

IMPROVEMENT PLANS FOR ESCUDILLA MOUNTAIN DWID WELL & FILL STATION

LOCATED WITHIN APN 102-64-080 IN SECTION 31, TOWNSHIP 7 NORTH, RANGE
30 EAST, G. & S.R.M., APACHE COUNTY, ARIZONA

LEGEND

LINETYPES	
SS	EXISTING PRIVATE SEWER LINE/LEACH LINE
OHE	EXISTING OVERHEAD ELECTRIC LINE
UE	EXISTING UNDERGROUND ELECTRIC LINE
---	SUBJECT PROPERTY LINE
---	EXISTING WOOD FENCE LINE
6380	EXISTING CONTOUR LINE
---	EXISTING GRAVEL DRIVE
CDM	EXISTING TELECOMMUNICATIONS LINE
X	EXISTING BARBED WIRE FENCE
---	EXISTING ADJOINING PROPERTY LINE
2"WM	PROPOSED 2" WATER LINE
6"WM	PROPOSED 6" WATER LINE
---	PROPOSED ALL WEATHER ACCESS DRIVE
UE	PROPOSED UNDERGROUND ELECTRIC LINE

SYMBOLS	
⊙	EXISTING SEPTIC VAULT LID/SEWER SERVICE
⊙	EXISTING LEACH FIELD RISER
⊙	EXISTING WELLHEAD
⊙	EXISTING ELECTRIC PEDESTAL
⊙	EXISTING POWER POLE
⊙	EXISTING PROPERTY CORNER
⊙	PROPOSED GATE VALVE
⊙	PROPOSED BLOW-OFF VALVE

HATCH PATTERNS	
▨	PROPOSED CONCRETE PAD
▨	PROPOSED BUILDING
▨	PROPOSED ALL-WEATHER ACCESS DRIVE

ESTIMATED QUANTITIES

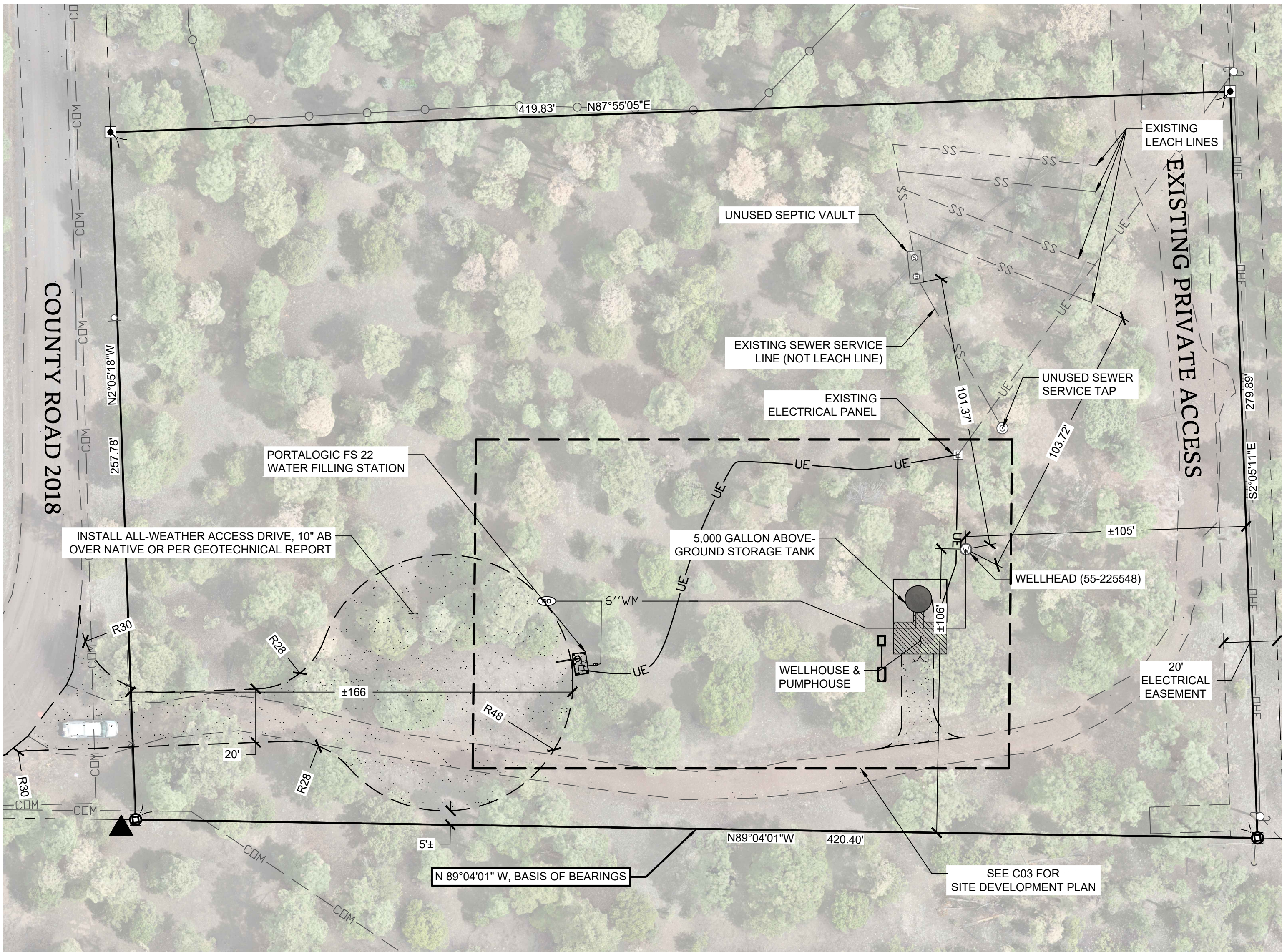
DESCRIPTION	QUANT.	UNIT
ALL-WEATHER ACCESS DRIVE	1134	SY
6" φ AWWA C-900 WATER LINE	135	LF
4" φ AWWA C-900 WATER LINE	23	LF
2" φ DUCTILE IRON WATER LINE	35	LF
6"X6"X4" TEE	1	EA
4"X2" REDUCER	1	EA
BACKFLOW PREVENTION VALVE	1	EA
6" 22.5° BEND	2	EA
BLOWOFF	1	EA
CHAIN LINK FENCE	52	LF

BENCHMARK

A rebar and plastic cap stamped "L.S. 15928" monumenting the Southwest corner of the subject property as shown hereon.
Elevation = 7848.92

BASIS OF BEARINGS (B.O.B.)

The South line of the subject property between two rebar and plastic caps stamped "L.S. 15928", bears North 89°04'01" West, and all bearings herein are relative thereto.



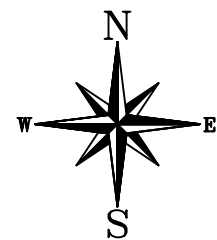
OVERALL SITE PLAN

SCALE 1" = 30'



PROJECT LOCATION

VICINITY MAP N.T.S.



OWNER

Escudilla Mountain DWID
P.O. Box 371
Nutrioso, AZ 85932

ENGINEER

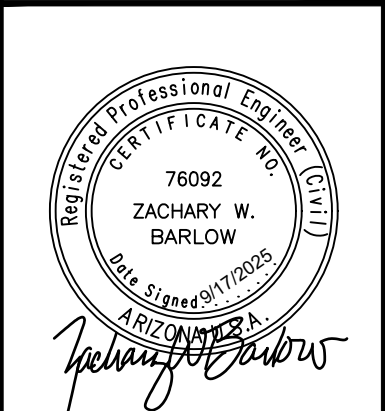
Ironsides Engineering & Development, Inc.
P.O. Box 1358
Show Low, Arizona 85902
(928)532-0880

DRAWING INDEX

SHT	DWG	DESCRIPTION
01	C01	COVER
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06	C06	WELLHOUSE DETAILS
07	C07	DETAILS
08	C08	DETAILS

REVISIONS	
NO.	DESCRIPTION

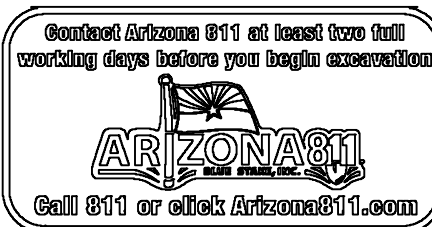
IRONSIDES
ENGINEERING & DEVELOPMENT
P.O. BOX 1358
SHOW LOW, AZ. 85902
(928) 532 - 0880



ESCUDILLA MTN DWID WELL & FILL STATION
ADEQ TECHNICAL ASSISTANCE
AZ0401349
COVER

CLIENT: ADEQ	DRAWN BY: JCL	DESIGNER: JCL	REVIEWER: ZWB	PROJECT #: 44802
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SHEET
C01
01 OF 08



