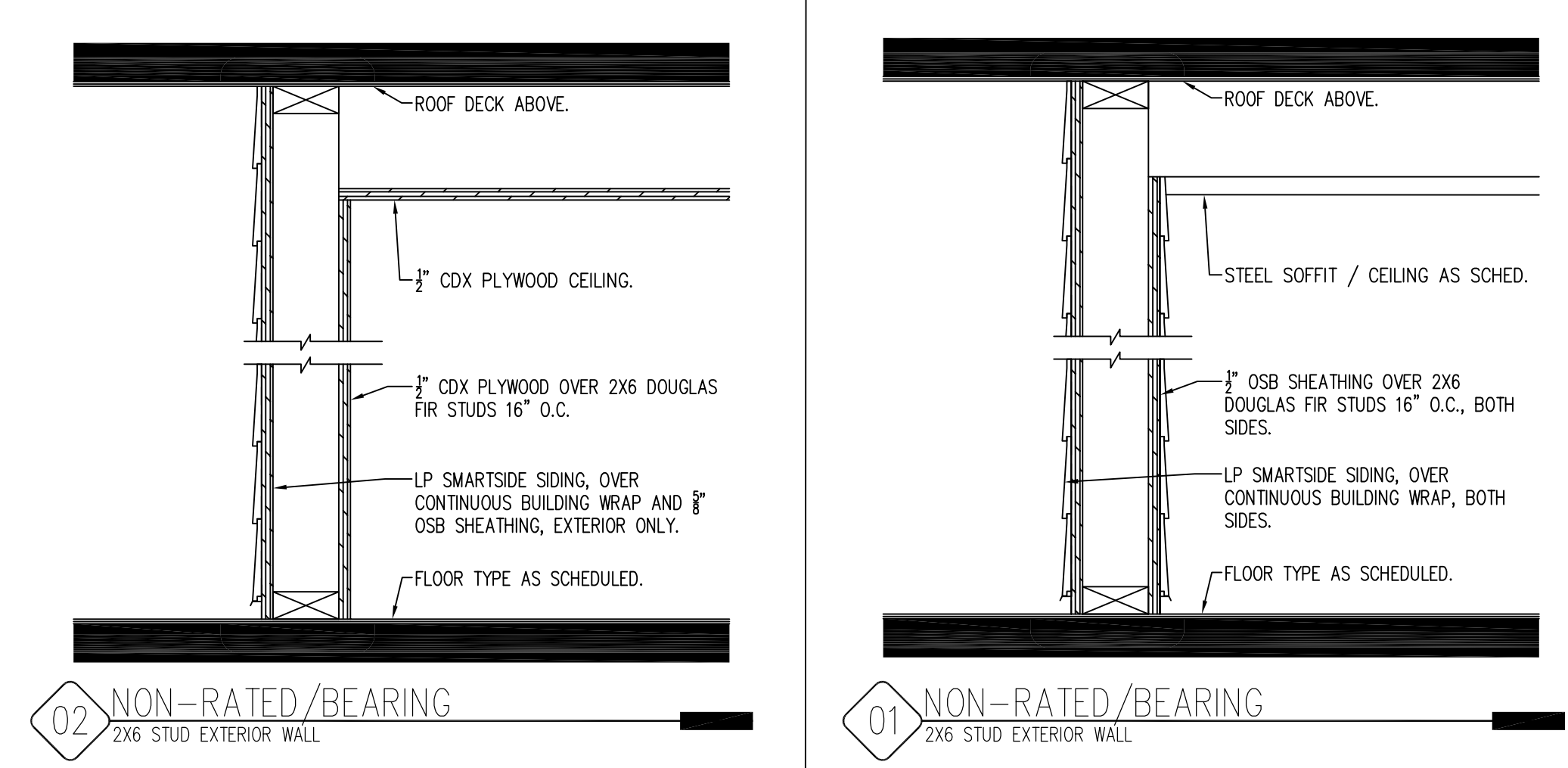
**SOLID WOOD ROOF DECKING**  
All roof decking shall be 3x6 Tongue and Groove Douglas-Fir Select V-groove decking, shall be arranged in either one of the three following layup configurations, "two-span continuous, cantilevered intermixed, or combination simple/two-span continuous". The Contractor shall install decking by first, pre-drilling between the tongues every 4'-0" o.c., in a staggered fashion from one decking board to the next. Contractor shall screw decking to one another via the pre-drilled holes in the tongues with one (1) #12 - 7" black e-coat truss drill-point roofing screw every 4'-0" o.c., stagger screws from one decking board to another. Contractor to screw decking boards to trusses with two (2) #14 - 5" black e-coat truss drill-point roofing screws at each truss support.

ROOF DECKING DETAILS

- 3x6 Tongue and Groove Douglas-Fir Select V-groove decking, apply two (2) coats of clear, semi-gloss, exterior spar-urethane.
- #12 - 7" black e-coat truss drill-point roofing screw every 4'-0" o.c., stagger screws from one decking board to another. Counter-sink all screw heads so they do not interfere with adjacent decking.
- 2 - #14, 5" black e-coat truss drill-point roofing screws at each truss support. Drive screws into wood far enough to be flush with surface.
- Heavy Timber truss.



WALL TYPES



CONSULTANT:

**IOWA DEPARTMENT OF NATURAL RESOURCES**  
ENGINEERING SERVICES - WALLACE BUILDING  
502 E. 9TH ST., DES MOINES, IA 50319-0034  
P: 515.725.8200  
F: 515.725.8202



WALL TYPES AND ROOFING REQ.

ARCHERY BUILDING AND COURTYARD IMPROVEMENTS FOR:  
**DNR FAIRGROUNDS**

DES MOINES, IA 50317

3000 EAST GRAND AVE.

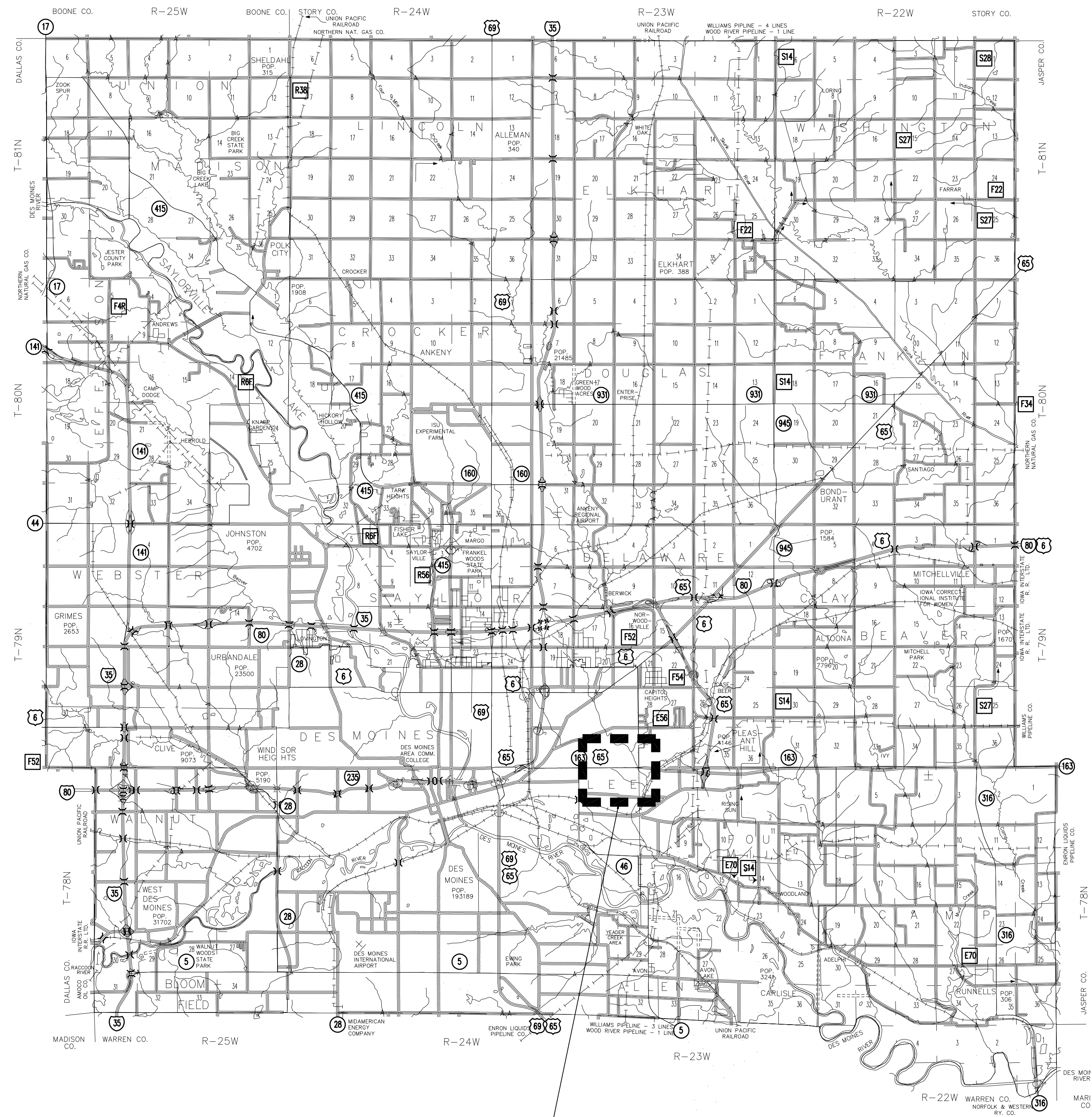
NO.	BY DATE	REVISION

DRAWN BY: PROJECT NUMBER:  
24-05-77-01

CHK'D BY: DATE:  
11.07.2023

SHEET NO:  
**A-002**





IOWA STATE FAIRGROUNDS



DNR FAIRGROUNDS BUILDING

CONSULTANT:

**IOWA DEPARTMENT OF  
NATURAL RESOURCES**  
ENGINEERING SERVICES - WALLACE BUILDING  
502 E. 9TH ST., DES MOINES, IA 50319-0034  
P: 515.725.8200  
F: 515.725.8202



**PROJECT LOCATION**  
ARCHERY BUILDING AND COURTYARD IMPROVEMENTS FOR:  
**DNR FAIRGROUNDS**

DES MOINES, IA 50317  
3000 EAST GRAND AVE.

NO.	BY DATE	REVISION

DRAWN BY: PROJECT NUMBER:  
24-05-77-01  
CHK'D BY: DATE:  
11.07.2023

SHEET No:  
**A-003**



ESTIMATE REFERENCE INFORMATION

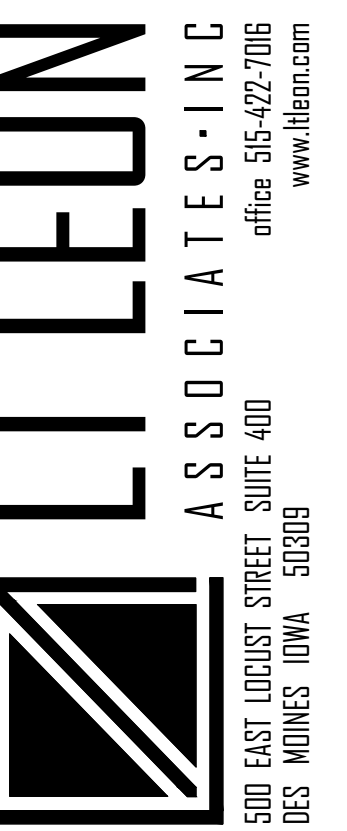
Table with 2 columns: ITEM NUMBER, DESCRIPTION. Contains 21 items including Mobilization, Demolition, Construction Staking, Excavation, Subgrade Preparation, Bioretention Cell, Choker Aggregate, Aggregate Subbase, Subdrains, Storm Sewer, Subdrain Cleanouts, Circular Area Intakes, Trench Drains, Trench Drain PCC Channel, Corten Steel Channel, and Permeable Pavers.

ESTIMATE REFERENCE INFORMATION

Table with 2 columns: ITEM NUMBER, DESCRIPTION. Contains 22 items including Bedding/Joint Filler Aggregate, Filter Aggregate Subbase, Storage Aggregate Subbase, PCC Edge, Soil Separation Fabric, Metal Landscape Edging, Permanent Seeding, Native Plugs, Shrubs, Perennials, Limestone Benches, Limestone Cubes, Salvaged Boulders, River Rock, Flagstone Steppers, Boardwalk, Filter Sock & Inlet Protection, and Tree Protection Fence.

Revision table with columns: NO., REVISION, BY, DATE. Includes project details like PROJECT NO., FILE NUMBER, SHEET NO., and DATE.

ARCHERY BUILDING AND COURTYARD IMPROVEMENTS FOR: DNR FAIRGROUNDS 3000 E GRAND AVE, DES MOINES, IOWA ESTIMATE REFERENCE INFORMATION



PROJECT NO. 038.028

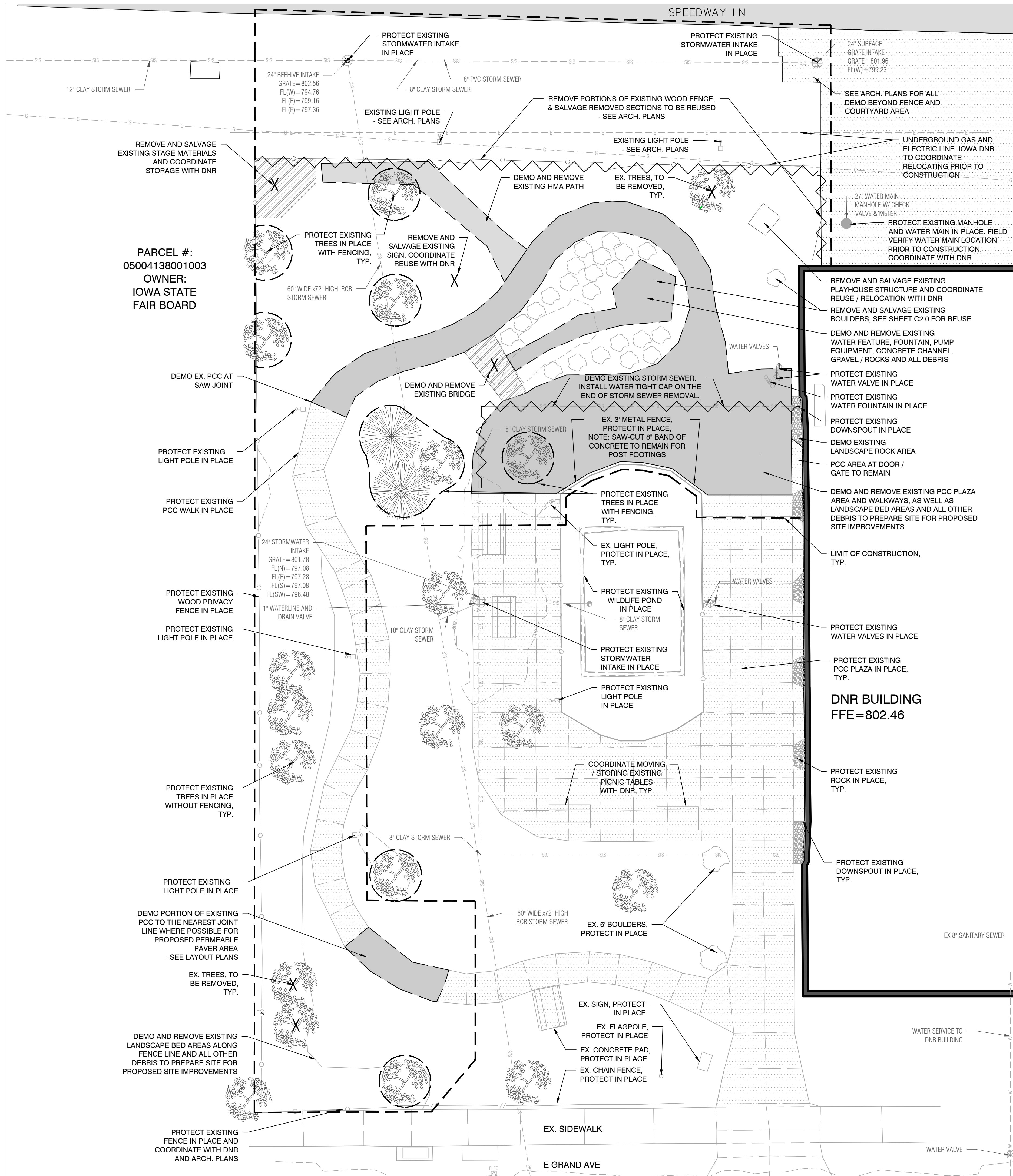
EST. REF. INFO.

SHEET NO.

C0.1







PARCEL #:  
05004138001003  
OWNER:  
IOWA STATE  
FAIR BOARD

DNR BUILDING  
FFE=802.46

**EXISTING CONDITIONS LEGEND**

	EX. WOOD / METAL FENCE
	EX. CHAIN FENCE
	EX. WATER LINE
	EX. WATER VALVE
	EX. FIRE HYDRANT
	EX. SANITARY SEWER LINE
	EX. STORM SEWER LINE
	EX. STORM SEWER MANHOLE
	EX. SANITARY SEWER MANHOLE
	EX. CLEANOUT
	EX. INTAKE
	EX. BEEHIVE INTAKE
	EX. ROOF DRAIN
	EX. GAS LINE
	EX. GAS VALVE
	EX. GAS METER
	EX. OVERHEAD ELECTRICAL LINE
	EX. UNDERGROUND ELECTRICAL LINE
	EX. POWER POLE
	EX. LIGHT POLE
	EX. ELECTRICAL BOX/TRANSFORMER
	EX. TELEPHONE LINE
	EX. FIBER OPTICS LINE
	EX. TELEPHONE POLE
	EX. FLAG POLE
	EX. PCC
	EX. LANDSCAPE ROCK
	EX. TREES
	EX. TREE PROTECTION FENCE

**DEMO LEGEND**

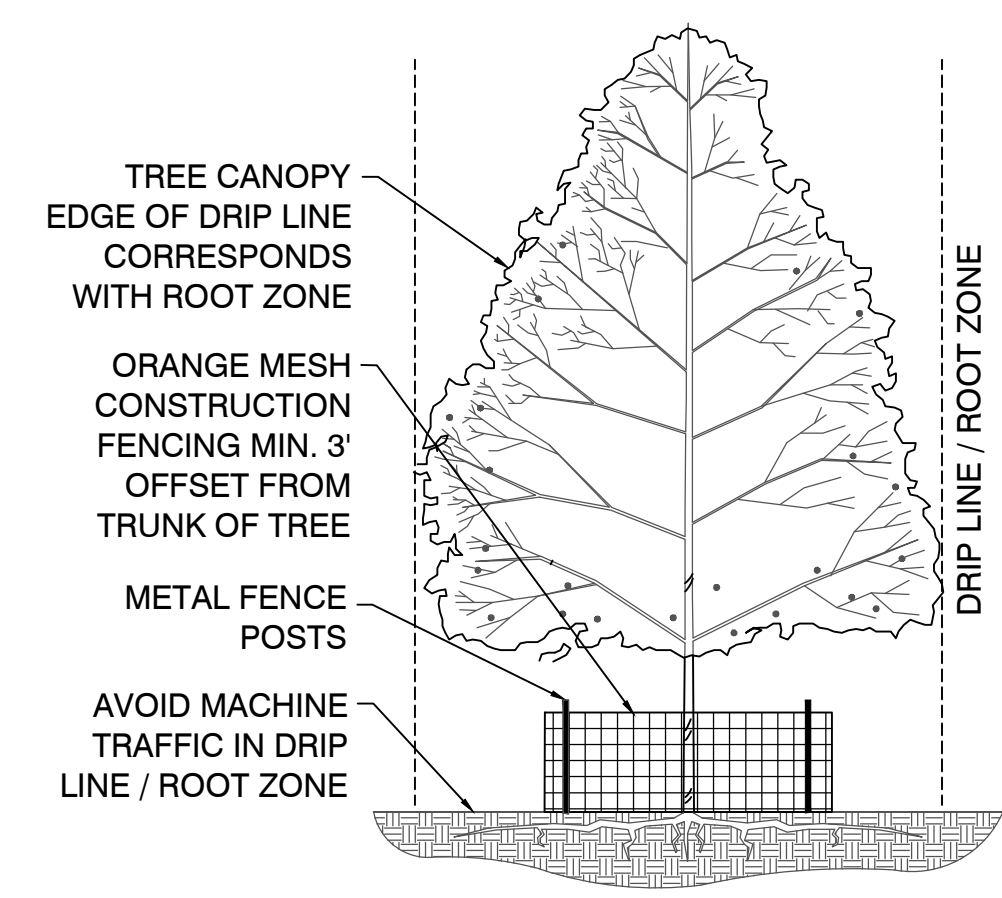
	PROPERTY LINE
	SETBACK
	STREET CENTERLINE
	LIMIT OF CONSTRUCTION
	REMOVE PAVEMENT
	REMOVE ITEM

**DEMOLITION NOTES**

- REMOVAL OR ABANDONMENT OF PUBLIC AND PRIVATE UTILITIES SHALL BE FULLY COORDINATED WITH APPROPRIATE UTILITY SUPPLIER AND REGULATORY AGENCIES.
- ALL CONSTRUCTION/DEMOLITION DEBRIS SHALL BE DISPOSED OF OFF SITE IN FULL COMPLIANCE WITH CURRENT ENVIRONMENTAL REGULATIONS.
- PROTECT ADJACENT PROPERTY DURING DEMOLITION. CONTRACTOR TO UTILIZE AND MAINTAIN EXISTING CONTRACTOR PARKING.
- PROTECT EXISTING UTILITIES WHICH ARE TO REMAIN. THE LOCATIONS OF ALL UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING RECORDS. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING THE EXACT LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO CONSTRUCTION, BOTH PUBLIC AND PRIVATE. IT SHALL BE THE DUTY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL UTILITIES OTHER THAN THOSE SHOWN ON THE PLAN MAY BE PRESENT.
- REMOVE ALL DESIGNATED STREETS, DRIVEWAYS, AND CURBS IN THEIR ENTIRETY. BACKFILL ALL EXCAVATIONS WITH COHESIVE MATERIAL COMPACTED TO 98% STANDARD PROCTOR DENSITY. DEMOLITION NOTES AS SHOWN ON THE PLAN ARE NOT ALL INCLUSIVE. CONTRACTOR TO ABANDON IN PLACE OR REMOVE AND DISPOSE OF ALL EXISTING SITE IMPROVEMENTS ABOVE AND BELOW GROUND TO COMPLY WITH THE GENERAL INTENT OF THIS DOCUMENT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES PRIOR TO CONSTRUCTION, BOTH PUBLIC AND PRIVATE.
- CONTRACTOR SHALL COORDINATE REMOVAL AND REPLACEMENT OF UTILITY SERVICES WITH UTILITY OWNER. POTHOLES AND HAND DIGGING SHALL BE PERFORMED NEAR EXISTING ABOVE OR UNDERGROUND UTILITIES, STRUCTURE, STORMWATER AND ANY ABOVE OR UNDERGROUND FEATURES. MAINTAIN POSITIVE DRAINAGE ON SITE FOR THE DURATION OF CONSTRUCTION.
- PERFORM SITE CLEANUP ON A DAILY BASIS. KEEP ALL SIDEWALKS, DRIVES, PARKING LOTS, ETC CLEAN OF DEBRIS. CONTRACTOR SHALL REPLACE ANY PROPERTY MONUMENTS REMOVED OR DESTROYED DURING CONSTRUCTION. ALL MONUMENTATION SHALL BE COMPLETED BY A PROFESSIONAL LICENSED SURVEYOR.
- ANY DAMAGE TO EXISTING FACILITIES (CURBS, PAVEMENT, UTILITIES, ETC) SHALL BE REPLACED BY THE CONTRACTOR AT NO EXPENSE TO THE PROPERTY OWNER.

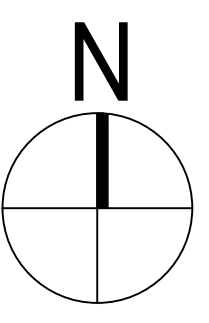
**UTILITY WARNING**

THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND/OR RECORDS OBTAINED. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES OR SUBSURFACE FEATURES SHOWN COMPRISE ALL SUCH ITEMS IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UTILITIES OR SUBSURFACE FEATURES SHOWN ARE IN THE EXACT LOCATION INDICATED.



1 TREE PROTECTION FENCE DETAIL, TYP.  
NOT TO SCALE

**IOWA ONE CALL**  
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2 Working Days BEFORE YOU DIG  
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**ARCHERY BUILDING AND COURTYARD IMPROVEMENTS FOR:**  
**DNR FAIRGROUNDS**  
**3000 E GRAND AVE, DES MOINES, IOWA**  
**DEMO PLAN**

**LT LEON**  
 ASSOCIATES - INC  
 office 515-472-7016  
 www.ltleon.com  
 5100 EAST LODGE STREET SUITE 400  
 DES MOINES, IOWA 50309

PROJECT NO. 038.028

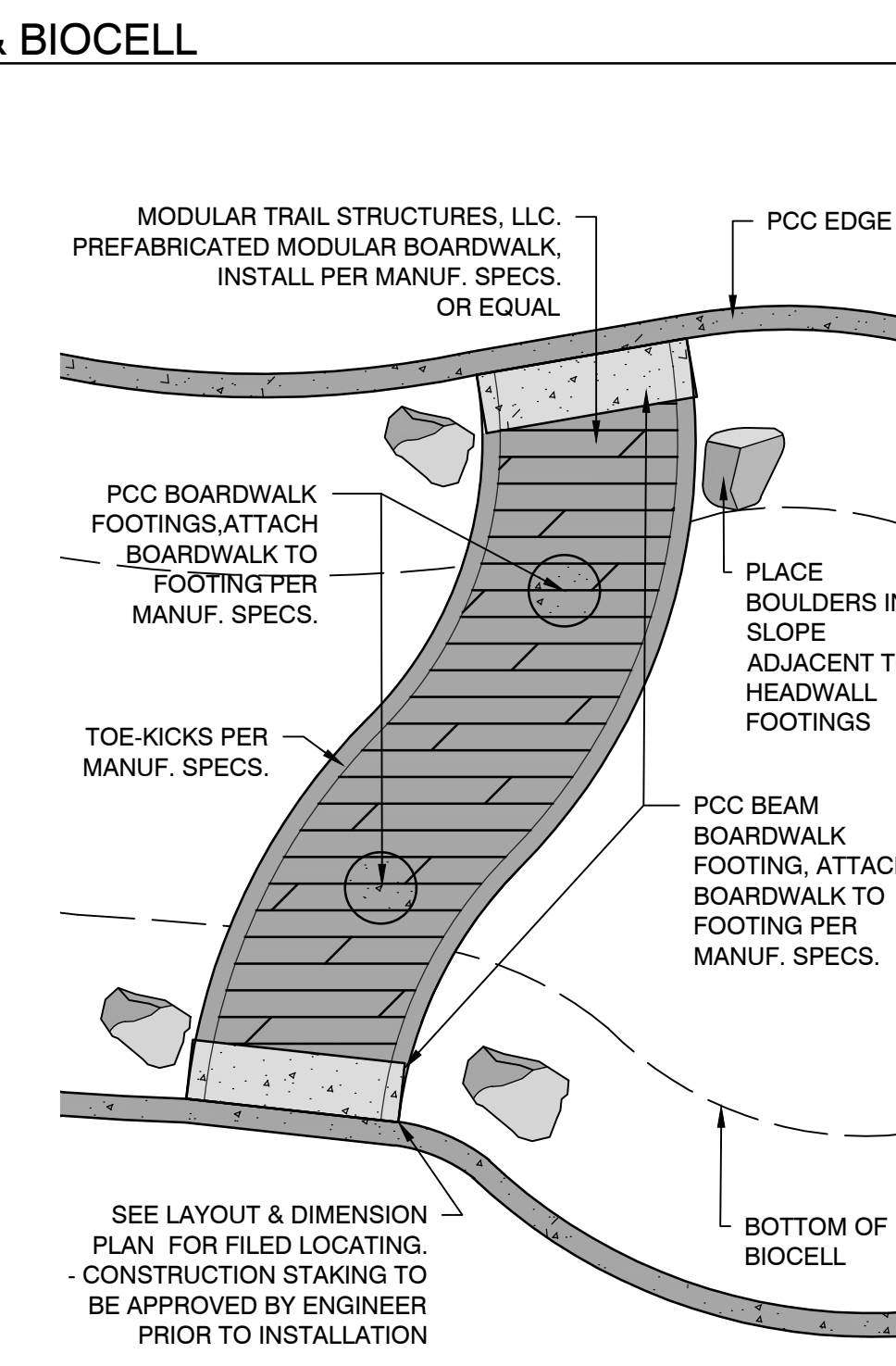
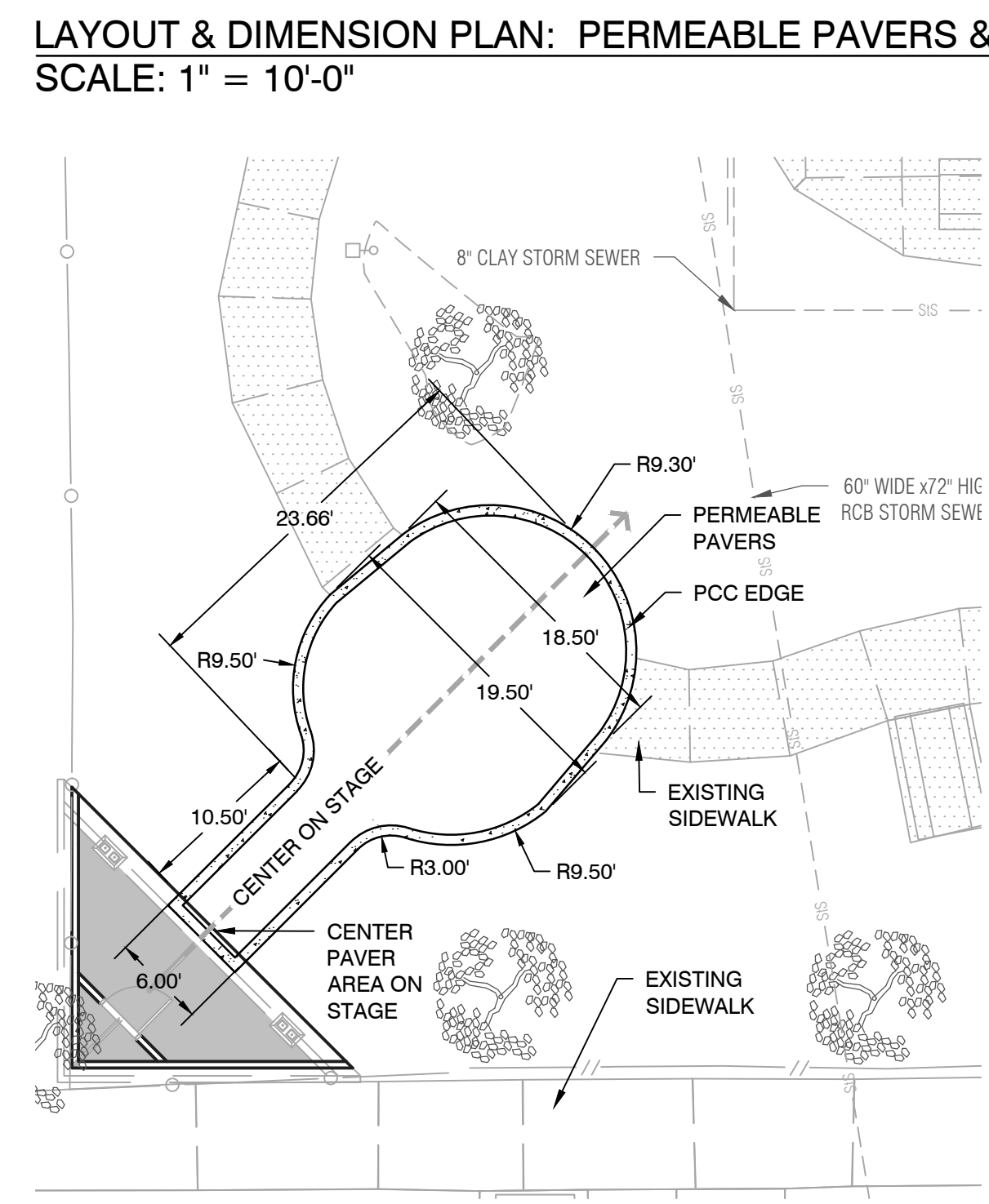
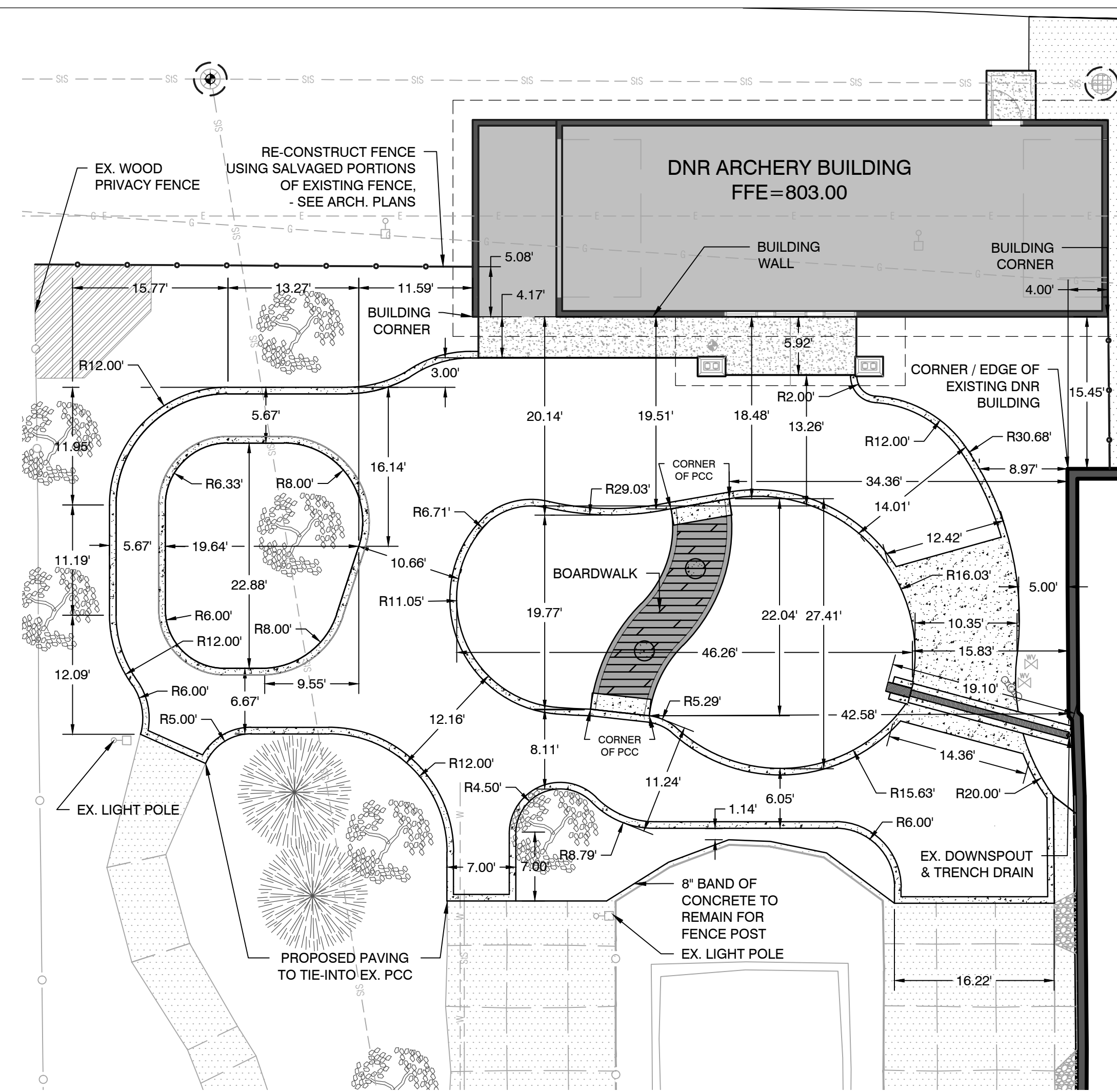
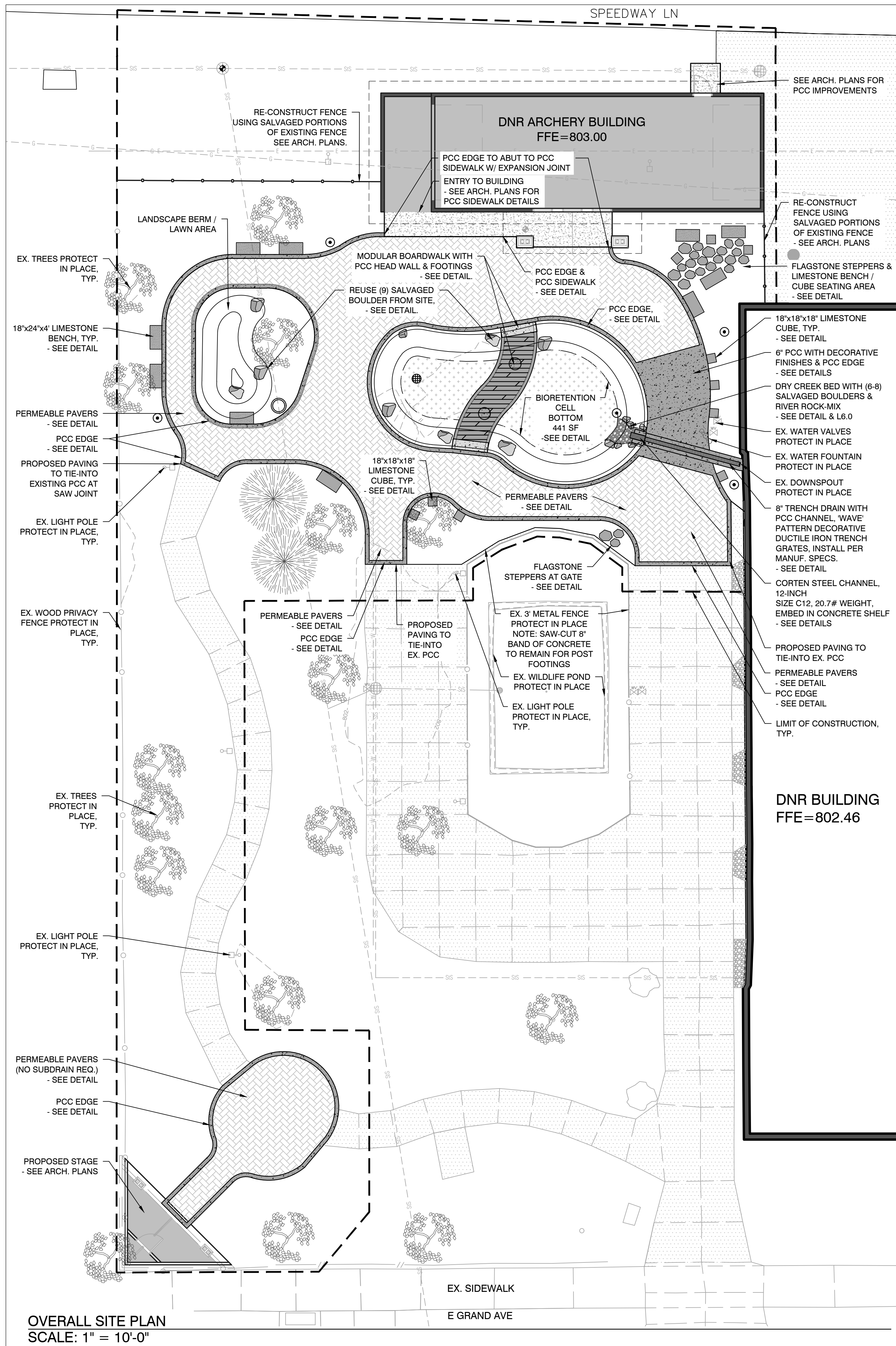
DEMO PLAN

SHEET NO.

C1.0

NO.	REVISION	BY	DATE
DESIGNED: AET	PROJECT NO.: 038.028		
DRAFTED: AET	FILE NUMBER: 038.028		
CHECKED: LTL	SHEET NO.: C1.0		
SCALE: 1"=10'-0"	DATE: NOVEMBER 7, 2023		





**ARCHERY BUILDING AND COURTYARD IMPROVEMENTS FOR:**  
DNR FAIRGROUNDS  
3000 E GRAND AVE, DES MOINES, IOWA  
SITE LAYOUT PLAN

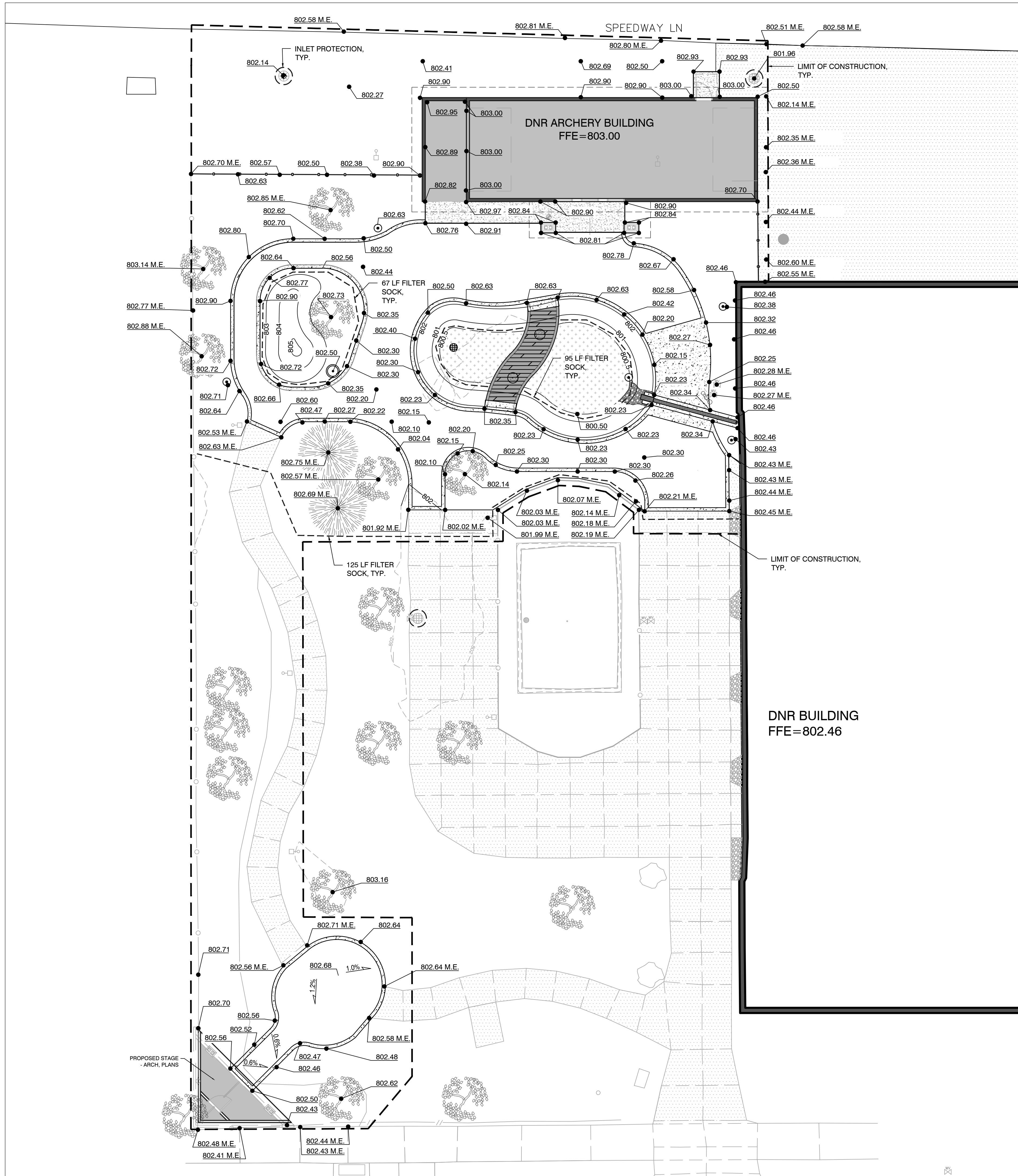
**LITTLEON ASSOCIATES - INC**  
office: 515-422-7016  
www.littleon.com  
5100 EAST LODGE STREET SUITE 400  
DES MOINES, IOWA 50319

PROJECT NO. 038.028  
SITE LAYOUT PLAN  
SHEET NO. C2.0

DESIGNED: AET  
DRAWN: AET  
CHECKED: LTL  
SCALE: VARIES

PROJECT NO.: 038.028  
FILE NUMBER: 038.028  
SHEET NO.: C2.0  
DATE: NOVEMBER 7, 2023





### LEGEND

	EXISTING CONTOUR
	PROPOSED CONTOUR
	SPOT ELEVATION
	PROPOSED STORM STRUCTURE
	PROPOSED AREA INTAKE
	PROPOSED SUBDRAIN CLEANOUT
	EXISTING WATER VALVE
	EXISTING LIGHT POLE
	PROPOSED FILTER SOCK
	INLET PROTECTION

- ### GRADING NOTES
- STRIP TOPSOIL FROM ENTIRE PROJECT AREA. STOCKPILE IN AREA DESIGNATED BY OWNER. TOPSOILS TO BE REUSED AS TOP DRESSINGS ON ALL UNSURFACED AREA UPON COMPLETION OF THE ROUGH GRADING. TOP DRESSING SHALL BE A MINIMUM UNIFORM THICKNESS OF 6".
  - PROVIDE COMPACTED NON-EXPANSIVE COHESIVE SOIL BENEATH ALL PAVEMENT PER DESIGN DETAILS. FILL TO BE COMPACTED TO 98% PROCTOR DENSITY.
  - ALL FILL AND BACKFILL MATERIALS SHALL BE APPROVED BY THE ENGINEER. UTILIZE EXISTING SITE FILL SOILS WHEN FEASIBLE. EXISTING SITE FILL SOILS SHALL BE SORTED TO REMOVE ANY RUBBLE OR DEBRIS. MOISTURE CONDITIONING OF EXISTING SITE FILL SOILS IS ANTICIPATED. ALL FILL SHALL BE PLACED WITHIN 4% OF THE OPTIMUM MOISTURE CONTENT.
  - FINISH CONTOURS SHOWN ARE TOP OF PAVEMENT OR TOP OF TOPSOIL. SEE BUILDING PLANS AND CONSTRUCTION DETAILS FOR FINISHED SUBGRADE BELOW FINISHED FLOOR AND PAVEMENT SECTIONS.
  - SCARIFY SUBGRADE TO DEPTH OF 6" WHERE TOPSOIL IS SCHEDULED. SCARIFY IN AREAS WHERE EQUIPMENT USED FOR HAULING AND SPREADING TOPSOIL HAS CAUSED COMPACTED SUBSOIL.
  - CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES PRIOR TO CONSTRUCTION, BOTH PUBLIC AND PRIVATE.
  - SPOT ELEVATIONS ARE SHOWN AT TOP OF FINISHED GRADE.
  - SEE STRUCTURAL PLANS FOR ANY SPECIAL EXCAVATION AND FILL REQUIREMENTS.