GENERAL

- 1) ALL WORK SHALL CONFORM TO THE LATEST EDITION OF MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) UNIFORM STANDARD SPECIFICATIONS AND UNIFORM STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION.
- 2) STANDARD DETAILS REFER TO THE MAG STANDARD DETAILS UNLESS OTHERWISE NOTED OR MODIFIED ON PLANS.
- 3) THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THEIR RESPECTIVE AGENCIES. ARIZONA NPDES IS REQUIRED.
- 4) DISPOSAL OF ALL CONSTRUCTION DEBRIS IS CONSIDERED AN INCIDENTAL COST TO THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND LEGAL DISPOSAL OF ALL WASTE MATERIAL AND CONSTRUCTION DEBRIS SUCH AS, BUT NOT LIMITED TO OLD CULVERTS, BROKEN CONCRETE, CONSTRUCTION TRASH, ETC. OFFSITE UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- 5) PRIOR TO BIDDING THE WORK THE CONTRACTOR SHALL THOROUGHLY SATISFY HIMSELF AS TO THE ACTUAL CONDITIONS AND EARTHWORK QUANTITIES, INCLUDING SOLID ROCK. NO CLAIM SHALL BE MADE AGAINST THE OWNER/DEVELOPER, ARCHITECT, OR ENGINEER FOR ANY EXCESS OR DEFICIENCY THEREIN, ACTUAL OR RELATIVE.
- 6) ALL EXISTING UTILITY LINES SHOWN ON THE PLANS ARE FROM AVAILABLE UTILITY RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DETERMINING AND VERIFICATION OF ACTUAL FIELD LOCATIONS OF PUBLIC UTILITIES BEFORE STARTING CONSTRUCTION. CALL BLUESTAKE AT 1-602-263-1100 OR 1-800-STAKE-IT OR 811.
- 7) THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND PIPELINES, UTILITIES AND STRUCTURES IN ADVANCE OF CONSTRUCTION AND SHALL TAKE ALL PRECAUTIONS NECESSARY TO RETAIN, PROTECT, AND AVOID DAMAGE TO SUCH. THE ENGINEER AND/OR OWNER WILL NOT GUARANTEE ANY LOCATIONS SHOWN ON THE PLANS, OR THOSE OMITTED. POTHOLE IN ACCORDANCE WITH BLUESTAKE REQUIREMENTS.
- 8) THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE REMOVAL, CONNECTION TIE-INS AND/OR REPLACEMENT OF ALL EXISTING UTILITIES WITH THE RESPECTIVE UTILITY COMPANY(S).
- 9) ALL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS, CONTRACT DOCUMENTS, AND PLANS.
- 10) THE ENGINEER WAIVES ALL RESPONSIBILITY AND IS NOT LIABLE FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS AND THE DESIGN INTENT THEY CONVEY OR FOR PROBLEMS WHICH ARISE FROM FAILURE TO OBTAIN AND FOLLOW THE ENGINEER'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS.
- 11) ANY FUTURE IMPROVEMENTS SHOWN HEREON SHALL REQUIRE A SEPARATE PERMIT.
- 12) PRIOR TO CONSTRUCTION OF STAKED IMPROVEMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY AND SATISFY TO HIMSELF OF THE ACCURACY OF ALL CONSTRUCTION STAKES SET BY OWNER, ENGINEER AND/OR SURVEYOR. IF A DISCREPANCY IS FOUND BETWEEN THE ENGINEER'S PLANS OR SURVEYOR'S STAKING, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY. THE CONTRACTOR SHALL MAKE NO CLAIM AGAINST THE OWNER OR THE ENGINEER REGARDING ALLEGED INACCURACY OR BLUNDERS OF CONSTRUCTION STAKES SET BY THE OWNER, ENGINEER OR SURVEYOR.
- 13) THE ENGINEER MAKES NO REPRESENTATION OR GUARANTEE REGARDING EARTHWORK QUANTITIES OR THAT THE EARTHWORK FOR THIS PROJECT WILL BALANCE DUE TO THE VARYING FIELD CONDITIONS, CHANGING SOIL TYPES, ALLOWABLE CONSTRUCTION TOLERANCES AND CONSTRUCTION METHODS THAT ARE BEYOND THE CONTROL OF THE ENGINEER.
- 14) THE ENGINEER WILL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS OR PROGRAMS UTILIZED IN CONNECTION WITH THE WORK, AND HE WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- 15) ANY WORK AND MATERIAL NOT IN CONFORMANCE WITH THE PLANS AND SPECIFICATIONS IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
- 16) ALL EXISTING AND NEW FRAMES, COVERS, VALVE BOXES AND WATER METER BOXES SHALL BE ADJUSTED TO FINISH GRADE BY CONTRACTOR PER MAG SPECIFICATIONS, SECTION 345.
- 17) THE CONTRACTOR SHALL KEEP SUITABLE EQUIPMENT ON-HAND AT THE JOB SITE FOR MAINTAINING DUST CONTROL AND SHALL CONTROL DUST AS DIRECTED BY THE OWNERS REPRESENTATIVE.
- 18) NO JOB WILL BE CONSIDERED COMPLETE UNTIL ALL CLEANUP IS COMPLETED, INCLUDING, BUT NOT LIMITED TO, CURBS, PAVEMENTS AND SIDEWALKS SWEEP CLEAN OF ALL DIRT AND DEBRIS.
- 19) SHOULD THE CONTRACTOR ENCOUNTER, DURING HIS OPERATIONS, ANY ARCHEOLOGICAL OR HISTORICAL FINDINGS, HE SHALL IMMEDIATELY CEASE OPERATIONS IN THAT LOCATION AND NOTIFY THE OWNER.
- 20) ANY REVISIONS TO THE APPROVED PLANS SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO CONSTRUCTION.
- 21) IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER OF ANY DISCREPANCIES, CONFLICTS, ETC. FOUND WITHIN THIS DRAWING SET, APPLICABLE SPECIFICATIONS, AND DETAILS.
- 22) THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND ANY AGENCY PERTAINING TO THE JOB TWO WORKING DAYS BEFORE BEGINNING ANY WORK IN THE PUBLIC RIGHT-OF-WAY.
- 23) ALL SIGNS TO BE DG3 SHEETING. SIGN POST BASE TO BE CONCRETED IN GROUND. BASE TO BE 12" DIA., 18" DEEP WITH 6" OF BASE SHOWING ABOVE GRADE. MAIN POST TO BE ATTACHED TO BASE WITH BREAKAWAY BOLTS. PLACEMENT OF SIGNS TO CONFORM TO MUTCD SPECIFICATIONS. STREET SIGNS MUST BE, 6" LETTERS FOR STREET NAME, 3" LETTERS FOR ADDRESSING AND STOP SIGNS MUST BE 24".
- 24) RIGHT-OF-WAY, PROPERTY LINES AND EASEMENTS SHOWN ON THIS SET OF PLANS ARE FROM AVAILABLE INFORMATION, NOT FROM A RECORDED SURVEY. RIGHT-OF-WAYS, PROPERTY LINES AND EASEMENTS SHOULD BE CONSIDERED APPROXIMATE FOR GRAPHICAL REPRESENTATION ONLY.
- 25) THE FIELD SURVEY FOR THIS PROJECT WAS COMPLETED ON 7-23-25 AND THE DESIGN HEREIN IS BASED ON THE FIELD CONDITIONS AS WAS PRESENT ON THAT DATE.

LIMITS OF CONSTRUCTION

- 1) ALL CONSTRUCTION SHALL REMAIN WITHIN PROJECT CONSTRUCTION LIMITS AND RIGHT-OF-WAY LIMITS (PERMANENT AND TEMPORARY) AS DEFINED BY PROJECT ENGINEER. THE RESIDENT SUPERVISOR SHALL ENSURE THE CONTRACTOR IS AWARE OF CONSTRUCTION LIMITS AND ANY SPECIAL CONSTRUCTION CONDITIONS IN THE PROJECT. IN THE EVENT THE CONTRACTOR IS UNABLE TO STAY WITHIN THE LIMITS PROVIDED PROPER AUTHORIZATION SHALL BE ACQUIRED FROM PROJECT ENGINEER, ENVIRONMENTAL, AND/OR GOVERNING AGENCIES PRIOR TO CONTINUATION OF WORK.
- 2) THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN A MANNER TO PREVENT LIMB, BARK, OR ROOT INJURIES TO TREES, SHRUBS, OR OTHER TYPES OF VEGETATION THAT ARE TO REMAIN GROWING AND ALSO TO PREVENT DAMAGE TO ADJACENT PROPERTY. WHEN ANY SUCH INJURIES UNAVOIDABLY OCCUR, ALL ROUGH EDGES OF SCARRED AREAS SHALL BE MADE REASONABLY SMOOTH IN ACCORDANCE WITH GENERALLY ACCEPTED HORTICULTURAL OR APPLICABLE PRACTICES. ANY SUCH PLANTS THAT ARE DAMAGED BY ANY CONSTRUCTION OPERATIONS TO SUCH AN EXTENT AS TO DESTROY THEIR VALUE FOR SHADE OR OTHER LANDSCAPE PURPOSES, SHALL BE CUT AND DISPOSED OF BY THE CONTRACTOR, AND REPLACED WITHOUT EXTRA COMPENSATION, WHEN SO DIRECTED BY THE PROJECT ENGINEER.
- 3) ANY DEBRIS AND/OR WASTE OUTSIDE CONSTRUCTION LIMITS GENERATED BY CONTRACTOR OR CONSTRUCTION ACTIVITY SHALL BE IMMEDIATELY CLEANED UP AND DISPOSED OF LEGALLY BY CONTRACTOR, IN ACCORDANCE WITH THE SWPPP OR AS DIRECTED BY PROJECT ENGINEER.

UNDERGROUND UTILITY STATEMENT

- 1) THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE ENGINEER MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE ENGINEER FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE ENGINEER HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.
- 2) THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION AND SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID DAMAGE TO SUCH. THE ENGINEER AND / OR OWNER WILL NOT GUARANTEE ANY LOCATIONS SHOWN ON THE PLANS, OR THOSE OMITTED.
- 3) THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING ALL BLUESTAKES.

WATER

- 1) ALL PIPE USED FOR WATER MAINS SHALL BE AWWA C900 (4" - 12") AWWA C905 (14" - 36") PVC POTABLE WATER PIPE, SINGLE GASKET, INTEGRAL BELL, 200 PSI WORKING PRESSURE, DR 18. ALL PVC PLASTIC PIPE SHALL BE APPROVED BY THE NATIONAL SANITATION FOUNDATION & CERTIFICATION MUST BE PROVIDED.
- 2) DIP PIPE AND FITTINGS USED IN FIRE HYDRANT INSTALLATIONS SHALL BE CEMENT MORTAR LINED, STANDARD THICKNESS AND BITUMINOUS COATED AND POLYWRAPPED IN ACCORDANCE WITH AWWA C104, TYTON TYPE, MECHANICAL JOINT OR C.I. - PVC (C-900) TYPE. ALL FIRE HYDRANTS SHALL BE MUELLER OR WATEROUS.
- 3) ALL VALVES SHALL CONFORM TO THE LATEST REVISIONS OF AWWA C-500, SUPPLEMENTED AS FOLLOWS: VALVES SHALL BE DOUBLE DISC GATE VALVES, WATEROUS OR MULLER DESIGNED TO WORK EQUALLY WELL WITH PRESSURE ON EITHER SIDE OF THE GATE, SHALL BE NON-RISING STEM TYPE AND SHALL BE LEFT HAND OPENING, COUNTER CLOCKWISE. ALL INTERIOR FERROUS SURFACES EXPOSED TO FLUIDS FLOW SHALL BE FACTORY COATED WITH A TWO PART THERMO-SETTING EPOXY COATING TO A MINIMUM THICKNESS OF 4 MLS. VALVE SHALL HAVE A 2" OPERATING NUT UNLESS OTHERWISE SPECIFIED. EXTEND NUT TO WITHIN 5" OF BOX COVER.
- 4) ALL WATER VALVE BOX TYPES TO BE PER (MAG) STANDARD DETAIL, 391-1, VALVES IN ASPHALT AREAS OR AREAS SUBJECT TO WHEEL LOADS SHALL BE TYPE 'A' LOCATION OF ALL WATER VALVES MUST BE REFERENCED AT ALL TIMES DURING CONSTRUCTION BY THE CONTRACTOR.
- 5) WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH ADEQ ENGINEERING BULLETIN NO. 8, " DISINFECTION OF WATER SYSTEMS. "
- 6) ALL MAINS AND SERVICES SHALL HAVE TRACING WIRE, 14 GAUGE MINIMUM, SINGLE STRAND, DIRECT BURY COPPER WIRE. TRACE WIRE SHALL BE SUBJECT TO A TRACTABILITY TEST. END WIRE AT FIRE HYDRANTS AND METER BOXES.
- 7) WATER MAINS SHALL BE SUBJECT TO A PRESSURE AND LEAKAGE TEST IN ACCORDANCE WITH AWWA C-600 STANDARD.
- 8) A 4' MINIMUM COVER SHALL BE PROVIDED FROM FINISHED GRADE TO TOP OF WATER LINES FOR LINES LARGER THAN 10" AND 3' MINIMUM COVER FOR LINES 10" OR SMALLER.
- 9) ALL FACILITIES AND WORKMANSHIP ARE SUBJECT TO THE APPROVAL AND ACCEPTANCE OF THE PROJECT ENGINEER TO INSURE THE PROPER AND ORDERLY DEVELOPMENT OF THE PUBLIC WATER SYSTEM.
- 10) ALL SPECIFICATIONS SHALL BE SUBJECT TO THE INTERPRETATION BY THE PROJECT ENGINEER. ALL MATERIALS SHALL BE INSPECTED BY THE PROJECT ENGINEER. THE CONTRACTOR MUST OBTAIN WRITTEN APPROVAL OF THEIR ACCEPTANCE BEFORE INSTALLING THE MATERIALS.
- 11) NO CHANGES TO THE SET OF PLANS APPROVED FOR CONSTRUCTION OF WATER FACILITIES WILL BE ALLOWED UNLESS WRITTEN PERMISSION IS OBTAINED FROM THE PROJECT ENGINEER OR HIS DESIGNEE.
- 12) WHERE EXTRA PROTECTION IS REQUIRED, DUCTILE IRON PIPE SHALL BE INSTALLED AND EXTENDED 10 FEET MINIMUM FROM EDGE OF PIPE CROSSING PER MAG STANDARD DETAIL 404.
- 13) ALL WATER AND SEWER PIPES MUST MAINTAIN VERTICAL AND HORIZONTAL SEPARATION PER ADEQ BULLETIN NO. 10.
- 14) WATER SYSTEM VALVES SHALL NOT BE OPERATED BY ANYONE OTHER THAN ESCUDILLA MOUNTAIN DWID PERSONNEL OR THEIR DESIGNEE.
- 15) THE CONTRACTOR SHALL INSTALL WATER SERVICES AWAY FROM ANY NATURAL OR PLANNED DRAINAGE WAYS.
- 16) ALL PIPES AND APPURTANCES THAT COME INTO CONTACT WITH POTABLE WATER SHALL BE NSF-61 APPROVED AND BEAR THE NSF-PW SEAL.
- 17) ALL WATER COMPONENTS SHALL BE LEAD FREE IN ACCORDANCE WITH A.A.C. R18-4-504.
- 18) ALL RESTRAINED JOINTS PER MAG STD. DETAILS & REQUIREMENTS.

STRUCTURAL GENERAL NOTES

- GENERAL:
1. THE FOLLOWING NOTES APPLY UNLESS NOTED OTHERWISE ON DRAWINGS.
2. THE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION.
3. THESE NOTES SHALL BE USED ALONG WITH THE DRAWINGS. WHERE DIFFERENCES OCCUR BETWEEN NOTES AND DRAWINGS, THE MOST STRINGENT REQUIREMENT SHALL GOVERN. THE CONTRACTOR SHALL REQUEST CLARIFICATION IMMEDIATELY UPON DISCOVERY AND BEFORE PROCEEDING.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPENSATING THE OWNER AND/OR OWNER'S REPRESENTATIVE FOR ANY DESIGN CHANGES MAKE AS A DEVIATION, BY THE CONTRACTOR, FROM THE DRAWINGS AND SPECIFICATIONS OR DUE TO ERRORS, FAULTY MATERIAL OR FAULTY WORKMANSHIP.
5. OPTIONS ARE FOR THE CONTRACTOR'S CONVENIENCE. HE SHALL BE RESPONSIBLE FOR ALL CHANGES NECESSARY IF HE CHOOSES AN OPTION AND SHALL COORDINATE ALL DETAILS. THE COST OF ADDITIONAL ENGINEERING/DESIGN WORK RESULTING FROM SELECTION OF AN OPTION SHALL BE PAID BY THE CONTRACTOR.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DRAWING DIMENSIONS AND CONDITIONS PRIOR TO START OF CONSTRUCTION. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES OR INCONSISTENCIES.
7. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS INDICATED ON THE DRAWINGS.
8. THE CONTRACTOR SHALL ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, STRUCTURAL, PLUMBING, MECHANICAL, ELECTRICAL AND OTHER WORK WITH THE APPROPRIATE PARTIES.
9. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND DETAILS. WHERE NO DETAIL ARE PROVIDED, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT.
10. TYPICAL DETAILS ARE NOT CUT ON PLANS, BUT APPLY UNLESS NOTED OTHERWISE.
11. WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST ADDITION.
12. ANY ENGINEERING DESIGN PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW SHALL BEAR THE SEAL AND SIGNATURE OF A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF ARIZONA.
- DESIGN CRITERIA:
1. GOVERNING CODE: 2003 INTERNATIONAL BUILDING CODE
2. WIND: WIND SPEED 90 MPH, EXPOSURE 'C', 3 SECOND GUST SPEED 110 MPH
3. LIVE LOADS: ROOF = 40 PSF (SNOW LOAD, 4:12 ROOF PITCH);
ROOF = 40 PSF (SNOW LOAD, 2:12 ROOF PITCH)
- EXCAVATION, FOUNDATION & COMPACTION:
1. ALL EARTH WORK SHALL COMPLY WITH THE REQUIREMENTS GIVEN IN THE GEOTECHNICAL REPORT, IF ANY.
2. FOOTINGS SHALL BE DESIGNED USING THE INFORMATION GIVEN IN THE ABOVE GOVERNING CODE(S) AND/OR GEOTECHNICAL REPORT.
- FORMWORK:
1. CONCRETE FORMWORK, SHORING, FORM REMOVAL, AND RESHORING / BACKSHORING ARE CONSTRUCTION MEANS AND METHODS THAT ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE IN ACCORDANCE WITH "ACI GUIDE TO FORMWORK FOR CONCRETE" (AC134-7R).
2. NO LOAD CONCENTRATION ON FLOOR SLABS SHALL OCCUR DURING CONSTRUCTION WITHOUT ADEQUATELY PROTECTING THE SLAB.
- CONCRETE:
1. CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 301, SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS, EXCEPT AS MODIFIED BY THE SUPPLEMENTAL REQUIREMENTS NOTED.
2. CONCRETE FOR THE PROJECT SHALL ATTAIN THE FOLLOWING COMPRESSIVE STRENGTHS (f_c) AT 28 DAYS:
A. DRILLED SHAFTS & SLABS 3000 PSI
B. GRADE BEAMS 3000 PSI
3. ALL CONCRETE MIXES USED WHERE EXPOSED TO WEATHER SHALL INCLUDE A 5% AIR ENTRAINMENT.
4. CONCRETE MIX DESIGNS SHALL BE SUBMITTED TO ARCHITECT AND/OR STRUCTURAL ENGINEER FOR REVIEW.
5. MAXIMUM SLUMP ATTAINED ON THE SITE SHALL BE 4" (+/- 1") FOR CONCRETE WITHOUT PLASTICIZER. WITH PLASTICIZER, A HIGHER SLUMP MAY BE USED UPON APPROVAL FROM THE ARCHITECT.
6. MIX DESIGNS SHALL BE SUBMITTED FOR EACH TYPE OF CONCRETE AND INCLUDE: MIX IDENTIFICATION, STATEMENT OF INTENDED USE, MIX PROPORTIONS, DESIGN STRENGTH, DESIGN SLUMP, WET AND DRY UNIT WEIGHT, AND OTHER SUPPORTING DATA.
7. CALCIUM CHLORIDE OR ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL NOT BE USED AS ADDITIVES.
8. ADMIXTURES MAY BE USED; HOWEVER, THEY SHALL NOT BE CONSIDERED AS REPLACING ANY PART OF THE CEMENT CONTENT FOR A SPECIFIED CONCRETE STRENGTH.
9. POZZOLAN CLASS 'F' MAY BE ADDED AT A RATIO NOT TO EXCEED 10% OF THE TOTAL WEIGHT OF CEMENT PLUS POZZOLAN.
10. NO ALUMINUM CONDUITS OR PIPE SHALL BE EMBEDDED IN CONCRETE.
11. HOT WEATHER AND COLD WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 305 AND ACI 306 RECOMMENDED PRACTICES RESPECTIVELY.
12. MECHANICAL VIBRATIONS SHALL ALSO BE USED AROUND ITEMS EMBEDDED IN THE SLAB OR BEAMS.
- REINFORCING STEEL:
1. ALL REINFORCING STEEL SHALL BE DEFORMED BARS AND SHALL CONFORM TO THE FOLLOWING ASTM STANDARD DESIGNATIONS:
A. #3 AND LARGER BAR REINFORCING A615 GRADE 60
B. WELDED WIRE FABRIC A185
2. REINFORCING LAP SPLICE LENGTHS SHALL BE AS FOLLOWS:
A. VERTICAL BARS IN CONCRETE (MIN. 2'-0") CLASS B
B. HORIZONATAL BARS IN CONCRETE (MIN. 2'-0") CLASS B
C. VERTICAL BARS IN MASONRY (MIN. 2'-0") 48 DIAM.
D. HORIZONTAL BARS IN MASONRY (MIN. 2'-0") 48 DIAM.
3. 90, 135 AND 180 DEGREE HOOKS INDICATED ON DETAILS AND CONCRETE COVER SHALL BE IN ACCORDANCE WITH ACI STANDARDS.
4. CHAIRS AND SUPPORT BARS SHALL BE PROVIDED IN ACCORDANCE WITH ACI STANDARDS TO ADEQUATELY SUPPORT AND PREVENT DISPLACEMENT OF ALL BAR REINFORCEMENT.
5. REINFORCEMENT SHALL BE DETAILED TO MEET ACI 315 STANDARDS.
6. WELDING OF REINFORCED BARS SHALL BE DONE WITH ASTM A706 REINFORCING AND IN ACCORDANCE WITH AVS D1.4, AND ONLY AFTER WRITTEN AUTHORIZATION FROM THE ARCHITECT AND/OR STRUCTURAL ENGINEER.

- CONCRETE PROTECTION FOR REINFORCING:
1. THE FOLLOWING MINIMUM COVER SHALL BE PROVIDED FOR REINFORCING PLACED IN CONCRETE:
A. CONCRETE CAST AGAINST EARTH ----- 3"
B. CONCRETE EXPOSED TO EARTH OR WEATHER ----- 2"
C. CONCRETE NOT EXPOSED TO EARTH OR WEATHER ----- 1-1/2"
D. CONCRETE SLABS, SOFFITS AND TOP SURFACE ----- 1"
- ANCHOR BOLTS:
1. ANCHOR BOLTS SHALL CONFORM TO ASTM A307 OR A325.
2. BENT BAR ANCHOR BOLTS SHALL HAVE A HOOK WITH A 90 DEGREE BEND WITH AN INSIDE DIAMETER OF THREE (3) BOLT DIAMETERS, PLUS AN EXTENSION OF ONE AND ONE-HALF (1-1/2) BOLT DIAMETERS AT THE FREE END.

- TRUSSES:
1. ALL ROOF TRUSSES SHALL BE DESIGNED PER "NATIONAL DESIGN SPECIFICATIONS FOR METAL PLATE CONNECTED WOOD TRUSSES" AS PUBLISHED BY THE TRUSS PLATE INSTITUTE (TPI) AND DESIGNED, REVIEWED AND SEALED BY A CIVIL OR STRUCTURAL ENGINEER LICENSED IN THE STATE OF ARIZONA.
2. ALL ROOF TRUSSES SHALL BE FABRICATED TO CONFORM TO THE DESIGN AS SPECIFIED IN ITEM #1 ABOVE.

- WOOD FRAMING:
1. ALL FRAMING SHALL BE DOUGLAS FIR LARCH NO. 2 OR BETTER, UNLESS NOTED OTHERWISE ON THE DRAWINGS.
2. ALL SILL PLATES AND OTHER WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED AND/OR REDWOOD.
3. NAILING SHALL CONFORM TO IBC TABLE 2304.9.1, FASTENING SCHEDULE.