- ### EROSION CONTROL NOTES
- DISTURB THE LEAST AREA POSSIBLE TO COMPLETE THE SCOPE OF THE PROJECT.
  - ALL SEDIMENT AND EROSION CONTROL PRACTICES WILL BE INSPECTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS BY RESPONSIBLE PERSONNEL. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE BEST MANAGEMENT PRACTICES SHALL BE MADE IMMEDIATELY. INSPECTIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
  - SEEDING FOR TEMPORARY SOIL STABILIZATION SHALL BE WITH OATS - 2 TO 3 BUSHELS PER ACRE - AND MULCH.
  - GENERAL CONTRACTOR SHALL IMPLEMENT ALL EROSION CONTROL ACTIVITY WITH THE ASSISTANCE OF THE UTILITY SUBCONTRACTORS, BUILDING CONTRACTORS AND SUPPLIERS.
  - APPLY FREQUENT LIGHT WATERING TO GROUND SURFACE AS REQUIRED TO CONTROL DUST.
  - UPON COMPLETION OF CONSTRUCTION, SEED ALL DISTURBED AREAS PER PROJECT SPECIFICATIONS.
  - MAINTENANCE OF ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES IS THE RESPONSIBILITY OF THE CONTRACTOR AND/OR CONTRACTORS. CLEANING OF CONTROL DEVICES SHALL BEGIN WHEN THEY HAVE LOST 50% OF THEIR CAPACITY.
  - LOCATION OF SOLID WASTE CONTAINER AND PORTABLE RESTROOM TO BE SPECIFIED BY CONTRACTOR.
  - WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICULAR TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY AND PRIOR TO A RAIN EVENT. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.
  - ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE IMPLEMENTING AGENCY. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENT.
  - LIMIT DUST GENERATION BY CLEARING ONLY THOSE AREAS WHERE IMMEDIATE ACTIVITY WILL TAKE PLACE. LEAVING THE REMAINING AREA(S) IN THE ORIGINAL CONDITION, IF STABLE. MAINTAIN THE ORIGINAL GROUND COVER AS LONG AS PRACTICAL. VEGETATE OR MULCH AREAS WITH EXPOSED SOILS THAT WILL NOT RECEIVE VEHICLE TRAFFIC. IN AREAS WHERE PLANTING, MULCHING OR PAVING IS IMPRACTICAL, APPLY GRAVEL OR LANDSCAPING ROCK. ADD SURFACE GRAVEL TO REDUCE THE SOURCE OF DUST EMISSION. LIMIT THE AMOUNT OF FINE PARTICLES (THOSE SMALLER THAN 0.075MM) TO 10 TO 20 PERCENT. SPRINKLE THE SITE WITH WATER UNTIL SURFACE IS WET. REPEAT AS NEEDED TO PREVENT CARRYOUT OF MUD ONTO STREET. USE VACUUM STREET SWEEPERS TO SWEEP UP ANY TRACKED SEDIMENT. REMOVE MUD AND OTHER DIRT PROMPTLY SO IT DOES NOT DRY AND THEN TURN INTO DUST. LIMIT DUST CAUSING WORK ON WINDY DAYS.
  - PRIOR TO ANY LAND DISTURBING ACTIVITIES, CONTRACTOR IS REQUIRED TO INSTALL ALL EROSION CONTROL MEASURES.

**AREA TO BE DISTURBED: 13,560 SF/.31 ACRES**

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GRAPHIC SCALE
   
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NO.	REVISION	BY	DATE

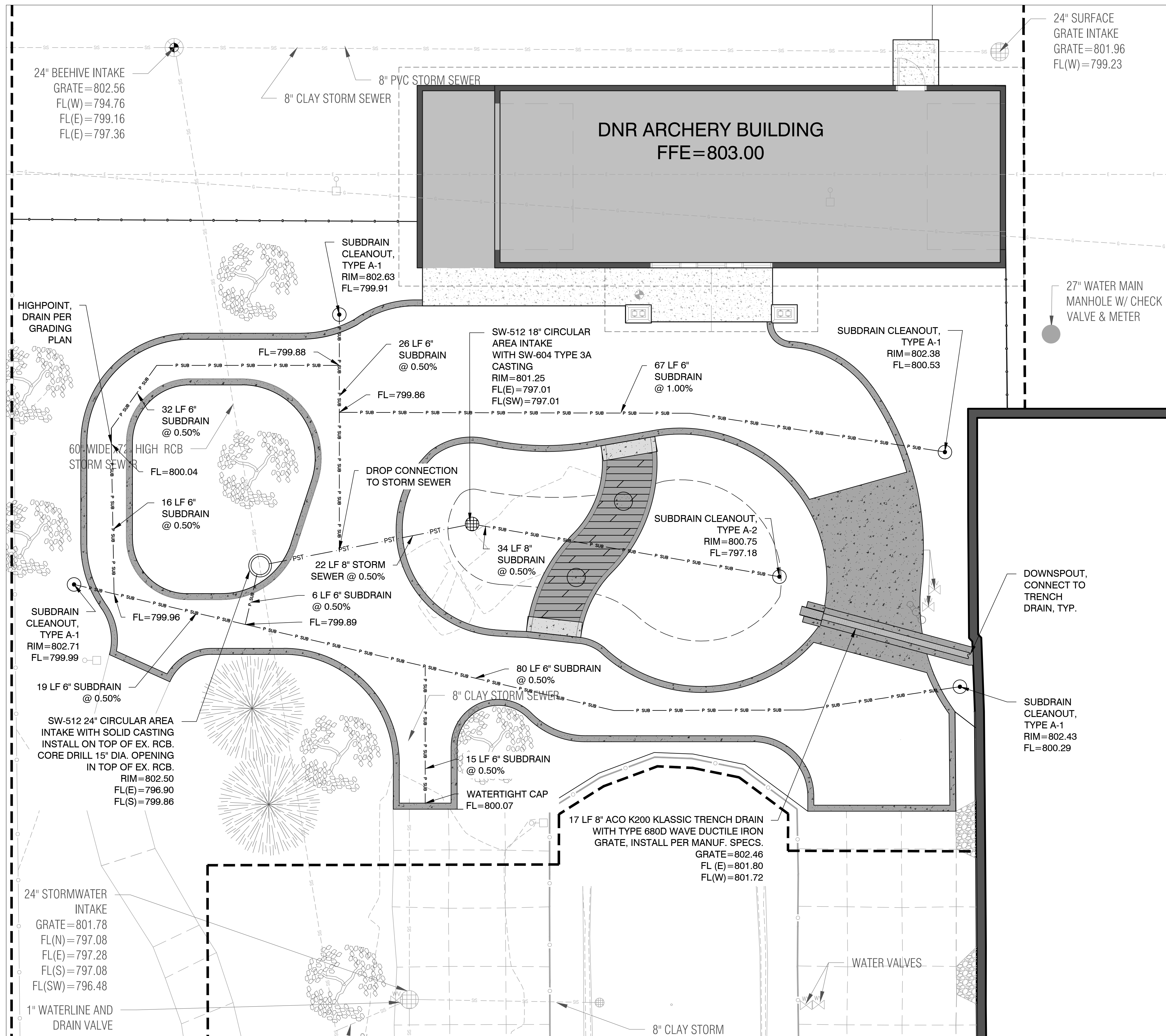
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DRAFTED: AET	FILE NUMBER: 038.028
CHECKED: LTL	SHEET NO.: C3.0
SCALE: 1"=10'-0"	DATE: NOVEMBER 7, 2023

**ARCHERY BUILDING AND COURTYARD IMPROVEMENTS FOR:**  
**DNR FAIRGROUNDS**  
**3000 E GRAND AVE, DES MOINES, IOWA**  
**GRADING PLAN**

**LITTLEON ASSOCIATES INC**
  
 office 515-472-7016
   
 www.littleon.com
   
 5100 EAST LODDUST STREET SUITE 400
   
 DES MOINES, IOWA 50309

PROJECT NO. 038.028
GRADING PLAN
SHEET NO. C3.0





24" SURFACE  
GRATE INTAKE  
GRATE=801.96  
FL(W)=799.23

24" BEEHIVE INTAKE  
GRATE=802.56  
FL(W)=794.76  
FL(E)=799.16  
FL(E)=797.36

**DNR ARCHERY BUILDING**  
FFE=803.00

LEGEND	
---	PROPOSED SILT FENCE
- - - - -	EXISTING CONTOUR
---	PROPOSED CONTOUR
P SUB	PROPOSED SUBDRAIN
- PSS -	PROPOSED SANITARY SEWER
- PW -	PROPOSED WATER LINE
- PST -	PROPOSED STORM PIPE
⊙	PROPOSED STORM STRUCTURE
⊕	PROPOSED AREA INTAKE
⊙	PROPOSED SUBDRAIN CLEANOUT
⊕	EXISTING WATER VALVE
⊕	EXISTING LIGHT POLE

**UTILITY NOTES**

- WHERE PUBLIC UTILITY FIXTURES ARE SHOWN ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.
- THE CONTRACTOR IS REQUIRED TO UTILIZE THE UTILITY ONE-CALL SERVICE AT (800) 292-8989 AT LEAST 48 HOURS PRIOR TO EXCAVATING ANYWHERE ON THE PROJECT. UTILITY CONFLICTS DISCOVERED DURING CONSTRUCTION WILL BE ADDRESSED AT THE TIME OF DISCOVERY. NOTIFY UTILITY COMPANIES PRIOR TO COMMENCING WORK. AVOID DAMAGE TO UTILITIES AND SERVICES DURING CONSTRUCTION. REPAIR ANY DAMAGE CAUSED BY THE CONTRACTOR'S CARELESSNESS AT THE CONTRACTOR'S EXPENSE. COORDINATE AND COOPERATE WITH UTILITY COMPANIES DURING CONSTRUCTION.
- COORDINATE WITH OWNER TO LOCATE EXISTING PRIVATE UTILITIES.
- PROTECT EXISTING UTILITIES WHICH ARE TO REMAIN. THE LOCATIONS OF ALL UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL UTILITIES MUST BE DETERMINED BY THE CONTRACTOR. IT SHALL BE THE DUTY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLAN MAY BE PRESENT AND TO AVOID DAMAGE TO UTILITIES. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY DAMAGE.
- SEE DETAILS FOR UTILITY TRENCH CONSTRUCTION REQUIREMENTS.
- CONTRACTOR SHALL PROTECT EXISTING CURB AND PAVEMENT.
- THE CONTRACTOR SHALL UTILIZE THE UTILITY ONE-CALL SERVICE AT (800)292-8989 AT LEAST 48 HOURS PRIOR TO EXCAVATING ANYWHERE ON THE PROJECT.
- PROVIDE 1.5' MINIMUM VERTICAL CLEARANCE AT UTILITY CROSSINGS. CONTACT ENGINEER IF CONFLICT EXISTS.

NO.	REVISION	DATE

ARCHERY BUILDING AND COURTYARD IMPROVEMENTS FOR:  
DNR FAIRGROUNDS  
3000 E GRAND AVE, DES MOINES, IOWA  
UTILITY PLAN

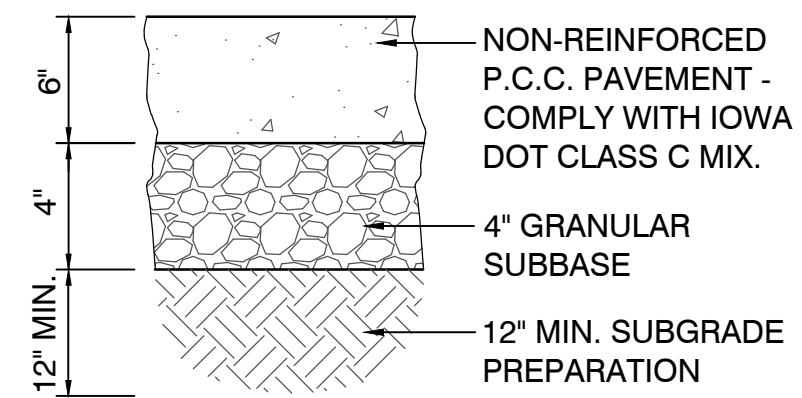
**LT LEON**  
A S S O C I A T E S - I N C  
office 515-422-7016  
www.ltleon.com  
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DES MOINES, IOWA 50309

PROJECT NO. 038.028  
UTILITY PLAN  
SHEET NO.  
C4.0

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GRAPHIC SCALE  
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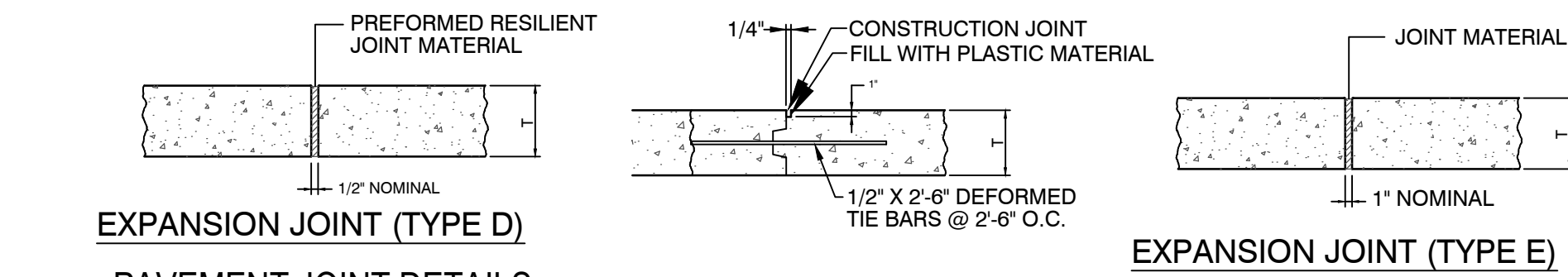
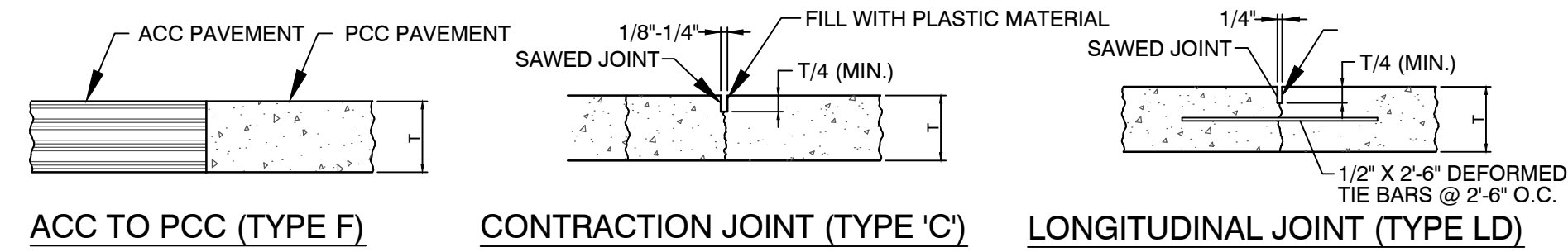




NOTE: PAVEMENT, SUBBASE, AND SUBGRADE SHALL COMPLY WITH SUDAS

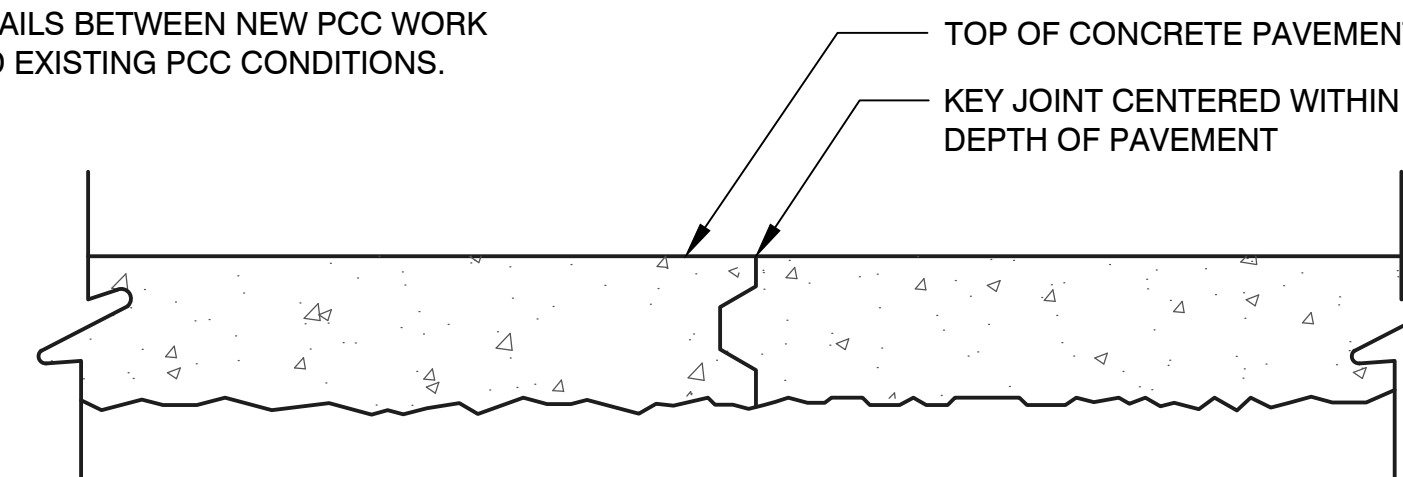
NOTE: PAVEMENT, SUBBASE, AND SUBGRADE SHALL COMPLY WITH SUDAS

1 6" PCC SECTION, TYP.  
NOT TO SCALE



2 PAVEMENT JOINT DETAILS  
NOT TO SCALE

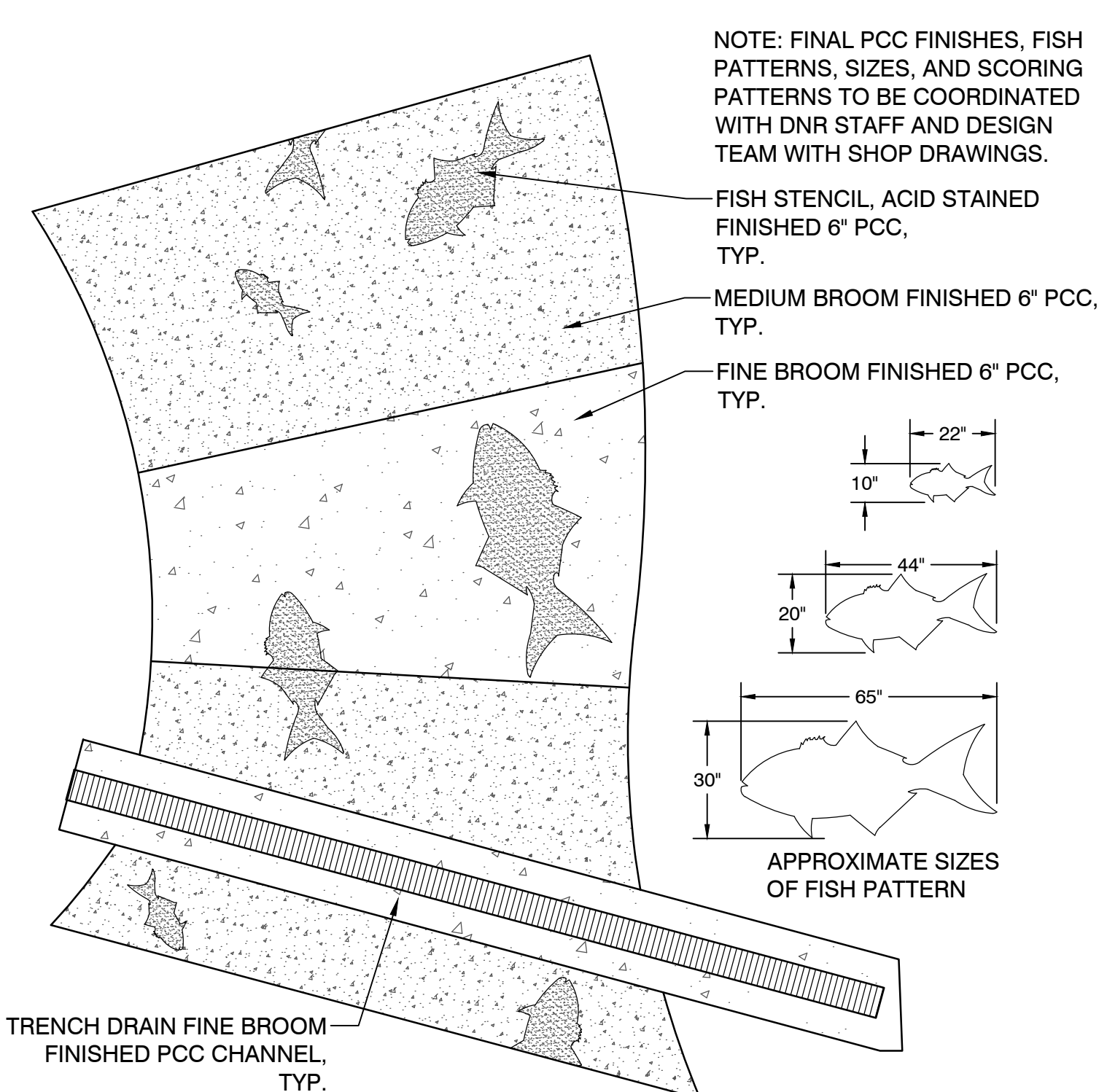
\*\*\*NOTE: CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR ALL JOINTING DETAILS BETWEEN NEW PCC WORK AND EXISTING PCC CONDITIONS.



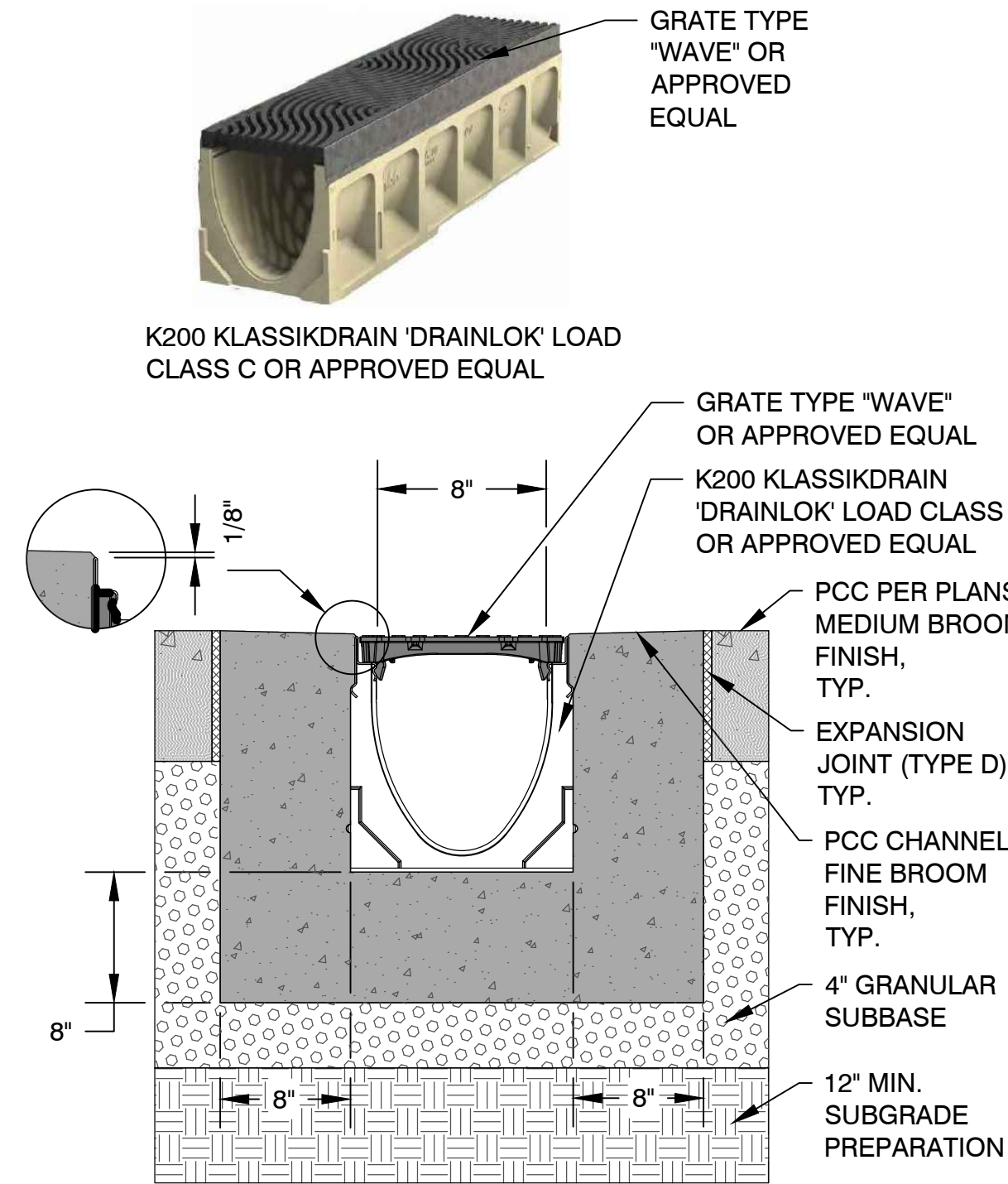
NOTE: CONSTRUCTION JOINTS SHALL BE PLACED BETWEEN INDIVIDUAL POURS OF CONCRETE WHERE EXPANSION JOINTS ARE NOT INDICATED

3 CONSTRUCTION JOINT, TYP.  
NOT TO SCALE

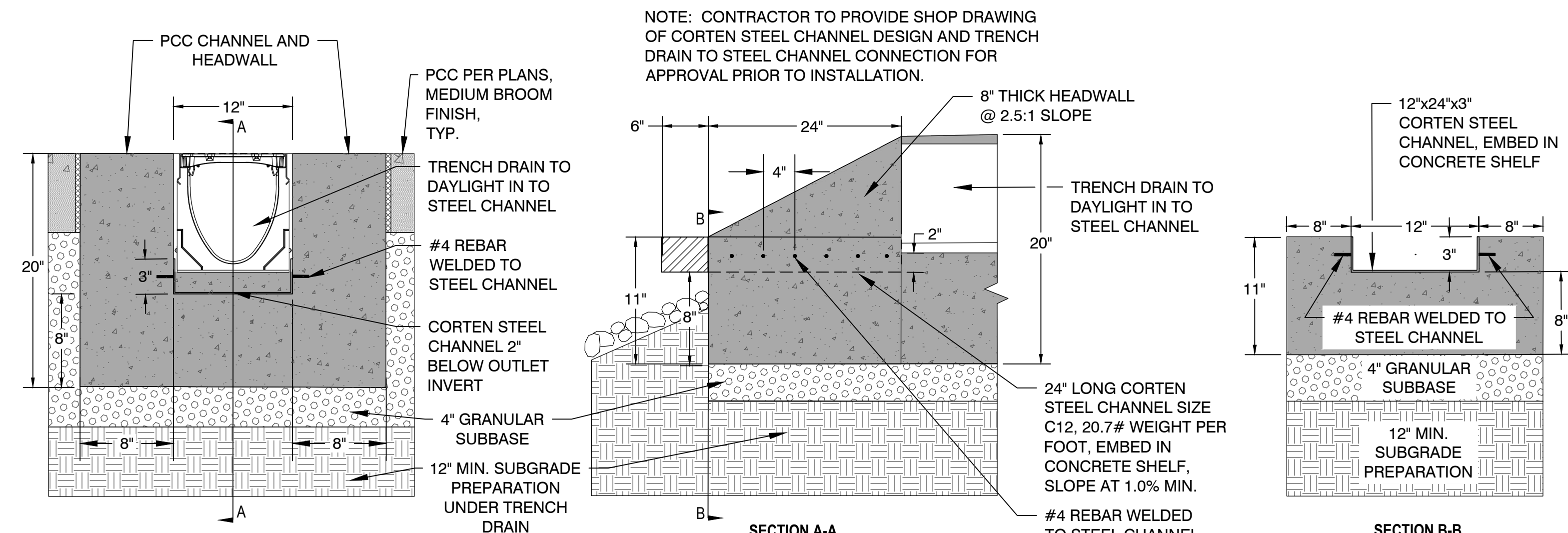
STANDARD DETAILS - SUDAS		
THE FOLLOWING LIST OF DETAILS FROM THE 2023 VERSION OF THE IOWA STATEWIDE URBAN DESIGN AND STANDARD SPECIFICATIONS (SUDAS) ARE APPLICABLE FOR THIS PROJECT.		
FIGURE	DATE	TITLE
3010.101	04-17-18	TRENCH BEDDING AND BACKFILL ZONES (SW-101)
3010.102	04-20-21	RIGID GRAVITY PIPE TRENCH BEDDING (SW-102)
3010.103	04-20-21	FLEXIBLE GRAVITY PIPE TRENCH BEDDING (SW-103)
4020.211	04-17-18	STORM SEWER PIPE CONNECTIONS (SW-211)
4040.231	10-21-14	SUBDRAINS
4040.232	2023 EDITION	SUBDRAIN CLEANOUTS
4040.233	10-18-16	SUBDRAIN OUTLETS
6010.401	04-20-21	CIRCULAR STORM SEWER MANHOLE (SW-401)
6010.512	04-21-20	CIRCULAR AREA INTAKE (SW-512)
6010.602	04-21-20	CASTINGS FOR STORM SEWER MANHOLES (SW-602)
6010.604	04-21-20	CASTINGS FOR AREA INTAKES (SW-604)
7010.101	04-19-22	JOINTS (PV-101)
9040.102	10-17-17	FILTER BERM AND FILTER SOCK



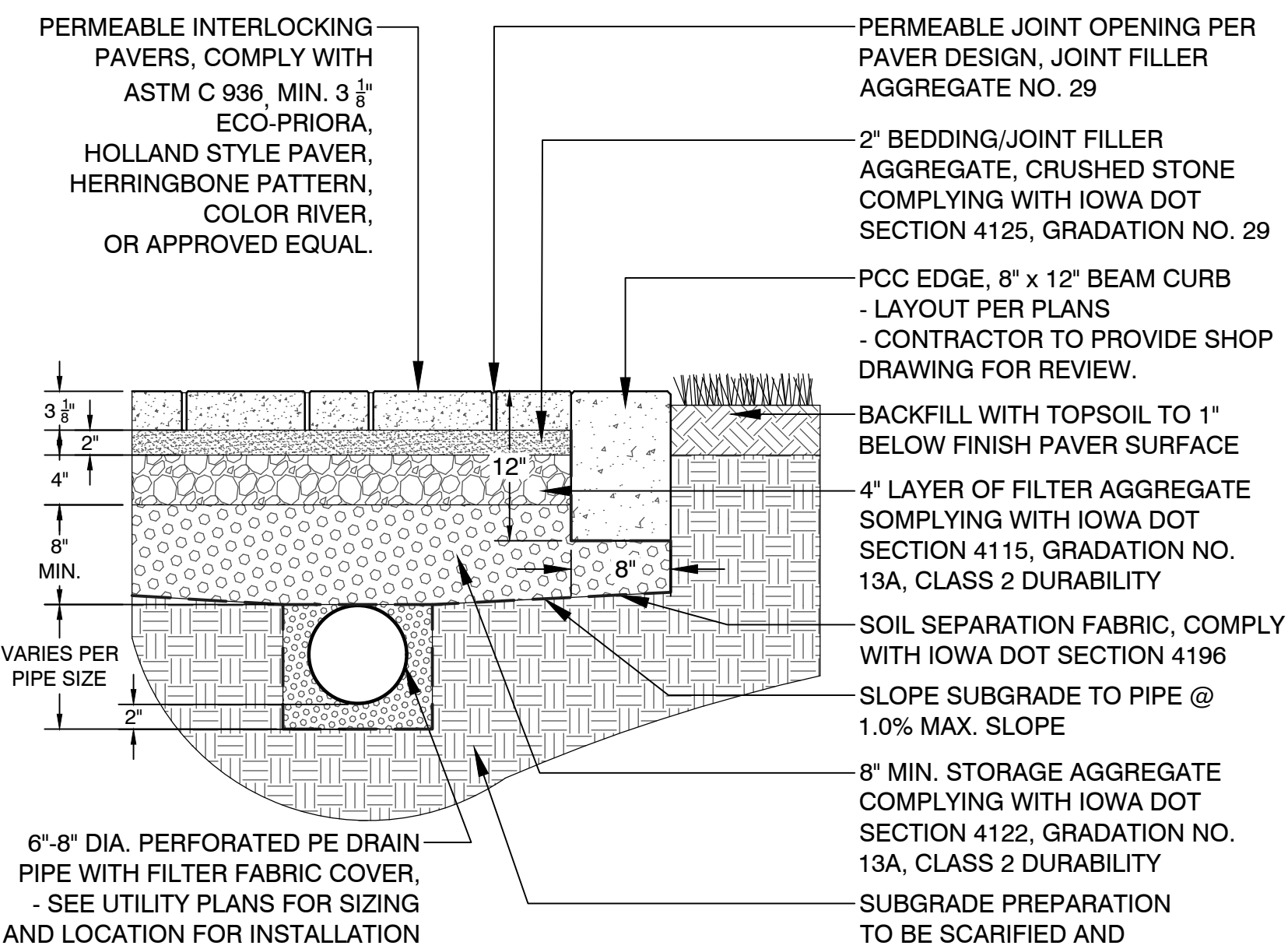
4 6" PCC WITH DECORATIVE FINISHES  
NOT TO SCALE



5 8" TRENCH DRAIN DETAIL  
NOT TO SCALE

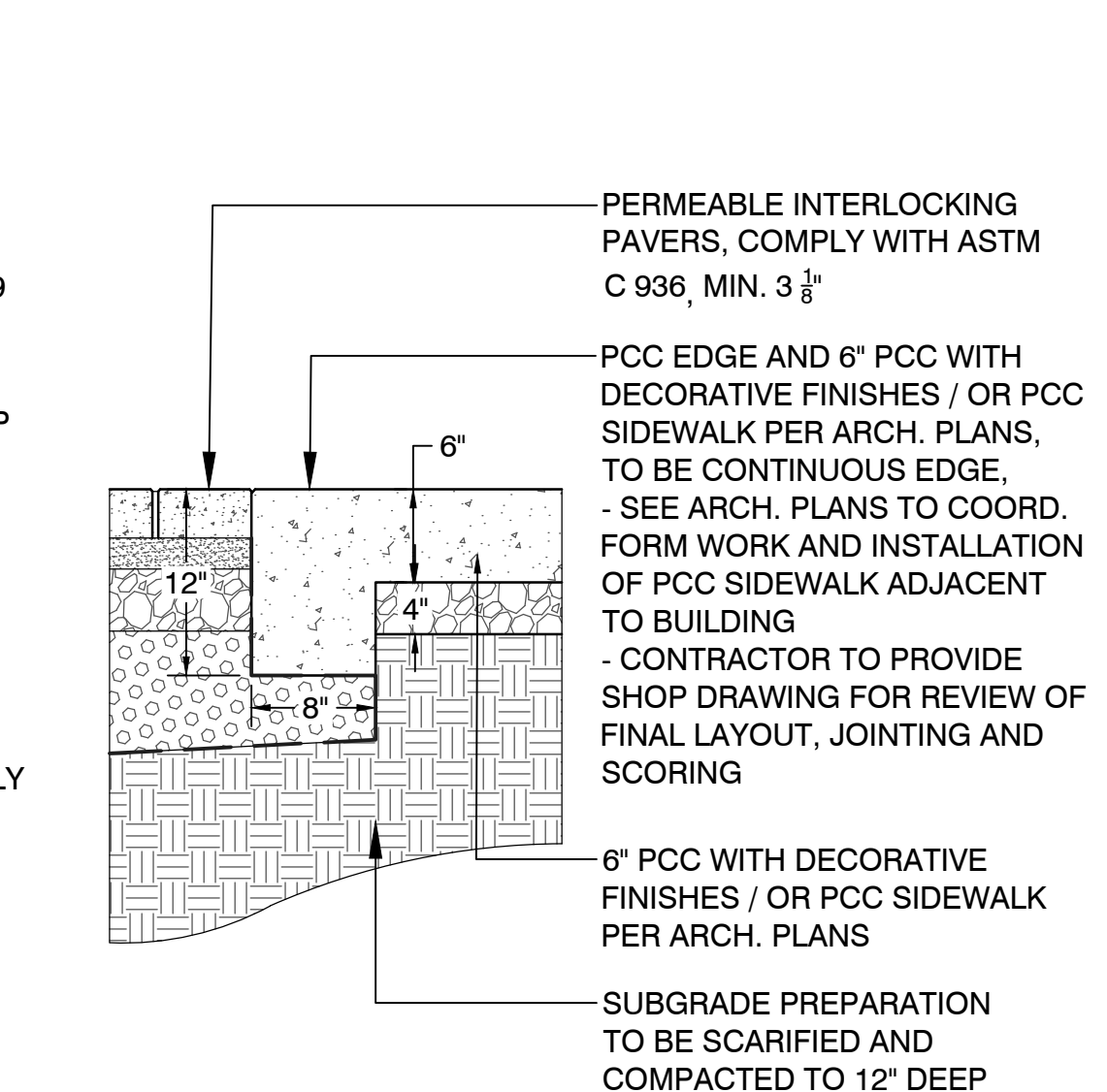


6 CORTEN STEEL CHANNEL, 12 INCH DETAIL  
NOT TO SCALE



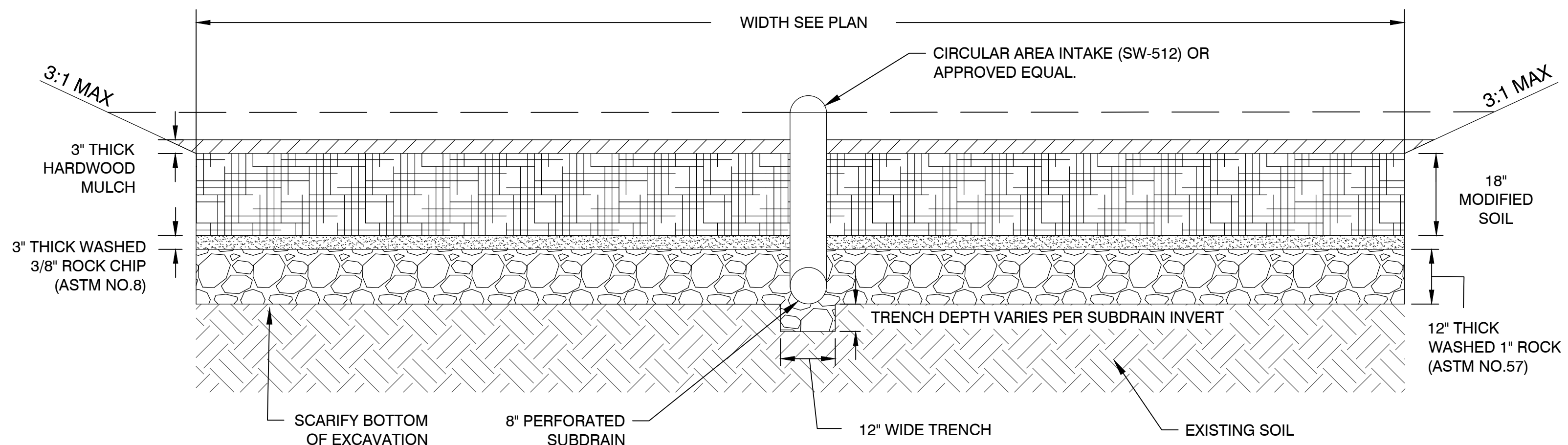
NOTES:  
1. PERMEABLE INTERLOCKING PAVERS PER PLANS AND SPECIFICATIONS, OR APPROVED EQUAL. CONTRACTOR TO PROVIDE SAMPLES AND MOCK-UP FOR APPROVAL.  
2. PERMEABLE STORAGE THICKNESS AS SPECIFIED PER PLANS AND DETAILS.  
3. SEE UTILITY PLANS TO VERIFY ALL SUBDRAIN LAYOUT INFORMATION AND DESIGN.  
4. ALL PCC EDGE AND FLATWORK TO HAVE MIN. 4" OF COMPACTED AGGREGATE BASE WITH SOIL SEPARATION FABRIC AS SHOWN IN DETAILS.

7 PERMEABLE PAVER DETAIL, TYP.  
NOT TO SCALE



NOTES:  
1. PCC EDGE AND OTHER PCC FLATWORK SHALL BE FORMED TO CREATE A CONTINUOUS EDGE AROUND PERMEABLE PAVERS.  
2. ALL PCC EDGE AND PCC FLATWORK TO HAVE MIN. 4" OF COMPACTED AGGREGATE BASE WITH SOIL SEPARATION FABRIC AS SHOWN IN DETAILS.

8 PCC EDGE AND 6" PCC WITH DECORATIVE FINISH / PCC SIDEWALK, TYP.  
NOT TO SCALE



NOTES:  
1. CONTRACTOR TO COORDINATE SOIL SAMPLES TO DETERMINE MIXTURE OF MODIFIED SOIL. SEE BIOCELL PLAN NOTES.  
2. SEE BIOCELL PLAN NOTES FOR INSTALLATION PROCESS AND REQUIREMENTS.  
3. SEE UTILITY PLANS TO VERIFY ALL SUBDRAIN LAYOUT INFORMATION AND DESIGN.

9 BIORETENTION CELL  
NOT TO SCALE

ARCHERY BUILDING AND COURTYARD IMPROVEMENTS FOR:  
DNR FAIRGROUNDS  
3000 E GRAND AVE, DES MOINES, IOWA  
CONSTRUCTION DETAILS

**LT LEON**  
ASSOCIATES - INC  
500 EAST LODGE STREET SUITE 400  
DES MOINES, IOWA 50309  
office: 515-422-7016  
www.ltleon.com

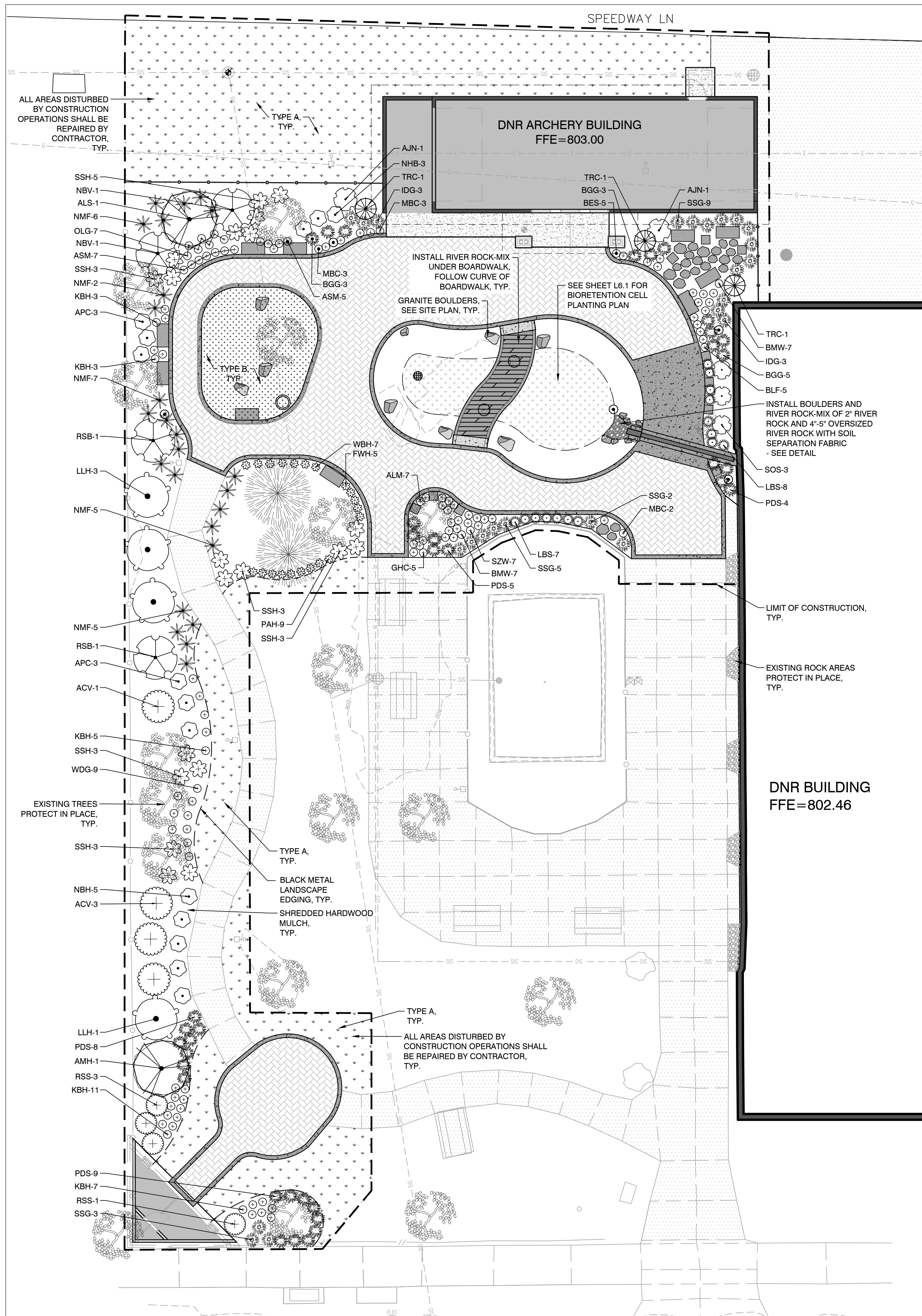
PROJECT NO. 038.028

CONSTRUCTION DETAILS

SHEET NO.  
C5.0

**IOWA ONE CALL**  
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2 Working Days BEFORE YOU DIG  
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NO.	REVISION	DATE

ARCHERY BUILDING AND COURTYARD IMPROVEMENTS FOR:  
**DNR FAIRGROUNDS**  
 3000 E GRAND AVE, DES MOINES, IOWA  
**PLANTING PLAN**

DESIGNED: AET  
 DRAWN: AET  
 CHECKED: LTL  
 SCALE: 1"=10'-0"

PROJECT NO.: 038.028  
 FILE NUMBER: 038.028  
 SHEET NO.: L6.0  
 DATE: NOVEMBER 7, 2023

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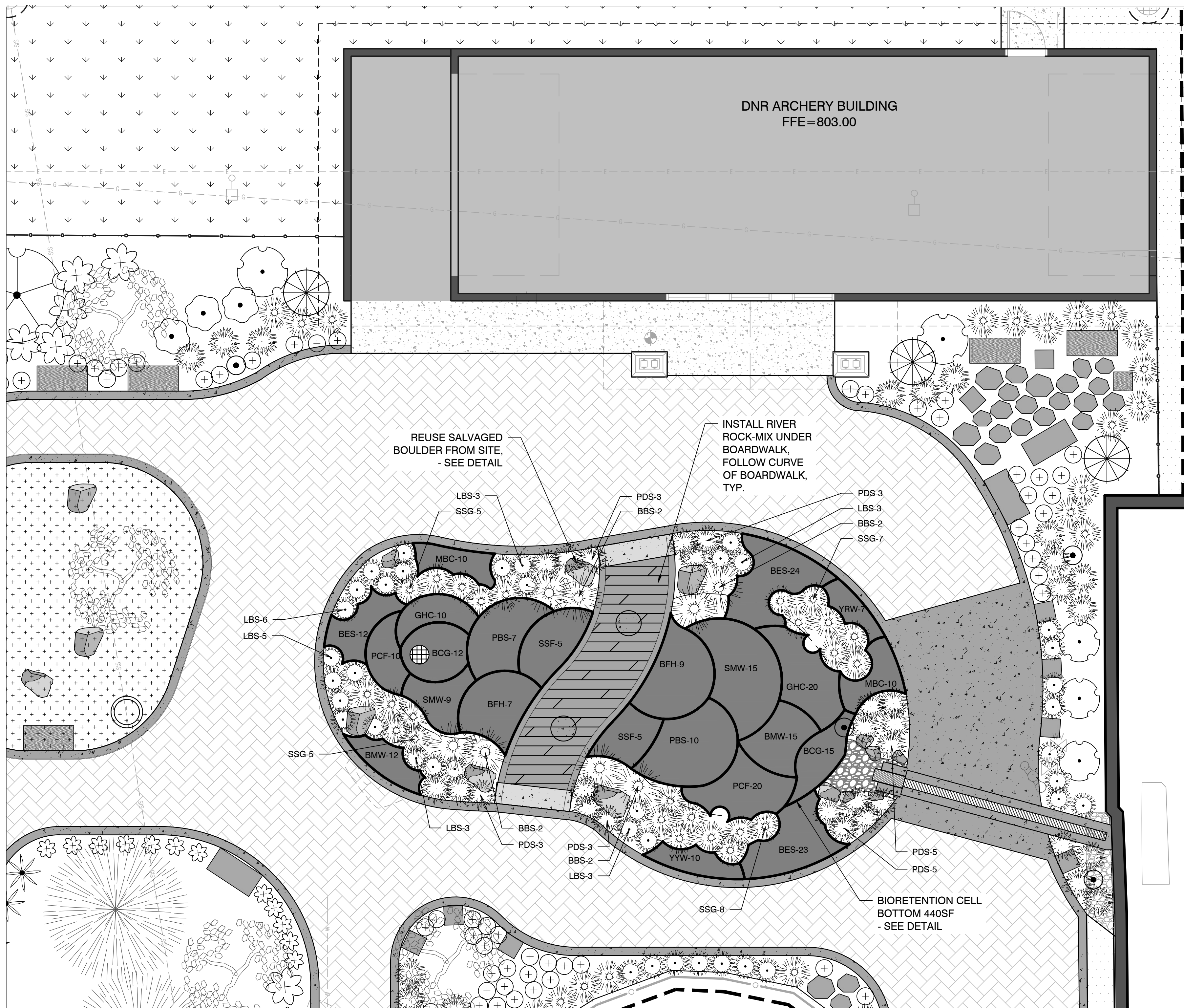
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**L6.0**