- WALL SHEATHING/SIDING:
1. PANEL GRADINGS SHALL BE C-C, C-D, SHEATHING OR OTHER GRADES COVERED IN IBC TABLE 2304.7(3) REQUIREMENTS.
2. ALL PANELS SHALL BE IDENTIFIED BY A GRADE MARK OF CERTIFICATE OF INSPECTION BY AN APPROVED AGENCY.
3. PANEL THICKNESS SHALL BE AS FOLLOWS: THICKNESS
A. ALL PANELS (U.N.O.): 3/8"

- ROOF SHEATHING:
1. PANEL GRADINGS SHALL BE C-C, C-D, SHEATHING OR OTHER GRADES COVERED IN IBC TABLE 2304.7(1) REQUIREMENTS.
2. ALL PANELS SHALL BE IDENTIFIED BY A GRADE MARK OF CERTIFICATE OF INSPECTION BY AN APPROVED AGENCY.
3. PANEL THICKNESS SHALL BE AS FOLLOWS: THICKNESS SPAN INDEX
A. ALL PANELS (U.N.O.) 5/8" 40/20
4. ALL ROOF SHEATHING SHALL BE NAILED WITH 10d NAILS @ 6" O.C. AT BOTH BOUNDARIES & INTERMEDIATE SUPPORTS UNLESS NOTED OTHERWISE ON DRAWINGS.

- WOOD FASTENERS:
1. ALL WOOD FASTENERS SHALL BE 'SIMPSON STRONG-TIE' PRODUCTS UNLESS NOTED OTHERWISE. PRODUCTS FROM OTHER MANUFACTURES MAY BE USED PROVIDED THAT BOTH THE INTENDED USE AND CAPACITY ARE EQUAL TO THE SIMPSON PRODUCT AND THAT IT HAS A CURRENT ICBO REPORT.
2. REFER TO DRAWINGS FOR FASTENER TYPES REQUIRED.
3. ALL FASTENERS SHALL BE INSTALLED PER MANUFACTURER SPECIFICATIONS AND REQUIREMENTS.
4. LAG BOLTS SHALL CONFORM TO ANSI/ASME STANDARD B18.2.1-1981.
5. SPLIT RINGS SHALL BE MANUFACTURED TO CONFORM TO NATIONAL DESIGN SPECIFICATION NDS-1997 SECTION 10.1.2.
6. SPLIT RINGS ASSEMBLY SHALL CONFORM TO NDS-1997 SECTION 10.1.3.

DRAINAGE/STORMWATER

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARATION AND SUBMITTAL OF A STORMWATER POLLUTION PREVENTION PLAN TO ALL APPROPRIATE GOVERNING AGENCIES. CONTRACTOR TO PROVIDE NOTICE OF INTENT TO ECCOA PRIOR TO CONSTRUCTION.

GRADING, CLEARING & EARTHWORK

1. ALL EARTHWORK SHALL BE CONDUCTED IN ACCORDANCE WITH STANDARD CURRENT MAG SPECIFICATIONS, PART 200 OR AS SPECIFIED ON PLANS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY CLEARING, STRIPING, GRUBBING, TREE REMOVAL, AND STUMPING WITHIN AREAS OF NEW IMPROVEMENTS. ALL CLEARING AND WASTE MATERIAL SHALL BE REMOVED FROM SITE AT CONTRACTORS EXPENSE. THE CONTRACTOR SHALL MAKE HIS OWN DETERMINATION OF QUANTITIES OF MATERIAL TO BE REMOVED, SUCH AS TREES AND STUMPS.
3. AREAS UNDERLYING STRUCTURAL IMPROVEMENTS, INCLUDED, BUT NOT LIMITED TO, PAYEMENT, NEW BUILDING, CURB, AND ALL TREES AND NATURAL VEGETATION OUTSIDE OF CLEARING LIMITS SHALL BE RETAINED AND PROTECTED. SIDEWALK SHALL BE STRIPPED OF 6 INCHES EXISTING MATERIAL OR AS DETERMINED BY THE ENGINEER.

DATE

DESCRIPTION

NO.

REVISIONS

IRON SIDE

ENGINEERING & DEVELOPMENT

P.O. BOX 1358
SHOW LOW, AZ. 85902
(928) 532 - 0880

Professional Engineer No. 76092
ZACHARY W. BARLOW
Date Signed 09/17/2025

Escudilla MTN DWID Well & Fill Station
ADEQ Technical Assistance
AZ0401349

NOTES

CLIENT: ADEQ

DRAWN BY: JCL

DESIGNER: JCL

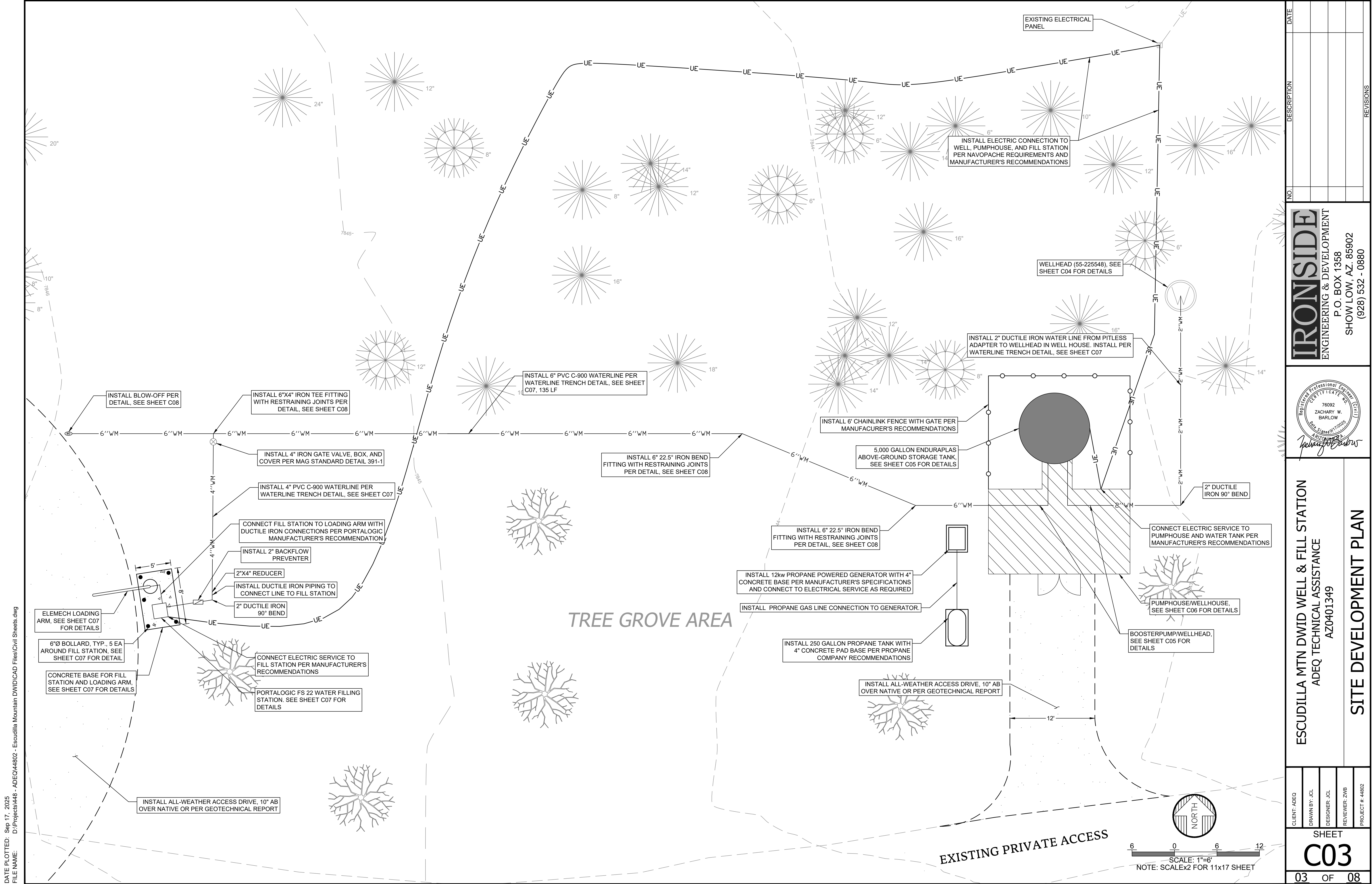
REVIEWER: ZWB

PROJECT #: 44802

SHEET

C02

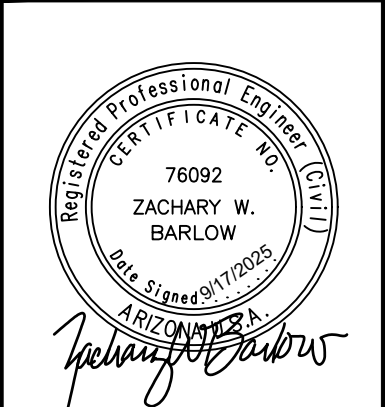
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DATE PLOTTED: Sep 17, 2025
FILE NAME: D:\Projects\448 - ADEQ\44802 - Escudilla Mountain DWID\CAD Files\Civil Sheets.dwg

NO.	DESCRIPTION	DATE

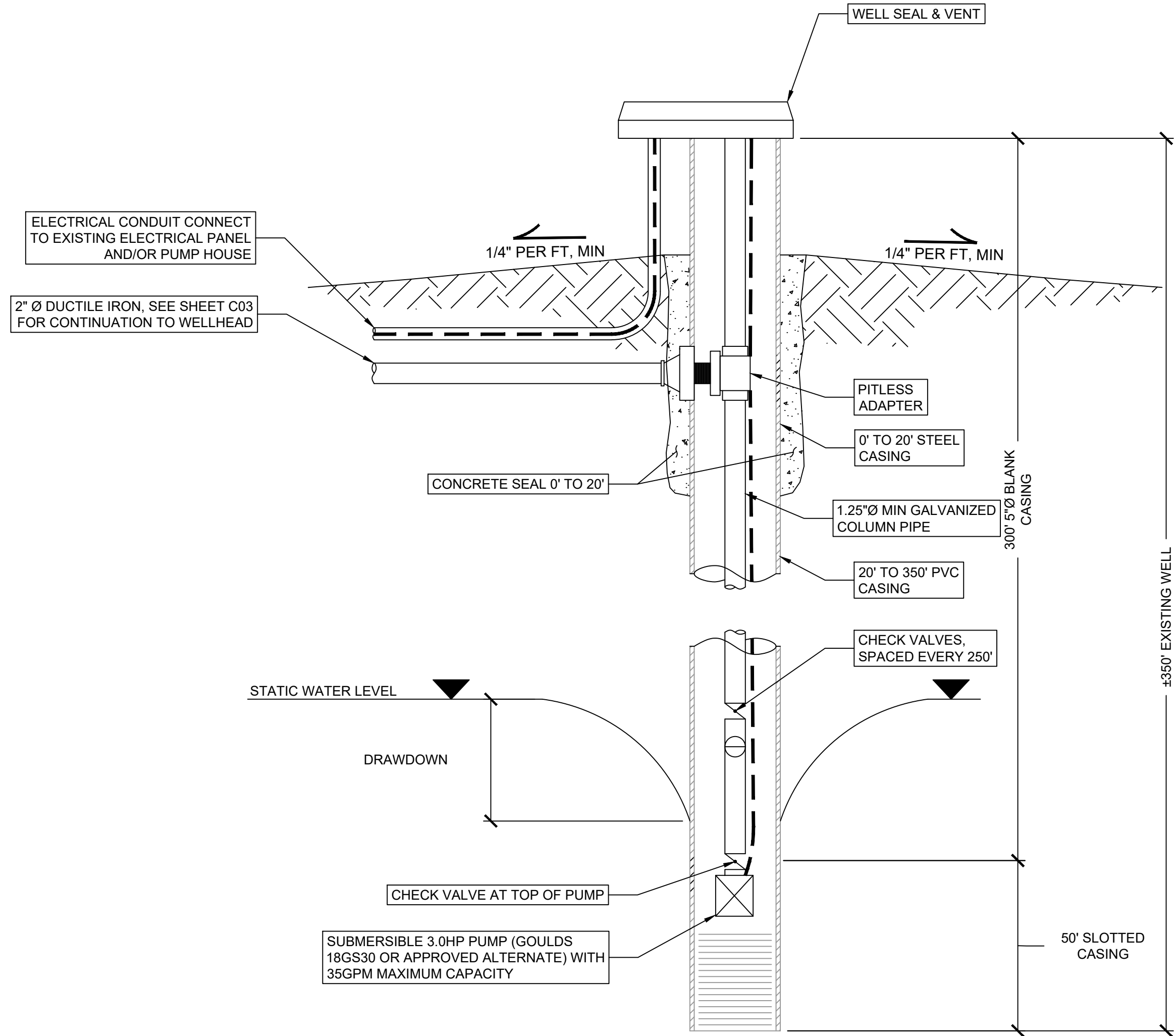
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P.O. BOX 1358
SHOW LOW, AZ. 85902
(928) 532 - 0880



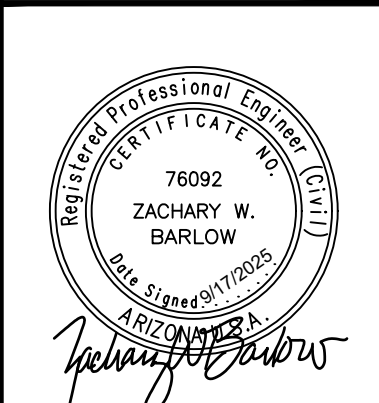
ESCUDILLA MTN DWID WELL & FILL STATION
ADEQ TECHNICAL ASSISTANCE
AZ0401349
SITE DEVELOPMENT PLAN

CLIENT: ADEQ	DRAWN BY: JCL	DESIGNER: JCL	REVIEWER: ZWB	PROJECT #: 44802
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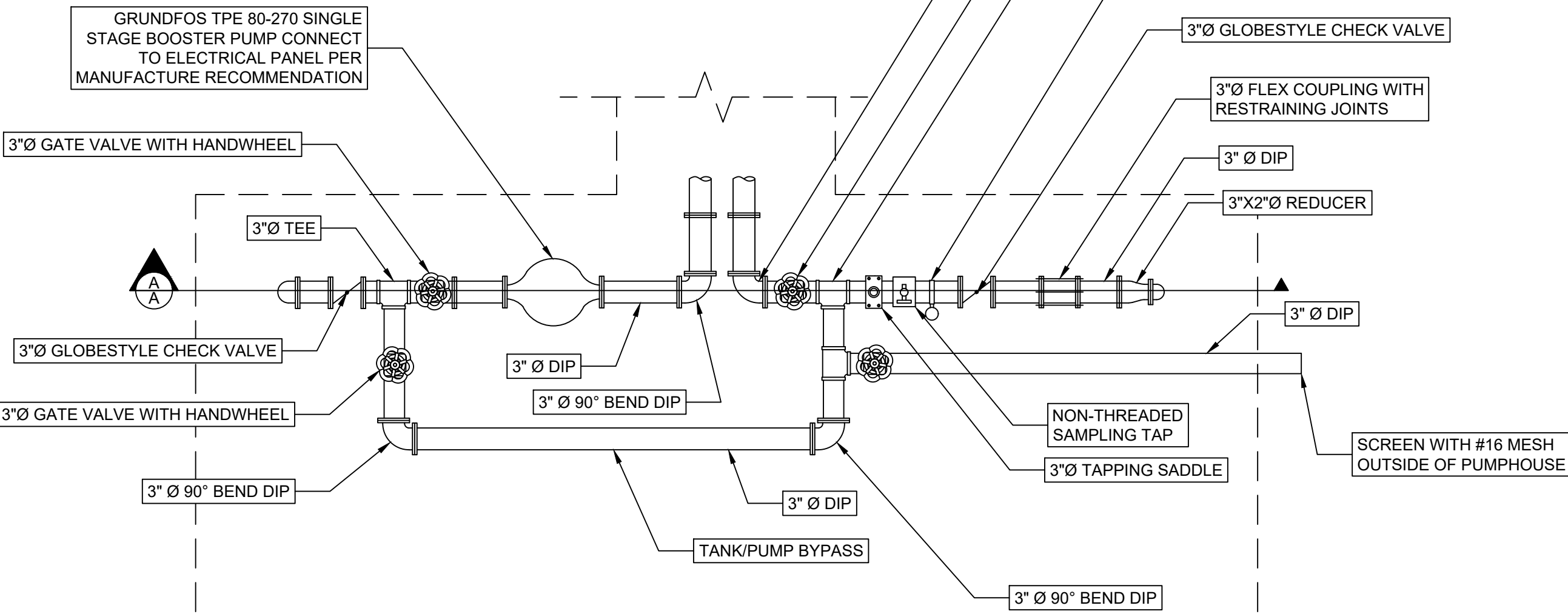
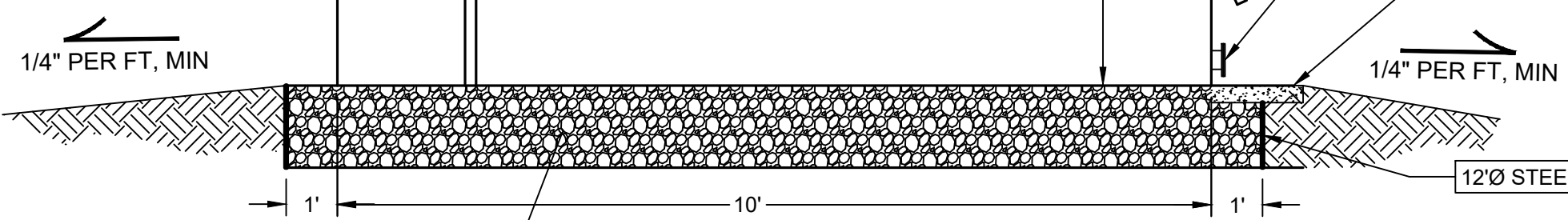
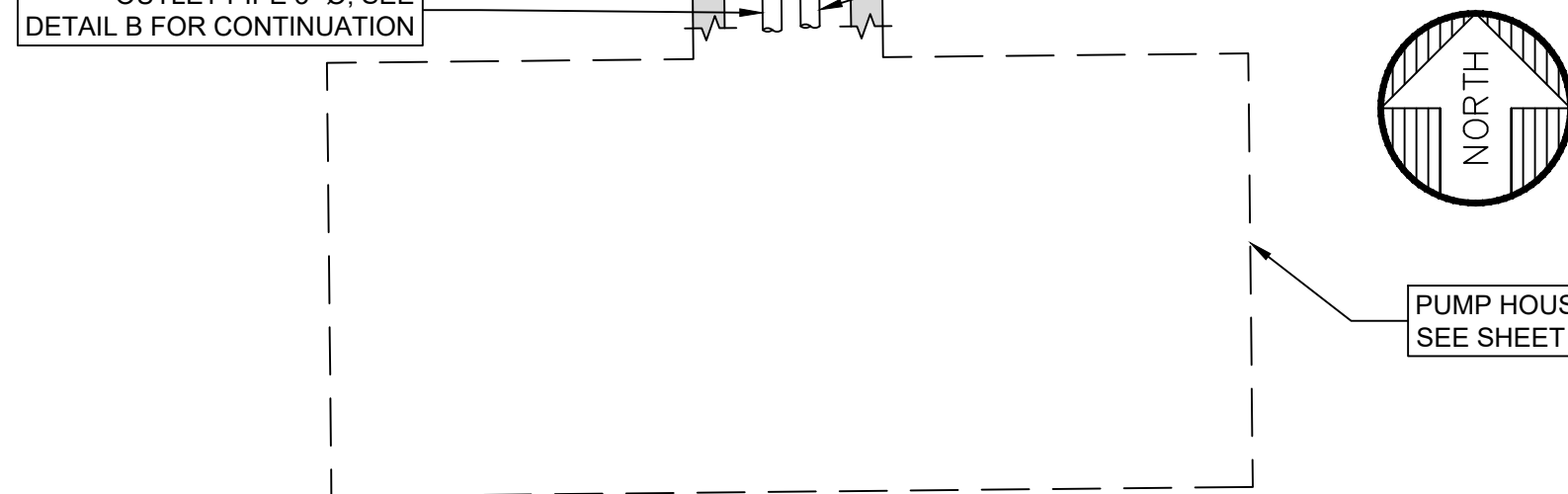
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C03
03 OF 08



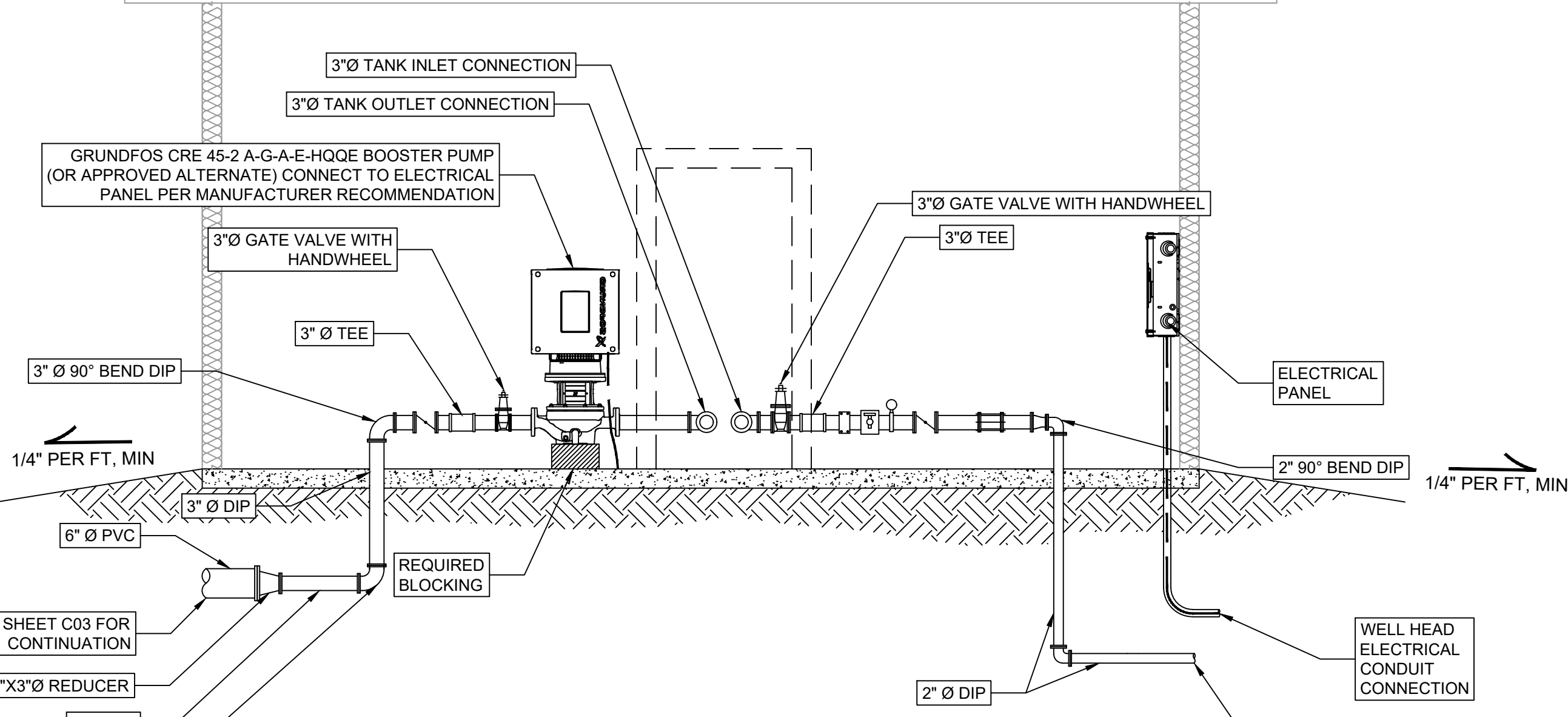
C WELL PROFILE (55-225548)
N.T.S.