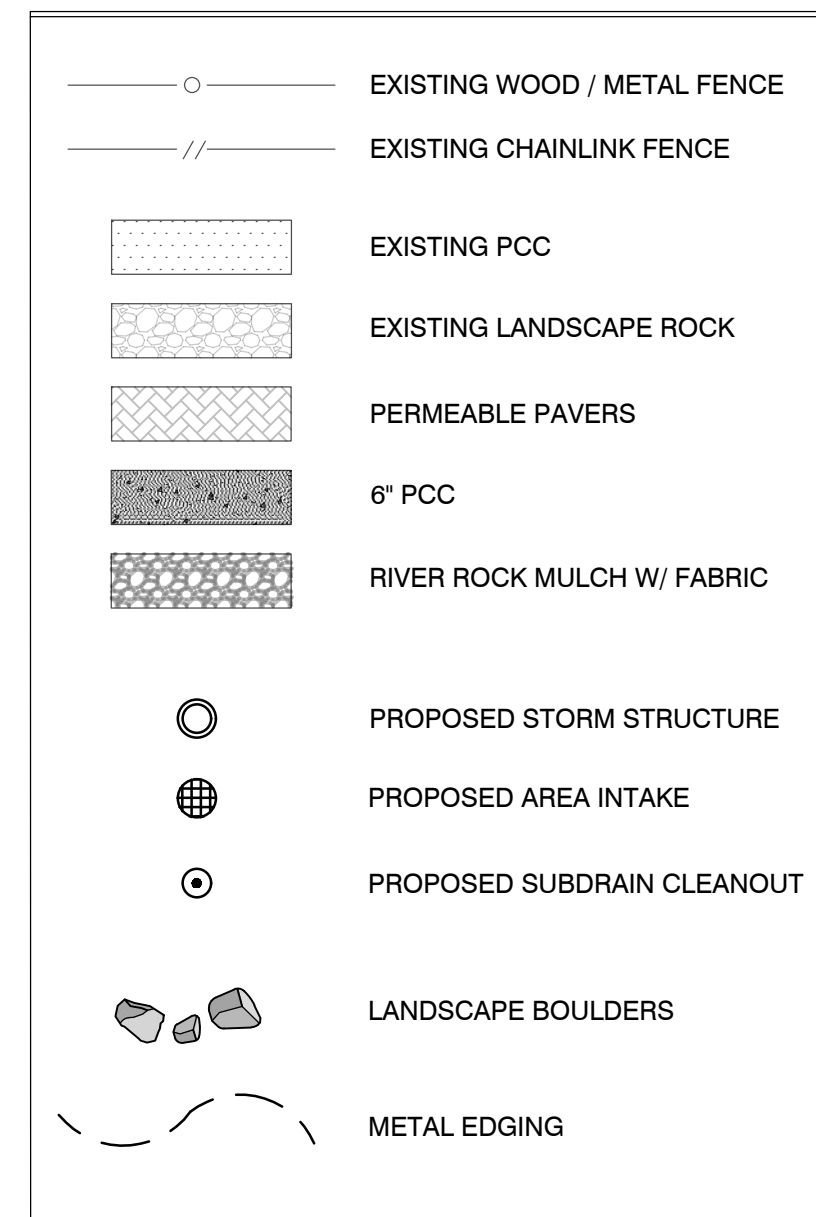
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GRAPHIC SCALE  
 0 10 20 30





**LEGEND**



**BIORETENTION CELL PLANTING PLAN NOTES**

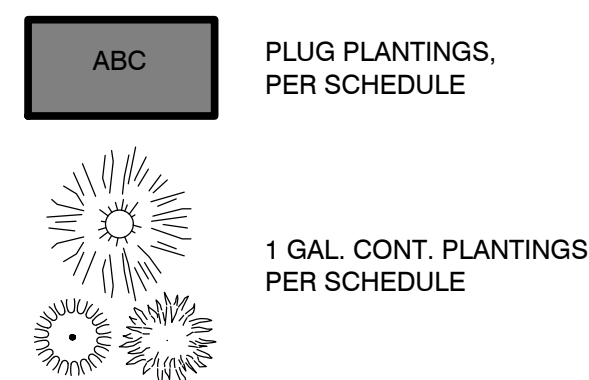
- ALL PLANT MATERIAL SHALL CONFORM WITH THE STANDARDS SET FORTH IN THE LATEST EDITION OF THE 'AMERICAN STANDARD NURSERY STOCK' ANSI Z60 PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL DEPARTMENT OF NATURAL RESOURCES (DNR) STANDARDS AND SPECIFICATIONS AND IN ACCORDANCE WITH IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS).
- ALL CONSTRUCTION TESTING TO BE IN ACCORDANCE WITH SUDAS AND IS AT THE EXPENSE OF THE CONTRACTOR.
- LOCATE ALL EXISTING UTILITIES PRIOR TO INSTALLATION OF PLANT MATERIAL. NOTIFY OWNER OF ANY DISCREPANCIES BETWEEN FIELD CONDITIONS AND THOSE SHOWN ON THE PLAN.
- VERIFICATION OF TOTAL QUANTITIES AS SHOWN ON THE PLANT LIST SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR AND THE TOTAL QUANTITIES SHALL BE AS SHOWN ON THE PLAN.
- CONTRACTOR SHALL WARRANTY ALL PLANTS FOR ONE YEAR FROM FAILURE TO THRIVE, DEFECTS, DEATH, AND DISEASE, PER SUDAS SECTION 9030.
- ESTABLISH POSITIVE DRAINAGE IN ALL PLANTING BEDS AND AWAY FROM BUILDINGS AND STRUCTURES.
- APPLY PRE-EMERGENT HERBICIDE TO ALL NEW PLANTING BEDS AT MANUFACTURER'S RECOMMENDED RATE PRIOR TO INSTALLATION OF MULCH.
- DO NOT INSTALL PLANT MATERIAL IN IMPERVIOUS SOILS, (i.e. HOLES WHICH, WHEN FILLED WITH WATER, DO NOT COMPLETELY DRAIN WITHIN TWO HOURS.)
- SEE ENGINEER'S PLAN FOR BIORETENTION CELL DESIGN, SIZING, AND TOPSOIL/MATERIAL PLACEMENT.
- ALL TURF AREAS/DISTURBED AREAS TO BE SEEDED PER PLANS AND SUDAS SECTION 9010.
- INSTALL 3-INCH DEPTH SHREDDED HARDWOOD MULCH IN BIORETENTION CELL PLANTING AREA PER SUDAS SECTION 9030.
- LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING SITE LANDSCAPING DUE TO NEW CONSTRUCTION INCLUDING, BUT NOT LIMITED TO:
  - RE-SODDING/SEEDING OF DAMAGED/DISTURBED TURF GRASS SWALES;
  - REPLACEMENT OF DAMAGED/DISTURBED TREES AND
  - RECONNECTION, REPLACEMENT, AND REINSTALLATION OF EXISTING IRRIGATION LINES AND EQUIPMENT THAT ARE BROKEN, INTERRUPTED, AND DEMOLISHED. CONTRACTOR SHALL INSTALL SLEEVING ACROSS NEW ROADWAY(S) AND SIDEWALK(S) TO RECONNECT EXISTING SYSTEM IF NECESSARY. FIELD VERIFY.

**BIORETENTION CELL BASIN PLANTING SCHEDULE**

CONTAINER & PLUG	QTY	ID	COMMON NAME	SCIENTIFIC NAME	SIZE	SPACING	BLOOM
	8	BBS	BIG BLUESTEM	<i>Andropogon gerardii</i>	1 GAL. CONT.	PER PLAN	SEPT-FEB
	27	BCG	GENTIAN 'BLUE CROSS'	<i>Gentiana cruciata 'Blue Cross'</i>	4" PLUG	12" O.C.	AUG-SEPT
	59	BES	BLACK-EYED SUSAN 'GOLDSTRUM'	<i>Rudbeckia fulgida 'Goldstrum'</i>	4" PLUG	12" O.C.	JULY-OCT
	16	BFH	HYSSOP 'BLUE FORTUNE'	<i>Agastache hybrida 'Blue Fortune'</i>	4" PLUG	24" O.C.	JULY-SEPT
	27	BMW	BUTTERFLY MILKWEED	<i>Asclepias tuberosa</i>	4" PLUG	12" O.C.	JUNE-SEPT
	30	GHC	GRAY-HEADED CONEFLOWER	<i>Ratibida pinnata</i>	4" PLUG	12" O.C.	JUNE-SEPT
	23	LBS	LITTLE BLUESTEM 'BLAZE'	<i>Schizachyrium scoparium 'Blaze'</i>	1 GAL. CONT.	PER PLAN	AUG-FEB
	20	MBC	COREOPSIS 'MOONBEAM'	<i>Coreopsis 'Moonbeam'</i>	4" PLUG	12" O.C.	MAY-SEPT
	17	PBS	PRAIRIE BLAZING STAR	<i>Liatris spicata</i>	4" PLUG	24" O.C.	AUG-SEPT
	30	PCF	CONEFLOWER 'CHEYENNE SPIRIT'	<i>Echinacea purpurea 'Cheyenne Spirit'</i>	4" PLUG	12" O.C.	JUNE-SEPT
	17	PDS	PRAIRIE DROPSIED 'TARA'	<i>Sporobolus heterolepis 'Tara'</i>	1 GAL. CONT.	PER PLAN	AUG-OCT
	14	SMW	SWAMP MILKWEED	<i>Asclepias incarnata</i>	4" PLUG	12" O.C.	JULY-SEPT
	10	SSF	SUMMER SUN FALSE SUNFLOWER	<i>Helioopsis helianthoides</i>	4" PLUG	24" O.C.	AUG-SEPT
	25	SSG	SWITCHGRASS 'SHENANDOAH'	<i>Panicum virgatum 'Shenandoah'</i>	1 GAL. CONT.	PER PLAN	JULY-FEB
	7	YRW	YARROW 'BALVINRED'	<i>Achillea hybrida 'Balvinred'</i>	4" PLUG	12" O.C.	JUNE-SEPT
	10	YRW	YARROW 'MOONSHINE'	<i>Achillea hybrida 'Moonshine'</i>	4" PLUG	12" O.C.	JUNE-SEPT

GRAPHIC SYMBOLS SUPERSEDE WRITTEN QUANTITIES WHERE DISCREPANCIES OCCUR.

**BIORETENTION CELL PLANT SYMBOLS**



**BIORETENTION CELL MAINTENANCE SCHEDULE**

DESCRIPTION	METHOD	FREQUENCY	SEASON
SOIL			
INSPECT AND REPAIR EROSION	VISUAL	MONTHLY	ALL
PLANTS			
REPLACE ANY DEAD OR DISEASED VEGETATION	SEE PLANTING SPECIFICATIONS	TWICE PER YEAR	SPRING SUMMER
TREAT ALL DISEASED PLANTS NOT TO BE REMOVED	MECHANICAL OR BY HAND	AS NEEDED	ALL
WATER PLANT MATERIAL AT END OF EACH DAY FOR 14 CONSECUTIVE DAYS AFTER PLANTING	BY HAND	IMMEDIATELY AFTER PROJECT COMPLETION	N/A
REMOVE ALL VOLUNTEER PLANTS OF INVASIVE SPECIES	BY HAND	MONTHLY	ALL
MOWING PLANTS TO HEIGHT OF 4-5"	BY HAND HELD STRING TRIMMERS	MONTHLY	1ST GROWING SEASON ONLY

CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE UNTIL SUBSTANTIAL COMPLETION AT WHICH TIME OWNER WILL ASSUME MAINTENANCE RESPONSIBILITY. LANDSCAPE WARRANTIES SHALL APPLY TO BIORETENTION PLANTINGS.

**BIORETENTION CELL NOTES**

- SUBMIT MATERIAL CERTIFICATION, INCLUDING MATERIAL TYPE AND GRADATION, FOR ALL STONE AND POROUS BACKFILL.
- SUBMIT WRITTEN INSTRUCTIONS RECOMMENDING PROCEDURES FOR MAINTENANCE OF SEEDED AREAS. SUBMIT PLUG PLANT LISTS, SIZE AND SOURCING.
- BIORETENTION CELL SOIL MEDIA: PRIOR TO PLACEMENT, THE CONTRACTOR SHALL SUBMIT A ONE-GALLON COMPOSITE SAMPLE OF EACH TYPE OF AMENDED SOIL MIX TO THE OWNER'S LABORATORY FOR QUALITY ASSURANCE TESTING.
- COMPLY WITH SUDAS SECTION 4040, 2.06, A FOR TYPE A-2 CLEANOUTS. MATCH DIAMETER OF THE ADJACENT SUBDRAIN.
- AGGREGATE SUBBASE (1" WASHED ROCK): PROVIDE AGGREGATE COMPLYING WITH IOWA DOT SECTION 4115, GRADATION NO. 3, CLASS 2 DURABILITY CRUSHED STONE (AASHTO M 43/ASTM D 148, SIZE 57)
- SUBDRAIN: PROVIDE SLOTTED PIPE(S) COMPLYING WITH REQUIREMENTS FOR TYPE 1 SUBDRAIN IN SUDAS SECTION 4040, 2.02, B OR C. PIPE SIZE AS SPECIFIED IN CONTRACT DOCUMENTS. SHOULD MATCH DIAMETER OF PIPE USED FOR SUBDRAIN CLEANOUTS.
- NONWOVEN GEOTEXTILE FABRIC: COMPLY WITH IOWA DOT ARTICLE 4196.01, B.2 MEETING THE REQUIREMENTS FOR SUBSURFACE DRAINAGE.
- CHOKER AGGREGATE (WASHED 3/8" ROCK CHIP) COMPLY WITH THE FOLLOWING: 3/8 INCH AGGREGATE COMPLYING WITH IOWA DOT SECTION 4125, GRADATION NO. 21 (AASHTO M 43/ASTM D 448, SIZE 8).
- MODIFIED SOIL:
  - ORGANIC MATERIAL: PROVIDE SUITABLE ORGANIC MATERIAL COMPOSED OF PRODUCTS FROM PLANT MATERIAL SUCH AS:
    - COMPOST COMPLYING WITH THE REQUIREMENTS FOR MULCH FOR PNEUMATIC SEEDING IN SUDAS SECTION 9010, 2.07.C.
    - FINELY CHIPPED BARK (3/8" DIAMETER OR LESS)
    - FINELY SHREDDED, PARTIALLY DECOMPOSED MULCH
    - PEAT OR SPHAGNUM PEAT MOSS

- SAND: PROVIDE CLEAN SAND COMPLYING WITH IOWA DOT SECTION 4110, GRADATION NO. 1.
- SOIL: PROVIDE SOIL TAKEN FROM THE TOP 6 INCHES OF THE A-HORIZON, HAVE A DARK BROWN TO BLACK COLOR, HAVE A GRANULAR STRUCTURE AND CLAY CONTENT LESS THAN 25% VERIFIED WITH A RIBBON TEST THAT YIELDS NO MORE THAN 1".
- MIXTURE: THE TEXTURE OF THE MODIFIED SOIL MIXTURE WILL BE LOAMY SAND OR SANDY LOAM ACCORDING TO THE USDA SOIL CLASSIFICATION SYSTEM. SOIL TEXTURAL TRIANGLE. A LABORATORY ANALYSIS FOR PARTICLE SIZE OR A SIMPLIFIED DISPERSAL METHOD FOR SAND CONTENT ONLY CAN ALSO BE USED TO VERIFY SOIL TEXTURE. THOROUGHLY BLEND ORGANIC MATERIALS, SAND AND SOIL TO PROVIDE A MIXTURE WITH 0-10% SUITABLE ORGANIC MATERIAL, 75-90% SAND AND 0-25% SOIL BY VOLUME. PLANT MATERIALS: SEE L6.1 FOR BIORETENTION CELL BASIN PLANTING SCHEDULE AND NOTES REGARDING SIZE AND SPACING.
- MULCH: COMPLY WITH THE STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS) STANDARD SPECIFICATIONS DIVISION 9, SECTION 9030 - SECTION 2.02. PROVIDE DOUBLE SHREDDED, HARDWOOD BARK MULCH WITH A 4" MAXIMUM LENGTH COMPLYING WITH THE FOLLOWING: FREE FROM LEAVES, TWIGS, DUST, TOXIC SUBSTANCES, AND ANY OTHER FOREIGN MATERIAL.
- PRE-INSTALLATION PROTECTION: COMPLETE UPLAND GRADING, UTILITY INSTALLATION, AND OTHER EARTH DISTURBING OPERATIONS PRIOR TO EXCAVATING FOR THE BIORETENTION CELL.
- PRIOR TO INSTALLING THE BIORETENTION CELL, INSTALL SEDIMENT AND EROSION CONTROL PRACTICES UPSTREAM TO PROTECT THE BIORETENTION CELL FROM SEDIMENT IN STORMWATER RUNOFF.

**BIORETENTION CELL INSTALLATION**

- COMPLETE EACH GRADING ACTIVITIES TO EXCAVATE THE BIORETENTION CELL AREA TO THE LENGTH, WIDTH, AND DEPTH SPECIFIED. DO NOT COMPACT THE BIORETENTION CELL SUBGRADE AND DO NOT OPERATE HEAVY MACHINERY ON THE SUBGRADE.

- PERFORM TOPSOIL RE-SPREAD, FINE GRADING OPERATIONS, AND SEEDBED PREPARATION AS SPECIFIED IN THE CONTRACT DOCUMENTS.
- EXCAVATE THE TRENCH FOR THE SUBDRAIN SIMILAR TO SUDAS FIGURE 4040.231 FOR TYPE 1 SUBDRAIN APPLICATION.
- EXCAVATE ACROSS THE BOTTOM OF THE BIORETENTION CELL FOR PLACEMENT OF THE MODIFIED SOIL LAYER AS SPECIFIED IN THE CONTRACT DOCUMENTS.
- VERIFY THAT THE BOTTOM OF THE SUBDRAIN TRENCH IS CLEAR OF DEBRIS OR OTHER MATERIAL AND REMAINS AT THE PROPER SUBGRADE ELEVATION TO ALLOW FOR SUBDRAIN INSTALLATION.
- IF NONWOVEN GEOTEXTILE FABRIC IS SPECIFIED, INSTALL OVER THE BOTTOM OF THE TRENCH AND UP THE SIDES OF THE EXCAVATED AREA WITH ENOUGH MATERIALS TO OVERLAP 18 INCHES OVER THE TOP OF THE AGGREGATE. OVERLAP ADJACENT STRIPS OF FABRIC A MINIMUM OF 6 INCHES.
- PLACE THE FIRST 2 INCHES OF THE AGGREGATE SUBBASE EVENLY OVER THE BOTTOM OF THE SUBDRAIN TRENCH. DO NOT OPERATE MACHINERY DIRECTLY ON THE EXCAVATED SUBGRADE OF THE MODIFIED SOIL LAYER DURING AGGREGATE SUBBASE OR SUBDRAIN INSTALLATION.
- INSTALL SUBDRAIN AT THE ELEVATION SPECIFIED IN THE PLAN. INSTALL CLEANOUTS AT LOCATIONS SPECIFIED IN THE CONTRACT DOCUMENTS.
- PLACE REMAINING AGGREGATE SUBBASE LAYER TO THE ELEVATION SPECIFIED IN THE PLANS.
- IF A CHOKER AGGREGATE LAYER IS SPECIFIED IN THE CONTRACT DOCUMENTS, INSTALL OVER STONE AGGREGATE SUBBASE LAYER TO THE DEPTH SPECIFIED.
- PLACE MODIFIED SOIL IN 8 TO 12 INCH LIFTS TO THE ELEVATION SPECIFIED IN THE PLANS. DO NOT OPERATE HEAVY MACHINERY DIRECTLY ON THE SUBGRADE OF THE MODIFIED SOIL LAYERS DURING PLACEMENT. OVERFILL AREA WITH MODIFIED SOIL BY 5% OF THE SPECIFIED DEPTH TO ALLOW FOR NATURAL SETTLEMENT.

- AVOID OVER COMPACTION BY ALLOWING TIME FOR NATURAL SETTLEMENT. IF THE PROJECT SCHEDULE DOES NOT ALLOW FOR NATURAL SETTLEMENT OF SOIL AND THE CONTRACT DOCUMENTS REQUIRE COMPACTION BY SOAKING, COMPACT THE FILTER SOIL MATRIX BY SOAKING AS DESCRIBED BELOW:
  - APPLY WATER TO UNIFORMLY SATURATE SURFACE BY SPRAYING OR SPRINKLING.
  - ENSURE ENTIRE BIORETENTION CELL IS SATURATED.
  - ADD MODIFIED SOIL AS REQUIRED TO RESTORE SETTLED SURFACE TO FINISHED ELEVATION.
- ROUGHEN SURFACE OF SIDE SLOPES THAT ARE 4(H):1(V) OR STEEPER TO REDUCE POTENTIAL FOR RILL EROSION ALONG EQUIPMENT TRACTS.
- PERFORM STABILIZATION MEASURES AND INSTALL LANDSCAPING (SEED, SOD, NATIVE PLANTS, TREES, SHRUBS, ETC.) AS SPECIFIED IN THE PLANS.
- INSTALL SIDE SLOPE EROSION AND SEDIMENT CONTROL MEASURES AS SPECIFIED IN THE PLANS.
- UNIFORMLY GRADE AND RAKE THE TOP OF THE MODIFIED SOIL LAYER TO A FLAT, SMOOTH, UNIFORM SURFACE.
- ENSURE GOOD HOUSEKEEPING MEASURES ARE TAKEN THROUGHOUT CONSTRUCTION, UNTIL FINAL ACCEPTANCE OF IMPROVEMENTS BY OWNER, TO PREVENT SEDIMENTATION AND EROSION THAT COULD REDUCE THE EFFECTIVENESS OF THE BIORETENTION CELL. ADDRESS ANY SUCH SEDIMENTATION AND EROSION SHOULD IT OCCUR, UNTIL FINAL ACCEPTANCE.
- DO NOT STORE MATERIALS OR OPERATE HEAVY EQUIPMENT WITHIN OR NEAR THE FOOTPRINT OF THE BIORETENTION CELL PRACTICE AFTER INSTALLATION HAS BEEN COMPLETED.

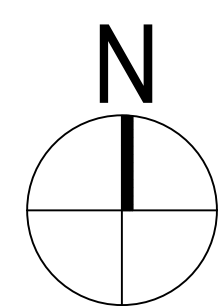
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**GENERAL PLANTING AND TOPSOIL NOTES:**

1. THE CONTRACTOR SHALL MAINTAIN A QUALIFIED SUPERVISOR ON THE SITE AT ALL TIMES DURING CONSTRUCTION THROUGH COMPLETION OF FINAL PUNCHLIST WORK.
2. THE CONTRACTOR SHALL VERIFY ALL PLANT MATERIAL QUANTITIES PRIOR TO INSTALLATION. ANY PLANT MATERIAL QUANTITIES LISTED ARE FOR THE CONVENIENCE OF THE CONTRACTOR. ACTUAL NUMBER OF SYMBOLS SHALL HAVE PRIORITY OVER QUANTITY DESIGNATED.
3. THE CONTRACTOR SHALL FURNISH AND PAY FOR ALL CONTAINER OR FIELD GROWN TREES, SHRUBS AND VINES, INCLUDING SEEDED AND SODDED TURF, HYDROMULCHES AND FLATTED GROUNDCOVERS. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE AND PAY FOR: PLANTING OF ALL PLANT MATERIALS; THE SPECIFIED GUARANTEE OF ALL PLANT MATERIALS; THE STAKING AND GUYING OF TREES AND THE CONTINUOUS PROTECTION OF ALL PLANT MATERIALS UPON THEIR ARRIVAL AT THE SITE. CONTRACTOR SHALL PROVIDE A WARRANTY ON ALL TREES, SHRUBS, AND PERENNIALS FOR ONE YEAR.
4. ALL PLANT MATERIAL SHALL BE SUBJECT TO APPROVAL BY THE LANDSCAPE ARCHITECT AND/OR OWNER PRIOR TO INSTALLATION.
5. TOPSOIL: TOPSOIL TO BE PLACED BY GENERAL/GRADING CONTRACTOR. COORDINATE TOPSOIL PLACEMENT WITH GENERAL/GRADING CONTRACTOR AND REFERENCE CIVIL SHEETS FOR MORE INFORMATION. REFER TO CIVIL SHEETS FOR TOPSOIL AND MULCHING REQUIREMENTS IN BIORETENTION CELLS.
  - ALL TURF GRASS AND NATIVE GRASS AREAS SHALL RECEIVE A MIN. OF 6" OF RESERVED OR IMPORTED TOPSOIL, COMPLY WITH SUDAS.
  - ALL SHRUB AND GROUND COVER AREAS SHALL RECEIVE A MIN. OF 8" OF RESERVED OR IMPORTED TOPSOIL, COMPLY WITH SUDAS.
  - TOPSOIL SHALL BE FREE OF ROCKS, BOULDERS, BRANCHES, STICKS, GARBAGE, ETC. AND SHALL BE SCREENED TO ELIMINATE ROCKS LARGER THAN 2" DIAMETER. IMPORTED TOPSOIL MIX IF USED SHALL CONTAIN 10% ORGANIC MATTER (40% COMPOST). SOIL PORTION MUST BE SANDY LOAM AS DEFINED BY THE USDA.
  - SHRUB BEDS: PLACE 4" IMPORTED OR RESERVED TOPSOIL MIX ON SURFACE AND TILL INTO 2" OF SOIL. PLACE SECOND LIFT OF 4" IMPORTED OR RESERVED TOPSOIL MIX ON SURFACE. RAKE BEDS TO SMOOTH AND REMOVE SURFACE ROCKS OVER 2" DIAMETER.
  - TURF GRASS AREAS: PLACE 3" IMPORTED OR RESERVED TOPSOIL MIX ON SURFACE AND TILL INTO 2" OF SOIL. PLACE SECOND LIFT OF 3" IMPORTED OR RESERVED TOPSOIL MIX ON SURFACE. WATER OR ROLL TO COMPACT SOIL TO 85% OF MAXIMUM. RAKE TO LEVEL AND SMOOTH AND REMOVE SURFACE ROCKS OVER 1" DIAMETER.
  - NATIVE GRASS AREAS: PLACE 6" IMPORTED OR RESERVED TOPSOIL MIX ON SURFACE AND DRAG OR RAKE TO SMOOTH. WATER OR ROLL TO COMPACT SOIL TO 85% OF MAXIMUM. RAKE TO LEVEL AND SMOOTH AND REMOVE SURFACE ROCKS OVER 1" DIAMETER.
6. FOR AREA TO BE LANDSCAPED, THE FOLLOWING AMENDMENTS SHALL BE UNIFORMLY BROADCAST AND THOROUGHLY INCORPORATED BY MEANS OF A ROTOTILLER OR EQUAL. AMOUNT PER 1,000 SQUARE FEET: 1 CY COMPOST
7. THIRTY (30) DAYS AFTER INSTALLATION ALL LANDSCAPE SHALL BE FERTILIZED WITH BEST FERTILIZER COMPANY 18-0-10 OR APPROVED EQUAL, APPLIED AT THE RATE OF SIX POUNDS (6 LBS.) PER 1,000 SQUARE FEET. FERTILIZER APPLICATION SHALL BE CONTINUED THEREAFTER AT MONTHLY INTERVALS.

**GENERAL TREE PLANTING NOTES:**

1. PLANTING MATERIALS MUST MEET THE MINIMUM ACCEPTABLE STANDARD SET BY THE AMERICAN ASSOCIATION OF NURSERYMEN'S AMERICAN STANDARD FOR NURSERY STOCK.
2. ONLY CLASS 1 (SMALL GROWING) TREES ARE PERMITTED TO BE PLANTED UNDER OR WITHIN FIFTEEN FEET (15') OF OVERHEAD UTILITY LINES.
3. PRUNE ONLY BROKEN OR DAMAGED BRANCHES.
4. DO NOT APPLY FERTILIZER AT TIME OF PLANTING.
5. THE DEPTH OF THE ROOT BALL SHALL BE MEASURED FROM THE BOTTOM OF THE TRUNK FLARE TO THE BOTTOM OF THE BALL. HANDLE B&B PLANTS CAREFULLY WHEN TRANSFERRING TO PLANTING HOLE. DO NOT DROP, LIFT OR CARRY BY HOLDING THE ROOT BALL, NOT THE TRUNK.
6. REMOVE ANY EXCESS SOIL FROM TOP OF ROOT BALL TO EXPOSE THE TRUNK FLARE. PLANT WITH TRUNK FLARE LEVEL WITH OR UP TO 1" ABOVE FINISHED GRADE.
7. REMOVE ALL WIRE BASKETS, BURLAP, AND ROPE FROM ROOT BALL.
8. STRAIGHTEN OR CUT AND REMOVE ANY CIRCLING ROOTS.
9. BACKFILL PLANTING HOLE 2/3 FULL WITH EXISTING SOIL. SETTLE WITH WATER, CONTINUE TO FILL WITH SOIL, WATER AGAIN. WATER THOROUGHLY AFTER INSTALLATION TO ELIMINATE AIR POCKETS.
10. DO NOT INSTALL TREES IN IMPERVIOUS SOILS (I.E. HOLES WHICH, WHEN FILLED WITH WATER, DO NOT COMPLETELY DRAIN WITHIN TWO HOURS).
11. ANY TREE WRAP SHALL BE REMOVED IMMEDIATELY AFTER INSTALLATION.
12. STAKES AND TIES. USE ONLY IF NECESSARY FOR STABILITY. PROVIDE STAKING PER SUDAS SECTION 9030 USING 3 STEEL POSTS (CAN BE USED FOR DEER PROTECTION FENCING ALSO). SET STAKES PARALLEL TO PREVAILING WIND AND OUTSIDE THE ROOT BALL. TIES MUST BE WIDE (MINIMUM 1") FLEXIBLE BELT-LIKE STRAPPING. DO NOT USE ROPE OR WIRE. DO NOT OVER-TIGHTEN AROUND TREE. TIES SHOULD BE TIGHT ENOUGH TO SUPPORT THE TREE WHILE ALLOWING IT TO SWAY. REMOVE STAKES AND TIES WITHIN ONE YEAR.
13. PROVIDE DEER PROTECTION FENCE: INSTALL A 4-FOOT TALL FENCE AROUND EACH TREE WITH A 3-FOOT DIAMETER. USE A 14-GAUGE WIRE FABRIC FENCE FASTENED TO A MIN. OF 3 STEEL POSTS WITH A MIN. OF 2 CABLE TIES PER POST.

**SEEDING NOTES:**

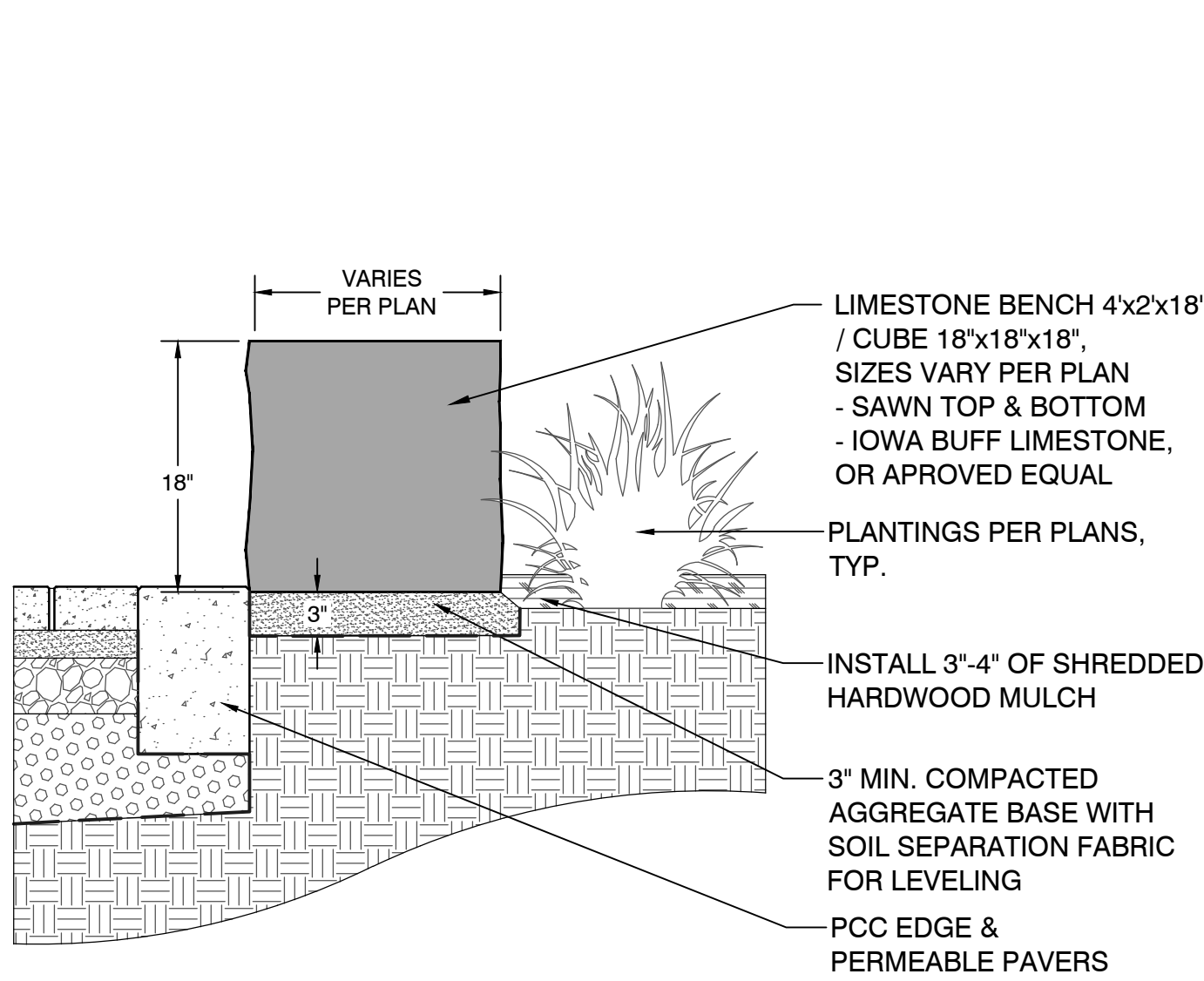
1. ALL SEED SHALL BE DELIVERED TO THE JOB SITE IN UNOPENED BAGS BEARING THE SEED SUPPLIER'S TAG SHOWING THE PROPORTIONS AND MIX COMPONENTS OF THE SEED CONTAINED IN EACH BAG INCLUDING THE AREA TO BE COVERED BY THE SEED CONTAINED IN EACH BAG.
  2. CONTRACTOR SHALL PROVIDE THE PACKING LIST FROM THE SEED SUPPLIER LISTING ALL THE SEED DELIVERED TO THE JOB SITE PER APPLICATION AND SEED SPECIES LISTED IN THE PLANS AND SPECIFICATIONS.
  3. THERE SHALL BE 32 LBS PER ACRE OF OATS (AVENA SATIVA) OR OTHER SEASONALLY APPROPRIATE COVER CROP AS APPROVED ADDED TO THE MIX.
  4. ALL SEEDING OF SLOPES SHALL BE INSTALLED WITH AN APPROVED TACKIFIER OR EROSION CONTROL BLANKET, OR APPROVED EQUAL.
  5. USE SUDAS TYPE 4 SEEDING PER TABLE 9010.09 FOR EROSION CONTROL (NOT SHOWN ON PLAN) IN ALL DISTURBED AREAS WHEN REQUIRED BASED ON SPECIFIED DATES FOR PERMANENT SEEDING. COMPLY WITH SUDAS 9010 SECTION 2.02.
  6. ALL SEEDING AREAS TO RECEIVE STRAW BLANKET, OR APPROVED EQUAL, STAPLED SECURELY IN PLACE IMMEDIATELY FOLLOWING SEEDING.
- TURF GRASS MIXES:**
- TURF 'A' - TYPE 1 SUDAS SEED MIX**  
**TURF 'B' - NO MOW FESCUE SEED MIX**  
 SEE TABLES THIS SHEET
- SEED - PROVIDE FRESH, CLEAN, NEW-CROP SEED COMPLYING WITH TOLERANCE OF PURITY AND GERMINATION ESTABLISHED BY THE OFFICIAL SEED ANALYSIS OF NORTH AMERICA. PROVIDE SEED MIXTURE COMPOSED OF GRASS SPECIES AND PERCENTAGES AS FOLLOWS:**
- PROVIDE MIXTURE COMPOSED OF GRASS AND FERTILIZER IN PERCENTAGES AS FOLLOWS:**
- SEED: RATES PER TABLES PROVIDED / 5-6 LBS PER 1000 SF  
 FERTILIZER: 5 LBS 18-0-10 PER 1000 SF  
 FALL SEEDING - AUGUST 10 - SEPTEMBER 30  
 SPRING SEEDING - MARCH 1 - MAY 31

TURF 'A'	TYPE 1 SEED MIXTURE SUDAS TABLE 9010.06	PLS
COMMON NAME		lbs/acre
GRASSES		
Creeping red fescue	(2)	25
Turf-type perennial ryegrass	(2)	20
Turf-type perennial ryegrass	(2)	20
Kentucky bluegrass cultivar	(3)	65
Kentucky bluegrass cultivar	(3)	65
Kentucky bluegrass cultivar	(3)	65

- (1) A commercial mixture may be used if it contains a high percentage of similar bluegrass, it may or may not contain creeping fescue.
- (2) Choose two different cultivars of turf-type perennial ryegrass, at 20 lbs/acre each.
- (3) Choose three different cultivars of Kentucky bluegrass, at 65 lbs/acre each.

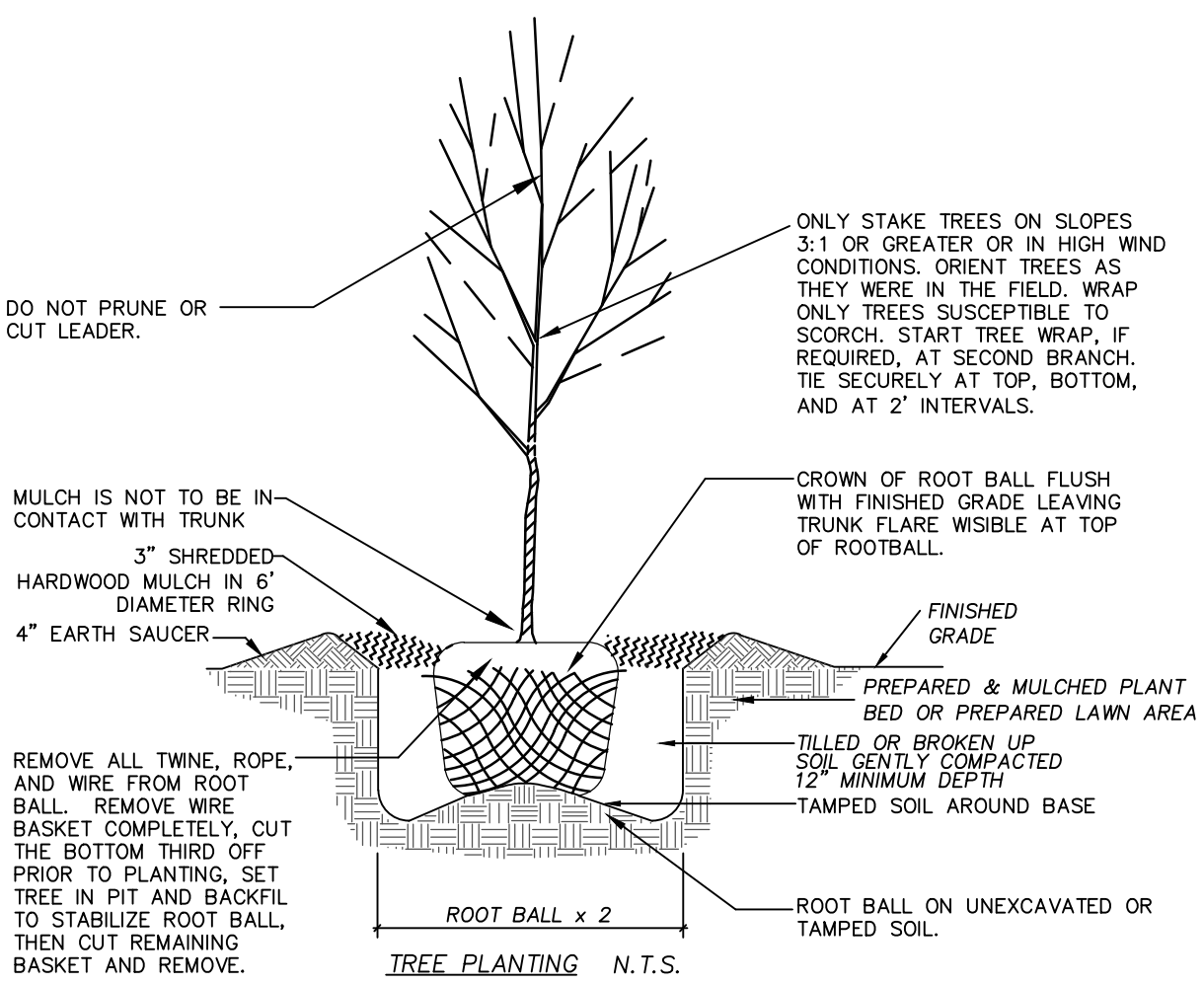
TURF 'B'	NO MOW FESCUE SEED MIXTURE	PLS
COMMON NAME	SCIENTIFIC NAME	lbs/acre
GRASSES		
Hard Fescue	<i>Festuca longifolia</i>	55
Chewing Fescue	<i>Festuca rubra var. commutata</i>	55
Creeping Red Fescue	<i>Festuca rubra var. rubra</i>	55
Sheeps Fescue	<i>Festuca ovina</i>	55

5 LIMESTONE BENCH / CUBE DETAIL, TYP.  
NOT TO SCALE

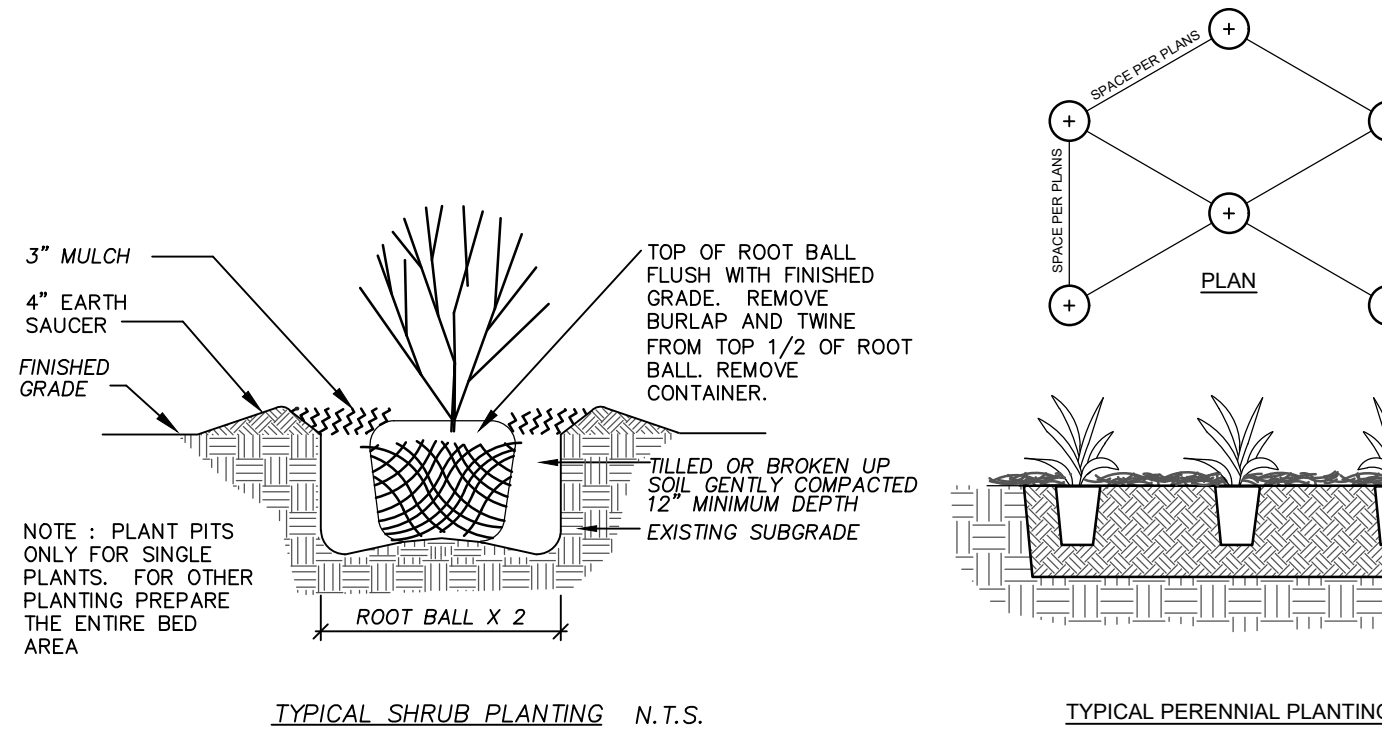


- NOTES**
1. ALL LIMESTONE ORDERED FROM A SINGLE QUARRY WITH RESOURCES TO PROVIDE MATERIALS OF CONSISTENT QUALITY IN APPEARANCE AND PHYSICAL PROPERTIES, INCLUDING THE CAPACITY TO CUT AND FINISH MATERIAL WITHOUT DELAYING THE PROGRESS OF THE WORK
  2. CONTRACTOR TO PROVIDE PHOTO SAMPLES FOR APPROVAL.