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TANK/PUMP BYPASS



(B)

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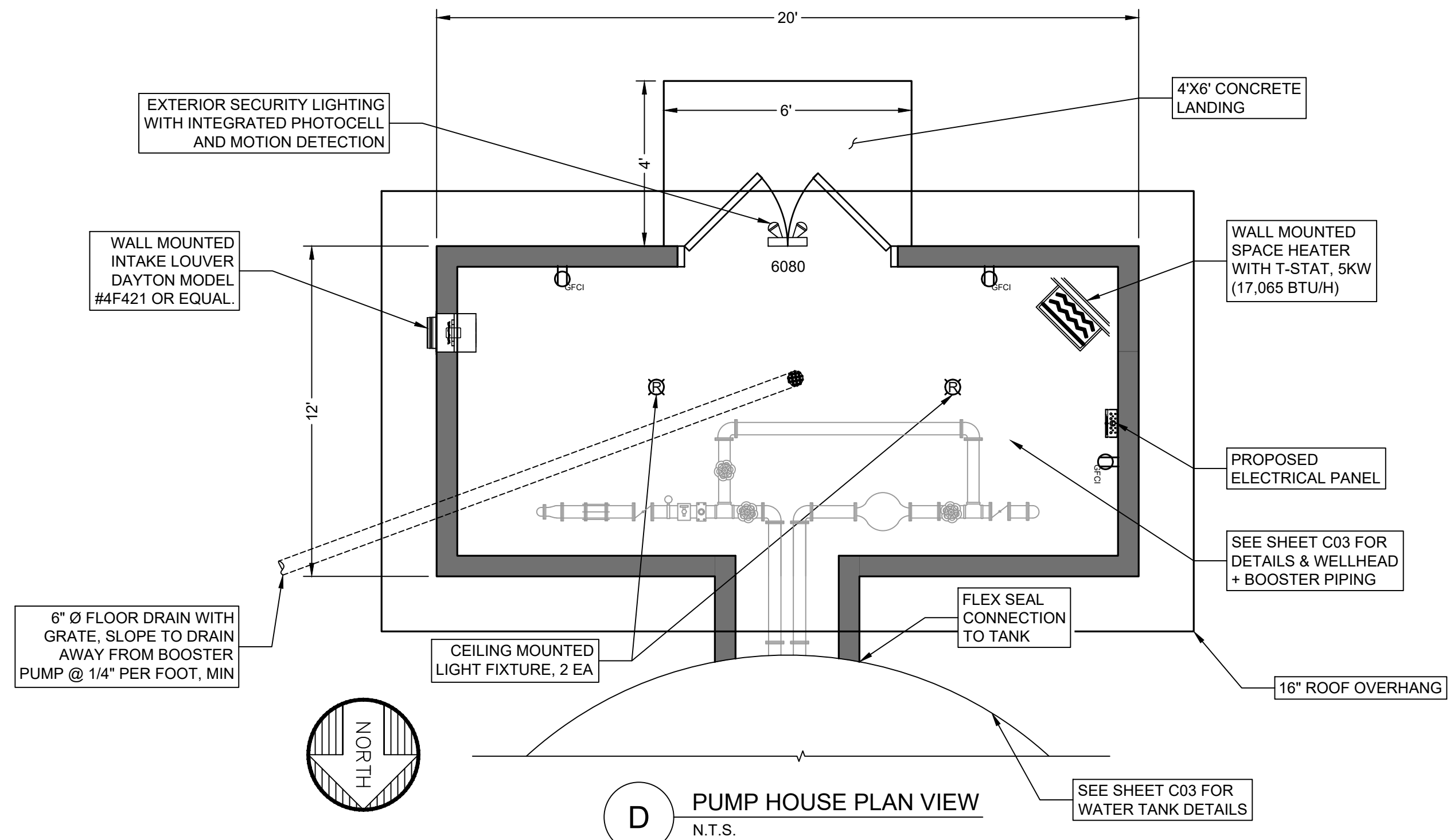


ESCUDILLA MTN DWID WELL & FILL STATION
ADEQ TECHNICAL ASSISTANCE
AZ0401349

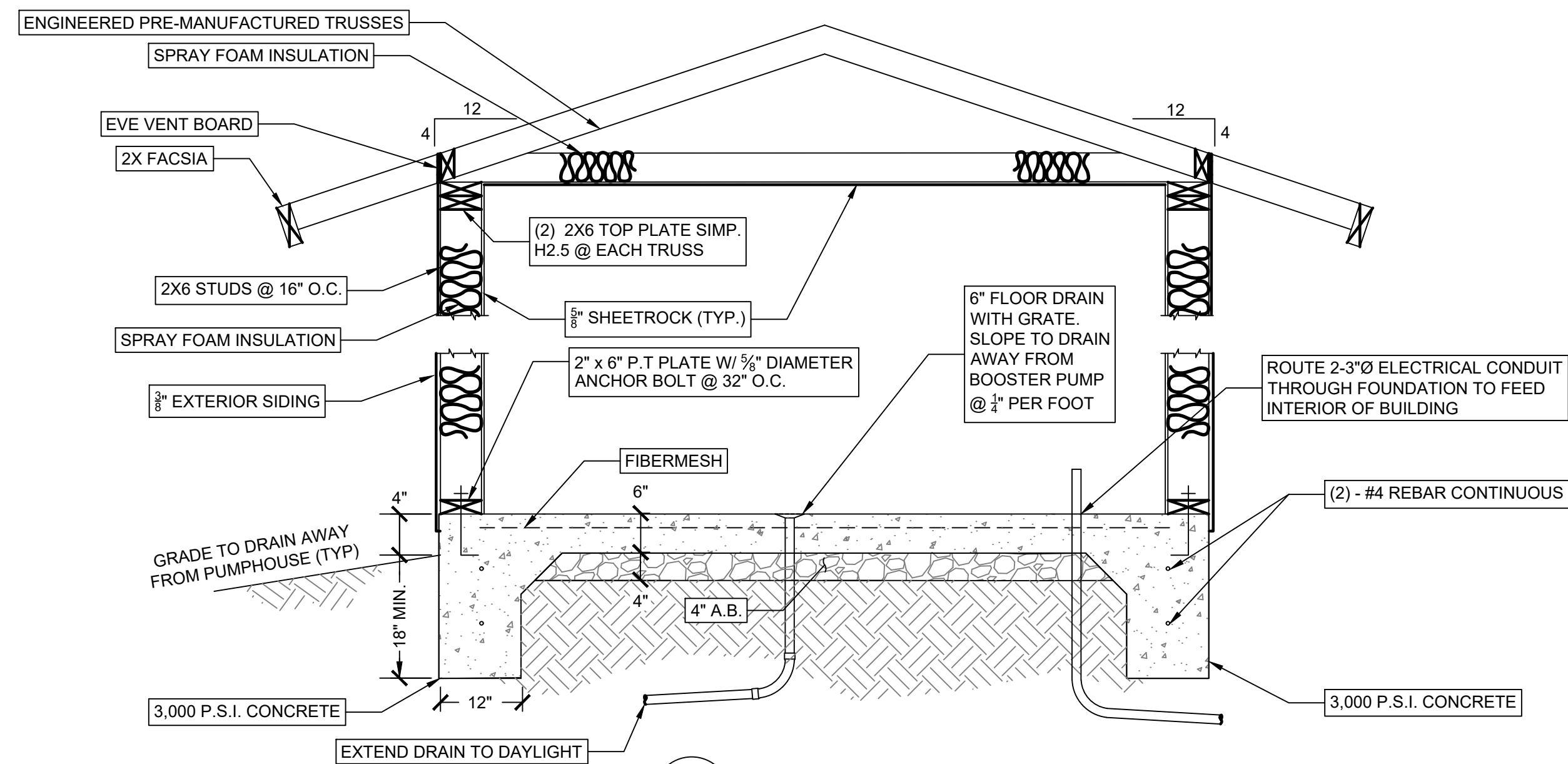
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DRAWN BY: JCL
DESIGNER: JCL
REVIEWER: ZWB
PROJECT #: 44802

SHEET
C05
05 OF 08

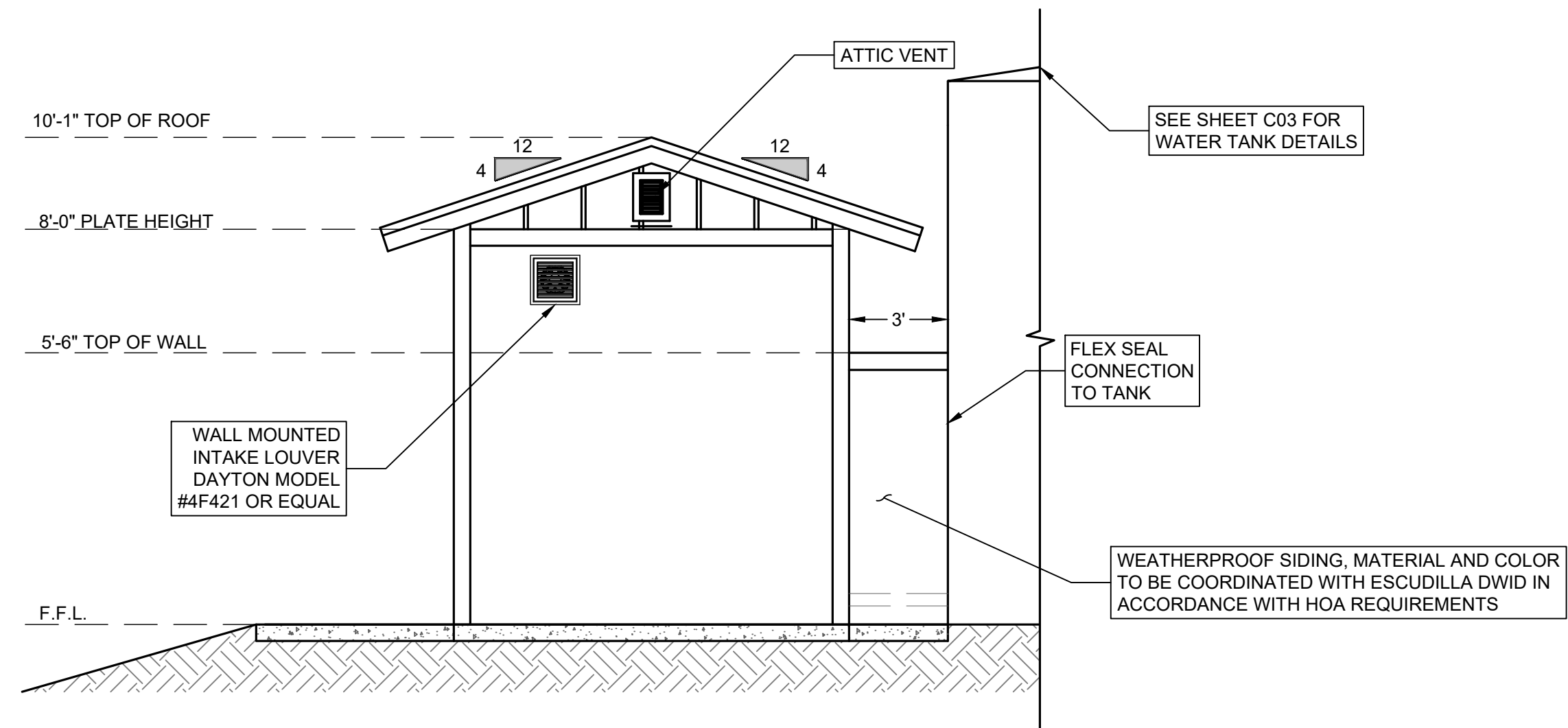
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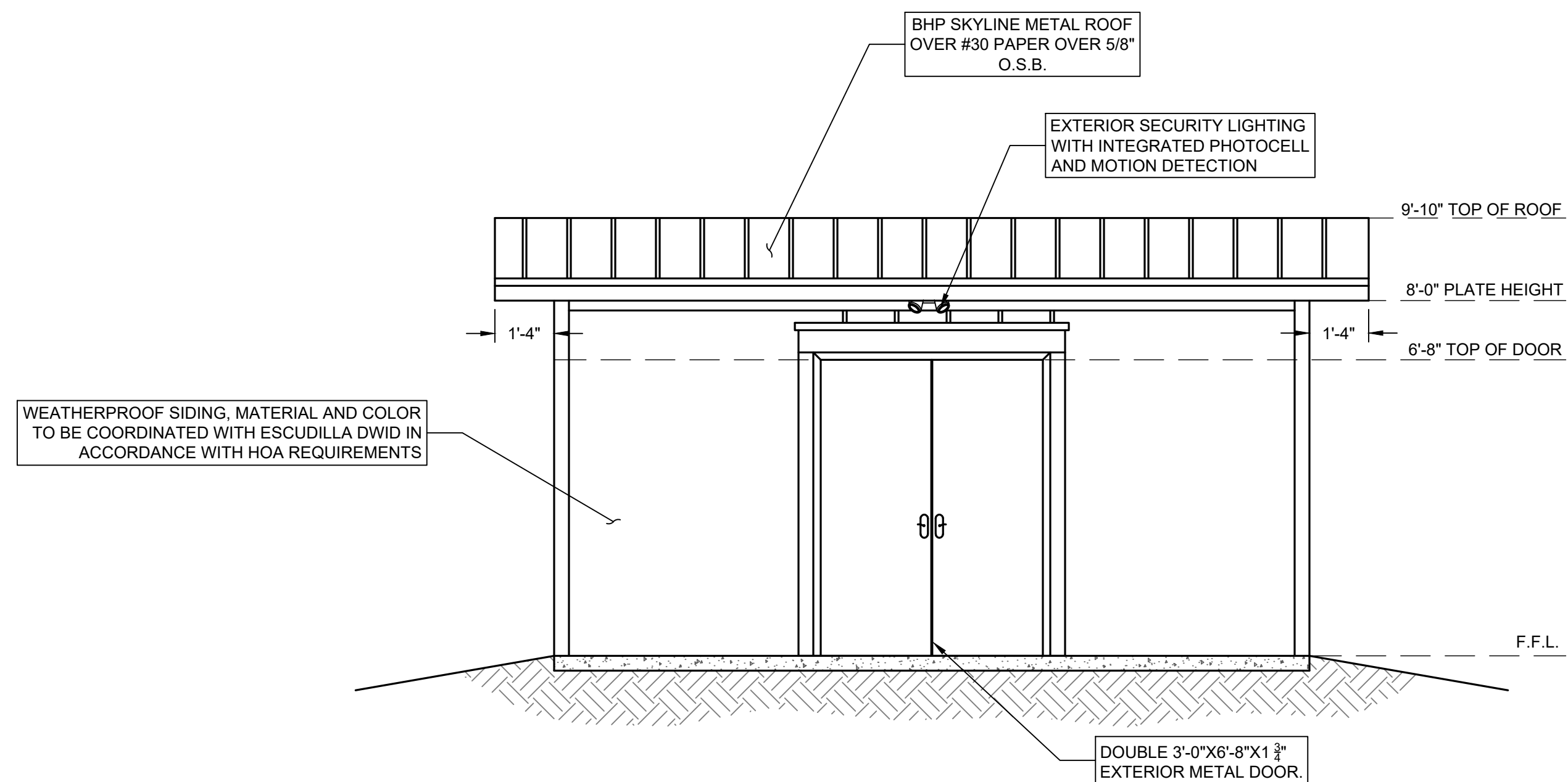
D PUMP HOUSE PLAN VIEW
N.T.S.



F PUMPHOUSE WALL SECTION
N.T.S.



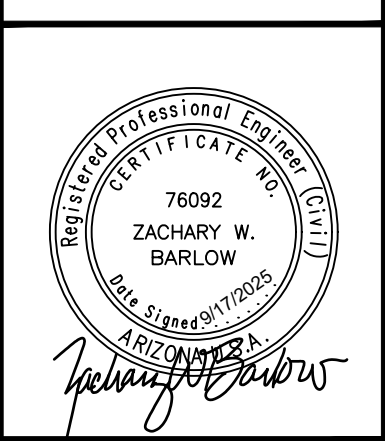
E PUMP HOUSE RIGHT ELEVATION
N.T.S.



G PUMP HOUSE FRONT ELEVATION
N.T.S.

NO.	DESCRIPTION	DATE

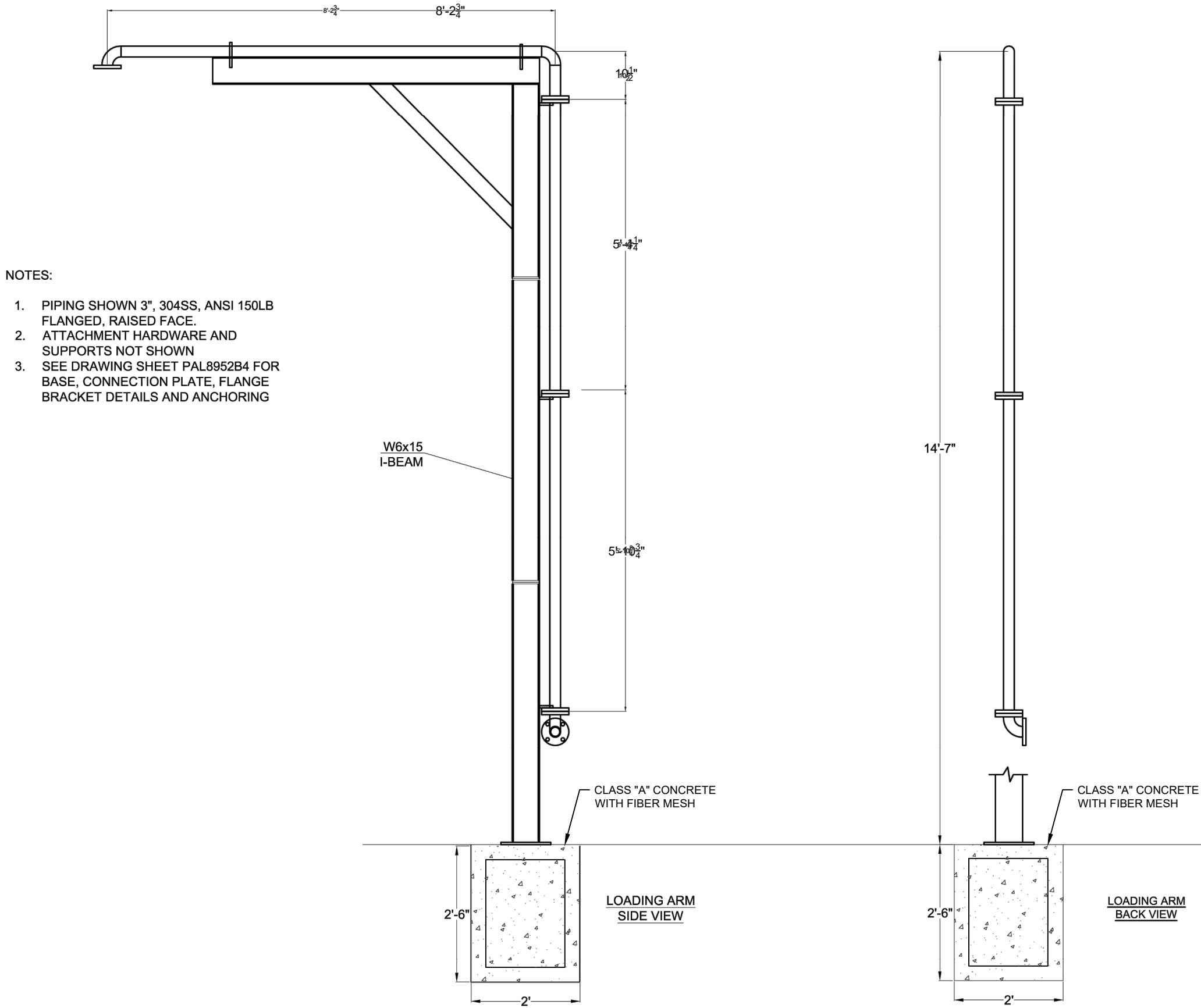
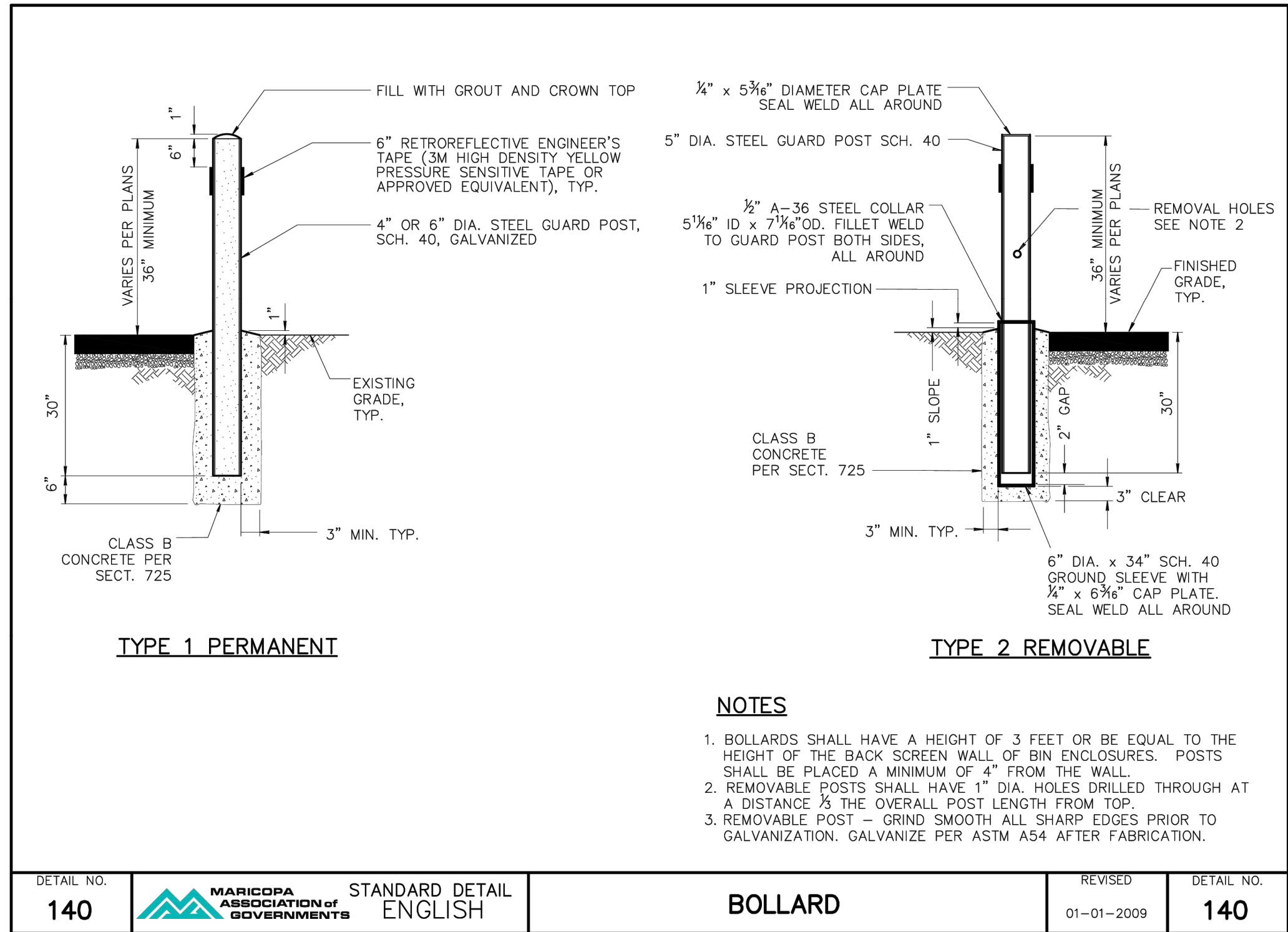
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ENGINEERING & DEVELOPMENT
P.O. BOX 1358
SHOW LOW, AZ. 85902
(928) 532 - 0880