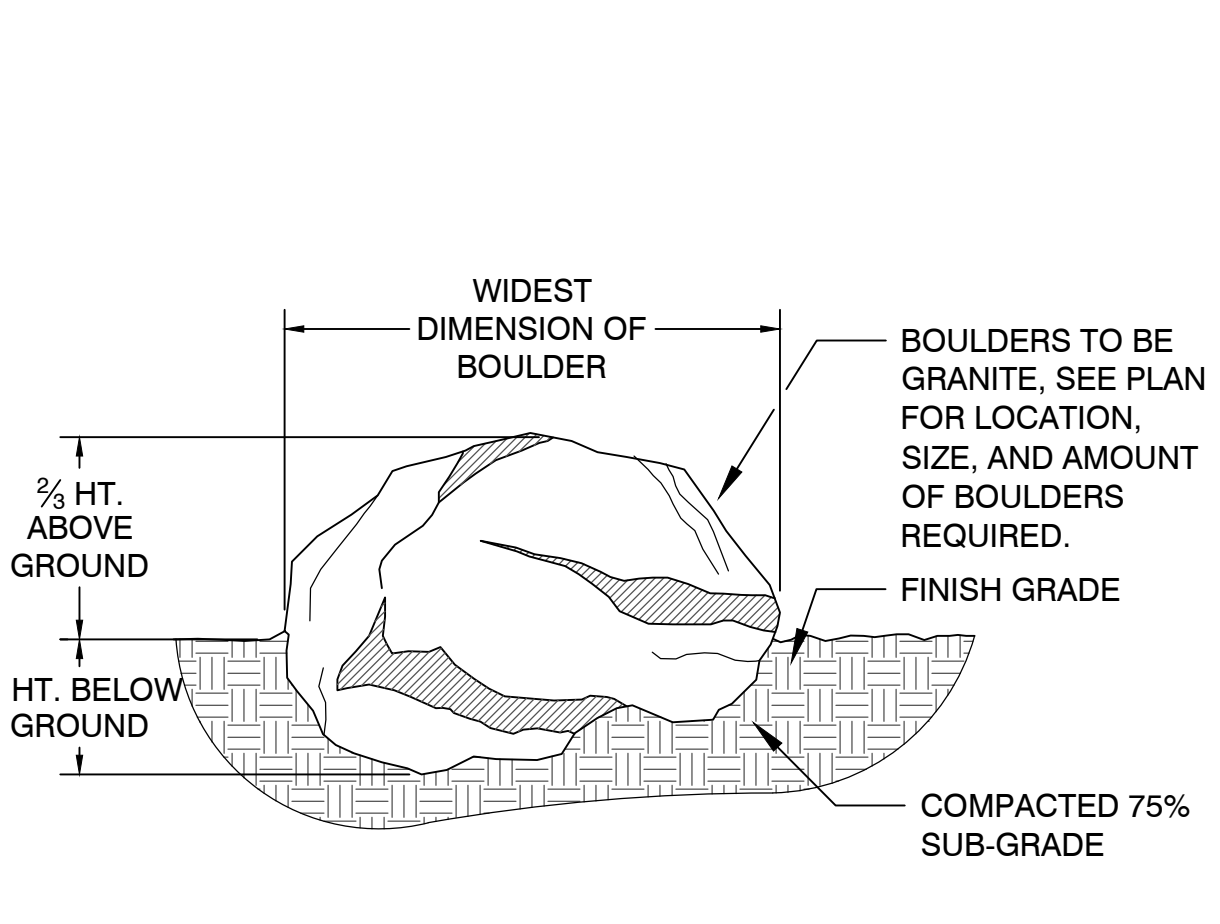
5 LIMESTONE BENCH / CUBE DETAIL, TYP.  
NOT TO SCALE



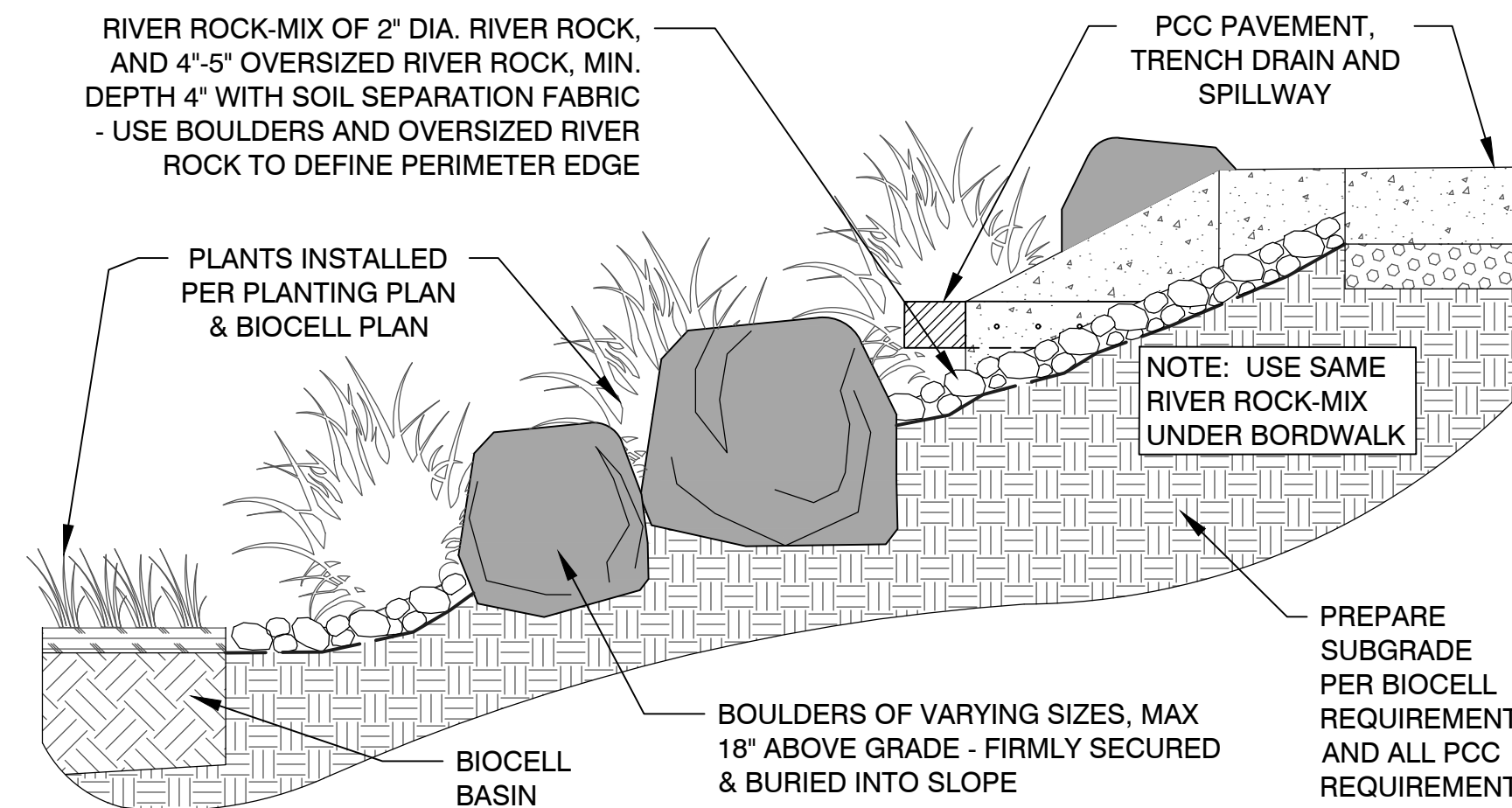
1 TREE PLANTING DETAIL, TYP.  
NOT TO SCALE



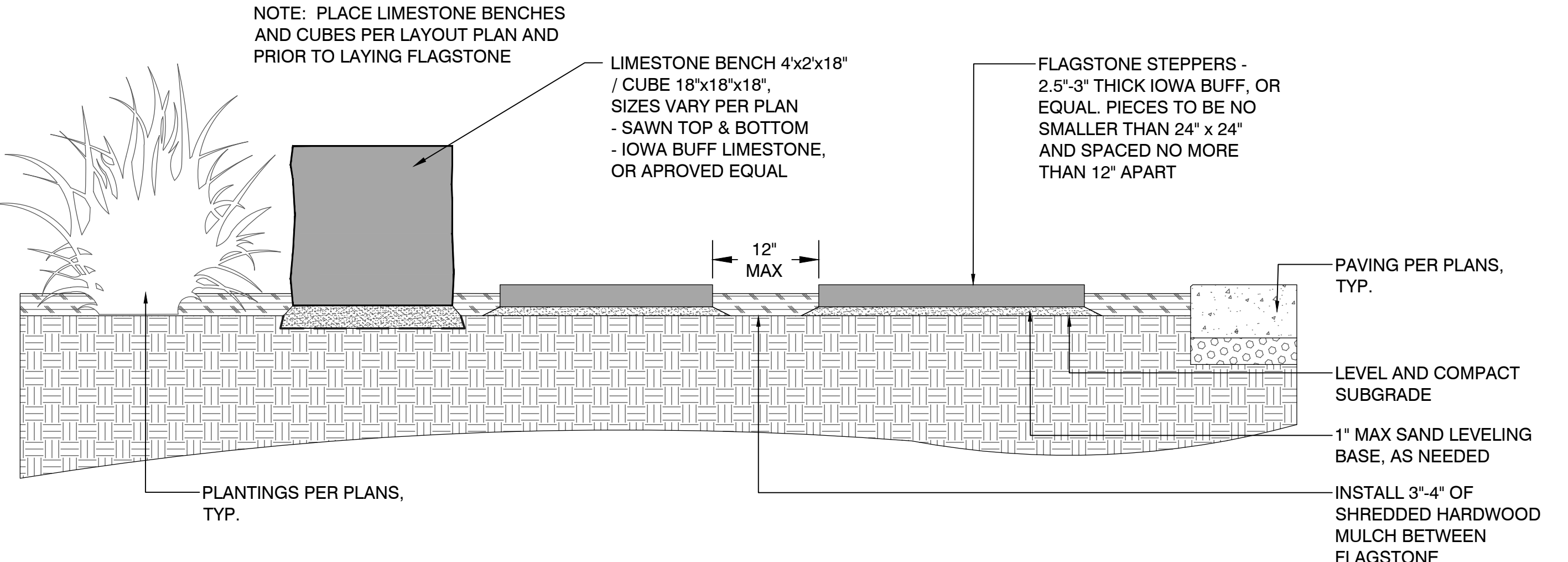
2 SHRUB & PERENNIAL PLANTING DETAILS, TYP.  
NOT TO SCALE



3 GRANITE BOULDER INSTALLATION, TYP.  
NOT TO SCALE



4 DRY CREEK BED CROSS SECTION  
NOT TO SCALE



- NOTES**
1. ALL LIMESTONE ORDERED FROM A SINGLE QUARRY WITH RESOURCES TO PROVIDE MATERIALS OF CONSISTENT QUALITY IN APPEARANCE AND PHYSICAL PROPERTIES, INCLUDING THE CAPACITY TO CUT AND FINISH MATERIAL WITHOUT DELAYING THE PROGRESS OF THE WORK
  2. CONTRACTOR TO PROVIDE PHOTO SAMPLES FOR APPROVAL.

6 FLAGSTONE STEPPERS & LIMESTONE BENCH / CUBE SEATING AREA DETAIL, TYP.  
NOT TO SCALE

NO.	REVISION	BY	DATE

PROJECT NO.: 038.028  
 FILE NUMBER: 038.028  
 SHEET NO.: L6.2  
 DATE: NOVEMBER 7, 2023

ARCHERY BUILDING AND COURTYARD IMPROVEMENTS FOR:  
 DNR FAIRGROUNDS  
 3000 E GRAND AVE, DES MOINES, IOWA  
 PLANTING NOTES AND DETAILS

**LITTLEON**  
 ASSOCIATES - INC  
 office: 515-472-7016  
 www.littleon.com  
 5100 EAST LOCUST STREET SUITE 400  
 DES MOINES, IOWA 50309

PROJECT NO. 038.028

PLANTING NOTES AND DETAILS

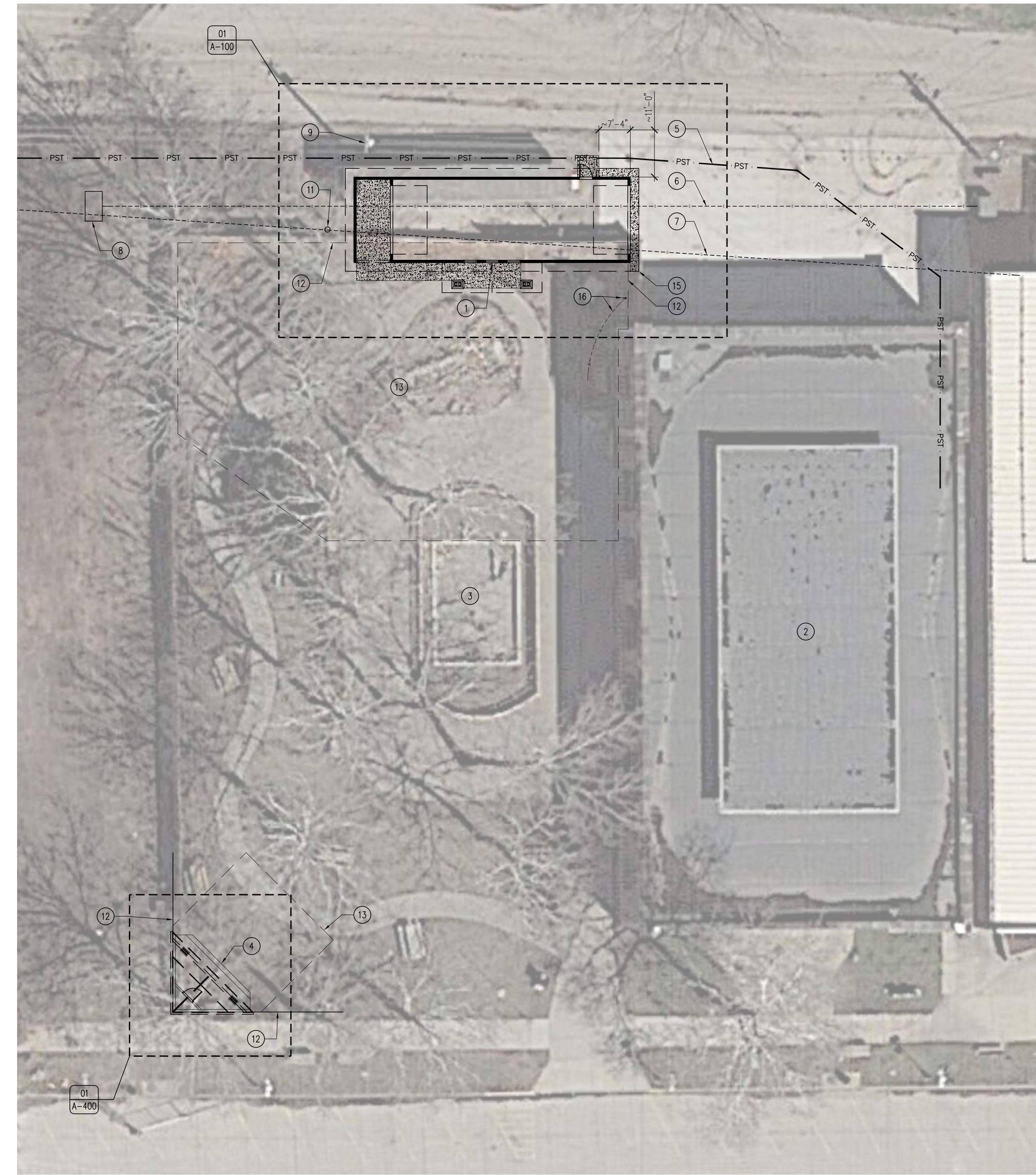
SHEET NO. L6.2

**IOWA ONE CALL**  
 CALL 811 / 1-800-292-8989  
 2 Working Days BEFORE YOU DIG  
 DigSafeWait48.com





**02** DEMOLITION SITE PLAN  
SCALE: 1/16" = 1'-0"



**01** ARCHITECTURAL SITE PLAN  
SCALE: 1/16" = 1'-0"

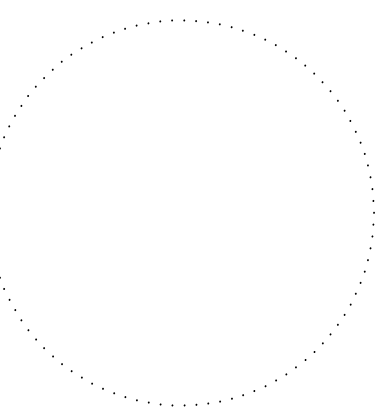
**KEYNOTES**

1. PROPOSED BUILDING, REFER TO REFERENCE FLOOR PLAN SHEET A-100.
2. EXISTING DNR PAVILION BUILDING TO REMAIN, LEAD ABATEMENT AND ATTIC STAIR TO BE INSTALL IN THIS BUILDING ON THE UPPER FLOOR.
3. EXISTING COURTYARD AREA TO REMAIN, REFER TO CIVIL DRAWINGS.
4. PROPOSED STAGE AREA, REFER TO REFERENCE FLOOR PLAN SHEET A-400.
5. EXISTING STORM-SEWER LINE TO REMAIN, PROTECT IN PLACE.
6. EXISTING ELECTRICAL SERVICE CONDUCTOR TO BE CUT AND REROUTED BY IOWA STATE FAIR, COORDINATE NEW ELECTRICAL LINE RELOCATION WITH IOWA STATE FAIR STAFF. RESTORE ALL DISTURBED AREAS, INCLUDING CONCRETE PARKING SLAB, FROM RELOCATION.
7. EXISTING GAS LINE TO BE REROUTED BY MID AMERICAN ENERGY, COORDINATE NEW GAS LINE RELOCATION WITH MID AMERICAN ENERGY. RESTORE ALL DISTURBED AREAS, INCLUDING CONCRETE PARKING SLAB, FROM RELOCATION.
8. EXISTING ELECTRICAL TRANSFORMER TO REMAIN.
9. EXISTING TELEPHONE/ELECTRICAL POLE TO REMAIN.
10. REMOVE AND SALVAGE POLE LIGHT, RETURN POLE AND LIGHT HEADS TO DNR FOR FUTURE USE.
11. EXISTING POLE LIGHT TO REMAIN, REWIRE TO NEW BUILDING PANEL, REFER TO ELECTRICAL DRAWINGS.
12. DEMOLISH PORTIONS OF THE EXISTING FENCE, AS NEEDED, TO ALLOW FOR CONSTRUCTION OF BUILDING AND STAGE. SALVAGE FENCE BOARDS AND REINSTALL FENCE TO FACE OF BUILDING AND STAGE TO PROVIDE A COMPLETED FENCE AFTER CONSTRUCTION IS COMPLETED.
13. DEMOLISH COURTYARD AREA, REFER TO CIVIL PLANS FOR EXTENT OF DEMOLITION AND RENOVATION.
14. DEMOLISH EXISTING ELECTRICAL SUB-PANEL, REFER TO ELECTRICAL DRAWINGS.
15. SAW-CUT AND DEMOLISH CONCRETE PARKING AREA TO ALLOW FOR CONSTRUCTION OF BUILDING. POUR NEW CONCRETE APRON TO ADJUST HEIGHT DIFFERENCE AND GAP BETWEEN BUILDING AND SLAB. SIZE OF SAW-CUT AREA TO BE DETERMINED BY CONTRACTOR, REPLACE WITH 6" THICK CONCRETE IN-FILL SLAB, #4 REBAR 24" O.C. ALL DIRECTIONS WITH 6" SUBBASE, DOWEL IN-FILL TO EXISTING SLAB WITH #4 REBAR 24" O.C.
16. TAP EXISTING WATER LINE NEAR CURB STOP ON NORTHEAST SIDE OF THE DNR BUILDING COURTYARD. TAP LINE AND RUN NEW 1" WATER LINE NEAR FENCE GATE, VERIFY FINAL LOCATION WITH DNR INSPECTOR. INSTALL NEW WOODFORD MANUFACTURING S-3 POTABLE WATER FREEZELESS YARD HYDRANT, AS SHOWN ON SHEET A-301.

**GENERAL NOTES**

- A. REFER TO FINISH, DOOR & WINDOW SCHEDULE, SHEET A-600.
- B. REFER TO REFLECTED CEILING PLAN FOR CEILING HEIGHTS, SHEET A-110.
- C. REFER TO INDEX SHEET FOR WALL TYPES, SHEET A-002.
- D. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION, SHEET A-101.
- E. FIELD VERIFY ALL EQUIPMENT LOCATIONS FOR ELECTRICAL OUTLET LOCATIONS, REFER TO ELECTRICAL PLAN.
- F. CONTRACTOR SHALL HAVE THIS BUILDING, PRIOR TO CONSTRUCTION, PRE-ENGINEERED TRUSSES BY BUILDING SUPPLIER.

CONSULTANT:



**IOWA DEPARTMENT OF NATURAL RESOURCES**  
ENGINEERING SERVICES - WALLACE BUILDING  
502 E. 9TH ST., DES MOINES, IA 50319-0034  
P: 515.725.8200  
F: 515.725.8202



**ARCHITECTURAL SITE PLANS**

ARCHERY BUILDING AND COURTYARD IMPROVEMENTS FOR:  
**DNR FAIRGROUNDS**

DES MOINES, IA 50317  
3000 EAST GRAND AVE.

NO. BY DATE REVISION

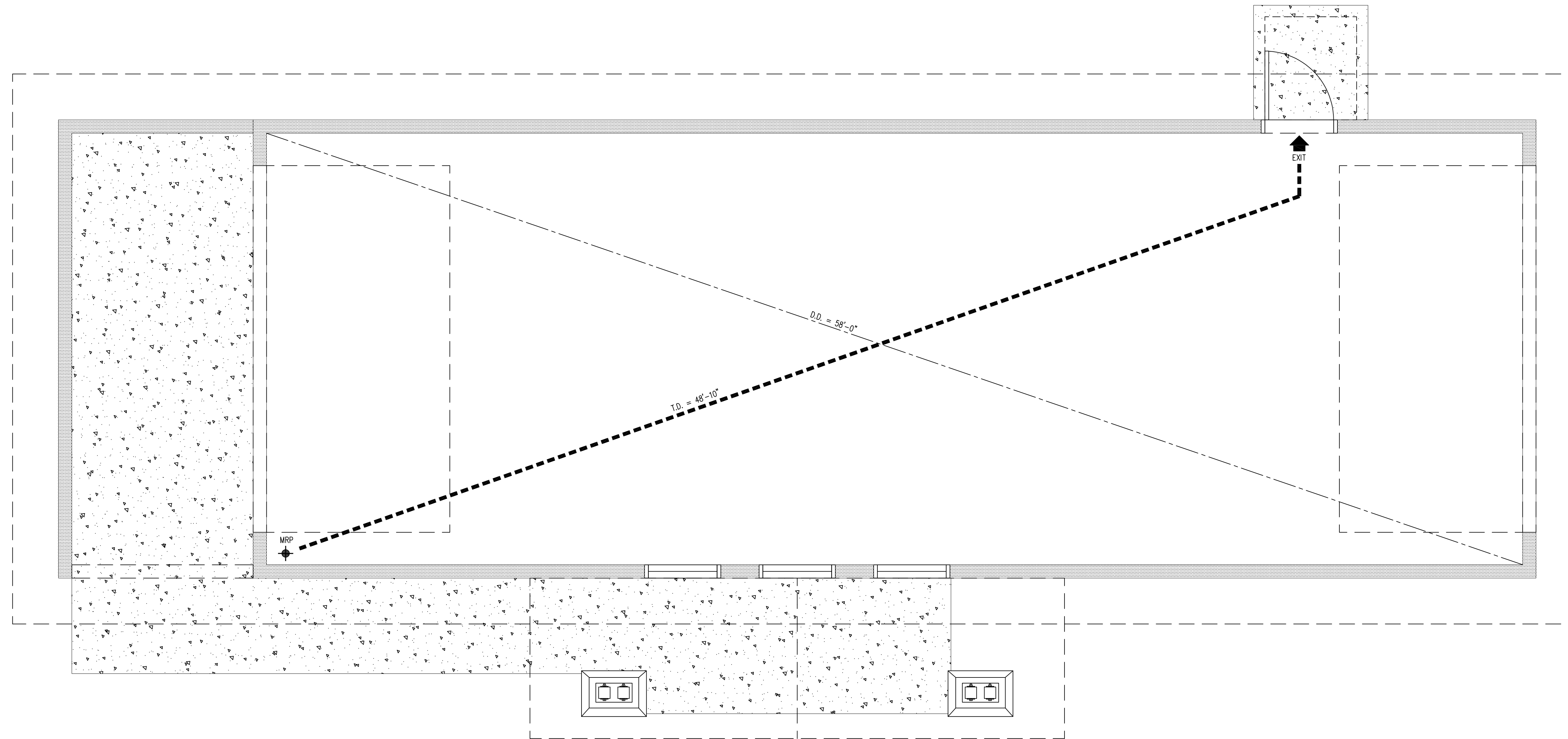

DRAWN BY: PROJECT NUMBER:  
24-05-77-01

CHK'D BY: DATE:  
11.07.2023

SHEET NO:

**A-010**





**01 LIFE SAFETY PLAN**  
SCALE: 3/8" = 1'-0"

**PROJECT DATA – STORAGE BUILDING**

**OCCUPANT LOAD:**  
GROUP S – STORAGE / ACCESSORY  
GARAGE AREAS – 1,120 SF GROSS  
GARAGE – STORAGE 1,120 SF / 300 = 3.73 = 4 OCCUPANTS  
TOTAL OCCUPANT LOAD = 4 OCCUPANTS

**REQUIRED FIXTURES:**  
0 TOTAL WATER CLOSET  
WATER CLOSETS – 1 PER 25 FOR FIRST 50 = 0 REQUIRED / 0 PROVIDED  
LAVATORIES – 1 PER 40 FOR FIRST 80 = 0 REQUIRED / 0 PROVIDED

**FIRE EXTINGUISHERS:**  
THE NUMBER AND LOCATION OF FIRE EXTINGUISHERS TO BE DETERMINED BY THE FIRE MARSHAL PRIOR TO CERTIFICATE OF OCCUPANCY.

**MEANS OF EGRESS:**  
MIN. REQUIRED # EXITS = 1 EXITS PER LEVEL (IBC TABLE 1021.1)  
MAX TRAVEL DISTANCE = 200' (IBC 1016.1)  
DEAD-END CORRIDOR WIDTH = 20' MAX. (IBC 1018.4)  
MIN. CORRIDOR WIDTH = 36" CLEAR  
MIN. CLEAR OPENINGS FOR EXIT DOORS = 34" (ACTUAL 32")

**BUILDING:**  
ADDRESS: IOWA STATE FAIRGROUNDS  
3000 EAST GRAND AVENUE  
DES MOINES, IA 50317  
POLK COUNTY  
USE – STORAGE  
BUILDING CONSTRUCTION – TYPE V-B (WITHOUT SPRINKLER SYSTEM)  
NUMBER OF STORIES – 1 STORY  
BUILDING HEIGHT – 17'-6"  
BUILDING AREA – 1,120 NSF  
BUILDING OCCUPANCY – GROUP S-1, STORAGE

**CODE SUMMARY**

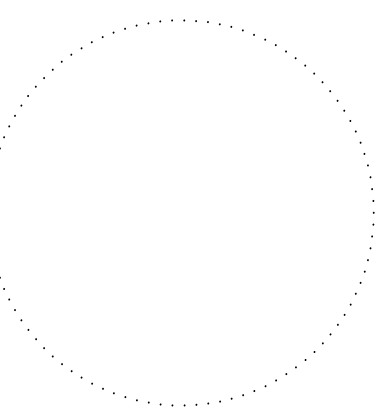
**STATE OF IOWA – RECOGNIZED AND ENFORCED CODES:**  
2015 International Building Code – Iowa Administrative Rule 661-201 and 661-301  
2015 International Fire Code – Iowa Administrative Rule 661-201  
2012 International Energy Conservation Code – Iowa Administrative Rule 661-303  
2015 International Existing Building Code – Iowa Administrative Rule 661-301 and 661-350  
2012 NFPA 101 Life Safety Code – Iowa Administrative Rule 661-205  
2010 Americans with Disabilities Act – Iowa Administrative Rule 661-302  
Smoke Alarms/Detectors – Iowa Administrative Rule 661-210 (effective July 1, 2021)  
Carbon Monoxide Alarms – Iowa Administrative Rule 661-211  
State Mechanical Code – the Department of Public Health Iowa Administrative Rule 641-61  
State Plumbing Code – the Department of Public Health Iowa Administrative Rule 641-25  
State Electrical Code – the State Electrical Licensing Board Iowa Administrative Rule 661-504

	REQUIRED	PROVIDED
ALLOWABLE BLDG AREA (IBC TBL 503)	17,500 SF	1,150 SF
HEIGHT LIMITATION (IBC TBL 503)	2 STORIES (40')	1 STORIES (17'-6")
AUTOMATIC SPRINKLER SYSTEM (NFPA 13)	NO	NO
EXIT ACCESS TRAVEL DISTANCE (IBC 1016.1)	200'-0"	48'-10"
EXIT ACCESS DOORWAYS (IBC TBL 1019.1)	1	1
EGRESS WIDTH PER OCCUPANT (IBC TBL 1005.1) LEVEL [ .2 ]	(.2") X 4 = 0.8"	1 DOORS @ 36" = 36"

**LIFE SAFETY LEGEND**

SYMBOL	DESCRIPTION	LINE TYPE
E-E	EXIT TO EXIT IN LINEAR FEET	----
T.D.	TRAVEL DISTANCE FROM M.R.P.	■■■■■■■■■■
D.D.	DIAGONAL DISTANCE	----
☉	EXIT LIGHT	
◆	MOST REMOTE POINT (M.R.P.)	
⬆	EGRESS DOOR	
[FEC]	FIRE EXTINGUISHER	

CONSULTANT:



**IOWA DEPARTMENT OF NATURAL RESOURCES**  
ENGINEERING SERVICES - WALLACE BUILDING  
502 E. 9TH ST., DES MOINES, IA 50319-0034  
P: 515.725.8200  
F: 515.725.8202



**LIFE SAFETY PLAN**

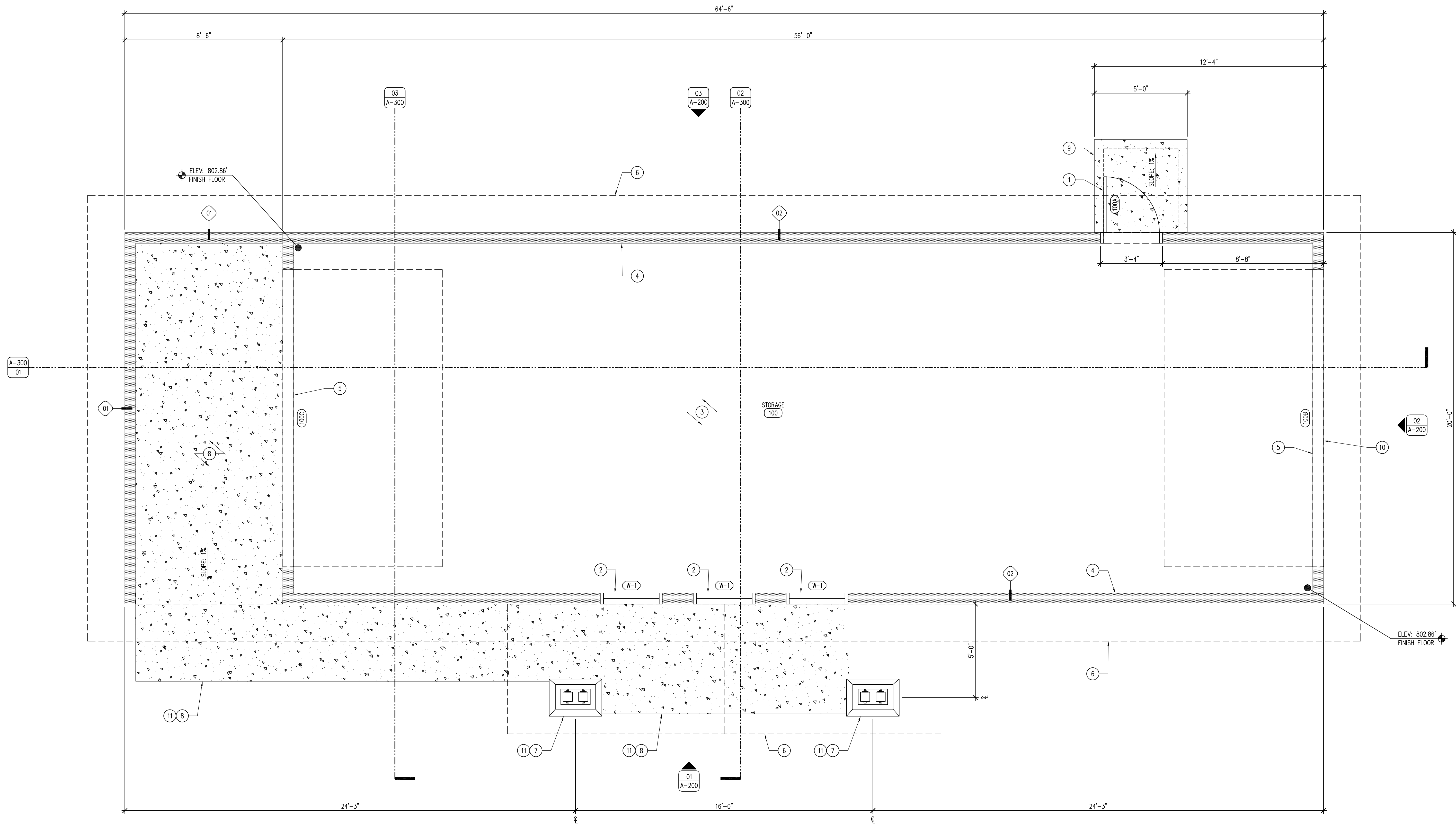
ARCHERY BUILDING AND COURTYARD IMPROVEMENTS FOR:  
**DNR FAIRGROUNDS**

DES MOINES, IA 50317  
3000 EAST GRAND AVE.

NO.	BY DATE	REVISION

DRAWN BY: PROJECT NUMBER:  
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11.07.2023  
SHEET NO:





**01** REFERENCE FLOOR PLAN  
SCALE: 3/8" = 1'-0"

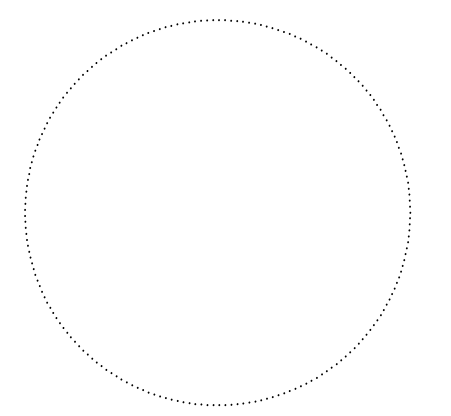
**KEYNOTES**

1. DOOR AS SCHEDULED, REFER TO SHEET A-600.
2. WINDOW AS SCHEDULED, REFER TO SHEET A-600.
3. 6" CONCRETE FLOOR SLAB WITH #4 REBAR 24" O.C. BOTH DIRECTIONS, OVER 6" OF SUBBASE. SMOOTH TROWEL FINISH, REFER TO SHEET A-600.
4. EXTERIOR WALL, REFER TO WALL TYPES SHEET A-002.
5. OVERHEAD GARAGE DOOR, REFER TO DOOR SCHEDULE SHEET A-600.
6. ROOF LINE ABOVE.
7. 6X6 ROUGH-SAWN DOUGLAS-FIR COLUMNS ON STONE COLUMN BASE, REFER TO DETAILS 04 & 05/A-300.
8. 6" EXTERIOR CONCRETE SIDEWALK WITH #4 REBAR 24" O.C. BOTH DIRECTIONS, OVER 6" OF SUBBASE, BROOM FINISH.
9. STOOP FOOTING WITH EXTERIOR CONCRETE, BROOM FINISH, REFER TO DETAIL 04/A-200.
10. IN-FILL SLAB WHERE EXISTING CONCRETE WAS SAW-CUT. POUR 6" THICK EXTERIOR CONCRETE WITH #4 REBAR 24" O.C. AND #4 DOWELS 24" O.C. INTO EXISTING SLAB. 3" EXPANSION JOINT MATERIAL WITH SELF-LEVELING POLYURETHANE SEALANT, CONTINUOUS.
11. 3" EXPANSION JOINT MATERIAL WITH SELF-LEVELING POLYURETHANE SEALANT CONTINUOUS, WHERE CONCRETE POURS MEET.

**GENERAL NOTES**

- A. REFER TO FINISH, DOOR & WINDOW SCHEDULE, SHEET A-600.
- B. REFER TO REFLECTED CEILING PLAN FOR CEILING HEIGHTS, SHEET A-110.
- C. REFER TO WALL TYPES, SHEET A-002.
- D. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
- E. FIELD VERIFY ALL EQUIPMENT LOCATIONS FOR ELECTRICAL OUTLET LOCATIONS, REFER TO ELECTRICAL PLAN.
- F. CONTRACTOR SHALL HAVE BUILDING TRUSSES, PRIOR TO CONSTRUCTION, PRE-ENGINEERED BY SUPPLIER.
- G. REFER TO ELECTRICAL DRAWINGS FOR LIGHTING AND POWER LAYOUTS.
- H. CONTRACTOR SHALL CAULK ALL INTERIOR CONCRETE SAW-CUT JOINTS AND ALL EXPANSION JOINTS WITH FLOWABLE URETHANE SEALANT, COLOR TO BE GRAY.

CONSULTANT:



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**REFERENCE FLOOR PLAN**  
ARCHERY BUILDING AND COURTYARD IMPROVEMENTS FOR:  
**DNR FAIRGROUNDS**

DES MOINES, IA 50317

3000 EAST GRAND AVE.

NO. BY DATE REVISION

1. 11.07.2023

2. 11.07.2023

3. 11.07.2023

4. 11.07.2023

5. 11.07.2023

6. 11.07.2023

7. 11.07.2023

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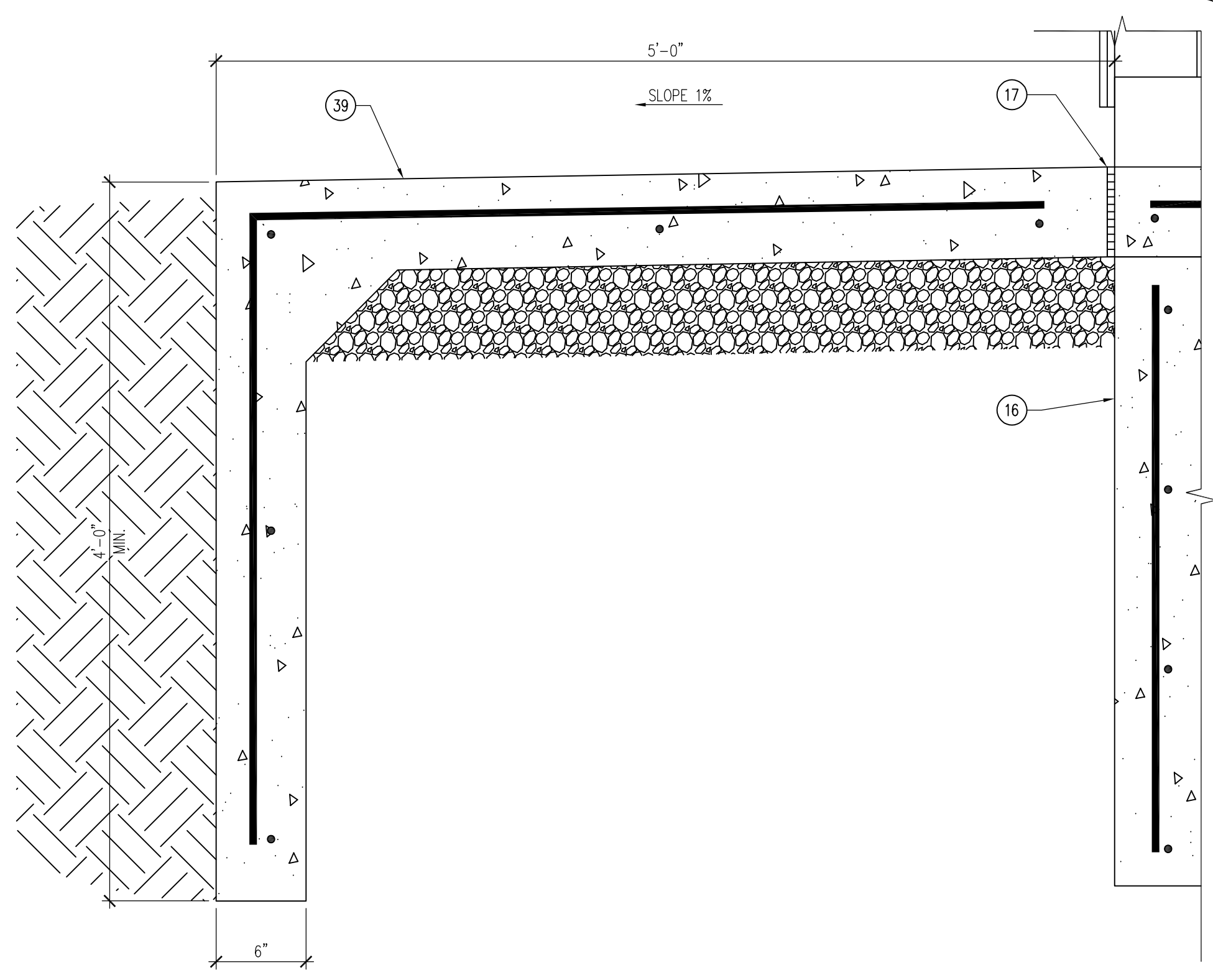
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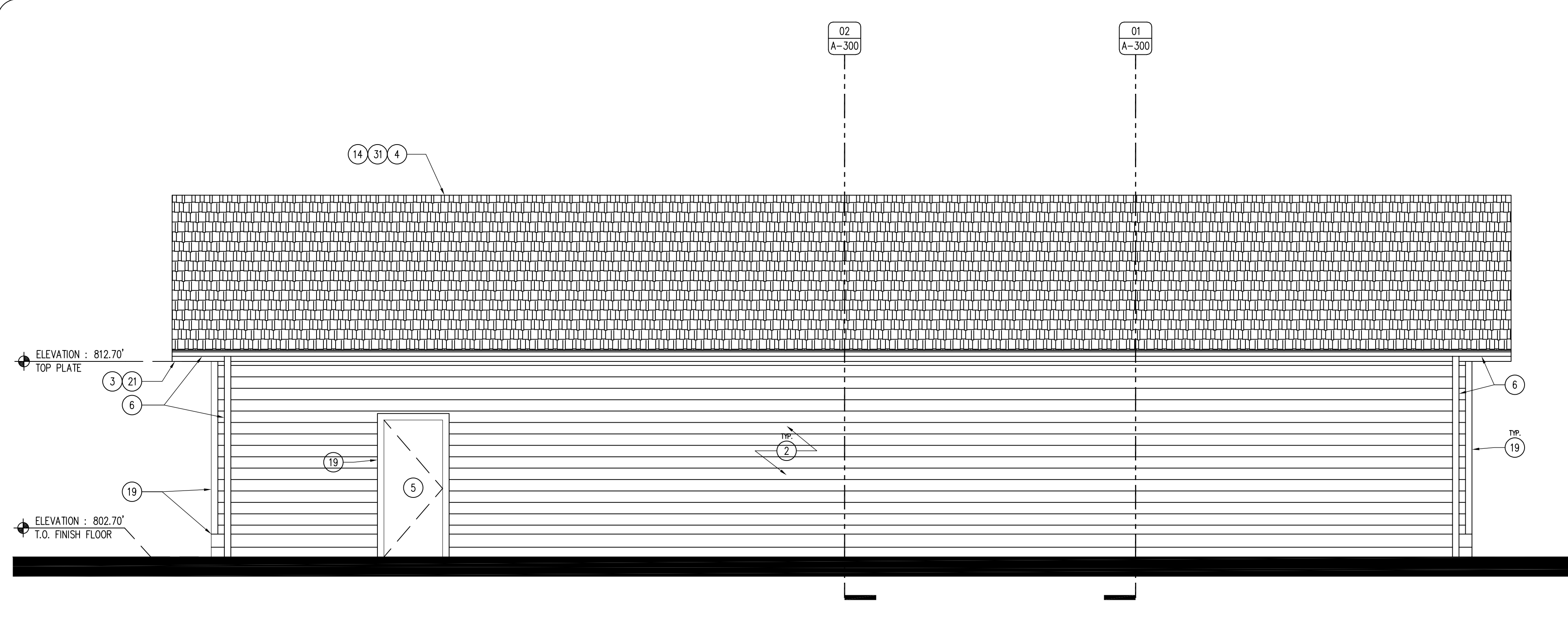
SHEET No:

**A-100**

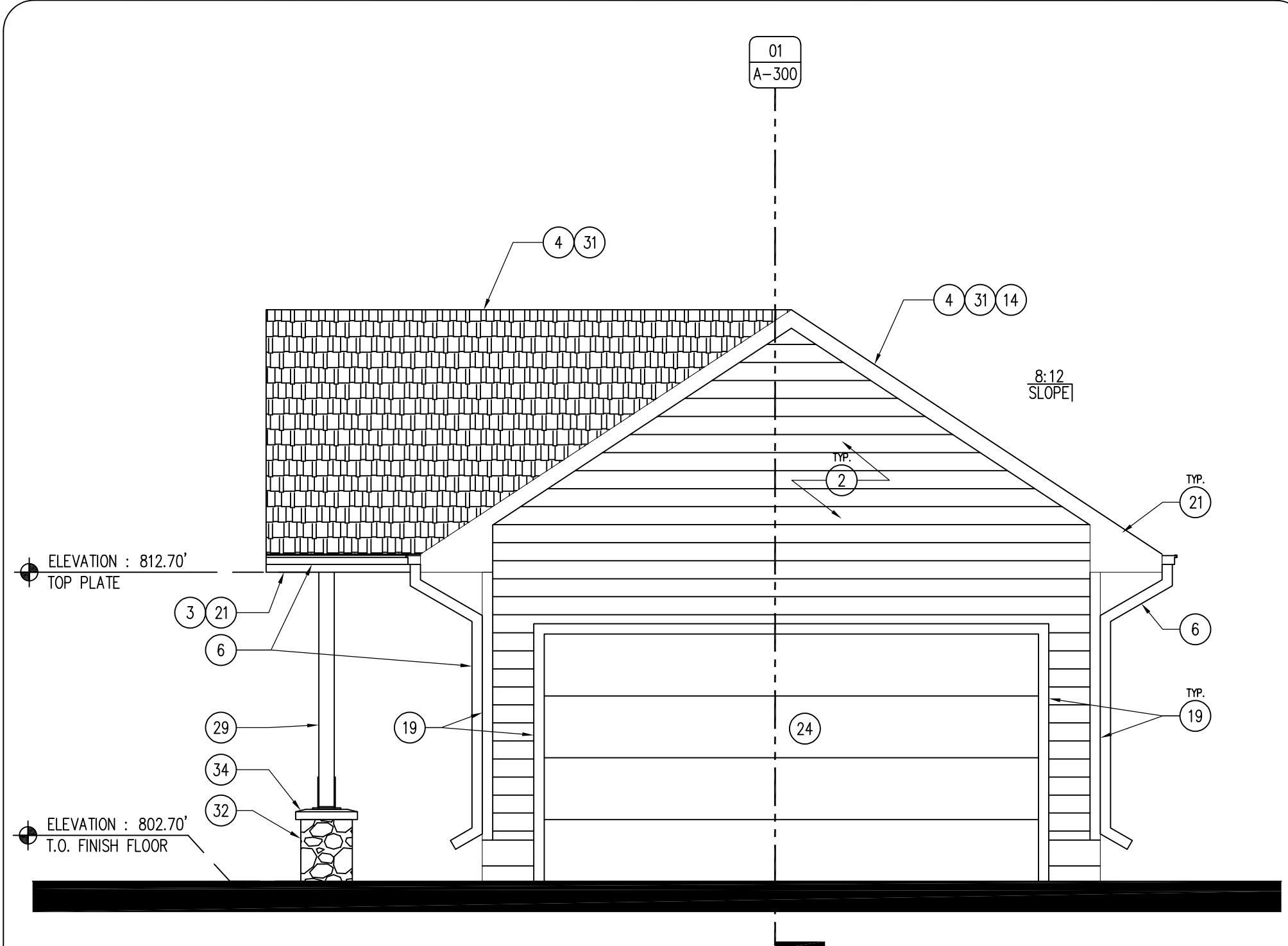




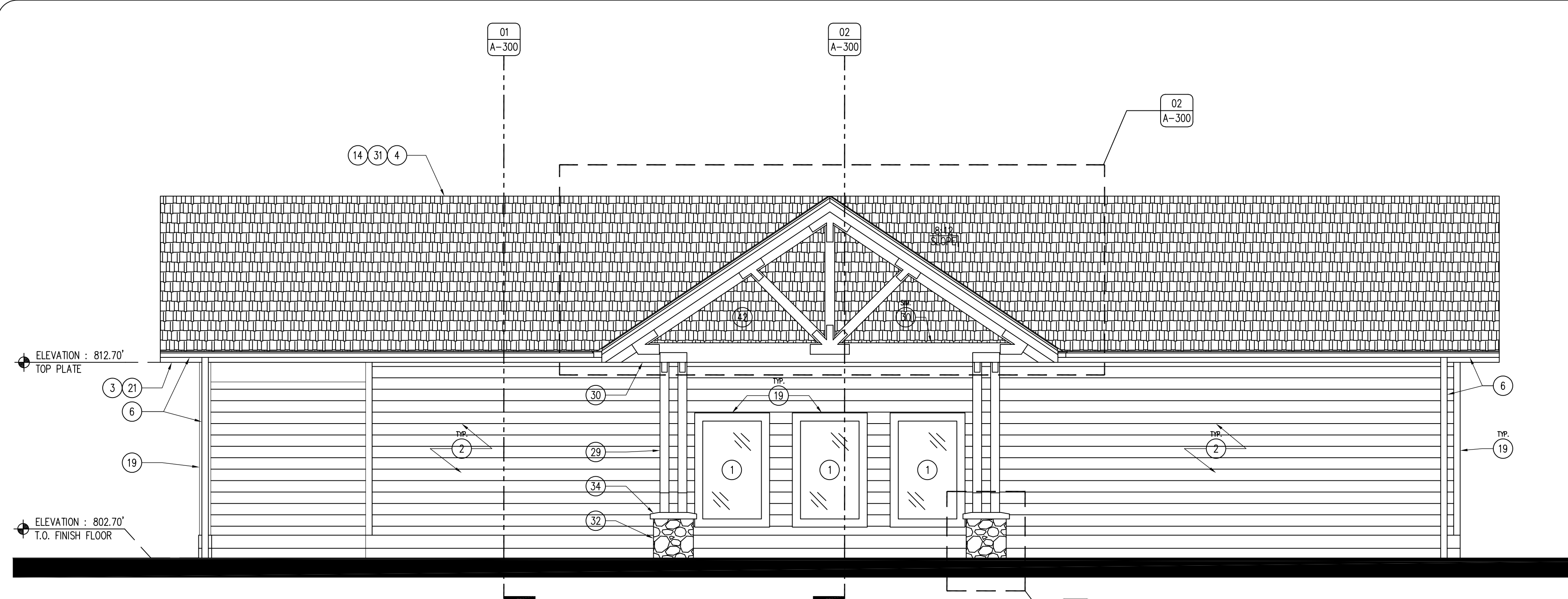
04 DETAIL - STOOP FOOTING  
SCALE: 1 1/2" = 1'-0"



03 BUILDING ELEVATION - NORTH  
SCALE: 1/4" = 1'-0"



02 BUILDING ELEVATION - EAST  
SCALE: 1/4" = 1'-0"



01 BUILDING ELEVATION - SOUTH  
SCALE: 1/4" = 1'-0"

KEYNOTES

1. WINDOW AS SCHEDULED, REFER TO SHEET A-600.
2. LP SMARTSIDE CEDAR LAPSIDING (LP-1), REFER TO SHEET A-600.
3. 26 GAUGE METAL VENTED V-SOFFIT PANEL. COLOR TO MATCH GUTTERS AND FASCIA.
4. ROOF SHINGLES, REFER TO SHINGLE REQUIREMENTS ON SHEET A-600.
5. DOOR AS SCHEDULED, REFER TO SHEET A-600.
6. 6" SEAMLESS GUTTER AND DOWNSPOUT SYSTEM WITH SHUR-FLO GUTTER GUARDS, DARK BRONZE.
7. 3X6 DOUGLAS FIR T&G ROOF DECKING, SEAL UNDERSIDE WITH TWO (2) COATS OF SPAR URETHANE. REFER TO ROOF DECKING NARRATIVE FOR INSTALLATION INFORMATION SHEET A-002.
8. 2X BLOCKING AS REQUIRED.
9. TRUSS TIE (SPECIFIED BY BUILDING MANUFACTURER).
10. TRUSS (DESIGNED BY TRUSS MANUFACTURER), FOR DEMONSTRATION PURPOSES ONLY.
11. 2X6 STUD WALL, REFER TO A-002 FOR WALL TYPES.
12. BUILDING WRAP, PER BUILDING MANUFACTURER'S RECOMMENDATIONS.
13. DOUBLE 2X6 TOP PLATE.
14. 3/8" OSB ROOF DECK SHEATHING.
15. SHINGLE RIDGE VENT, BE SHINGLE MANUFACTURER.
16. 8" WIDE X 4'-0" DEEP, FORMED, CAST-IN-PLACE CONCRETE FOOTING WALL WITH #5 REBAR, 12" O.C. ALL DIRECTIONS. 8" WIDE SILL EXTENSION TO EXTEND 12" ABOVE SLAB LEDGE, AS SHOWN.
17. 1/2" EXPANSION JOINT WITH CONTINUOUS POLYURETHANE SEALANT, COLOR CONCRETE GRAY.
18. 2X6 TREATED SILL PLATE.
19. LP SMARTSIDE CEDAR TRIM (LP-2), BUILDING CORNERS TO MATCH SIDING (PNT-4), WINDOW AND DOOR TRIM TO BE FIELD PAINTED DARK BRONZE (PNT-3), REFER TO SHEET A-600.
20. ADA ACCESSIBLE DOOR THRESHOLD.
21. 2X8 FASCIA, WRAP IN DARK BRONZE BREAK METAL TO MATCH GUTTERS.
22. GARAGE DOOR HEADER BY BUILDING SUPPLIER.
23. LP SMARTSIDE CEDAR SHAKE SIDING (LP-3), REFER TO SHEET A-600.
24. OVERHEAD GARAGE DOOR, REFER TO SHEET A-600.
25. 6" CONCRETE BUILDING SLAB WITH #4 REBAR 24" O.C. BOTH DIRECTIONS OVER 15 MIL TAPE AND SEALED VAPOR BARRIER AND 6" COMPACTED SUBBASE, SMOOTH TROWEL FINISH.
26. WALL FINISH AS SCHEDULED, REFER TO SHEET A-600.
27. METAL FLASHING, MATCH SOFFIT AND GUTTER COLOR.
28. BACKER ROD AND POLYURETHANE SEALANT.
29. 6X6 ROUGH-SAWN DOUGLAS FIR COLUMN, STAIN WITH TWO (2) COATS TWP 116.
30. HEAVY TIMBER, ROUGH-SAWN DOUGLAS FIR TRUSS, STAIN TWO (2) COATS TWP 116 WITH OVERSIZED METAL BRACKETS AS SHOWN, POWDER COAT BLACK, REFER TO SHEET A-402.
31. SELF-ADHERED, 40MIL WATER AND ICE ROOFING UNDERLAYMENT OVER ENTIRE ROOF.
32. 6" EXTERIOR CONCRETE SIDEWALK WITH #4 REBAR 24" O.C. BOTH DIRECTIONS OVER 6" SUBBASE UNDER ENTIRE BUILDING SLAB, FINISH.
33. ROUND SIDE OUT GRANITE BOULDERS - THIN VENEER BY EDEN STONE, OR APPROVED EQUAL. MORTAR TO BE WHITE BASED ASTM C270, COLOR BUFF. REFER TO SHEET A-400.
34. 4" HONED INDIANA LIMESTONE COLUMN CAP, BUFF COLORED. FULLY BED CAP WITH 1/2" MORTAR JOINT BETWEEN CAP AND CONCRETE BASE OVER 40MIL EPDM MEMBRANE. 160Z COPPER DRIP EDGE CONTINUOUSLY AROUND PERIMETER. CAP TO BE PRE-DRILLED FOR BOLTS BY MANUFACTURER.
35. 1/2" OVERSIZED MILD-STEEL TRUSS BRACKET, POWDER COAT BLACK. ALL HARDWARE TO BE 1/2" GALVANIZED WITH LOCK WASHERS. BRACKETS TO BE PLACED ON BOTH SIDES OF TRUSS. REFER TO 02/A-402 FOR MORE INFORMATION.
36. MILD-STEEL COLUMN BASE PLATE, POWDER COATED BLACK. ANCHOR BOLTS TO BE UNDER COLUMNS, REFER TO 03/A-402 FOR MORE INFORMATION.
37. 1/2" X 10" ANCHOR BOLT 4'-0" O.C.
38. 2X6 OUTRIGGER EAVE, 24" OVERHANG, BY BUILDING TRUSS MANUFACTURER.
39. 6" THICK, THREE SIDED STOOP FOOTING, OVER FOOTINGS TO GO 4'-0" DEEP, #4 REBAR 24" O.C. ALL DIRECTIONS.
40. 4'-0" DEEP, CAST-IN-PLACE CONCRETE COLUMN FOOTING WITH #5 REBAR, 12" O.C. ALL DIRECTIONS. REFER TO DETAILS 04 & 05/A-300.
41. DRIP EDGE / GUTTER APRON, COLOR TO MATCH GUTTERS AND FASCIA METAL.

GENERAL NOTES

- A. REFER TO FINISH, DOOR & WINDOW SCHEDULE, SHEET A-600.
- B. REFER TO INDEX SHEET FOR WALL TYPES, SHEET A-002.
- C. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
- D. FIELD VERIFY ALL EQUIPMENT LOCATIONS FOR ELECTRICAL OUTLET LOCATIONS, REFER TO ELECTRICAL PLAN.
- E. CONTRACTOR SHALL HAVE TRUSSES AND BUILDING, PRIOR TO CONSTRUCTION, PRE-ENGINEERED BY BUILDING SUPPLIER.
- F. CONTRACTOR SHALL CAULK ALL CONCRETE SAW-CUT JOINTS AND EXPANSION JOINTS WITH FLOWABLE URETHANE SEALANT, COLOR TO BE GRAY.
- G. ALL LP SMARTSIDE PRODUCTS TO BE FIELD PAINTED TWO (2) COATS OF EXTERIOR LATEX ACRYLIC PAINT (SHERWIN WILLIAMS - DURATION OR APPROVED EQUAL), REFER TO FINISH SCHEDULE A-600.
- H. ALL STAIN TO BE TWP 116 - RUSTIC, COAT ALL MEMBERS TWO (2) TIMES. STAIN COLUMNS, AND TRUSSES, DO NOT STAIN 3X T&G ROOF DECK.
- I. UNDERSIDE OF 3X WOOD T&G ROOF DECKING TO RECEIVE TWO (2) COATS OF CLEAR GLOSS, UV RESISTANT, SPAR URETHANE.
- D. ALL BOLTS, NUTS, FENDER AND LOCK WASHERS TO BE HOT DIP GALVANIZED, ADD ONE LOCK WASHERS TO ALL BOLT ASSEMBLIES.
- E. MORTAR TO BE WHITE BASE, BUFF COLOR.

CONSULTANT:

**IOWA DEPARTMENT OF  
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P: 515.725.8200  
F: 515.725.8202



EXTERIOR ELEVATIONS

ARCHERY BUILDING AND COURTYARD IMPROVEMENTS FOR:  
**DNR FAIRGROUNDS**

DES MOINES, IA 50317  
3000 EAST GRAND AVE.

NO. BY DATE REVISION


DRAWN BY: PROJECT NUMBER:

24-05-77-01

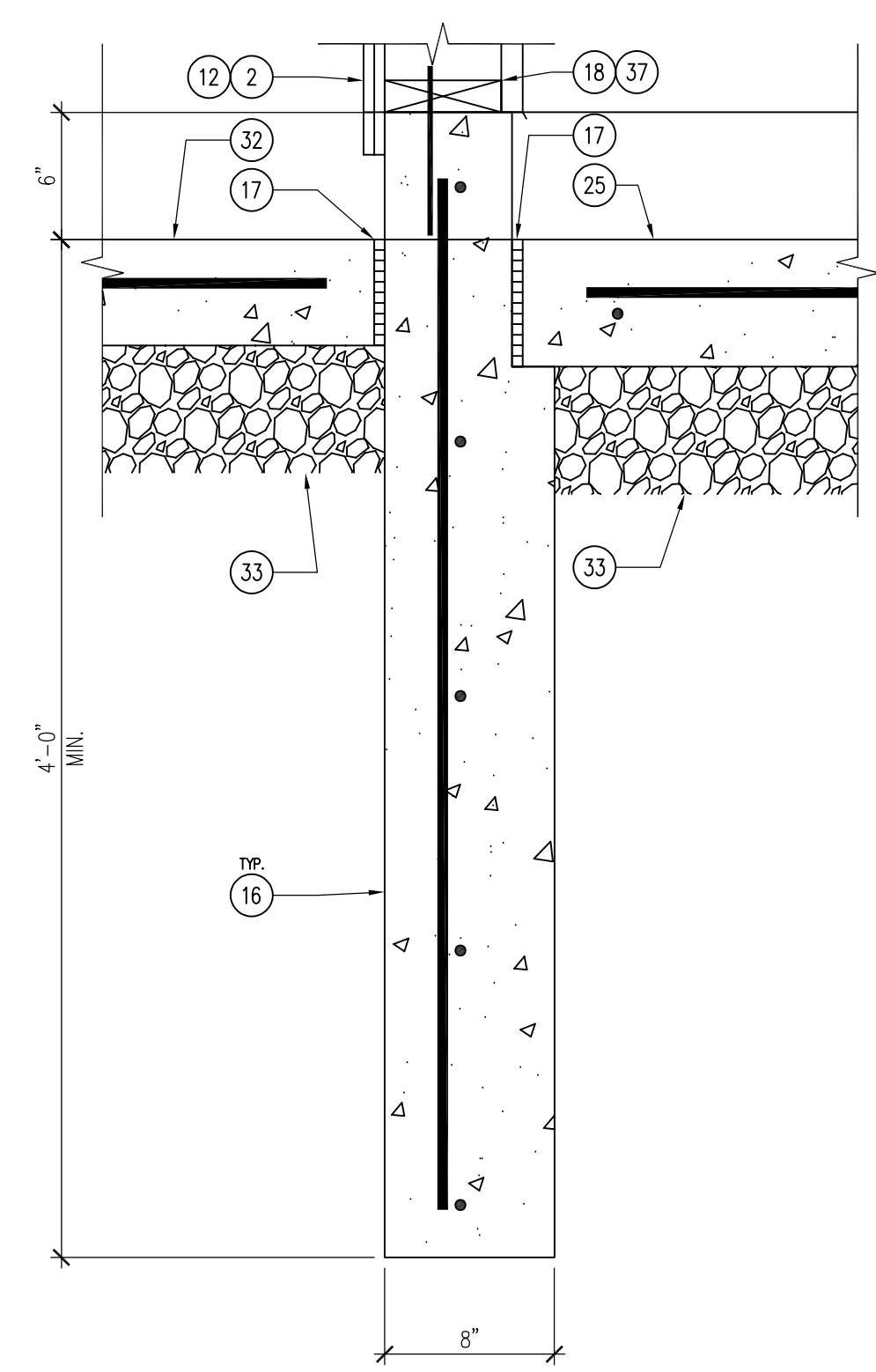
CHK'D BY: DATE:

11.07.2023

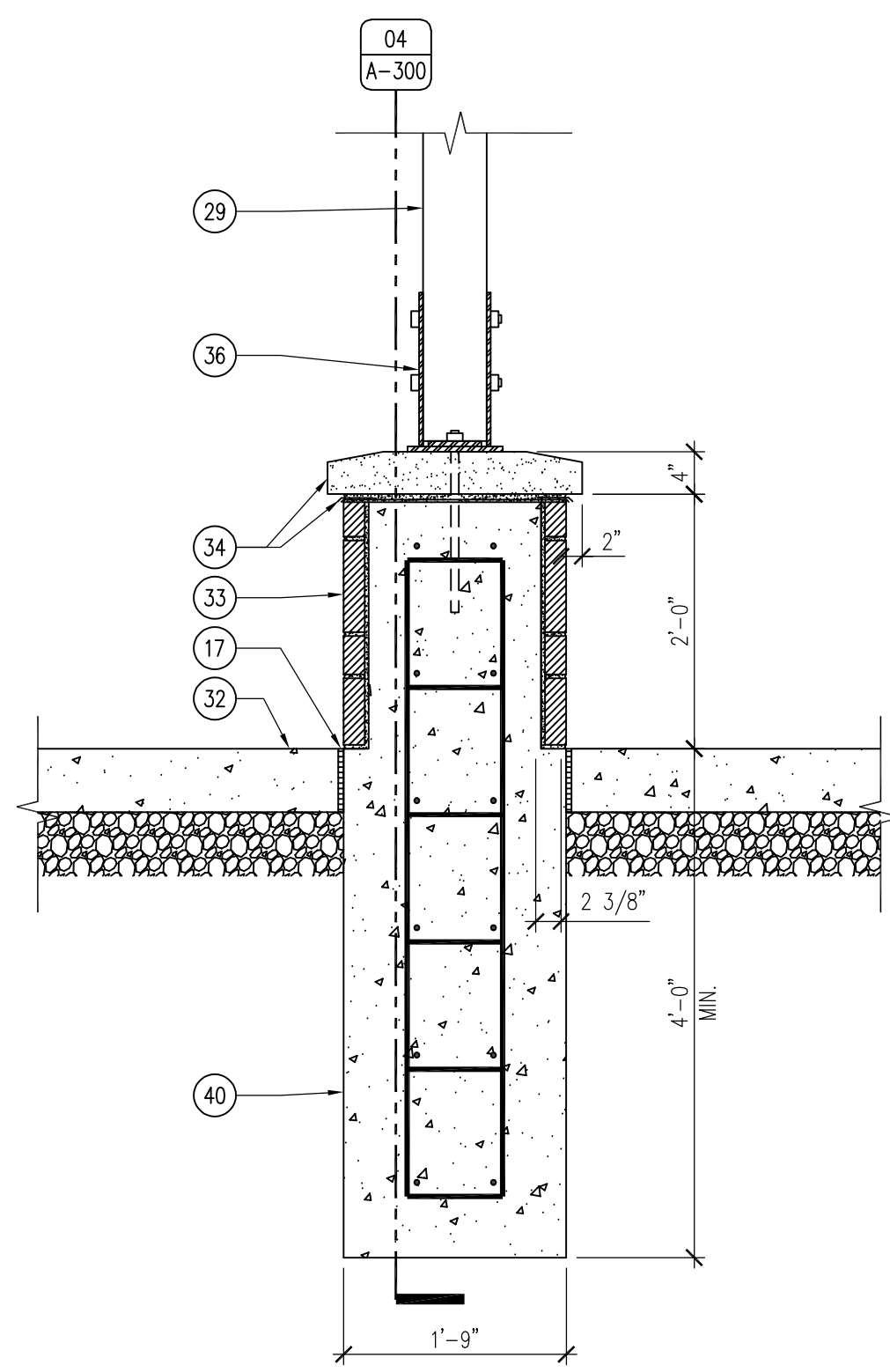
SHEET NO:

**A-200**

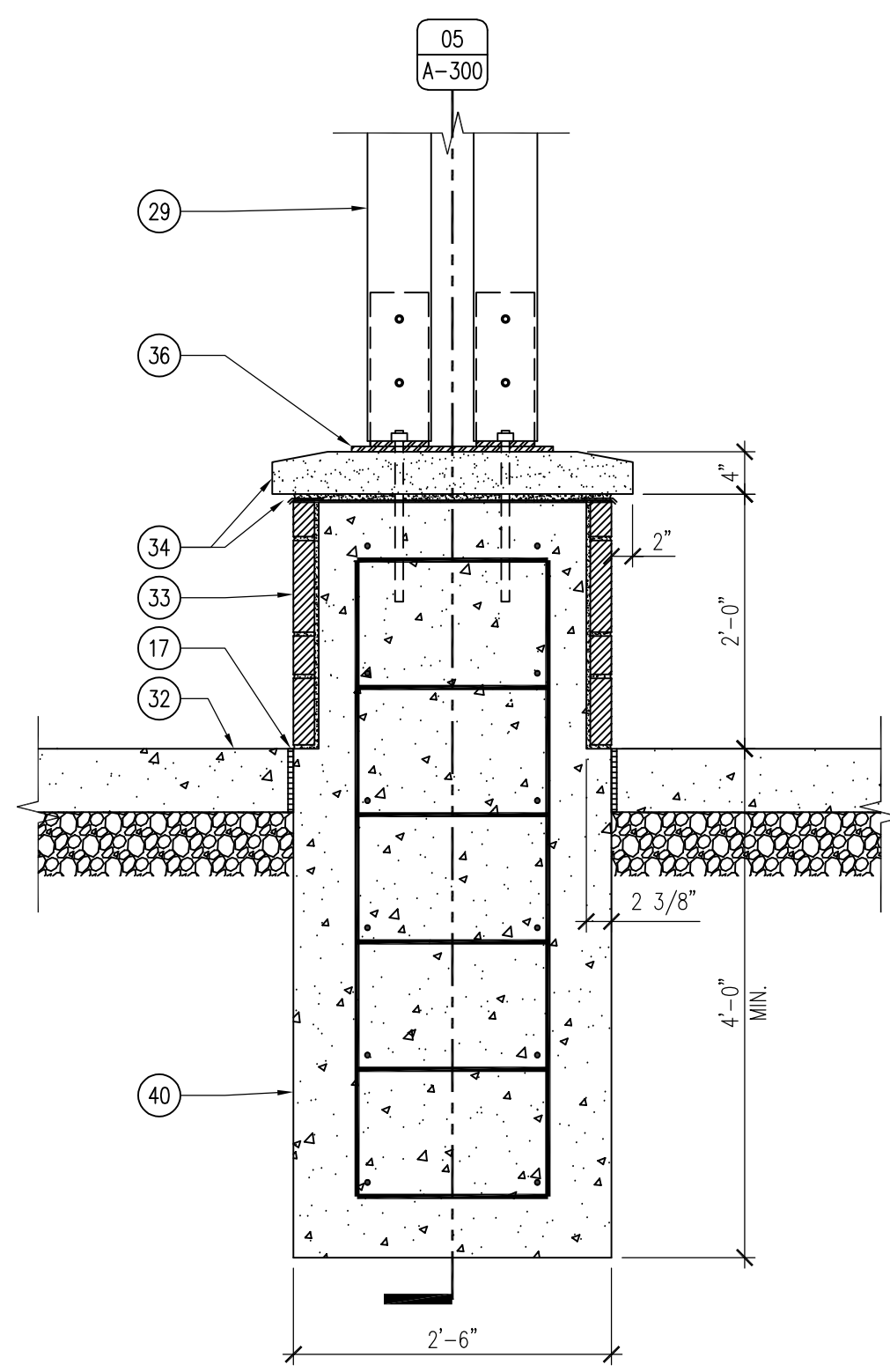




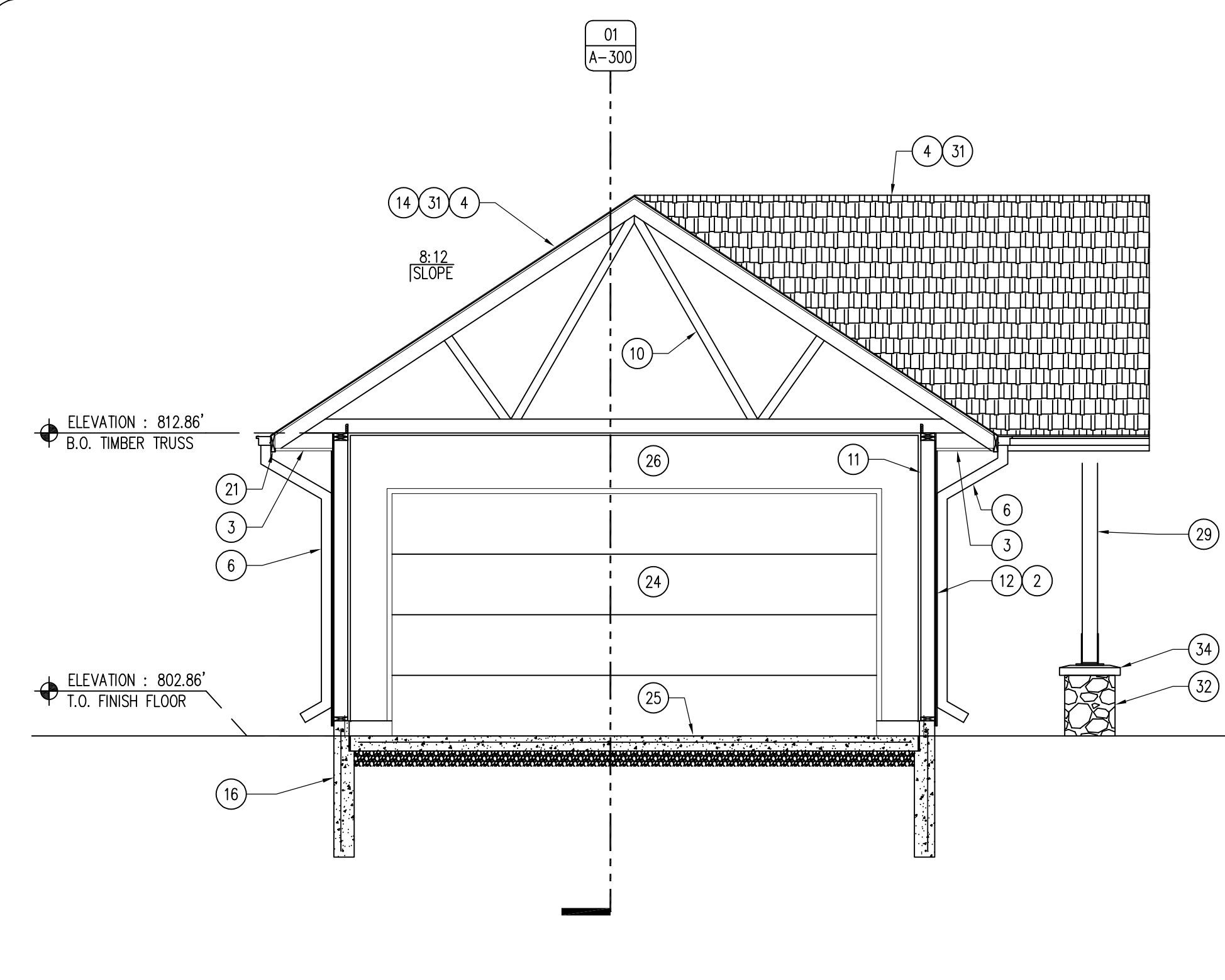
06 DETAIL - BUILDING FOOTING  
SCALE: 1 1/2" = 1'-0"



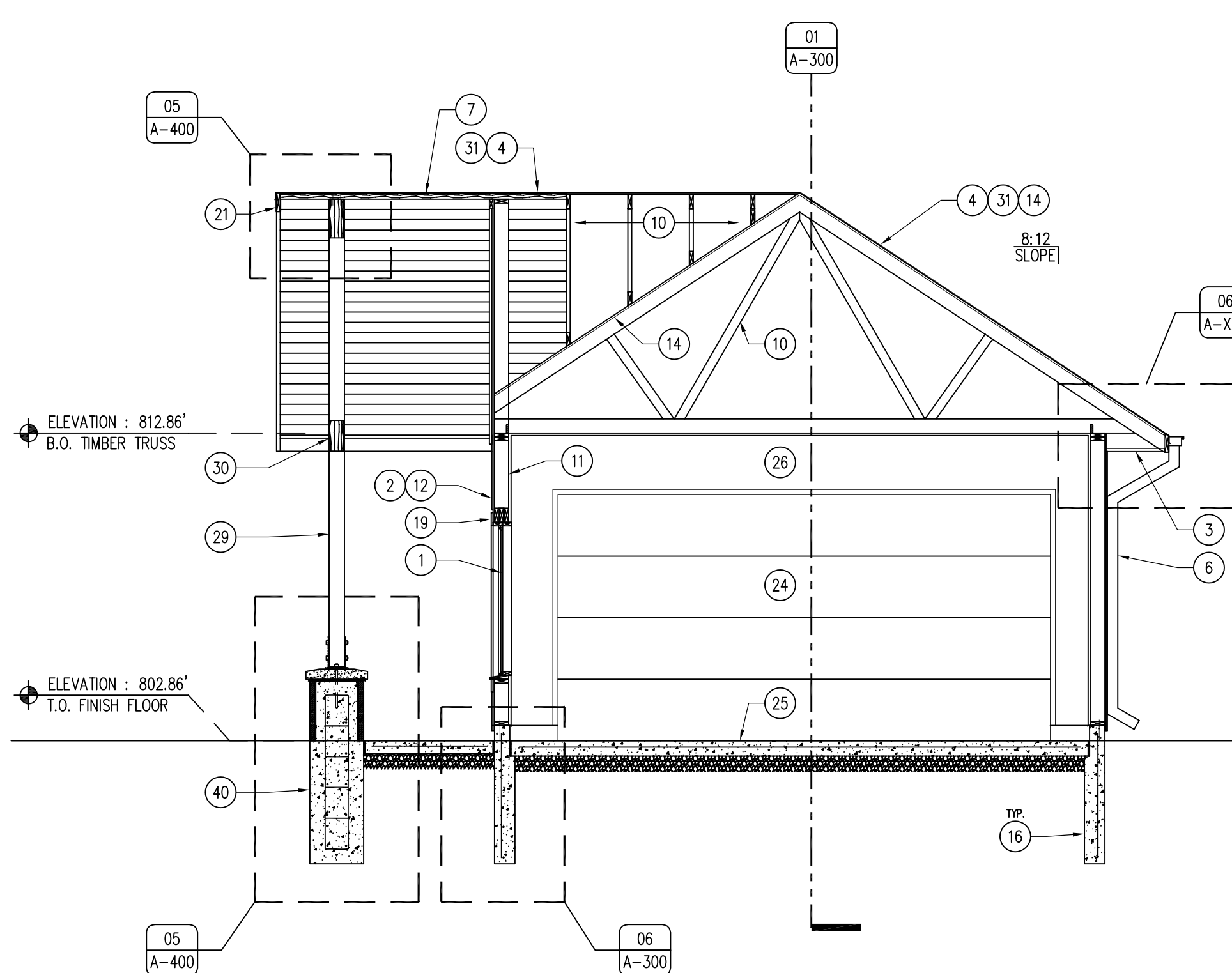
05 DETAIL - STONE COLUMN BASE  
SCALE: 3/4" = 1'-0"



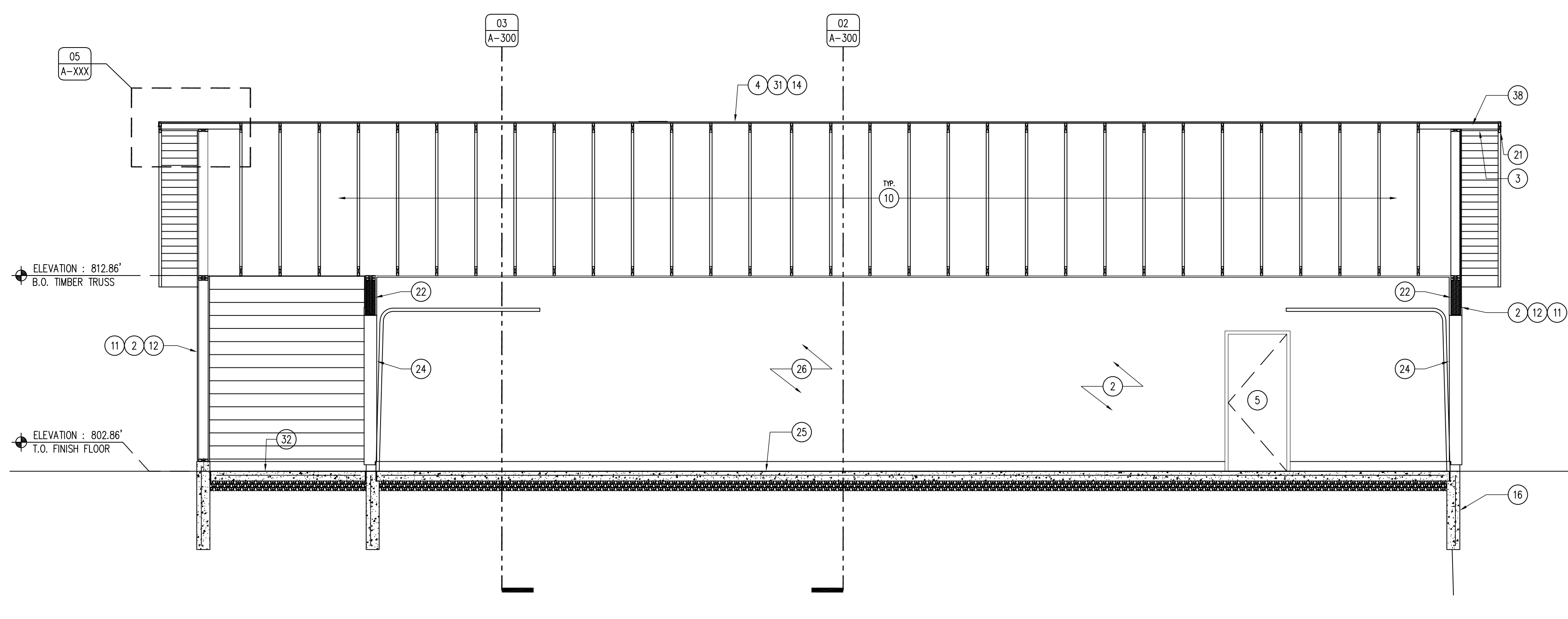
04 DETAIL - STONE COLUMN BASE  
SCALE: 3/4" = 1'-0"



03 BUILDING SECTION  
SCALE: 1/4" = 1'-0"



02 BUILDING SECTION  
SCALE: 1/4" = 1'-0"



01 BUILDING SECTION  
SCALE: 1/4" = 1'-0"

KEYNOTES

1. WINDOW AS SCHEDULED, REFER TO SHEET A-600.
2. LP SMARTSIDE CEDAR LAPSIDING (LP-1), REFER TO SHEET A-600.
3. 26 GAUGE METAL VENTED V-SOFFIT PANEL. COLOR TO MATCH GUTTERS AND FASCIA.
4. ROOF SHINGLES, REFER TO SHINGLE REQUIREMENTS ON SHEET A-600.
5. DOOR AS SCHEDULED, REFER TO SHEET A-600.
6. 6" SEAMLESS GUTTER AND DOWNSPOUT SYSTEM WITH SHUR-LO GUTTER GUARDS, DARK BRONZE.
7. 3X6 DOUGLAS FIR T&G ROOF DECKING, SEAL UNDERSIDE WITH TWO (2) COATS OF SPAR URETHANE. REFER TO ROOF DECKING NARRATIVE FOR INSTALLATION INFORMATION SHEET A-002.
8. 2X BLOCKING AS REQUIRED.
9. TRUSS TIE (SPECIFIED BY BUILDING MANUFACTURER).
10. TRUSS (DESIGNED BY TRUSS MANUFACTURER), FOR DEMONSTRATION PURPOSES ONLY.
11. 2X6 STUD WALL, REFER TO A-002 FOR WALL TYPES.
12. BUILDING WRAP, PER BUILDING MANUFACTURER'S RECOMMENDATIONS.
13. DOUBLE 2X6 TOP PLATE.
14. 8" OSB ROOF DECK SHEATHING.
15. SHINGLE RIDGE VENT, BE SHINGLE MANUFACTURER.
16. 8" WIDE X 4'-0" DEEP, FORMED, CAST-IN-PLACE CONCRETE FOOTING WALL WITH #5 REBAR, 12" O.C. ALL DIRECTIONS. 8" WIDE SILL EXTENSION TO EXTEND 12" ABOVE SLAB LEDGE, AS SHOWN.
17. 1/2" EXPANSION JOINT WITH CONTINUOUS POLYURETHANE SEALANT, COLOR CONCRETE GRAY.
18. 2X6 TREATED SILL PLATE.
19. LP SMARTSIDE CEDAR TRIM (LP-2), BUILDING CORNERS TO MATCH SIDING (PNT-4), WINDOW AND DOOR TRIM TO BE FIELD PAINTED DARK BRONZE (PNT-3), REFER TO SHEET A-600.
20. ADA ACCESSIBLE DOOR THRESHOLD.
21. 2X8 FASCIA, WRAP IN DARK BRONZE BREAK METAL TO MATCH GUTTERS.
22. GARAGE DOOR HEADER BY BUILDING SUPPLIER.
23. LP SMARTSIDE CEDAR SHAKE SIDING (LP-3), REFER TO SHEET A-600.
24. OVERHEAD GARAGE DOOR, REFER TO SHEET A-600.
25. 6" CONCRETE BUILDING SLAB WITH #4 REBAR 24" O.C. BOTH DIRECTIONS OVER 15 MIL TAPE AND SEALED VAPOR BARRIER AND 6" COMPACTED SUBBASE, SMOOTH TROWEL FINISH.
26. WALL FINISH AS SCHEDULED, REFER TO SHEET A-600.
27. METAL FLASHING, MATCH SOFFIT AND GUTTER COLOR.
28. BACKER ROD AND POLYURETHANE SEALANT.
29. 6X6 ROUGH-SAWN DOUGLAS FIR COLUMN, STAIN WITH TWO (2) COATS TWP 116.
30. HEAVY TIMBER, ROUGH-SAWN DOUGLAS FIR TRUSS, STAIN TWO (2) COATS TWP 116 WITH OVERSIZED METAL BRACKETS AS SHOWN, POWDER COAT BLACK, REFER TO SHEET A-402.
31. SELF-ADHERED, 40MIL WATER AND ICE ROOFING UNDERLAYMENT OVER ENTIRE ROOF.
32. 6" EXTERIOR CONCRETE SIDEWALK WITH #4 REBAR 24" O.C. BOTH DIRECTIONS OVER 6" SUBBASE UNDER ENTIRE BUILDING SLAB, BROOM FINISH.
33. ROUND SIDE OUT GRANITE BOULDERS - THIN VENEER BY EDEN STONE, OR APPROVED EQUAL. MORTAR TO BE WHITE BASED ASTM C270, COLOR BUFF. REFER TO SHEET A-400.
34. 4" HONED INDIANA LIMESTONE COLUMN CAP, BUFF COLORED. FULLY BED CAP WITH 1/2" MORTAR JOINT BETWEEN CAP AND CONCRETE BASE OVER 40MIL EPDM MEMBRANE. 160Z COPPER DRIP EDGE CONTINUOUSLY AROUND PERIMETER. CAP TO BE PRE-DRILLED FOR BOLTS BY MANUFACTURER.
35. 1/2" OVERSIZED MILD-STEEL TRUSS BRACKET, POWDER COAT BLACK. ALL HARDWARE TO BE 1/2" GALVANIZED WITH LOCK WASHERS. BRACKETS TO BE PLACED ON BOTH SIDES OF TRUSS. REFER TO 02/A-402 FOR MORE INFORMATION.
36. MILD-STEEL COLUMN BASE PLATE, POWDER COATED BLACK. ANCHOR BOLTS TO BE UNDER COLUMNS, REFER TO 03/A-402 FOR MORE INFORMATION.
37. 1/2" X 10" ANCHOR BOLT 4'-0" O.C.
38. 2X6 OUTRIGGER EAVE, 24" OVERHANG, BY BUILDING TRUSS MANUFACTURER.
39. 6" THICK, THREE SIDED STOOP FOOTING, OVER FOOTINGS TO GO 4'-0" DEEP, #4 REBAR 24" O.C. ALL DIRECTIONS.
40. 4'-0" DEEP, CAST-IN-PLACE CONCRETE COLUMN FOOTING WITH #5 REBAR, 12" O.C. ALL DIRECTIONS. REFER TO DETAILS 04 & 05/A-300.
41. DRIP EDGE / GUTTER APRON, COLOR TO MATCH GUTTERS AND FASCIA METAL.

GENERAL NOTES

- A. REFER TO FINISH, DOOR & WINDOW SCHEDULE, SHEET A-600.
- B. REFER TO INDEX SHEET FOR WALL TYPES, SHEET A-002.
- C. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
- D. FIELD VERIFY ALL EQUIPMENT LOCATIONS FOR ELECTRICAL OUTLET LOCATIONS, REFER TO ELECTRICAL PLAN.
- E. CONTRACTOR SHALL HAVE TRUSSES AND BUILDING, PRIOR TO CONSTRUCTION, PRE-ENGINEERED BY BUILDING SUPPLIER.
- F. CONTRACTOR SHALL CAULK ALL CONCRETE SAW-CUT JOINTS AND EXPANSION JOINTS WITH FLOWABLE URETHANE SEALANT, COLOR TO BE GRAY.
- G. ALL LP SMARTSIDE PRODUCTS TO BE FIELD PAINTED TWO (2) COATS OF EXTERIOR LATEX ACRYLIC PAINT (SHERWIN WILLIAMS - DURATION OR APPROVED EQUAL), REFER TO FINISH SCHEDULE A-600.
- H. ALL STAIN TO BE TWP 116 - RUSTIC, COAT ALL MEMBERS TWO (2) TIMES. STAIN COLUMNS, AND TRUSSES, DO NOT STAIN 3X T&G ROOF DECK.
- I. UNDERSIDE OF 3X WOOD T&G ROOF DECKING TO RECEIVE TWO (2) COATS OF CLEAR GLOSS, UV RESISTANT, SPAR URETHANE.
- D. ALL BOLTS, NUTS, FENDER AND LOCK WASHERS TO BE HOT DIP GALVANIZED, ADD ONE LOCK WASHERS TO ALL BOLT ASSEMBLIES.
- E. MORTAR TO BE WHITE BASE, BUFF COLOR.

CONSULTANT:

**IOWA DEPARTMENT OF NATURAL RESOURCES**  
ENGINEERING SERVICES - WALLACE BUILDING  
502 E. 9TH ST., DES MOINES, IA 50319-0034  
P: 515.725.8200  
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BUILDING SECTIONS

ARCHERY BUILDING AND COURTYARD IMPROVEMENTS FOR:  
**DNR FAIRGROUNDS**

DES MOINES, IA 50317  
3000 EAST GRAND AVE.

NO.	BY DATE	REVISION

DRAWN BY: PROJECT NUMBER:  
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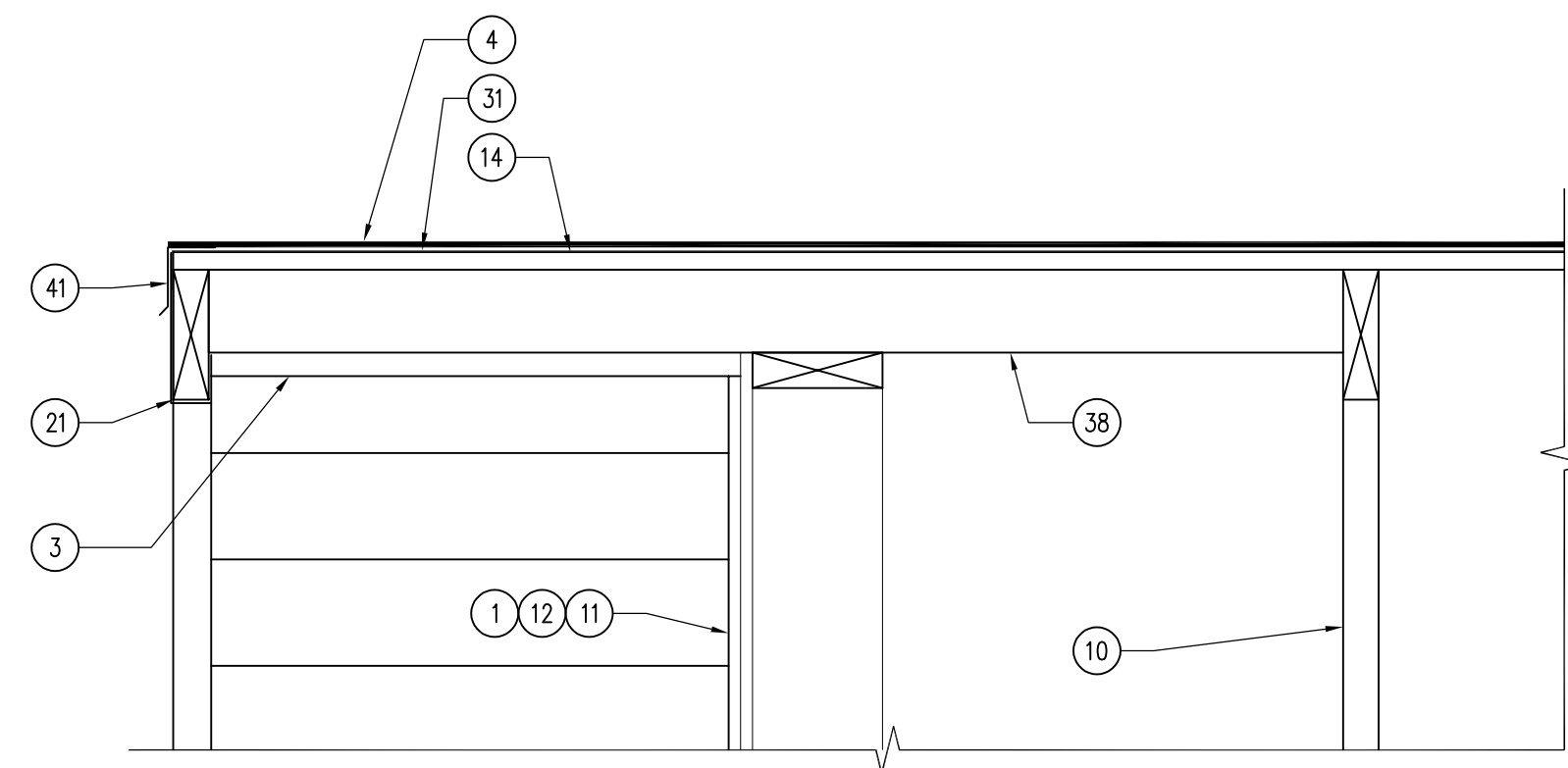
**A-300**



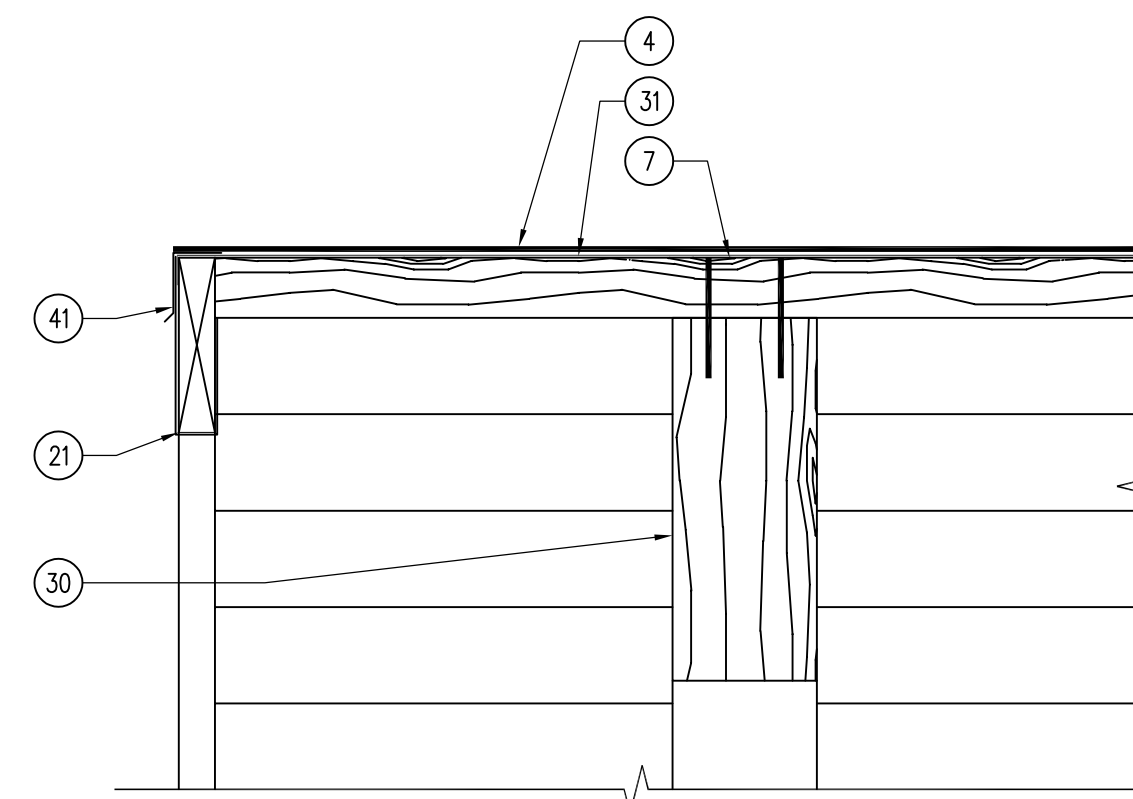
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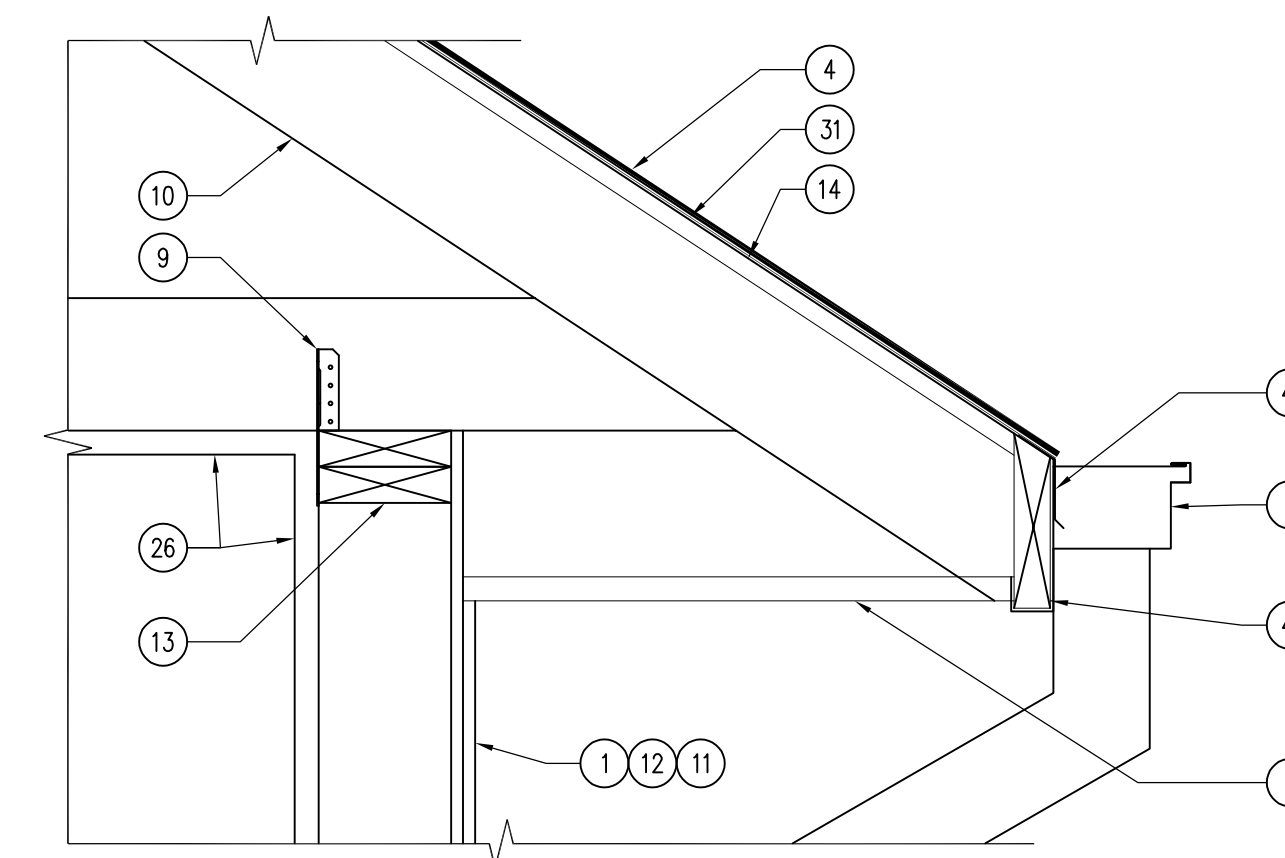
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SCALE: 1/4" = 1'-0"



03 DETAIL - ROOF GABLE OUTRIGGER  
SCALE: 1 1/2" = 1'-0"



02 DETAIL - T&G TRUSS OVERHANG  
SCALE: 1 1/2" = 1'-0"



01 DETAIL - ROOF EAVE  
SCALE: 1 1/2" = 1'-0"

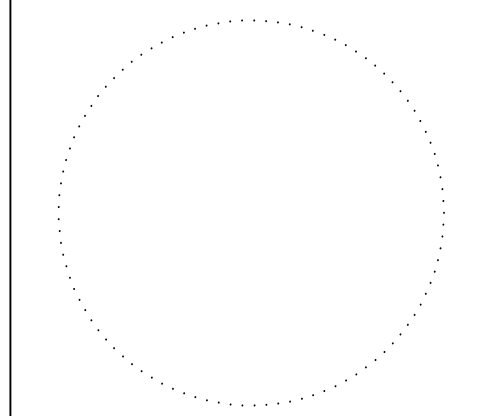
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41. DRIP EDGE / GUTTER APRON, COLOR TO MATCH GUTTERS AND FASCIA METAL.

GENERAL NOTES

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- D. FIELD VERIFY ALL EQUIPMENT LOCATIONS FOR ELECTRICAL OUTLET LOCATIONS, REFER TO ELECTRICAL PLAN.
- E. CONTRACTOR SHALL HAVE TRUSSES AND BUILDING, PRIOR TO CONSTRUCTION, PRE-ENGINEERED BY BUILDING SUPPLIER.
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- E. MORTAR TO BE WHITE BASE, BUFF COLOR.

CONSULTANT:



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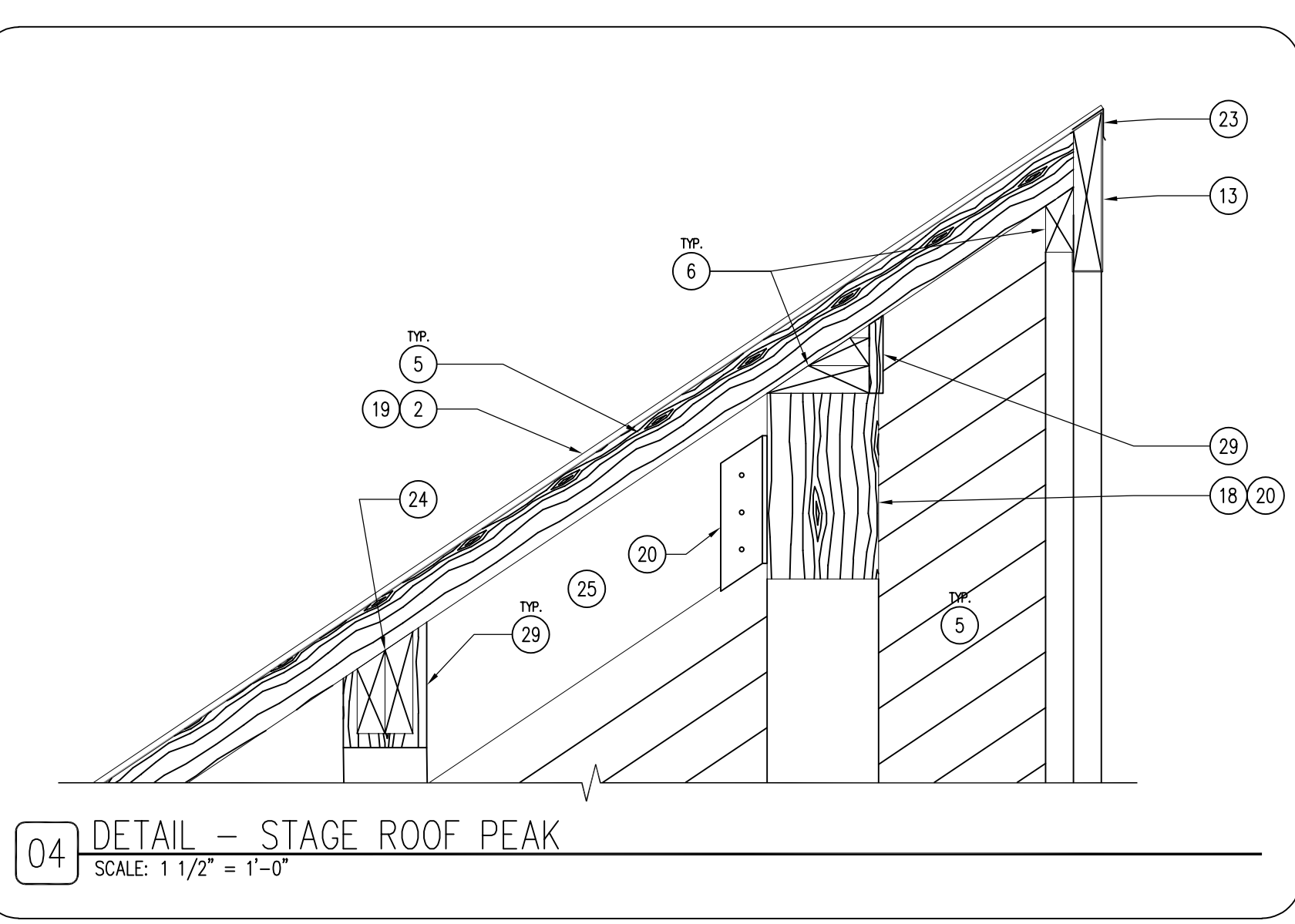
BUILDING DETAILS  
ARCHERY BUILDING AND COURTYARD IMPROVEMENTS FOR:  
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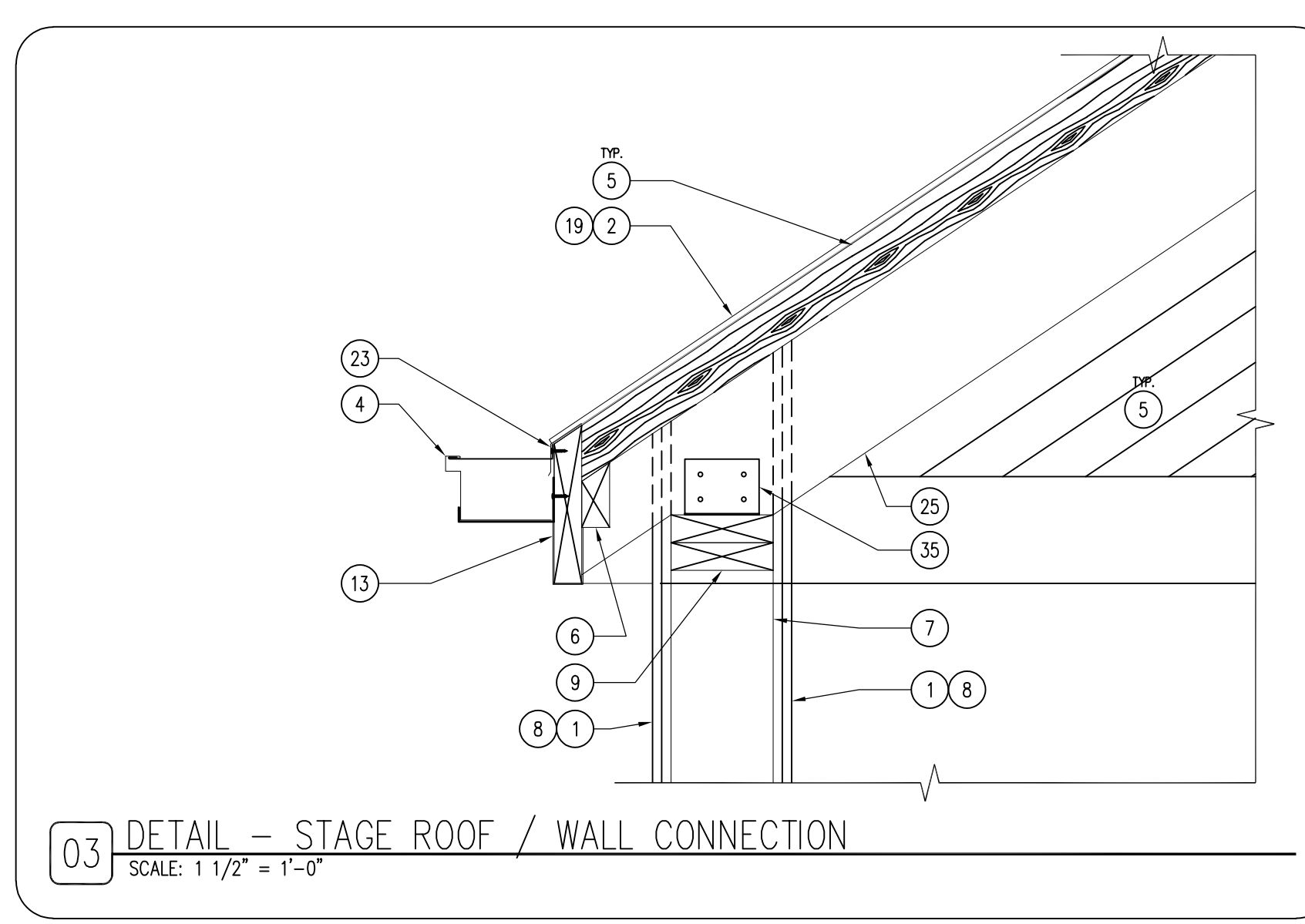
DRAWN BY: PROJECT NUMBER:  
24-05-77-01  
CHK'D BY: DATE:  
11.07.2023

SHEET NO:  
**A-301**

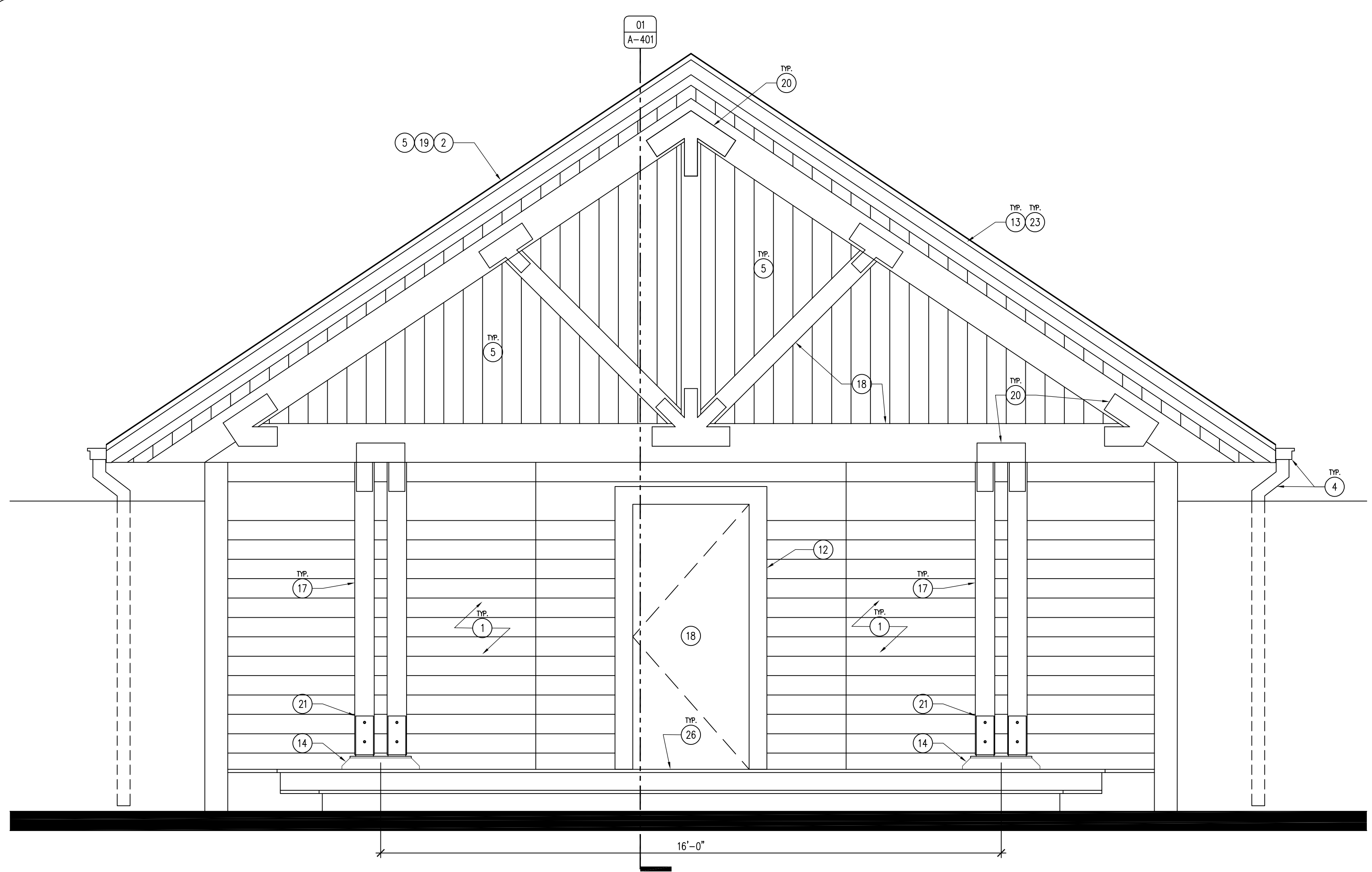




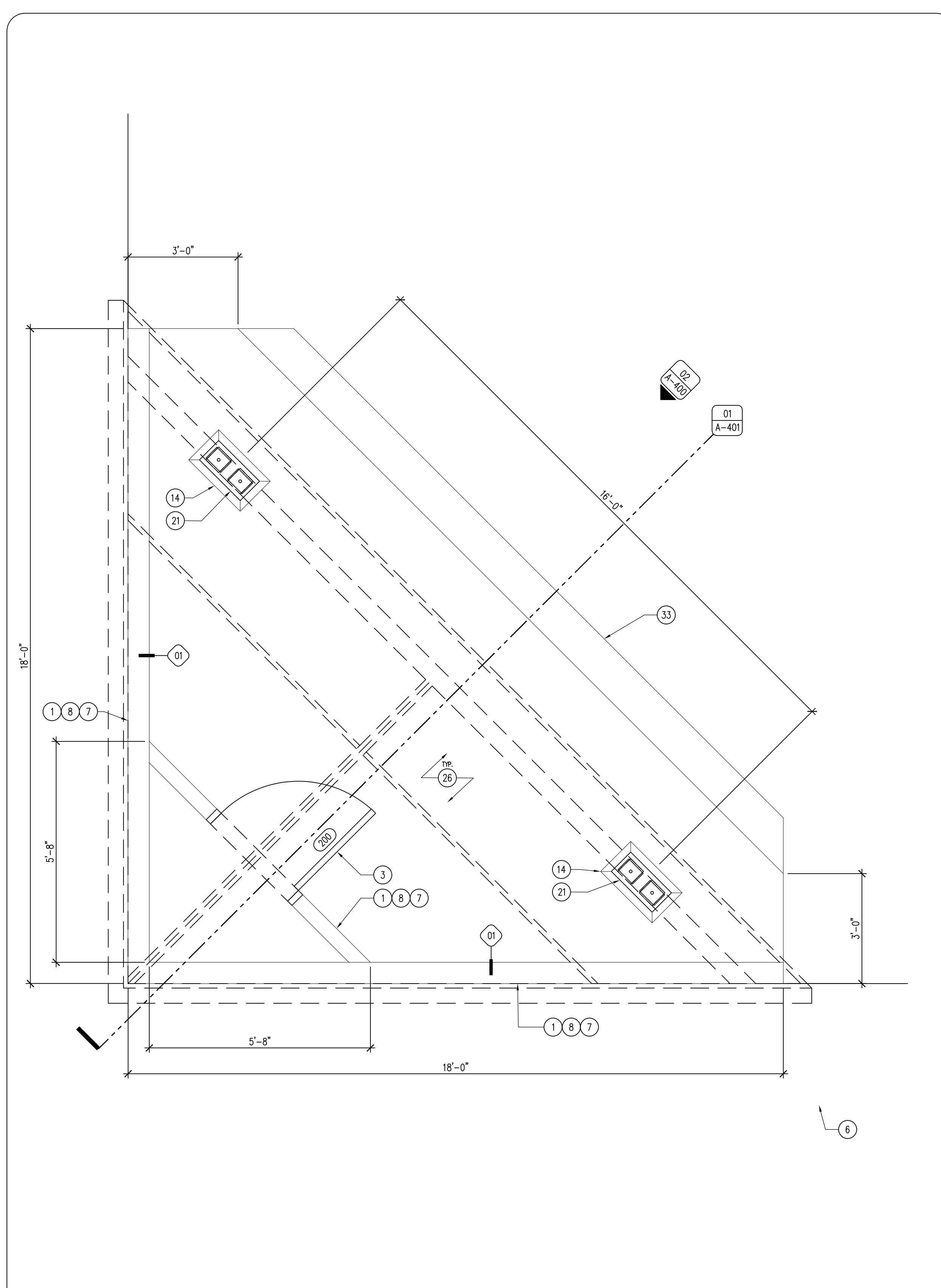
04 DETAIL - STAGE ROOF PEAK  
SCALE: 1 1/2" = 1'-0"



03 DETAIL - STAGE ROOF / WALL CONNECTION  
SCALE: 1 1/2" = 1'-0"



02 BUILDING ELEVATION - STAGE  
SCALE: 1/2" = 1'-0"



01 REFERENCE FLOOR PLAN - STAGE  
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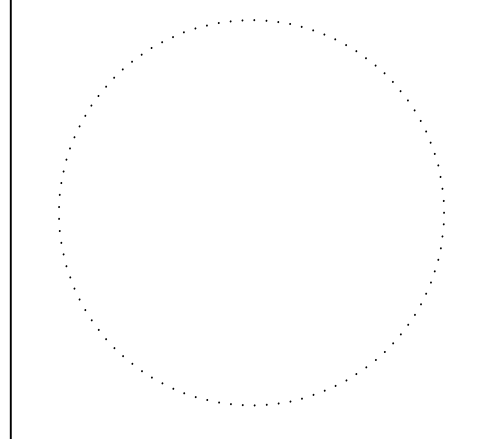
KEYNOTES

1. LP SMARTSIDE CEDAR LAPSIDING, PAINT TWO (2) COATS PNT-4, REFER TO SHEET A-600.
2. ROOF SHINGLES, REFER TO SHINGLE REQUIREMENTS ON SHEET A-600.
3. DOOR AS SCHEDULED, REFER TO SHEET A-600.
4. 6" SEAMLESS GUTTER AND DOWNSPOUT SYSTEM WITH SHUR-FLO GUTTER GUARDS, DARK BROWN.
5. 3X6 DOUGLAS FIR T&G ROOF DECKING, SEAL UNDERSIDE WITH TWO (2) COATS OF SPAR URETHANE. REFER TO ROOF DECKING NARRATIVE FOR INSTALLATION INFORMATION SHEET A-002.
6. 2X BLOCKING AS REQUIRED.
7. 2X6 STUD WALL, REFER TO A-002 FOR WALL TYPES.
8. 1/2" WALL SHEATHING WITH BUILDING WRAP, BOTH SIDES.
9. DOUBLE 2X6 TOP PLATE.
10. 8" WIDE X 4'-0" DEEP, FORMED, CAST-IN-PLACE CONCRETE FOOTING WALL WITH #5 REBAR, 12" O.C. ALL DIRECTIONS. 6" WIDE SILL EXTENSION TO EXTEND 12" ABOVE SLAB LEDGE, AS SHOWN.
11. 2X6 TREATED SILL PLATE.
12. LP SMARTSIDE CEDAR TRIM, BUILDING CORNERS TO MATCH SIDING (PNT-4), WINDOW AND DOOR TRIM TO BE FIELD PAINTED DARK BRONZE (PNT-3), REFER TO SHEET A-600.
13. 2X FASCIA, WRAP IN DARK BRONZE BREAK METAL TO MATCH GUTTERS.
14. 4'-0" DEEP, CAST-IN-PLACE CONCRETE COLUMN FOOTING WITH #5 REBAR, 12" O.C. ALL DIRECTIONS, CHAMFER TOP EDGE AS SHOWN. REFER TO DETAILS 02 & 03/A-401.
15. 4X4 X 5'-0" GROUND TREATED WOOD POST 4'-0" DEEP, 3'-0" O.C.
16. METAL FLASHING TRIM.
17. 6X6 ROUGH-SAWN DOUGLAS FIR COLUMN, STAIN WITH TWO (2) COATS TWP 116.
18. HEAVY TIMBER, ROUGH-SAWN DOUGLAS FIR TRUSS, STAIN TWO (2) COATS TWP 116 WITH OVERSIZED METAL BRACKETS AS SHOWN, POWDER COAT BLACK, REFER TO SHEET A-402.
19. SELF-ADHERED, 40MIL WATER AND ICE ROOFING UNDERLAYMENT OVER ENTIRE ROOF.
20. 1/2" OVERSIZED MILD-STEEL TRUSS BRACKET, POWDER COAT BLACK. ALL HARDWARE TO BE GALVANIZED WITH LOCK WASHERS. BRACKETS TO BE PLACED ON BOTH SIDES OF TRUSS. REFER TO 02/A-402 FOR MORE INFORMATION.
21. MILD-STEEL COLUMN BASE PLATE, POWDER COATED BLACK. ANCHOR BOLTS TO BE UNDER COLUMNS, REFER TO 03/A-402 FOR MORE INFORMATION.
22. 1/2" X 6" ANCHOR BOLT 4'-0" O.C.
23. DRIP EDGE / GUTTER APRON, COLOR TO MATCH GUTTERS AND FASCIA METAL.
24. DOUBLE 2X6 RAFTER BEAM, CONNECT TO RIDGE BEAM, SCREW T&G DECKING TO RAFTER.
25. DOUBLE 2X8 RIDGE BEAM, BOLT TO WALL AND CONNECT TO TIMBER TRUSS WITH BEAM SADDLE.
26. TREX SELECT DECKING (CDB-1) OR APPROVED EQUAL, ATTACH TO JOISTS WITH STAINLESS STEEL COUNTER-SUNK, FACE-SCREWED FASTENER SYSTEM, PER MANUFACTURER'S INSTALL INSTRUCTIONS.
27. 2X10 PRESSURE TREATED JOISTS, 16" O.C., 2X10 PRESSURE TREATED TRANSVERSE BLOCKING EVERY 4'-0" O.C., HANG FROM BEAMS WITH EXTERIOR RATED JOIST HANGERS.
28. 2X10 PRESSURE TREATED LEDGER BEAM, BOLT TO CONCRETE WALL/COLUMN WITH 2 - 1/2" X 6" HDG WEDGE ANCHOR BOLTS 24" O.C.
29. 1X DOUGLAS FIR TRIM, WRAP BEAM/BLOCKING ENTIRELY, STAIN TO MATCH TRUSS AND COLUMNS.
30. 6" OF CLASS "A" GRAVEL UNDER ENTIRE STAGE AREA.
31. 2X4 STUD WALL, FOR CLOSET AREA.
32. 2X10 PRESSURE TREATED DECK EDGE BEAM BOTH SIDES, BOLT TO 4X4 POST WITH 2 - 1/2" X 8" HDG CARRIAGE BOLTS AT ALL POSTS.
33. 2X6 TREATED BOX TREAD, 2X6 BLOCKING 16" O.C., WITH DECKING (CDB-1) ON TREAD AND RISER. ATTACH TO DECK EDGE BEAM WITH 1 - 1/2" X 5" HDG LAG BOLT WITH WASHER, 12" O.C., SEAT SECURELY IN ROCK BENEATH.
34. BUILDING WRAP, PER BUILDING MANUFACTURER'S RECOMMENDATIONS.
35. SIMPSON HGA10KT-090 GALVANIZED GUSSET ANGLE, BOTH SIDES. INSTALL PER MANUFACTURER'S INSTRUCTIONS.

GENERAL NOTES

- A. REFER TO FINISH, DOOR & WINDOW SCHEDULE, SHEET A-600.
- B. REFER TO INDEX SHEET FOR WALL TYPES, SHEET A-002.
- C. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
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- E. CONTRACTOR SHALL HAVE TRUSSES AND BUILDING, PRIOR TO CONSTRUCTION, PRE-ENGINEERED BY BUILDING SUPPLIER.
- F. CONTRACTOR SHALL CAULK ALL CONCRETE SAW-CUT JOINTS AND EXPANSION JOINTS WITH FLOWABLE URETHANE SEALANT, COLOR TO BE GRAY.
- G. ALL LP SMARTSIDE PRODUCTS TO BE FIELD PAINTED TWO (2) COATS OF EXTERIOR LATEX ACRYLIC PAINT (SHERWIN WILLIAMS - DURATION OR APPROVED EQUAL), COLOR TBD.
- H. ALL STAIN TO BE TWP 116 - RUSTIC, COAT ALL MEMBERS TWO (2) TIMES. STAIN COLUMNS, AND TRUSSES, DO NOT STAIN 3X T&G ROOF DECK.
- I. UNDERSIDE OF 3X WOOD T&G ROOF DECKING TO RECEIVE TWO (2) COATS OF CLEAR GLOSS, UV RESISTANT, SPAR URETHANE.
- D. ALL BOLTS, NUTS, FENDER AND LOCK WASHERS TO BE HOT-DIPPED GALVANIZED, ADD ONE LOCK WASHER TO ALL BOLT ASSEMBLIES.
- E. MORTAR TO BE WHITE BASE, BUFF COLOR.
- F. COVER ENTIRE 2X10 DECKING STRUCTURE WITH SELF-ADHERED DECK-PROTECT FLASHING.

CONSULTANT:



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STAGE PLAN AND ELEVATION

ARCHERY BUILDING AND COURTYARD IMPROVEMENTS FOR:  
**DNR FAIRGROUNDS**

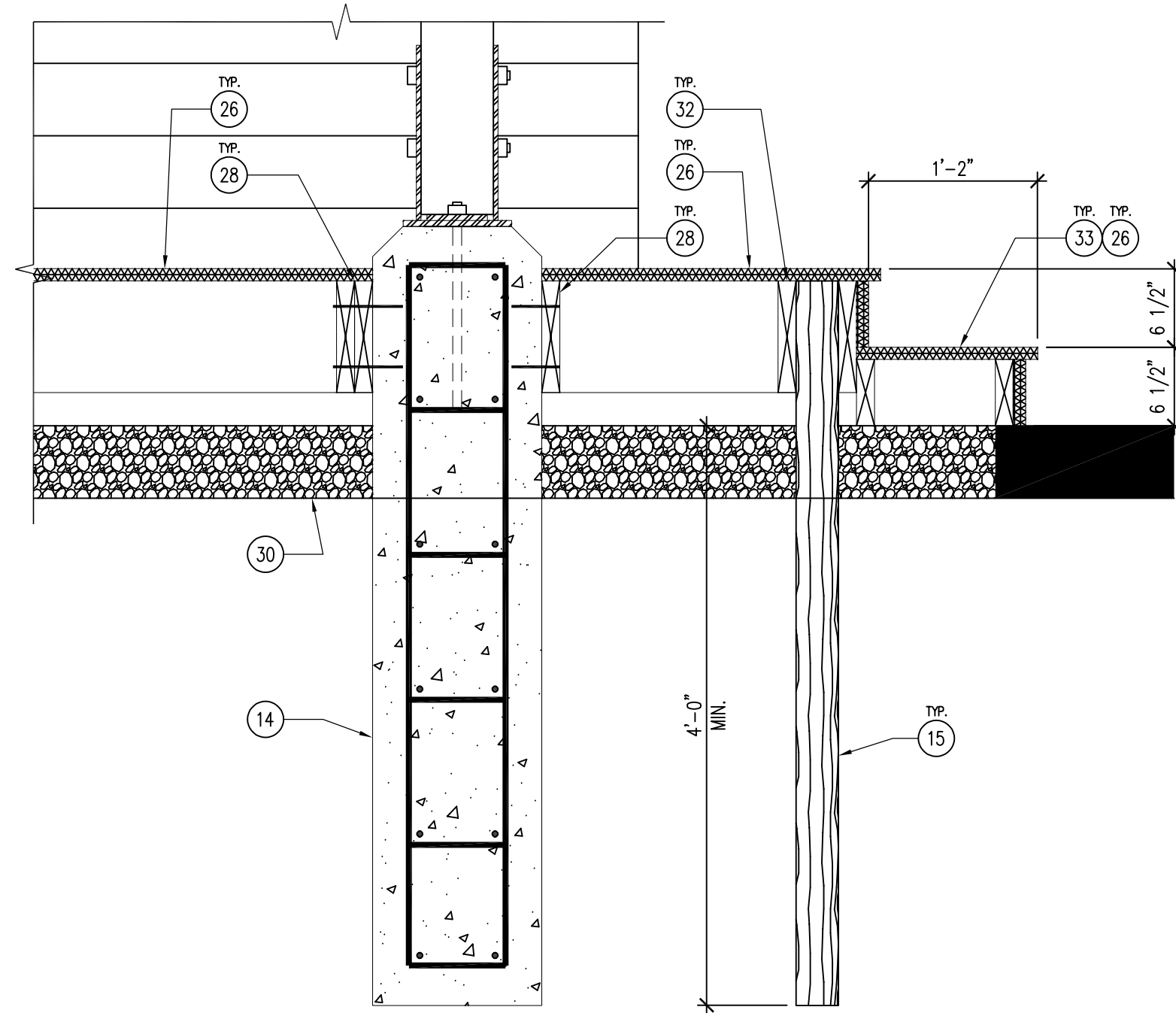
DES MOINES, IA 50317  
3000 EAST GRAND AVE.

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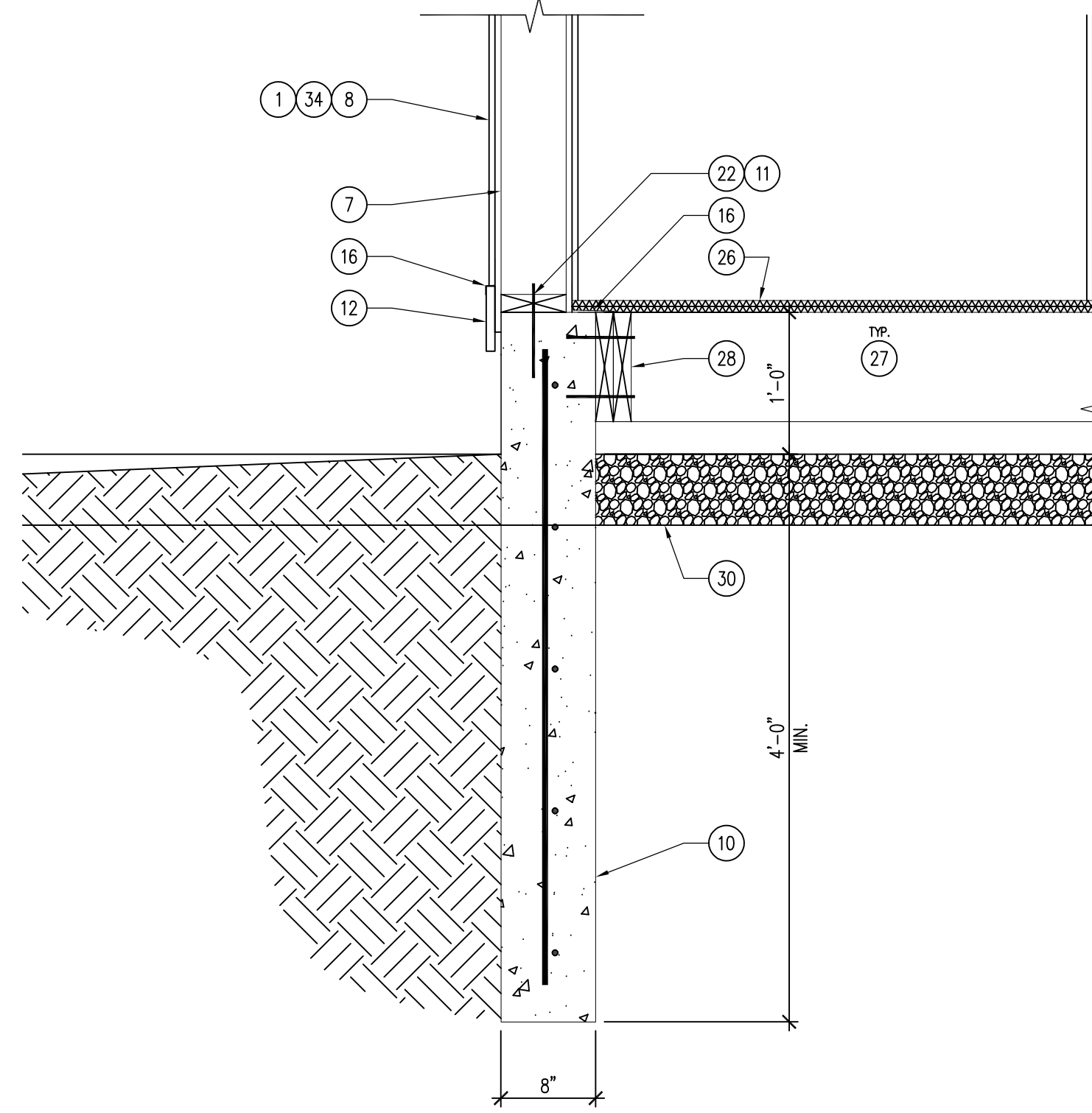
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24-05-77-01  
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11.07.2023

SHEET NO:  
**A-400**

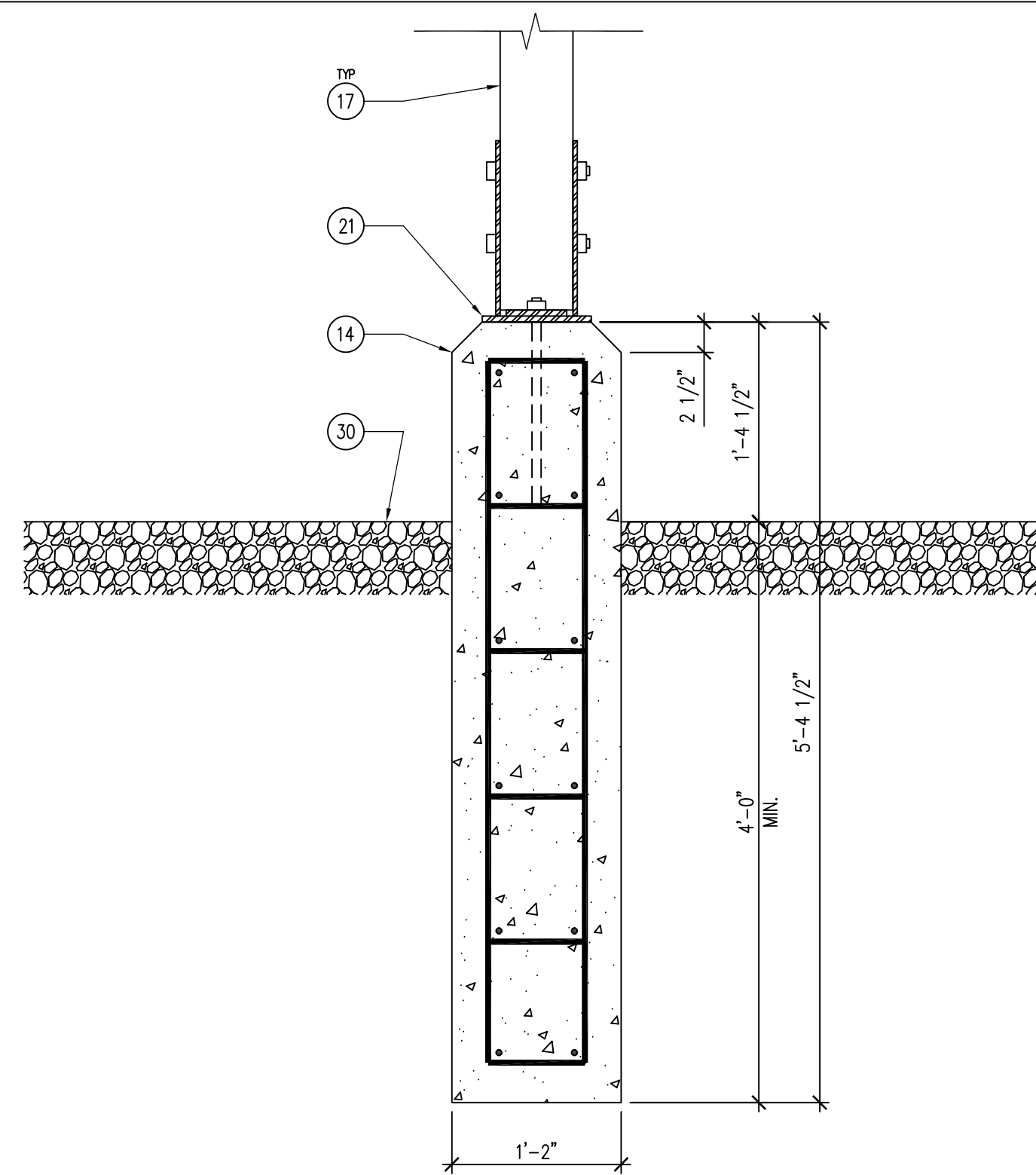




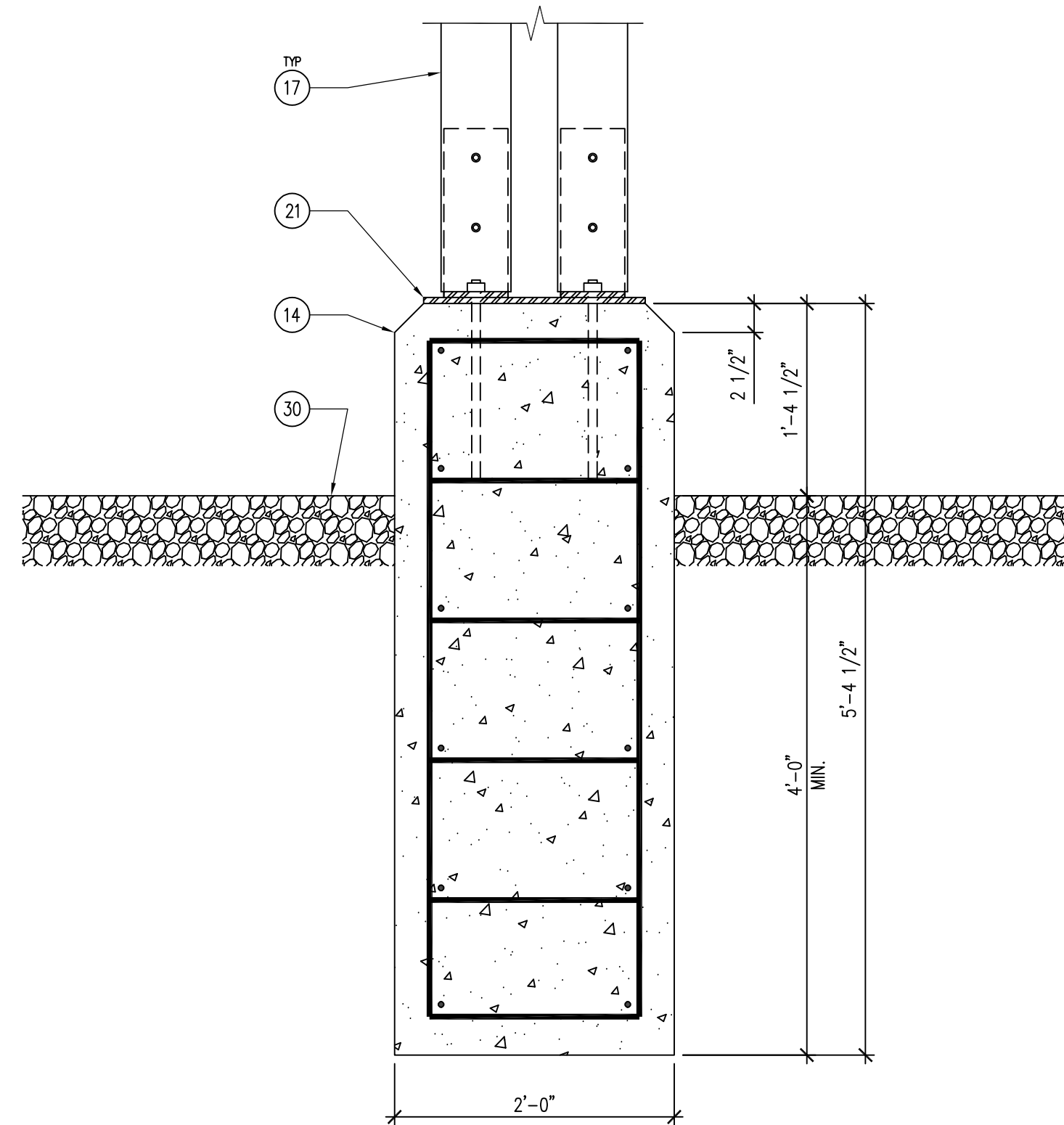
05 DETAIL - STAIR TREAD/RISER SECTION  
SCALE: 1" = 1'-0"



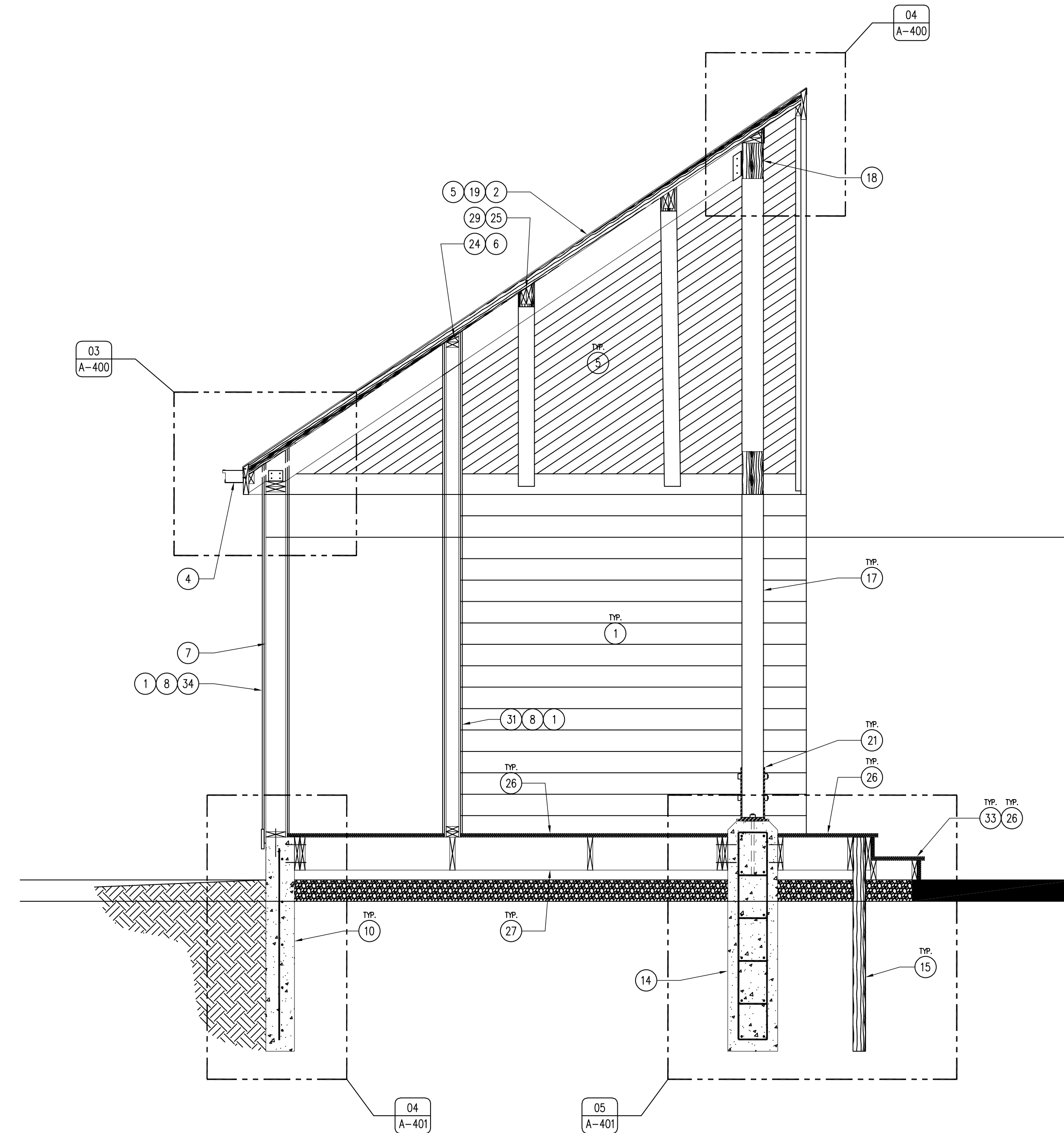
04 DETAIL - BUILDING FOOTING  
SCALE: 1" = 1'-0"



03 DETAIL - COLUMN BASE SIDE SECTION  
SCALE: 1" = 1'-0"



02 DETAIL - COLUMN BASE SECTION  
SCALE: 1" = 1'-0"



01 REFERENCE FLOOR PLAN - STAGE  
SCALE: 1/2" = 1'-0"

KEYNOTES

1. LP SMARTSIDE CEDAR LAPSIDING, PAINT TWO (2) COATS PNT-4, REFER TO SHEET A-600.
2. ROOF SHINGLES, REFER TO SHINGLE REQUIREMENTS ON SHEET A-600.
3. DOOR AS SCHEDULED, REFER TO SHEET A-600.
4. 6" SEAMLESS GUTTER AND DOWNSPOUT SYSTEM WITH SHUR-FLO GUTTER GUARDS, DARK BROWN.
5. 3X6 DOUGLAS FIR T&G ROOF DECKING, SEAL UNDERSIDE WITH TWO (2) COATS OF SPAR URETHANE. REFER TO ROOF DECKING NARRATIVE FOR INSTALLATION INFORMATION SHEET A-002.
6. 2X BLOCKING AS REQUIRED.
7. 2X6 STUD WALL, REFER TO A-002 FOR WALL TYPES.
8. 2" WALL SHEATHING WITH BUILDING WRAP, BOTH SIDES.
9. DOUBLE 2X6 TOP PLATE.
10. 8" WIDE X 4'-0" DEEP, FORMED, CAST-IN-PLACE CONCRETE FOOTING WALL WITH #5 REBAR, 12" O.C. ALL DIRECTIONS. 6" WIDE SILL EXTENSION TO EXTEND 12" ABOVE SLAB LEDGE, AS SHOWN.
11. 2X6 TREATED SILL PLATE.
12. LP SMARTSIDE CEDAR TRIM, BUILDING CORNERS TO MATCH SIDING (PNT-4), WINDOW AND DOOR TRIM TO BE FIELD PAINTED DARK BRONZE (PNT-3), REFER TO SHEET A-600.
13. 2X FASCIA, WRAP IN DARK BRONZE BREAK METAL TO MATCH GUTTERS.
14. 4'-0" DEEP, CAST-IN-PLACE CONCRETE COLUMN FOOTING WITH #5 REBAR, 12" O.C. ALL DIRECTIONS, CHAMFER TOP EDGE AS SHOWN. REFER TO DETAILS 02 & 03/A-401.
15. 4X4 X 5'-0" GROUND TREATED WOOD POST 4'-0" DEEP, 3'-0" O.C.
16. METAL FLASHING TRIM.
17. 6X6 ROUGH-SAWN DOUGLAS FIR COLUMN, STAIN WITH TWO (2) COATS TWP 116.
18. HEAVY TIMBER, ROUGH-SAWN DOUGLAS FIR TRUSS, STAIN TWO (2) COATS TWP 116 WITH OVERSIZED METAL BRACKETS AS SHOWN, POWDER COAT BLACK, REFER TO SHEET A-402.
19. SELF-ADHERED, 40ML WATER AND ICE ROOFING UNDERLAYMENT OVER ENTIRE ROOF.
20. 1" OVERSIZED MILD-STEEL TRUSS BRACKET, POWDER COAT BLACK. ALL HARDWARE TO BE GALVANIZED WITH LOCK WASHERS. BRACKETS TO BE PLACED ON BOTH SIDES OF TRUSS. REFER TO 02/A-402 FOR MORE INFORMATION.
21. MILD-STEEL COLUMN BASE PLATE, POWDER COATED BLACK. ANCHOR BOLTS TO BE UNDER COLUMNS, REFER TO 03/A-402 FOR MORE INFORMATION.
22. 3" X 6" ANCHOR BOLT 4'-0" O.C.
23. DRIP EDGE / GUTTER APRON, COLOR TO MATCH GUTTERS AND FASCIA METAL.
24. DOUBLE 2X6 RAFTER BEAM, CONNECT TO RIDGE BEAM, SCREW T&G DECKING TO RAFTER.
25. DOUBLE 2X8 RIDGE BEAM, BOLT TO WALL AND CONNECT TO TIMBER TRUSS WITH BEAM SADDLE.
26. TREX SELECT DECKING (CDB-1) OR APPROVED EQUAL, ATTACH TO JOISTS WITH STAINLESS STEEL COUNTER-SUNK, FACE-SCREWED FASTENER SYSTEM, PER MANUFACTURER'S INSTALL INSTRUCTIONS.
27. 2X10 PRESSURE TREATED JOISTS, 16" O.C., 2X10 PRESSURE TREATED TRANSVERSE BLOCKING EVERY 4'-0" O.C., HANG FROM BEAMS WITH EXTERIOR RATED JOIST HANGERS.
28. 2X10 PRESSURE TREATED LEDGER BEAM, BOLT TO CONCRETE WALL/COLUMN WITH 2 - 3/4" X 6" HDG WEDGE ANCHOR BOLTS 24" O.C.
29. 1X DOUGLAS FIR TRIM, WRAP BEAM/BLOCKING ENTIRELY, STAIN TO MATCH TRUSS AND COLUMNS.
30. 6" OF CLASS "A" GRAVEL UNDER ENTIRE STAGE AREA.
31. 2X4 STUD WALL, FOR CLOSET AREA.
32. 2X10 PRESSURE TREATED DECK EDGE BEAM BOTH SIDES, BOLT TO 4X4 POST WITH 2 - 3/4" X 8" HDG CARRIAGE BOLTS AT ALL POSTS.
33. 2X6 TREATED BOX TREAD, 2X6 BLOCKING 16" O.C., WITH DECKING (CDB-1) ON TREAD AND RISER. ATTACH TO DECK EDGE BEAM WITH 1 - 3/4" X 5" HDG LAG BOLT WITH WASHER, 12" O.C., SEAT SECURELY IN ROCK BENEATH.
34. BUILDING WRAP, PER BUILDING MANUFACTURER'S RECOMMENDATIONS.
35. SIMPSON HGA10K1-090 GALVANIZED GUSSET ANGLE, BOTH SIDES. INSTALL PER MANUFACTURER'S INSTRUCTIONS.

GENERAL NOTES

- A. REFER TO FINISH, DOOR & WINDOW SCHEDULE, SHEET A-600.
- B. REFER TO INDEX SHEET FOR WALL TYPES, SHEET A-002.
- C. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
- D. FIELD VERIFY ALL EQUIPMENT LOCATIONS FOR ELECTRICAL OUTLET LOCATIONS, REFER TO ELECTRICAL PLAN.
- E. CONTRACTOR SHALL HAVE TRUSSES AND BUILDING, PRIOR TO CONSTRUCTION, PRE-ENGINEERED BY BUILDING SUPPLIER.
- F. CONTRACTOR SHALL CAULK ALL CONCRETE SAW-CUT JOINTS AND EXPANSION JOINTS WITH FLOWABLE URETHANE SEALANT, COLOR TO BE GRAY.
- G. ALL LP SMARTSIDE PRODUCTS TO BE FIELD PAINTED TWO (2) COATS OF EXTERIOR LATEX ACRYLIC PAINT (SHERWIN WILLIAMS - DURATION OR APPROVED EQUAL), COLOR TBD.
- H. ALL STAIN TO BE TWP 116 - RUSTIC, COAT ALL MEMBERS TWO (2) TIMES. STAIN COLUMNS, AND TRUSSES, DO NOT STAIN 3X T&G ROOF DECK.
- I. UNDERSIDE OF 3X WOOD T&G ROOF DECKING TO RECEIVE TWO (2) COATS OF CLEAR GLOSS, UV RESISTANT, SPAR URETHANE.
- D. ALL BOLTS, NUTS, FENDER AND LOCK WASHERS TO BE HOT-DIPPED GALVANIZED, ADD ONE LOCK WASHERS TO ALL BOLT ASSEMBLIES.
- E. MORTAR TO BE WHITE BASE, BUFF COLOR.
- F. COVER ENTIRE 2X10 DECKING STRUCTURE WITH SELF-ADHERED DECK-PROTECT FLASHING.

CONSULTANT:

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STAGE SECTION AND DETAILS  
ARCHERY BUILDING AND COURTYARD IMPROVEMENTS FOR:  
**DNR FAIRGROUNDS**

DES MOINES, IA 50317  
3000 EAST GRAND AVE.

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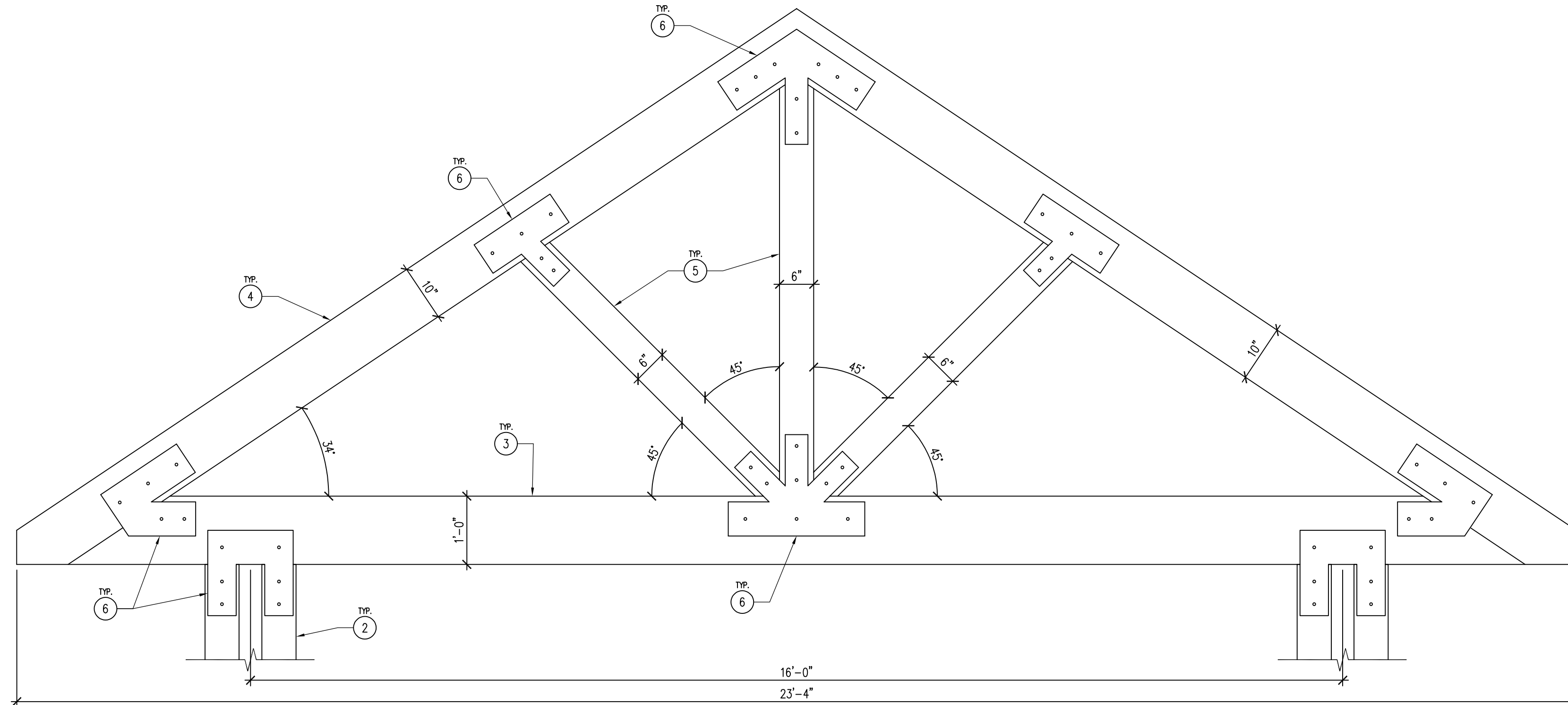
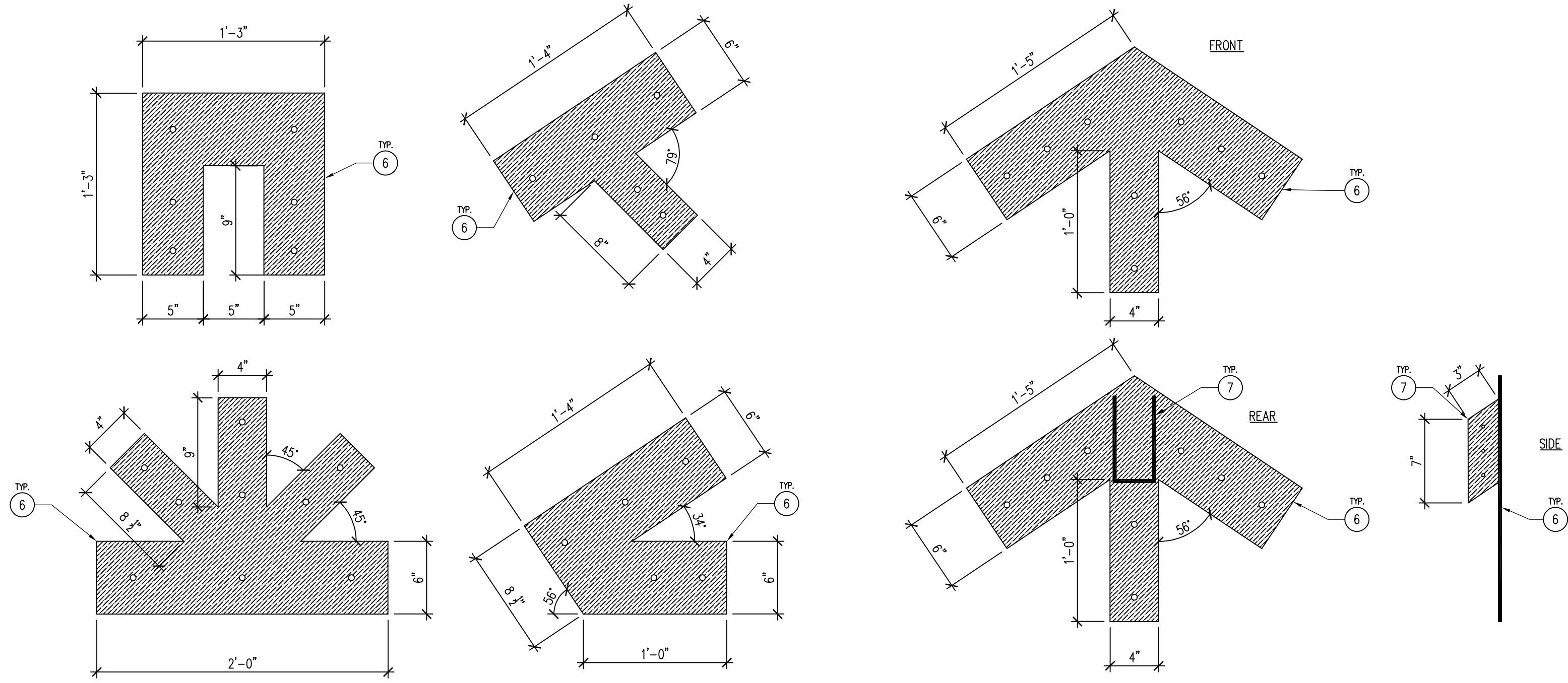
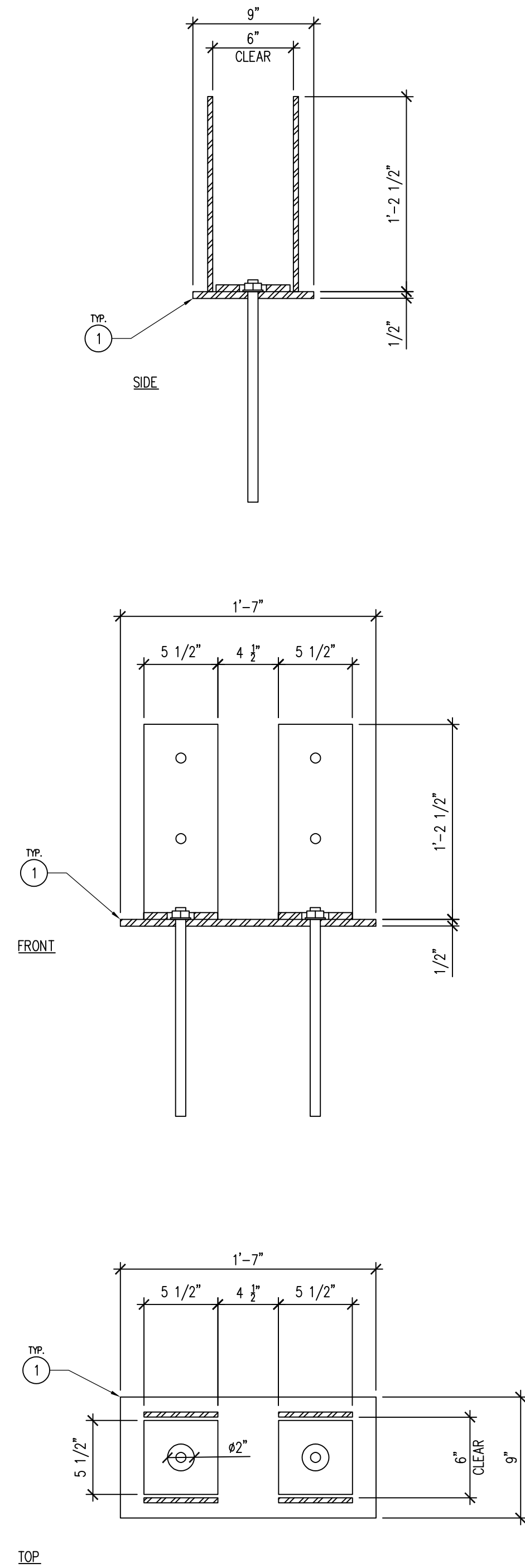
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24-05-77-01  
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11.07.2023

SHEET NO:

**A-401**





KEYNOTES	
1.	3/8" THICK STEEL COLUMN BASE PLATE WITH 3/8" THICK VERTICAL CONNECTOR TONGUES. WELD 5.5" X 5.5" X 1/2" THICK COLUMN PLATE CENTERED BEHIND STEEL VERTICAL BRACKET TONGUES TO HOLD WOOD COLUMN ABOVE BOTTOM PLATE. WITH 2" DIAMETER HOLE FOR ANCHOR BOLT, REFER TO DETAIL 03/A-402. POWDER COAT BASE PLATE BLACK. 3/4" X 16" LONG ANCHOR BOLTS TO BE UNDER COLUMNS. EPOXY SET ANCHOR BOLTS INTO CONCRETE BASE. LEVEL PLATE.
2.	6X6 ROUGH-SAWN DOUGLAS FIR COLUMN, STAIN WITH TWO (2) COATS TWP 116. CONNECT TO BASE PLATE WITH TWO (2) - 3/4" DIAMETER, HOT-DIPPED GALVANIZED HEX-HEAD BOLTS WITH FENDER WASHERS BOTH SIDES, NUT AND LOCK WASHER.
3.	4X12 ROUGH-SAWN DOUGLAS FIR TRUSS BOTTOM CHORD, STAIN TWO (2) COATS TWP 116.
4.	4X10 ROUGH-SAWN DOUGLAS FIR TRUSS TOP CHORD, STAIN TWO (2) COATS TWP 116.
5.	4X6 ROUGH-SAWN DOUGLAS FIR TRUSS WEB, STAIN TWO (2) COATS TWP 116.
6.	1" OVERSIZED MILD-STEEL TRUSS BRACKET, POWDER COAT BLACK. ALL HARDWARE TO BE 3/4" DIAMETER, HOT-DIPPED GALVANIZED HEX-HEAD BOLTS WITH FENDER WASHERS BOTH SIDES, NUT AND LOCK WASHER. BRACKETS TO BE PLACED ON BOTH SIDES OF TRUSS.
7.	STEEL SADDLE FOR DOUBLE 2X8 RIDGE BEAM.

GENERAL NOTES	
A.	REFER TO FINISH, DOOR & WINDOW SCHEDULE, SHEET A-600.
B.	REFER TO REFLECTED CEILING PLAN FOR CEILING HEIGHTS, SHEET A-110.
C.	REFER TO INDEX SHEET FOR WALL TYPES, SHEET A-002.
D.	FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION, SHEET A-101.

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TRUSS AND BRACKET DETAILS  
ARCHERY BUILDING AND COURTYARD IMPROVEMENTS FOR:  
DNR FAIRGROUNDS

DES MOINES, IA 50317  
3000 EAST GRAND AVE.

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SHEET No:

A-402





04 DNR PAVILION – UPSTAIRS EXISTING CONDITIONS  
SCALE: NTS



03 DNR PAVILION – UPSTAIRS EXISTING CONDITIONS  
SCALE: NTS



02 DNR PAVILION – UPSTAIRS EXISTING CONDITIONS  
SCALE: NTS



01 DNR PAVILION – UPSTAIRS EXISTING CONDITIONS  
SCALE: NTS

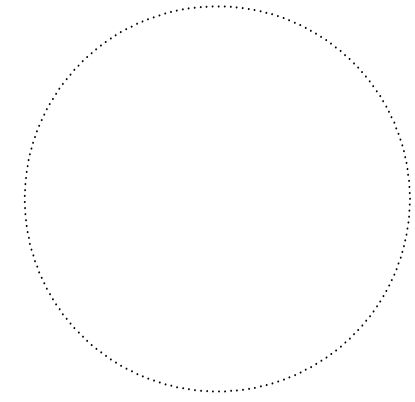
KEYNOTES

1. ABATE / REMOVE ALL LEAD BASED PAINT AND MATERIALS WITHIN THE UPPER FLOOR OF THE DNR PAVILION BUILDING. FOLLOW EPA CRF-745 AND ALL OSHA WORK SAFETY REQUIREMENTS, LEAD ABATEMENT CONTRACTOR TO BE CERTIFIED AND LICENSED TO WORK IN IOWA.
2. PAINT ALL WALL SURFACES TWO (2) COATS OF PNT-1, REFER TO SHEET A-600.
3. 30X60 OPENING 8'-2" – 9'-4", HEAVY-DUTY STEEL ATTIC STAIR WITH 570# LOAD CAPACITY MINIMUM. RAINBOW G3075-9 OR APPROVED EQUAL. INSTALL STAIR AND SCUTTLE HOLE TO MANUFACTURER'S INSTRUCTIONS. FINAL LOCATION TO BE DETERMINED BY DNR INSPECTOR.

GENERAL NOTES

- A. REFER TO FINISH, DOOR & WINDOW SCHEDULE, SHEET A-600.
- B. FIELD VERIFY ALL DIMENSIONS AND QUANTITIES PRIOR TO CONSTRUCTION.

CONSULTANT:



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DNR PAVILION BUILDING  
ARCHERY BUILDING AND COURTYARD IMPROVEMENTS FOR:  
**DNR FAIRGROUNDS**

DES MOINES, IA 50317  
3000 EAST GRAND AVE.

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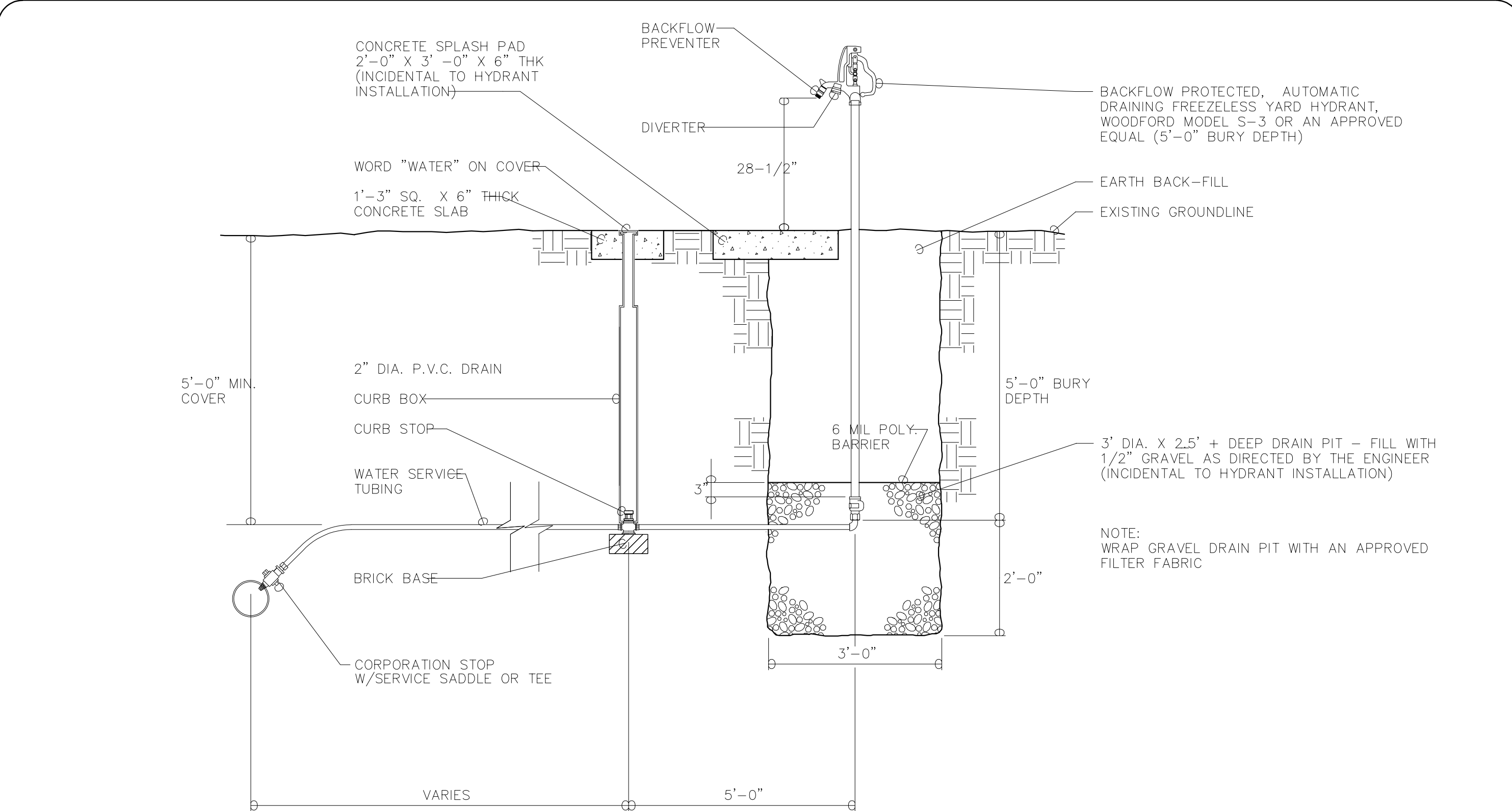
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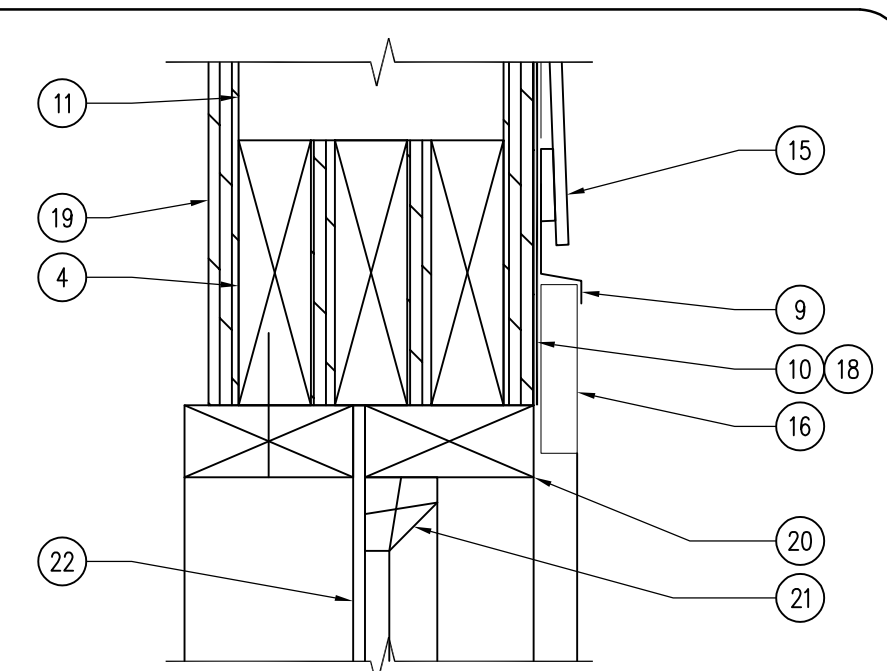


DOOR TYPES	FRAME TYPES	WINDOW TYPES
D-1 STEELCRAFT L18 EXTERIOR GALVALUME HONEY-COMB CORE	F-1 STEELCRAFT "F" SERIES EXTERIOR FRAME HOLLOW METAL	W-1 FIXED WINDOW CUSTOM CLEAR ACRYLIC PAINTED WOOD FRAME

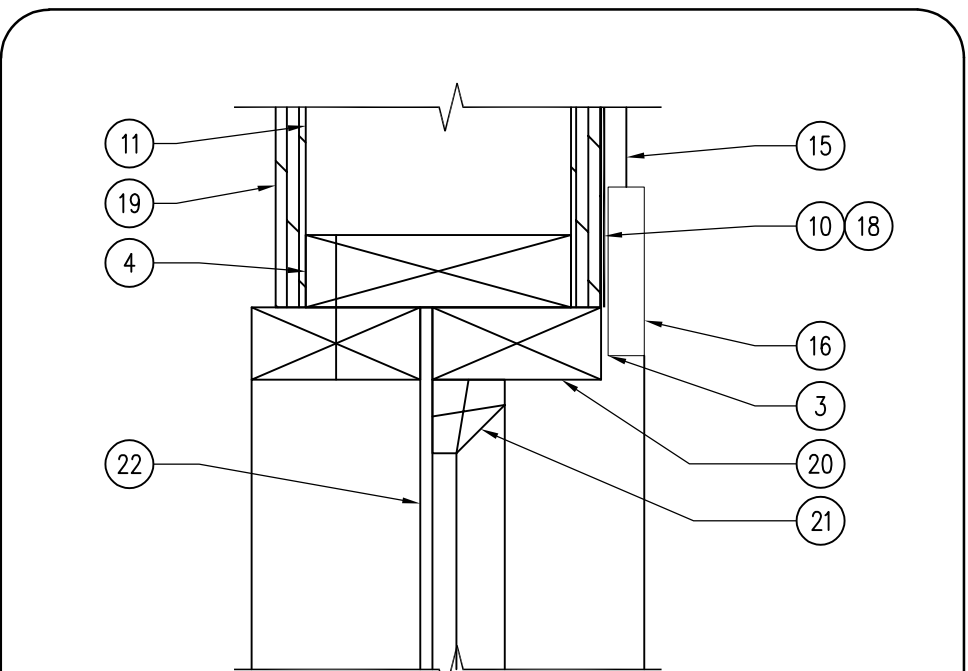
ROOM SCHEDULE										
ROOM #	ROOM NAME	FLOORING	BASE	NORTH WALL FINISH	EAST WALL FINISH	SOUTH WALL FINISH	WEST WALL FINISH	CEILING	NOTES	
100	STORAGE	CONC-1	-	PLY-1	PLY-1	PLY-1	PLY-1	PLY-1	PRIME AND PAINT TWO (2) COATS ALL PLYWOOD	
200	STAGE	CDB-1	-	LP-1	LP-1	LP-1	LP-1	-	-	



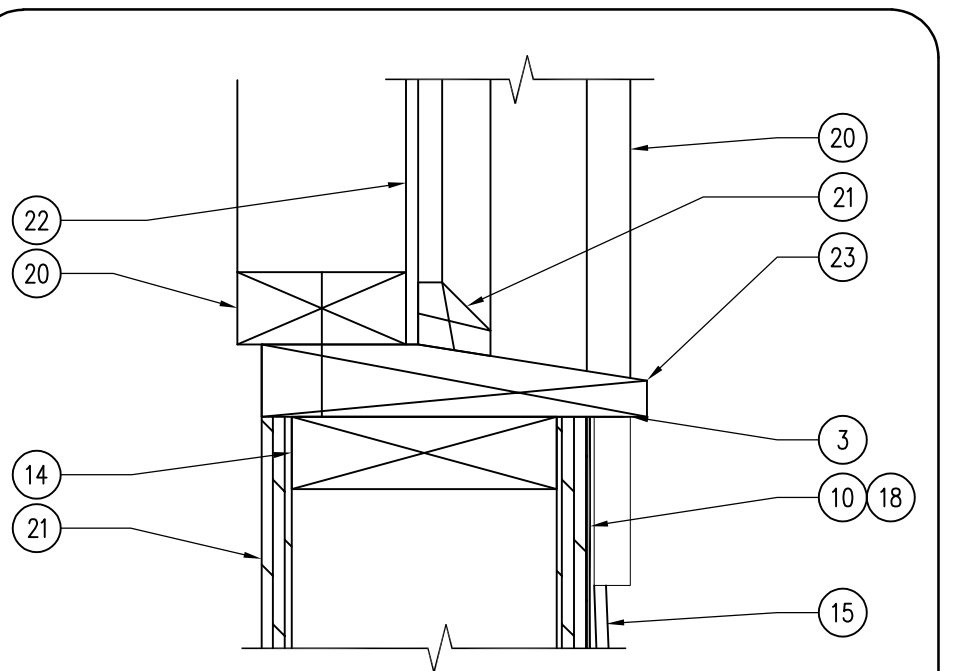
07 DETAIL -- WOODFORD S-3 YARD HYDRANT  
SCALE: NTS



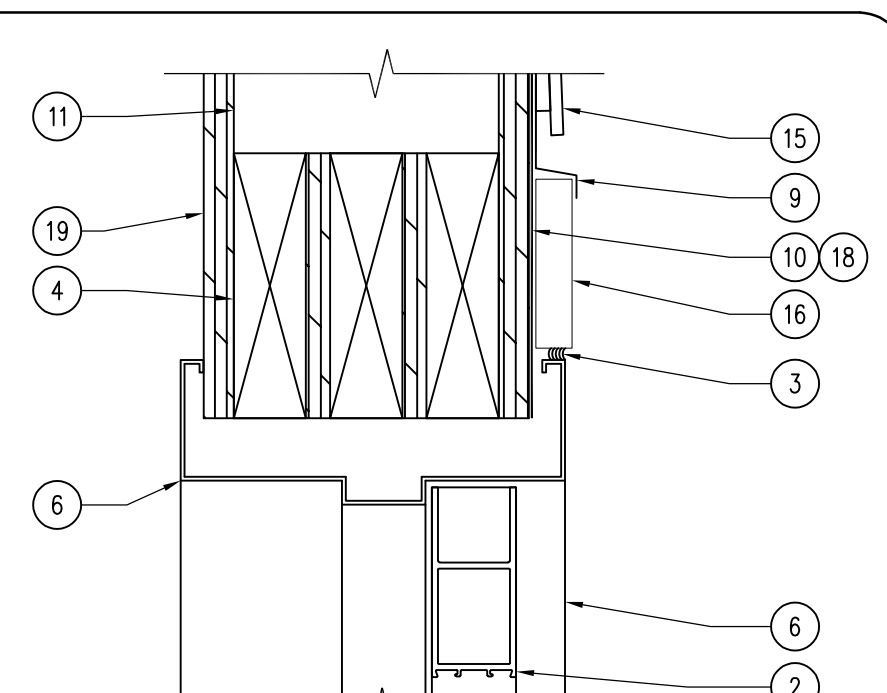
06 WINDOW DETAIL -- HEADER  
SCALE: 3" = 1'-0"



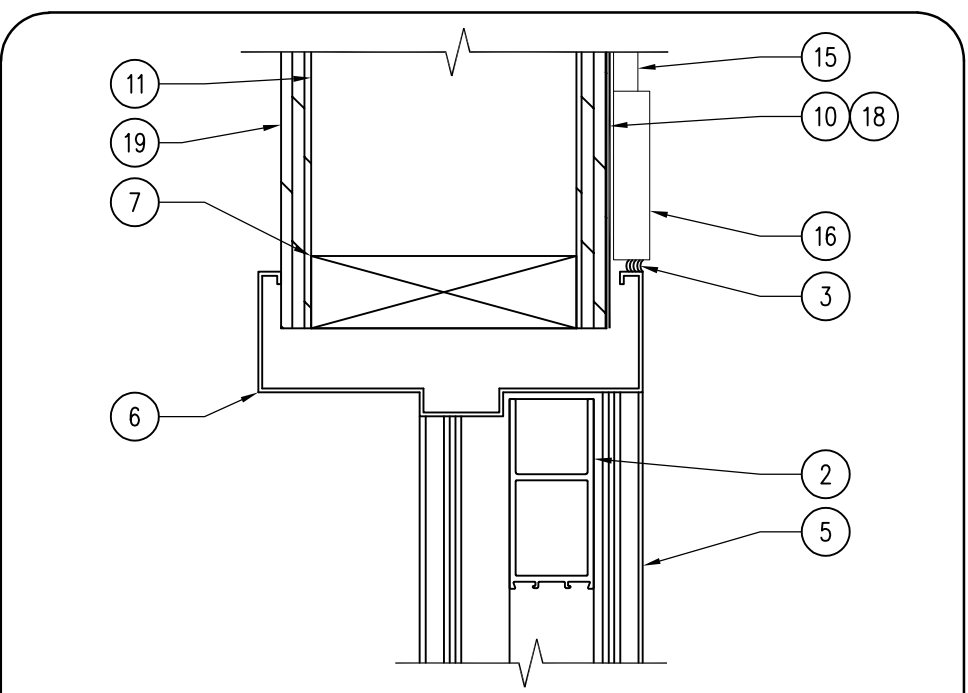
05 WINDOW DETAIL -- JAMB  
SCALE: 3" = 1'-0"



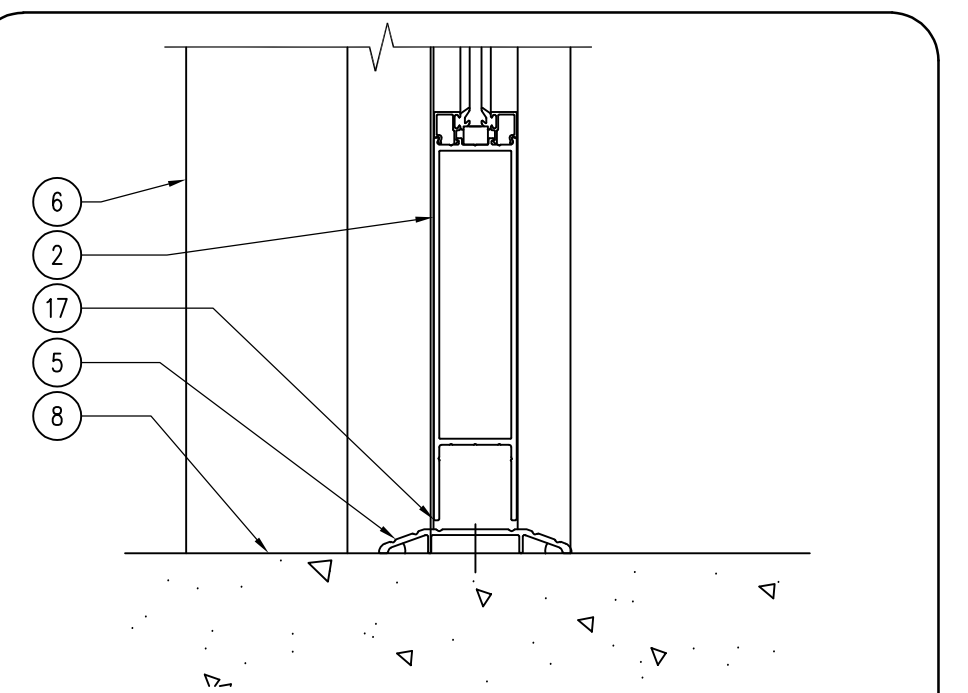
04 WINDOW DETAIL -- SILL  
SCALE: 3" = 1'-0"



03 DOOR DETAIL -- HEADER  
SCALE: 3" = 1'-0"



02 DOOR DETAIL -- JAMB  
SCALE: 3" = 1'-0"



01 DOOR DETAIL -- THRESHOLD  
SCALE: 3" = 1'-0"

- ### HARDWARE SCHEDULE
- A. ALL HARDWARE MODEL NUMBERS BASED ON SCHLAGE "ND-SERIES" LOCKSETS (ATHENS) AND "IVES" HARDWARE, OR APPROVED EQUAL.  
 B. HARDWARE FINISH TO BE "AGED BRONZE (643e)", UNLESS NOTED OTHERWISE.  
 C. CHECK ALL QUANTITIES, DIMENSIONS AND FINISHES BEFORE ORDERING.  
 D. ALL STEEL DOORS TO BE GALVANIZED. PAINT ALL STEEL DOORS AND FRAMES DARK BRONZE.  
 E. ALL EXTERIOR STEEL WALK-THROUGH DOORS TO RECEIVE DRIP-CAPS BY MANUFACTURER.  
 F. ALL OVERHEAD GARAGE DOORS BASED ON CHI COMPANY MODEL 3220, OR APPROVED EQUAL. PROVIDE KEYPAD ENTRY AT ALL DOORS, THREE KEYLESS FOBS, REQUIRED POWER LIFT, AND PUSH-BUTTON ENTRY FROM THE INTERIOR.
- HARDWARE SET NO. 1 - DOORS: 100A, 200**  
 3 EA. NRP HINGES FB191 4 1/2 X 4 1/2  
 1 EA. ENTRANCE LOCKSET ND70PD  
 1 EA. DEADBOLT B661  
 3 EA. PERIMETER SEALS BLACK GASKET  
 1 EA. THRESHOLD SEAL BLACK BROOM TYPE  
 1 EA. ADA THRESHOLD DARK BRONZE  
 1 EA. CLOSER LCN 4111

### FINISH SCHEDULE

FINISH MARK	MATERIAL	MANUFACTURER INFO		DIMENSION	COLOR	FINISH	COMMENTS
		COMPANY NAME	PRODUCT NUMBER				
<b>FLOOR FINISH</b>							
CONC-1	PENETRATING SEALER	-	-	-	CLEAR	MATTE	SILANE, SILOXANE OR SILICONATE
<b>CEILING FINISH</b>							
PLY-1	CDX PLYWOOD	-	-	1/2" 4X8	-	PNT-1	SECURE TO TRUSSES 24" O.C.
<b>INTERIOR FINISH</b>							
PLY-1	CDX PLYWOOD	-	-	1/2" - 4X8	-	PNT-1	SECURE TO WALLS 16" O.C.
PNT-1	INTERIOR PAINT	SHERWIN WILLIAMS	INTERIOR DURATION	-	TBD	FLAT	WOOD PRIMER AND 2X COATS PNT-1
<b>EXTERIOR FINISH</b>							
SR-1	SHINGLE ROOF	-	-	-	-	-	SEE ROOFING NARRATIVE
LP-1	LP SMARTSIDE - LAP SIDING	LP CORPORATION	38 SERIES CEDAR TEXT.	11.84"	PNT-4	-	2X COATS SW EXT. DURATION
LP-2	LP SMARTSIDE - TRIM	LP CORPORATION	440 SERIES CEDAR TEXT.	5.5" & 9.21"	PNT-3 & PNT-4	-	WINDOW & DOOR TRIM PNT-3
LP-3	LP SMARTSIDE - SHAKE	LP CORPORATION	38 SERIES CEDAR TEXT.	-	PNT-4	-	2X COATS SW EXT. DURATION
PNT-3	EXTERIOR PAINT	SHERWIN WILLIAMS	EXT. DURATION	-	COLOR MATCH D. BRONZE	SATIN	WINDOW AND DOOR TRIM
PNT-4	EXTERIOR PAINT	SHERWIN WILLIAMS	EXT. DURATION	-	SW6152 SUPERIOR BRONZE	SATIN	LAP SIDING AND BUILDING CORNERS
SP-2	STEEL SOFFIT PANEL	-	V-GROOVE VENTED	28GA	MATCH FASCIA	-	ALL EAVES AND OVERHANGS
T&G-1	3X6 T&G STRUCTURAL DECKING	DOUGLAS FIR	-	3X6	CLEAR	SEMI-GLOSS	TWO (2) COATS SPAR-URETHANE
CDB-1	TREX SELECT	TREX	-	1" SQUARE	WOODLAND BROWN	-	DECK, STAIRS, AND RISERS

- ### KEYNOTES
- WALL FINISH AS SCHEDULED.
  - DOOR AS SCHEDULED.
  - CONTINUOUS SEALANT, BACKER ROD WHERE NECESSARY.
  - 2X6 WOOD STUD HEADER.
  - ADA COMPLIANT THRESHOLD.
  - DOOR FRAME AS SCHEDULED.
  - 2X6 WOOD STUD JAMB.
  - CONCRETE BUILDING SLAB.
  - FLASHING AS REQUIRED.
  - CONTINUOUS WRB BUILDING WRAP.
  - 2X6 WOOD STUD WALL.
  - NOT USED.
  - NOT USED.
  - 2X6 WOOD WINDOW SILL PLATE.
  - LP SMARTSIDE SIDING, AS SCHEDULED.
  - LP SMARTSIDE TRIM, AS SCHEDULED.
  - BRUSH TYPE GASKET FOR EXTERIOR DOORS.
  - 3" OSB SHEATHING.
  - 1/2" PLYWOOD (PLY-1) WALL COVERING, PAINT AS SCHEDULED.
  - WOOD WINDOW FRAME / BRICK MOLDING. SUBMIT SHOP DRAWINGS FOR APPROVAL OF WINDOW DESIGN. CAULK ALL JOINTS WITH EXTERIOR POLYURETHANE CAULK, PRIME AND PAINT TWO (2) COATS, ENTIRE WINDOW FRAME.
  - WOOD WINDOW STOP/DRAIN PLANE, CAULK WITH EXTERIOR POLYURETHANE CAULK.
  - 1/2" CLEAR ACRYLIC SHEET SECURED IN CUSTOM WINDOW FRAME.
  - 2X6 WOOD STUD WALL.
  - WOOD WINDOW SILL, PART OF CUSTOM WINDOW.

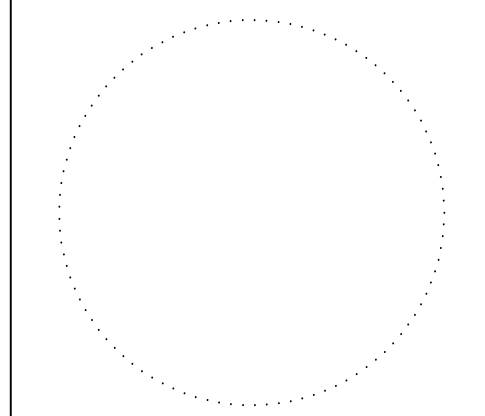
### DOOR SCHEDULE

DOOR NUMBER	DIMENSION			TYPE	GLASS	FINISH	FRAME			FIRE RATING LABEL	HARDWARE		COMMENTS		
	WIDTH	HEIGHT	THICK.				DETAILS				TYPE	FINISH		SET #	KEYSIDE ROOM NUMBER
							HEAD	JAMB	THRESHOLD						
100A	3'-0"	7'-0"	1 3/4"	D-1	-	DARK BRONZE	03/A-600	02/A-600	01/A-600	F-1	DARK BRONZE	1	EXT.	EXT. STEELCRAFT "L" SERIES	
100B	18'-0"	8'-0"	-	3220	-	POWDER COAT	-	-	-	-	-	-	-	CHI 3220 - POWDER COAT DARK BRONZE	
100C	18'-0"	8'-0"	-	3220	-	POWDER COAT	-	-	-	-	-	-	-	CHI 3220 - POWDER COAT DARK BRONZE	
200	3'-0"	7'-0"	1 3/4"	D-1	-	DARK BRONZE	03/A-600	02/A-600	01/A-600	F-1	DARK BRONZE	1	EXT.	EXT. STEELCRAFT "L" SERIES	

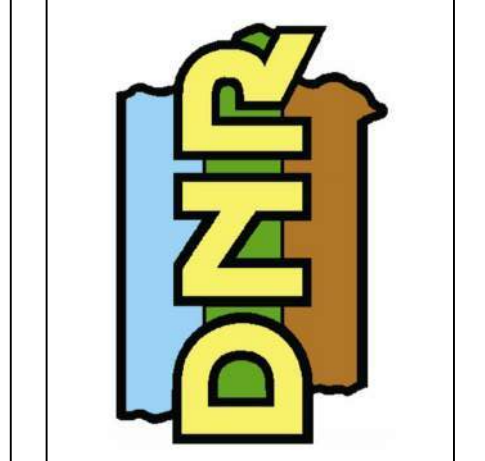
### WINDOW SCHEDULE

WINDOW TYPE	DIMENSION			TYPE	GLASS	FINISH	FRAME			QUANTITY	COMMENTS		
	WIDTH	HEIGHT	THICK.				DETAILS					TYPE	FINISH
							HEAD	JAMB	SILL				
W-1	36"	60"	-	ACRYLIC	CLEAR	06/A-600	05/A-600	04/A-600	-	PNT-3 & PNT-1	3	CUSTOM BUILT WOOD WINDOWS WITH 1/4" CLEAR ACRYLIC WINDOWS	

CONSULTANT:



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**FINISH, DOOR & WINDOW SCHEDULES**  
 ARCHERY BUILDING AND COURTYARD IMPROVEMENTS FOR:  
**DNR FAIRGROUNDS**  
 DES MOINES, IA 50317  
 3000 EAST GRAND AVE.

NO.	BY DATE	REVISION

DRAWN BY: PROJECT NUMBER: 24-05-77-01  
 CHK'D BY: DATE: 11.07.2023  
 SHEET NO:

**A-600**







CONSULTANT:

**IOWA DEPARTMENT OF  
NATURAL RESOURCES**  
ENGINEERING SERVICES - WALLACE  
BUILDING  
502 E. 9TH ST., DES MOINES, IA 50319-0034  
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**ELECTRICAL SITE REFERENCE PLAN**

ARCHERY BUILDING AND COURTYARD IMPROVEMENTS FOR:  
**DNR FAIRGROUNDS**

DES MOINES, IA 50317  
3000 EAST GRAND AVE.

NO. BY REVISION  
DATE

DRAWN BY: PROJECT NUMBER:  
DEB 24-05-77-01

CHK'D BY: DATE:  
JTL 11.07.2023

SHEET No:

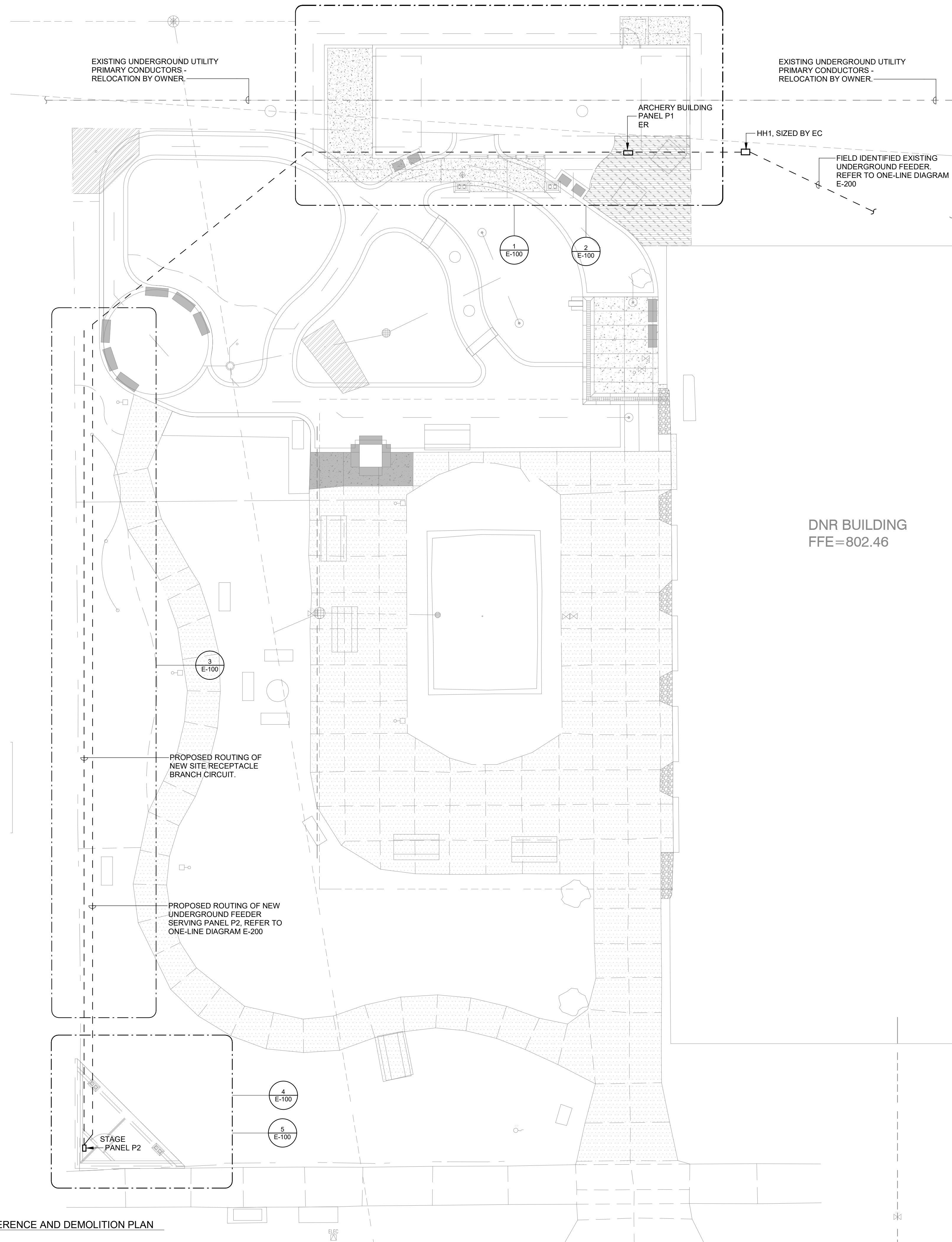
**E-001**

SITE NOTES - ELECTRICAL

- UTILITIES SHOWN ON ELECTRICAL SITE PLAN ARE SCHEMATIC ONLY. VERIFY ALL SITE CONDITIONS AND DIMENSIONS ON SITE PRIOR TO SUBMITTING BID AND ORDERING EQUIPMENT.
- REPAIR ALL AFFECTED SURFACES AND RESTORE TO EXISTING CONDITIONS AT COMPLETION OF PROJECT.
- WARNING - CALL BEFORE YOU DIG: LAW REQUIRES ANYONE DOING EXCAVATION, FENCING, PLANTING OR DRILLING TO CALL 48 HOURS IN ADVANCE. HAND DIG WITHIN 18 INCHES OF ANY LOCATE MARK OR FLAG. ONE-CALL 811.

ELECTRICAL DEMOLITION NOTES

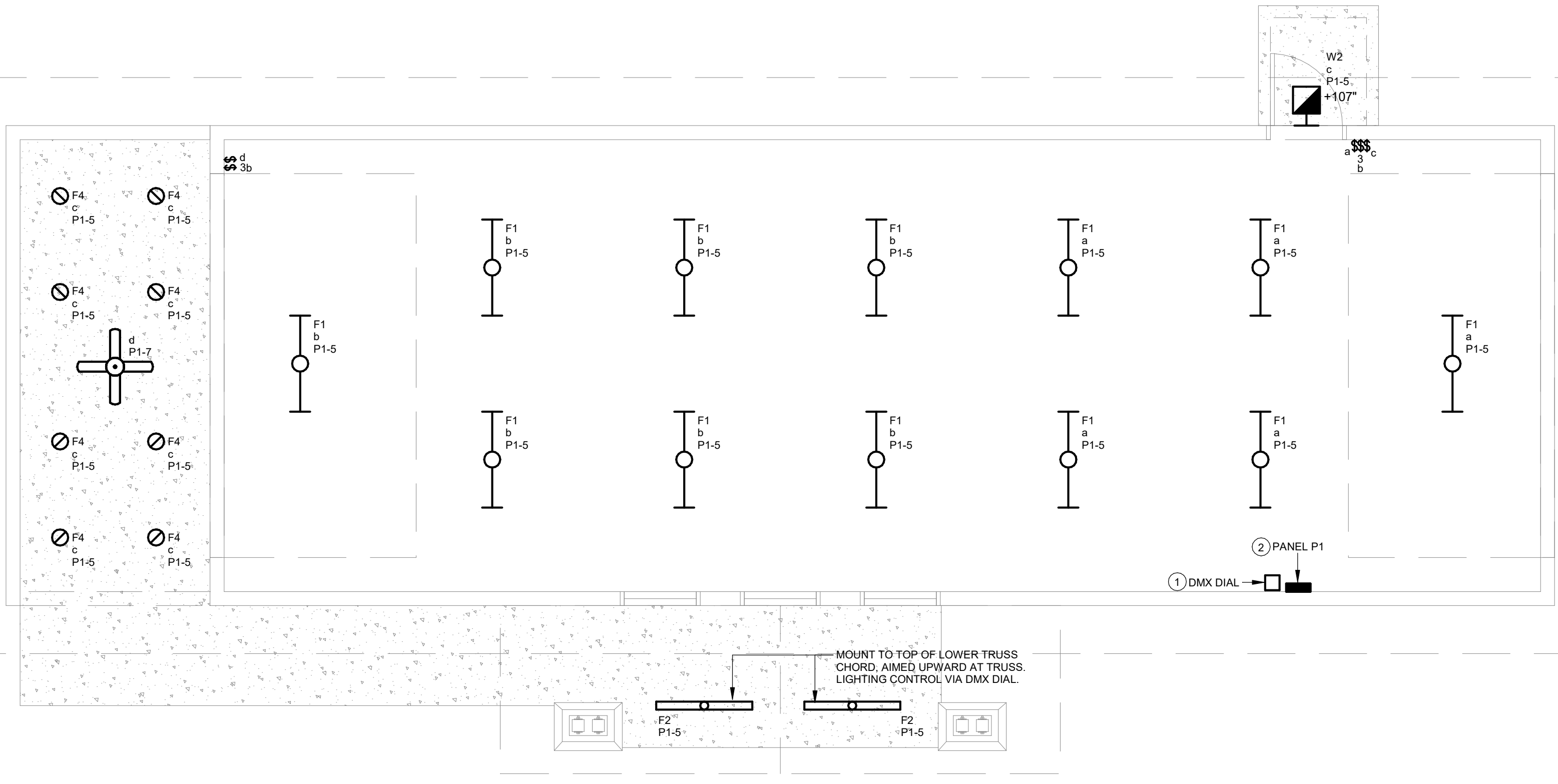
- DEMOLITION DRAWINGS PRESENT LAYOUT OF EXISTING CONDITIONS AND MAJOR ELECTRICAL ITEMS. THEY ARE NOT TO BE CONSTRUED AS COMPLETE IN REPRESENTATION OF ACCESSORIES AND INCIDENTALS TO BE REMOVED, REPLACED, OR REWORKED. NOR SHOULD ACCESSIBILITY BE INFERRED. THE CONTRACTOR IS RESPONSIBLE TO FAMILIARIZE THEMSELVES WITH THE BUILDING, SITE AND EXISTING CONDITIONS, PRIOR TO THE SUBMITTING OF A BID FOR THIS PROJECT.
- REMOVE ELECTRICAL FACILITIES AND CLEAR THE AREA TO RECEIVE THE NEW WORK TO BE PROVIDED UNDER THIS CONTRACT.
- THIS ELECTRICAL DEMOLITION DRAWING SHOWING EXISTING CONDITIONS HAS BEEN PREPARED BASED ON FIELD OBSERVATION AND ORIGINAL DRAWINGS. ADDITIONAL COMPONENTS MAY EXIST WHICH DO NOT SHOW, AND SUCH ITEMS SHALL BE DEALT WITH IN A MANNER SIMILAR TO THOSE ITEMS WHICH DO SHOW. CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS.
- CONDUITS, BOXES, ETC., SHALL BE REMOVED AS REQUIRED BY WALL AND CEILING DEMOLITION AND REMOVALS. WIRING SHALL BE REMOVED. ALL WIRING FOR THE REMODELED AREAS SHALL BE NEW UNLESS SPECIFICALLY NOTED OTHERWISE. ALL BRANCH CIRCUITS TO BE DISCONNECTED SHALL BE IDENTIFIED AS TO LOCATION OR ITEM SERVED BEFORE DISCONNECTING. CIRCUITS SERVING AREAS BEYOND THE IMMEDIATE DEMOLITION AREA SHALL BE MAINTAINED.
- CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH EXISTING ELECTRICAL SYSTEM WHICH WILL BE AFFECTED BY THE DEMOLITION WORK. CONTRACTOR SHALL OBTAIN PERMISSION FROM OWNER'S REPRESENTATIVE TO SHUT OFF SERVICES OR SYSTEMS WHICH MAY AFFECT OTHER AREAS BEYOND THE LIMITS OF THE IMMEDIATE DEMOLITION AREA. SUCH PERMISSION WILL BE GRANTED ONLY AFTER OWNER'S REPRESENTATIVE IS INFORMED OF THE REASON FOR AND DURATION OF THE SHUTDOWN AND IS SATISFIED THAT THE SHUTDOWN CAN BE MADE WITH AS LITTLE INCONVENIENCE TO OTHER AREAS AS POSSIBLE.
- PANELBOARDS, DISCONNECTS, FIXTURES, WIRING DEVICES, SIGNAL DEVICES, ETC., SHOWN ON PLANS SHALL BE REMOVED UNLESS NOTED OTHERWISE. REMOVAL SHALL BE DONE IN A TIMELY MANNER IN ACCORDANCE WITH THE GENERAL DEMOLITION WORK. COORDINATE WITH THE OWNER AND OTHER CONTRACTORS.
- ABBREVIATIONS:  
E - EXISTING ITEM TO REMAIN  
ER - NEW LOCATION OF EXISTING ITEM  
N - NEW ITEM IN EXISTING LOCATION  
R - EXISTING ITEM TO BE REMOVED, PATCH AND/OR COVER  
RN - REPLACE EXISTING WITH NEW  
RR - EXISTING ITEM TO BE REMOVED AND RELOCATED



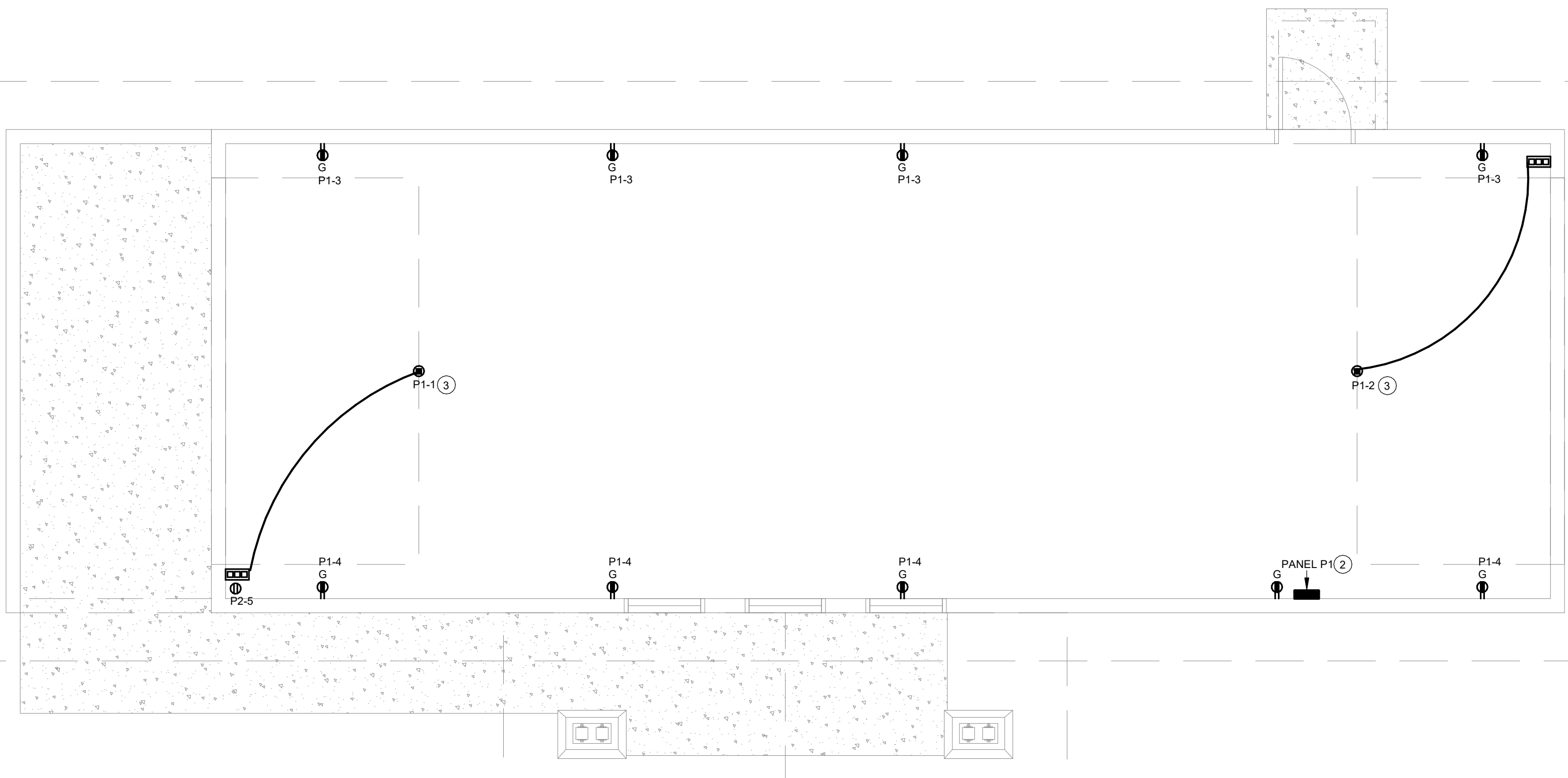
**1** ELECTRICAL SITE REFERENCE AND DEMOLITION PLAN  
1" = 10'-0"

NOT FOR CONSTRUCTION - REVIEW ONLY





1 ARCHERY LIGHTING PLAN  
1/4" = 1'-0"



2 ARCHERY POWER PLAN  
1/4" = 1'-0"

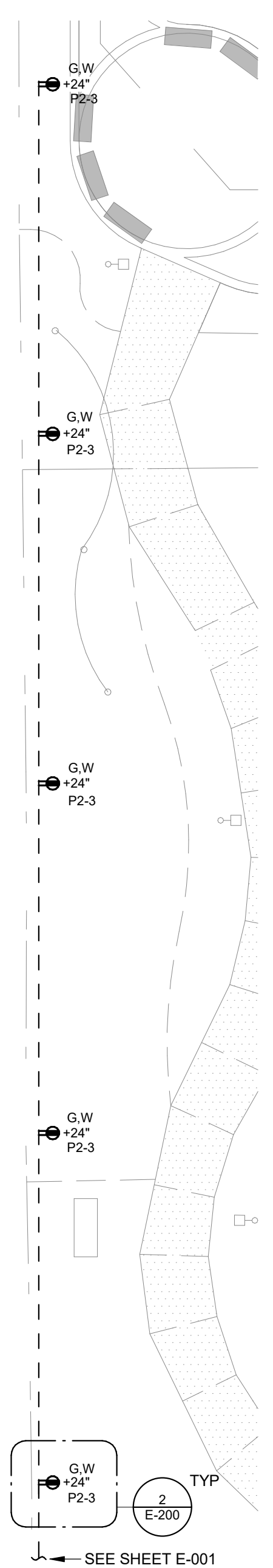
3 ELECTRICAL SITE PLAN - WEST FEST  
1" = 10'-0"

- SITE NOTES - ELECTRICAL**
- UTILITIES SHOWN ON ELECTRICAL SITE PLAN ARE SCHEMATIC ONLY. VERIFY ALL SITE CONDITIONS AND DIMENSIONS ON SITE PRIOR TO SUBMITTING BID AND ORDERING EQUIPMENT.
  - REPAIR ALL AFFECTED SURFACES AND RESTORE TO EXISTING CONDITIONS AT COMPLETION OF PROJECT.
  - WARNING - CALL BEFORE YOU DIG: LAW REQUIRES ANYONE DOING EXCAVATION, FENCING, PLANTING OR DRILLING TO CALL 48 HOURS IN ADVANCE. HAND DIG WITHIN 18 INCHES OF ANY LOCATE MARK OR FLAG. ONE-CALL 811.

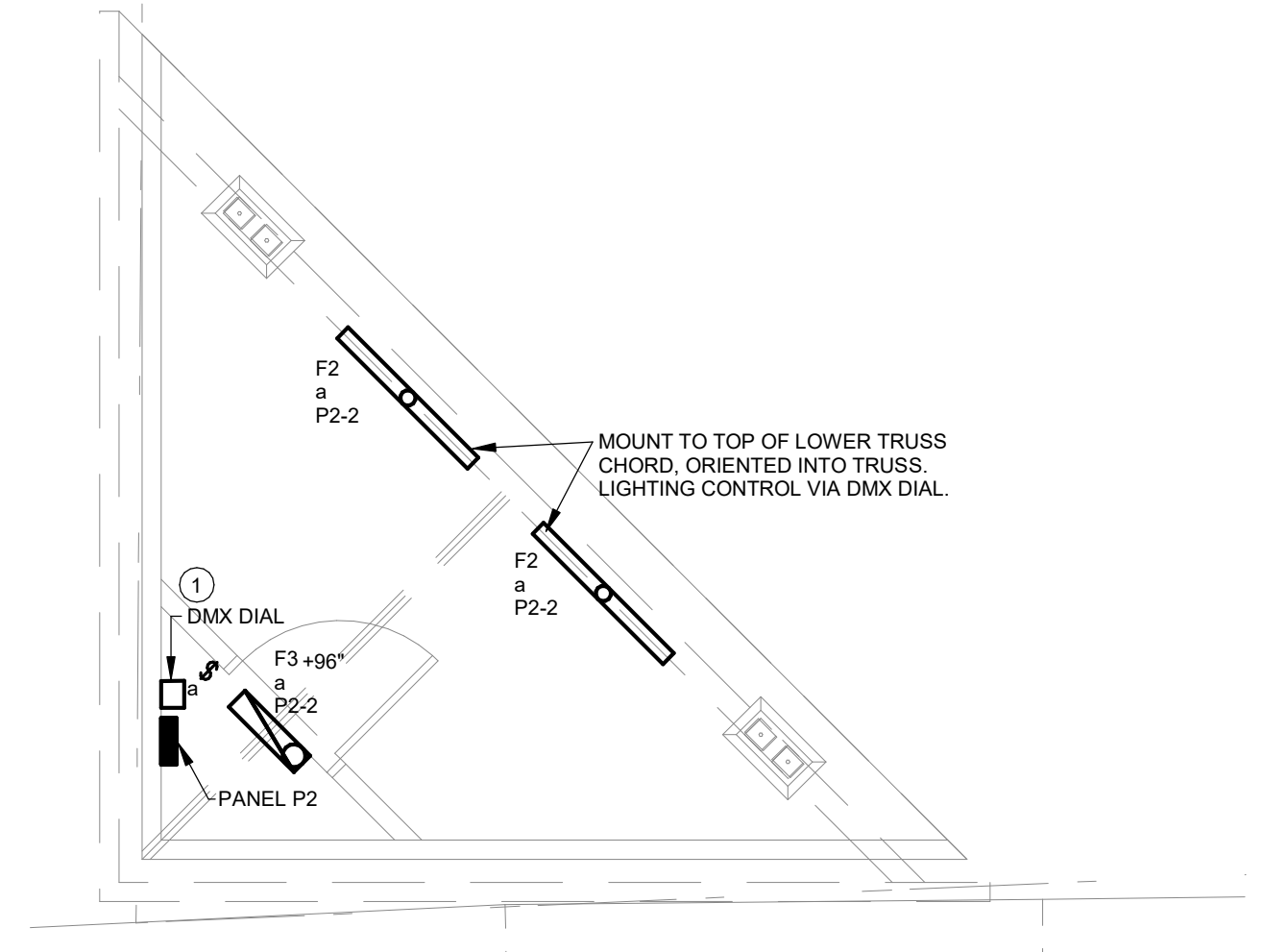
- LIGHTING GENERAL NOTES**
- COORDINATE LOCATION/INSTALLATION OF ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE BUT NOT BE LIMITED TO: BUILDING STRUCTURE, SHEET METAL, LIGHT FIXTURES, CONDUITS, ETC. REFER TO ALL GENERAL, ARCHITECTURAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.

- POWER GENERAL NOTES**
- COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE BUT NOT BE LIMITED TO: BUILDING STRUCTURE, SHEET METAL, PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, ETC. REFER TO ALL GENERAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
  - COORDINATE ELECTRICAL REQUIREMENTS FOR MECHANICAL UNITS WITH M.C. AND FINAL MECHANICAL SHOP DRAWINGS.
  - PROVIDE PENETRATIONS REQUIRED FOR ROUTING RACEWAYS THROUGH THE BUILDING. COORDINATE FIRE RATED WALL PENETRATIONS AND PROVIDE CONDUIT SLEEVES AND FIRE STOPPING TO MAINTAIN RATING.

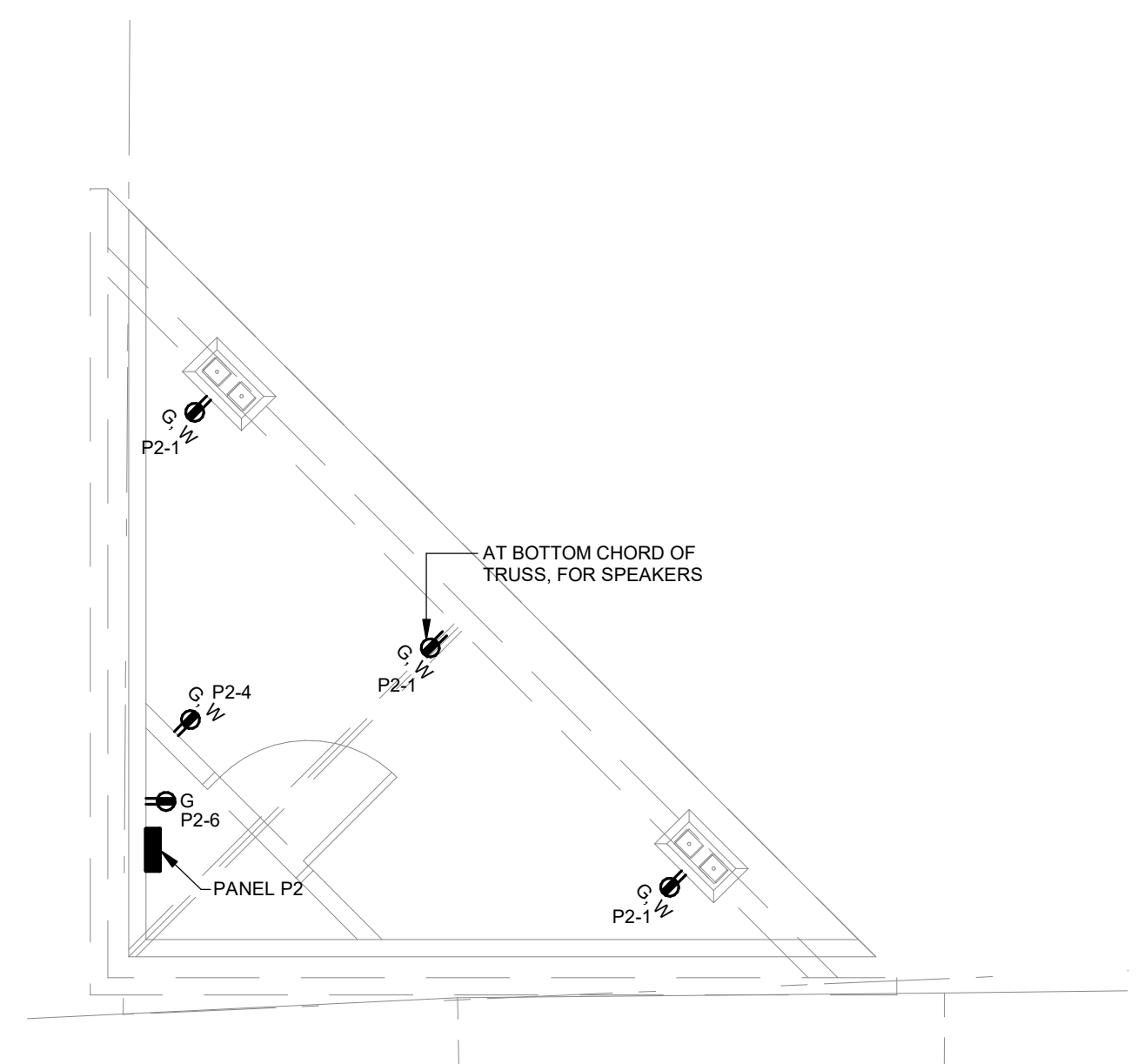
- KEYNOTES**
- PROVIDE WALL MOUNTED DMX CONTROLLER MODEL #DI-DMX-WIFI-WMUS-3Z-WH, OR APPROVED EQUAL, TO CONTROL LUMINAIRE TYPE F2.
  - NEW PANELBOARD USING EXISTING SITE SERVICE FEEDER. REFER TO SITE PLAN E-001. FIELD COORDINATE FINAL ROUTING AND SPLICE REQUIREMENTS.
  - OVERHEAD DOOR MOTORIZED CONTROLLER. INSTALL DEVICES PER MANUFACTURER INCLUDING ALL LOW VOLTAGE SENSORS AND SWITCHES. PROVIDE EQUIPMENT DISCONNECT WHERE NECESSARY.



4 STAGE LIGHTING PLAN  
1/4" = 1'-0"

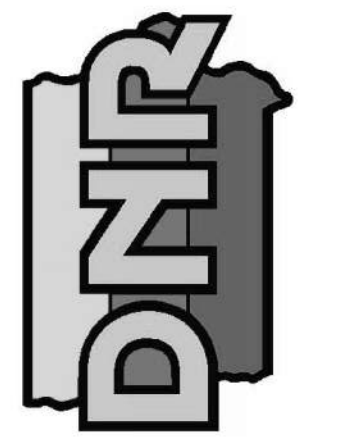


5 STAGE POWER PLAN  
1/4" = 1'-0"



NOT FOR CONSTRUCTION - REVIEW ONLY

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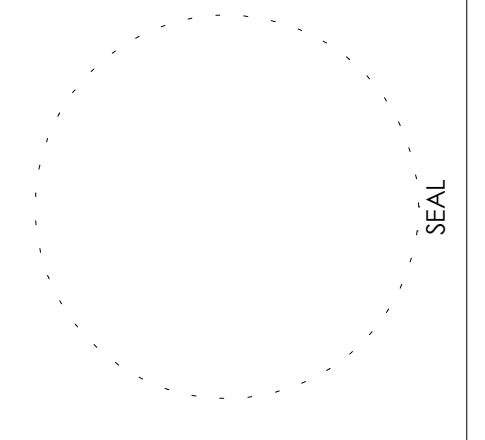
**ENLARGED ELECTRICAL PLANS**  
ARCHERY BUILDING AND COURTYARD IMPROVEMENTS FOR:  
**DNR FAIRGROUNDS**

NO.	BY DATE	REVISION

DRAWN BY: **DEB** PROJECT NUMBER: **24-05-77-01**  
CHK'D BY: **JTL** DATE: **11.07.2023**

SHEET No: **E-100**

CONSULTANT:  
**KCL**  
ENGINEERING  
300 4th St  
West Des Moines, IA  
50265  
515-724-7938



DES MOINES, IA 50317  
3000 EAST GRAND AVE.



**LIGHTING FIXTURE SCHEDULE**

**NOTES:**

- ALL FIXTURES SHALL BE U.L. OR SIMILARLY LISTED.
- INCLUDE A MINIMUM 1 YEAR WARRANTY FOR LIGHTING FIXTURES, WHERE NOT OTHERWISE SPECIFIED.
- REFER TO ARCHITECTURAL DOCUMENTS FOR EXACT MOUNTING LOCATIONS, DETAILS, AND CONFIGURATIONS OF ALL LUMINAIRES. IF ARCHITECTURAL DRAWINGS DO NOT CLARIFY EXACT MOUNTING LOCATION OR DETAIL, ISSUE AN RFI FOR ARCHITECT TO SPECIFICALLY CLARIFY PRIOR TO FIXTURE ROUGH-IN.
- VERIFY COMPATIBILITY OF LIGHT FIXTURES WITH CEILING MATERIAL, ADJACENT CONSTRUCTION, AND ADJACENT FINISHES PRIOR TO SHOP DRAWINGS SUBMITTAL. NOTIFY THE ARCHITECT OF ANY CONFLICTS WITH THE PROPOSED INSTALLATION.
- CONTRACTOR IS RESPONSIBLE FOR ALL MISCELLANEOUS HARDWARE NECESSARY TO INSTALL AND SUPPORT THE LUMINAIRES.
- AIM AND TARGET ADJUSTABLE INTERIOR AND EXTERIOR LIGHT FIXTURES UNDER THE OBSERVATION AND IN COMPLIANCE WITH RECOMMENDATIONS OF THE ARCHITECT. INCLUDE LABOR AND MATERIAL COSTS MADE NECESSARY BY THIS REQUIREMENT.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND FILLING OUT ALL UTILITY REBATE FORMS FOR OWNER.

DESIGNED BY: DLB

TYPE	MANUFACTURER	MODEL	DESCRIPTION	FINISH	LUMENS	CRI	DRIVER TYPE	SOURCE-CCT	VOLTAGE	LOAD-VA	APPROVED EQUALS
F1	CURRENT LIGHTING	HEM-4-40K-ML-RFA-E-U-XEHC	SURFACE MOUNT UTILITY FIXTURE 4' LENGTH, CURVED RIBBED LENS, GENERAL DISTRIBUTION, RATED TO 40 C DEGREES, IP65 RATED	WHITE	1500	80	NON-DIMMING	LED-3000K	120 V	47 VA	LITHONIA LIGHTING, METALUX, OR AS APPROVED BY ENGINEER
F2	KELVIX LIGHTING	Z7AC-4-15-C-X-30-50-L3-BK-LV // Z-7AC-FML-20 // Z-7AC-FMC-1 // Z-7AC-END-DMX	EXTERIOR RATED SURFACE MOUNT NOMINAL 3" X 3" WIDE LINEAR LUMINAIRE, 50 DEGREE RGBW FLOOD, ENCLOSED AND GASKETED LENS, IP66 RATED, PROVIDE LEADER CABLE, JUMPER CABLES, END CAP, AND 2" STAND OFF MOUNTING ACCESSORIES FOR A COMPLETE SYSTEM AND INSTALLATION. COORDINATE DMX CONTROLLER LOCATIONS WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN. PROVIDE INITIAL STARTUP AND PROGRAM (B) COLOR AND STATIC WHITE SCENES AS SELECTED BY OWNER.	BLACK	2400	80	DMX DIMMABLE	LED-RGBW	120 V	60 VA	LLI+FRESCO CONTROL, LUMINII, ACROLYTE, Q-TRAN, CORE, OR AS APPROVED BY ENGINEER
F3	LITHONIA LIGHTING	BLWP2-8L-PDSM-GZ10-LP830	WALL MOUNT UTILITY FIXTURE 2' LENGTH, PRISMATIC LENS, WIDE DISTRIBUTION	WHITE	800	80	0-10V DIMMING TO 10%	LED-3000K	120 V	17 VA	HUBBELL, METALUX, OR AS APPROVED BY ENGINEER
F4	COOPER HALO	HOUSING HC5-07-D010 // ENGINE HM6-0525-830 // TRIM 61-WD-WB	RECESSED 6" ROUND BAFFLE DOWNLIGHT, WET LOCATION UNDER CANOPY, WHITE TRIM RING	WHITE	750	80	NON-DIMMING	LED-3000K	120 V	8 VA	GOTHAM, PRESCOLITE, OR AS APPROVED BY ENGINEER
W2	CURRENT LIGHTING	TRP1-24L-15-3K9-4W-UNV-DBT-EH	EXTERIOR RATED TRAPEZOIDAL WALL PACK, FULL CUT-OFF OPTICS, COLD-WEATHER RATED EMERGENCY BATTERY PACK, IP66 RATED	BRONZE	700	80	NON-DIMMING	LED-3000K	120 V	15 VA	LITHONIA LIGHTING, MCRAW EDISON, OR AS APPROVED BY ENGINEER

**BRANCH PANEL: P1**

LOCATION: ARCHERY BUILDING  
 SUPPLY FROM: IDNR BUILDING  
 MOUNTING: SURFACE  
 ENCLOSURE: TYPE 1

VOLTAGE: 120/240 SINGLE  
 PHASES: 1  
 WIRES: 3

SCCR RATING: 10,000  
 MAINS TYPE: MCB  
 MAINS RATING: 100 A  
 MAIN BREAKER: 100 A

**NOTES:**

CIRCUIT DESCRIPTION	P	AMP	CKT NO	A	B	CKT NO	AMP	P	CIRCUIT DESCRIPTION	
GARAGE DOOR	1	20 A	1	920	920	2	20 A	1	GARAGE DOOR	
ARCHERY RECEPTACLES	1	20 A	3		720	720	4	20 A	ARCHERY RECEPTACLES	
ARCHERY LIGHTING	1	20 A	5	763	0	6	20 A	-- 1	SPARE	
FAN	1	20 A	7		100	0	8	20 A	-- 1	SPARE
SPARE	1	-- 20 A	9	0	0	10	20 A	-- 1	SPARE	
SPARE	1	-- 20 A	11			12	20 A	-- 1	SPARE	
				2603 VA	1540 VA					
				22 A	13 A					

**LEGEND:**

"G" INDICATES GFCI TYPE BREAKER.

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED...	PANEL TOTALS
LIGHTING	763 VA	125.00%	954 VA	<b>TOTAL CONN. LOAD:</b> 4143 VA
Motor	100 VA	125.00%	125 VA	
POWER	1840 VA	100.00%	1840 VA	<b>TOTAL EST. DEMAND:</b> 4359 VA
RECEPTACLE	1440 VA	100.00%	1440 VA	<b>TOTAL CONN.:</b> 17 A
				<b>TOTAL EST. DEMAND:</b> 18 A

**NOTES:**

**BRANCH PANEL: P2**

LOCATION: STAGE BUILDING  
 SUPPLY FROM: PANEL P1  
 MOUNTING: SURFACE  
 ENCLOSURE: TYPE 1

VOLTAGE: 120/240 SINGLE  
 PHASES: 1  
 WIRES: 3

SCCR RATING: 10,000  
 MAINS TYPE: MCB  
 MAINS RATING: 100 A  
 MAIN BREAKER: 50 A

**NOTES:**

CIRCUIT DESCRIPTION	P	AMP	CKT NO	A	B	CKT NO	AMP	P	CIRCUIT DESCRIPTION	
STAGE RECEPTACLES	1	20 A	1	540	137	2	20 A	1	STAGE LIGHTING	
SITE RECEPTACLES	1	20 A	3		900	180	4	20 A	RECEPTACLE	
CEILING CAMERA	1	20 A	5	180	180	6	20 A	1	RECEPTACLE	
SPARE	1	-- 20 A	7		0	0	8	20 A	-- 1	SPARE
SPARE	1	-- 20 A	9	0	0	10	20 A	-- 1	SPARE	
SPARE	1	-- 20 A	11			12	20 A	-- 1	SPARE	
				1037 VA	1080 VA					
				9 A	9 A					

**LEGEND:**

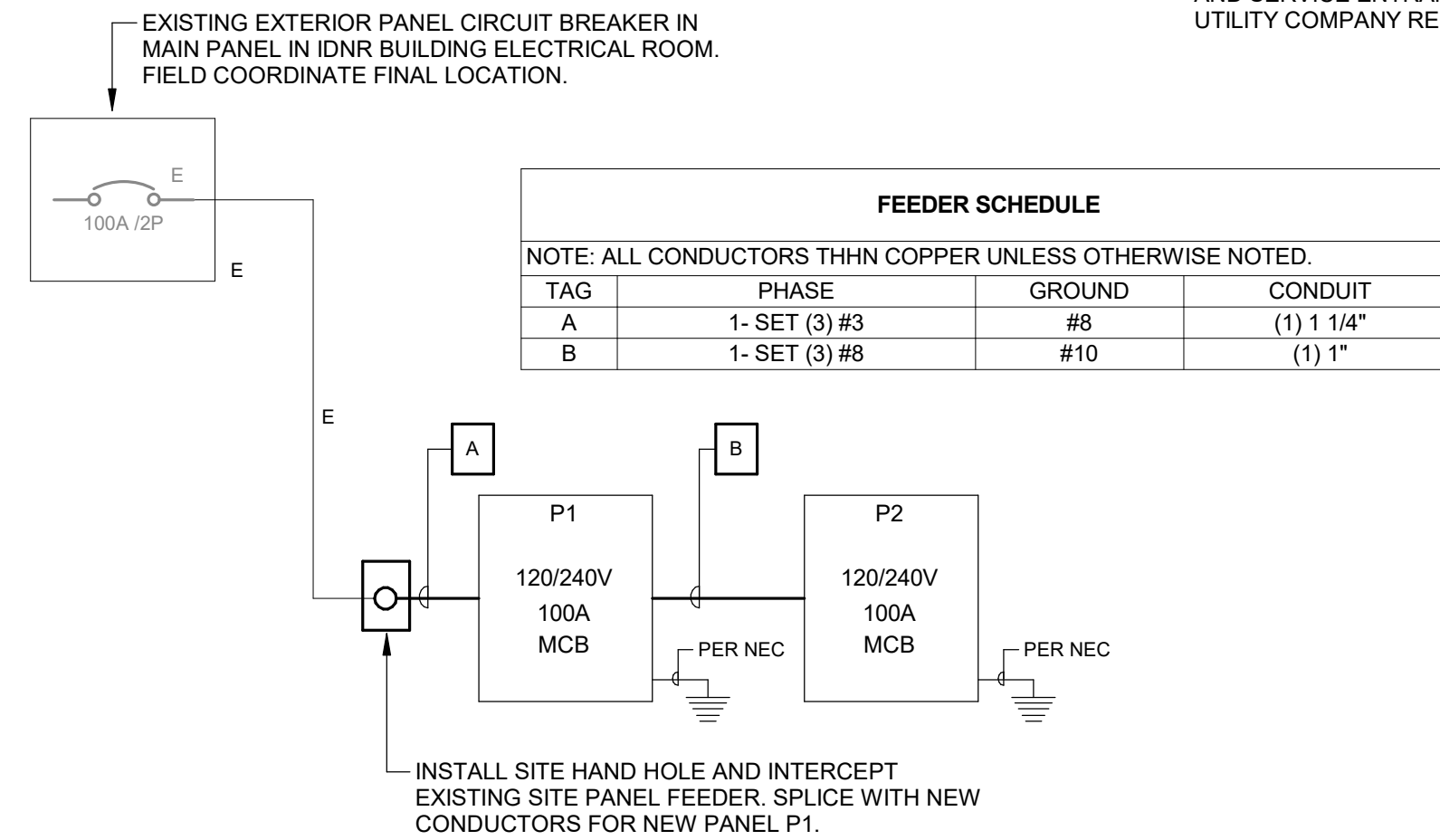
"G" INDICATES GFCI TYPE BREAKER.

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED...	PANEL TOTALS
LIGHTING	137 VA	125.00%	171 VA	<b>TOTAL CONN. LOAD:</b> 2117 VA
RECEPTACLE	1980 VA	100.00%	1980 VA	
				<b>TOTAL EST. DEMAND:</b> 2151 VA
				<b>TOTAL CONN.:</b> 9 A
				<b>TOTAL EST. DEMAND:</b> 9 A

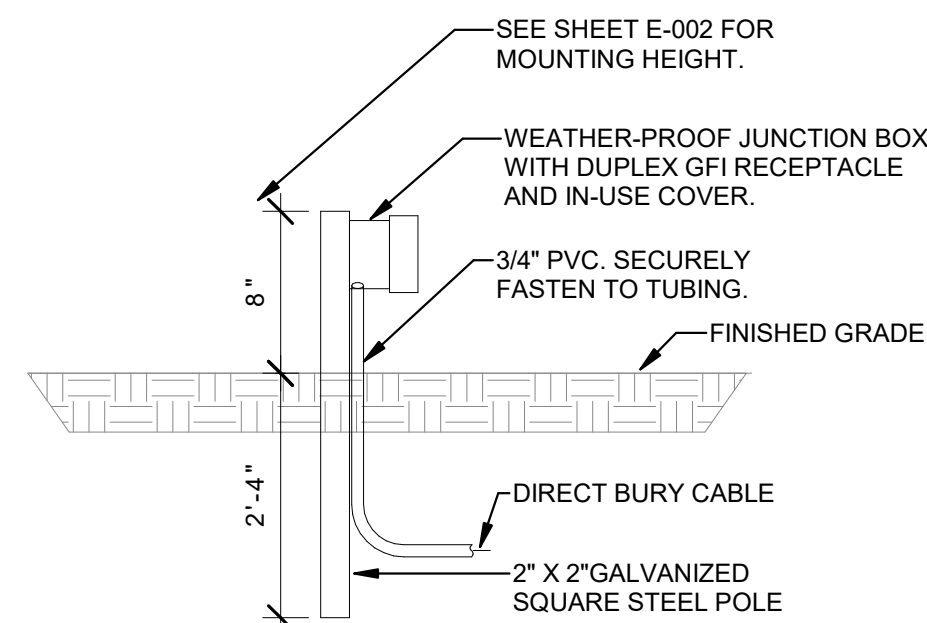
**NOTES:**

**RISER DIAGRAM GENERAL NOTES**

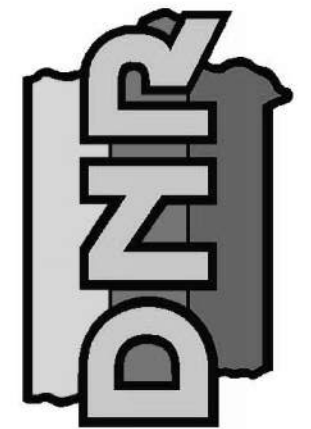
- DIAGRAM INDICATES OVERALL LAYOUT OF ELECTRICAL DISTRIBUTION SYSTEM. REFER TO FLOOR PLANS FOR EQUIPMENT LOCATIONS.
- USE COPPER CONDUCTORS UNLESS OTHERWISE INDICATED.
- MATCH NEUTRAL CONDUCTOR SIZE TO THE PHASE CONDUCTORS UNLESS OTHERWISE NOTED.
- ALL WIRING SHALL BE IN RACEWAY AS NOTED. REFER TO SPECIFICATIONS FOR CONDUIT APPLICATION REQUIREMENTS.
- INSTALL UTILITY TRANSFORMER PAD, METERING EQUIPMENT, AND SERVICE ENTRANCE FEEDERS IN ACCORDANCE WITH UTILITY COMPANY REQUIREMENTS.



1 ONE-LINE DIAGRAM NOT TO SCALE



2 GROUND MOUNT LANDSCAPE RECEPTACLE DETAIL NOT TO SCALE



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