ESCUDILLA MTN DWID WELL & FILL STATION
ADEQ TECHNICAL ASSISTANCE
AZ0401349
WELLHOUSE DETAILS

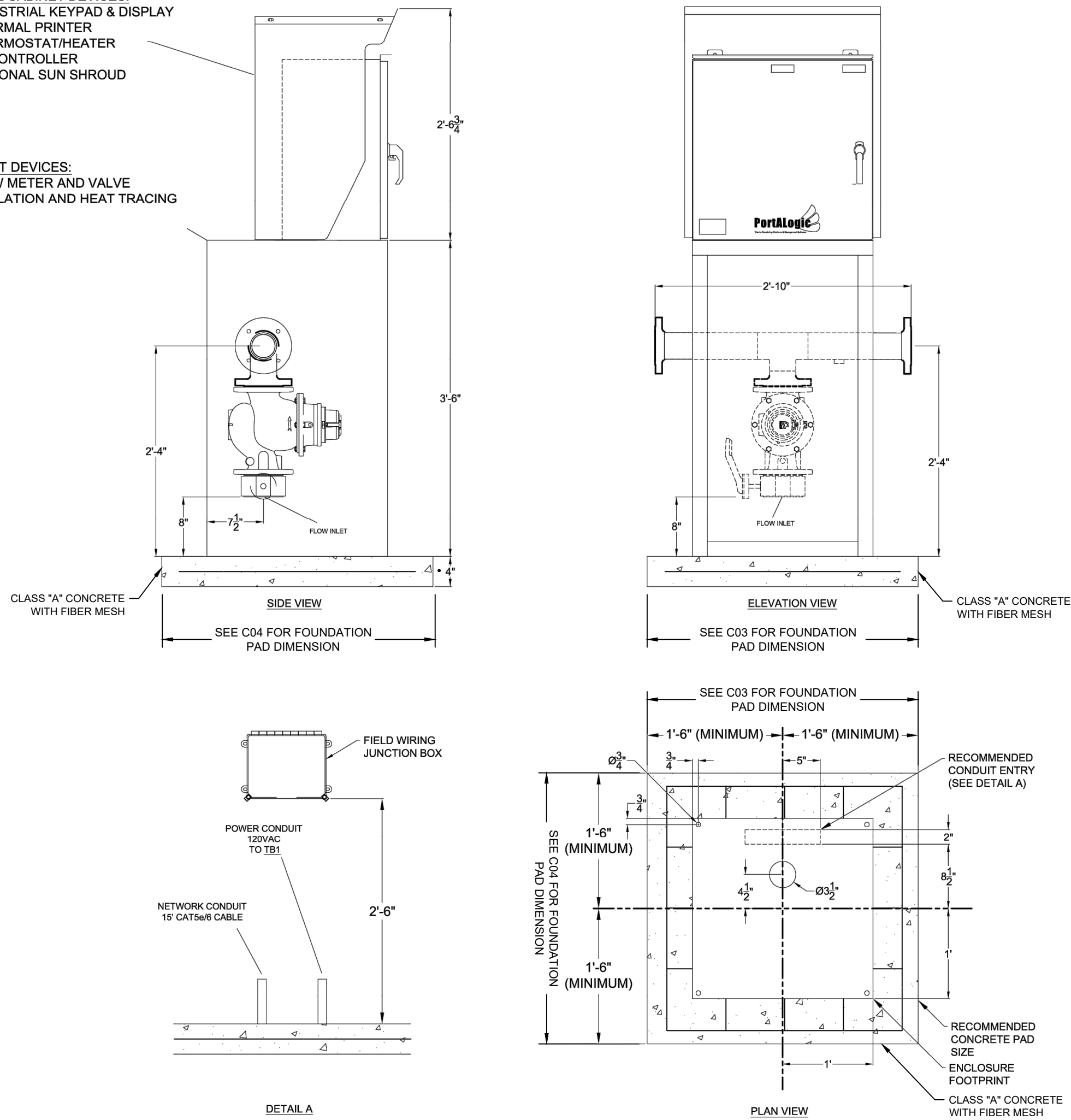
CLIENT: ADEQ	DRAWN BY: JCL	DESIGNER: JCL	REVIEWER: ZWB	PROJECT #: 44802
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C06
06 OF 08

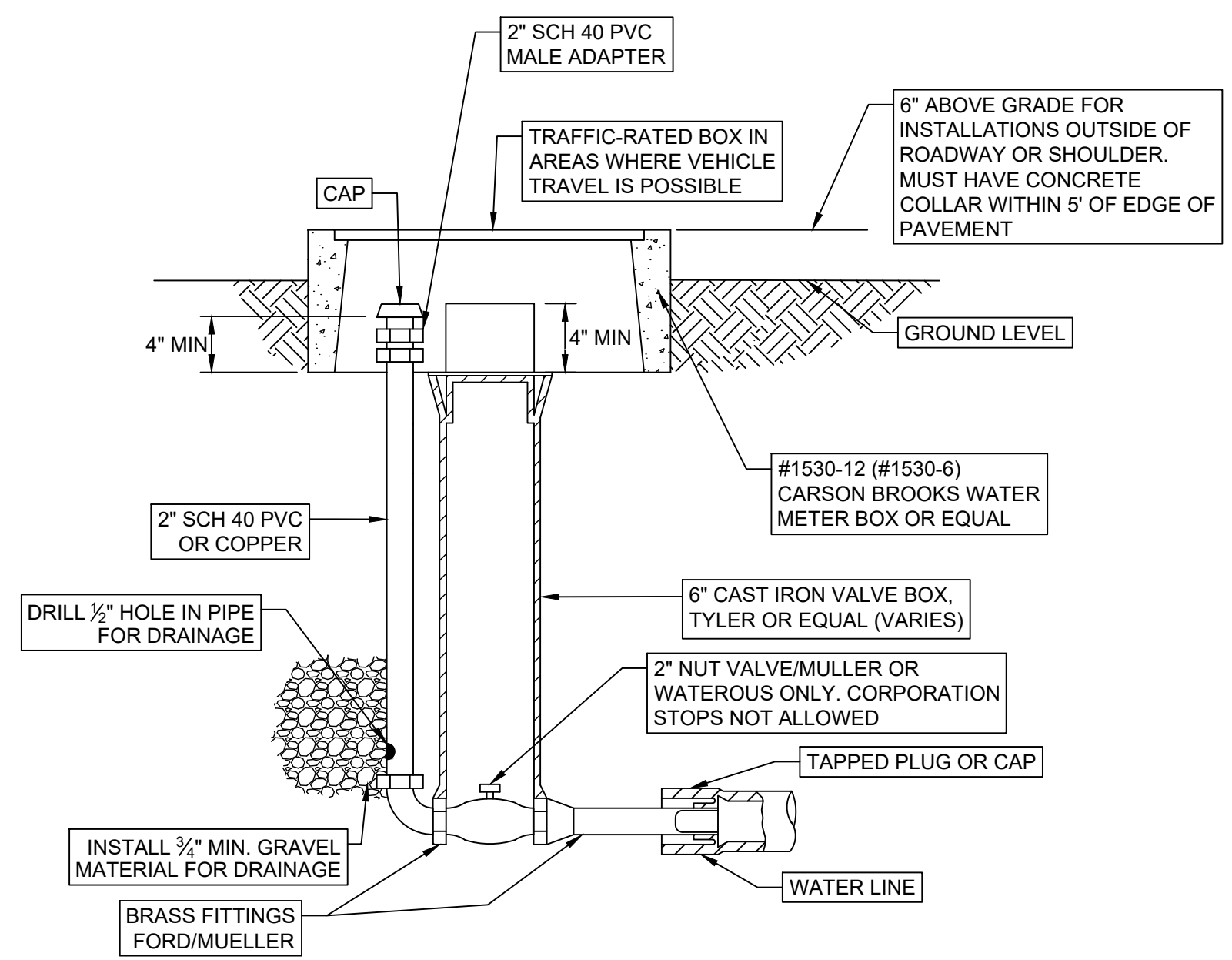


G ELEMECH LOADING ARM DETAILS
NTS

- CONTROL CABINET DEVICES:**
- INDUSTRIAL KEYPAD & DISPLAY
 - THERMAL PRINTER
 - THERMOSTAT/HEATER
 - I/O CONTROLLER
 - OPTIONAL SUN SHROUD
- BASE UNIT DEVICES:**
- FLOW METER AND VALVE
 - INSULATION AND HEAT TRACING

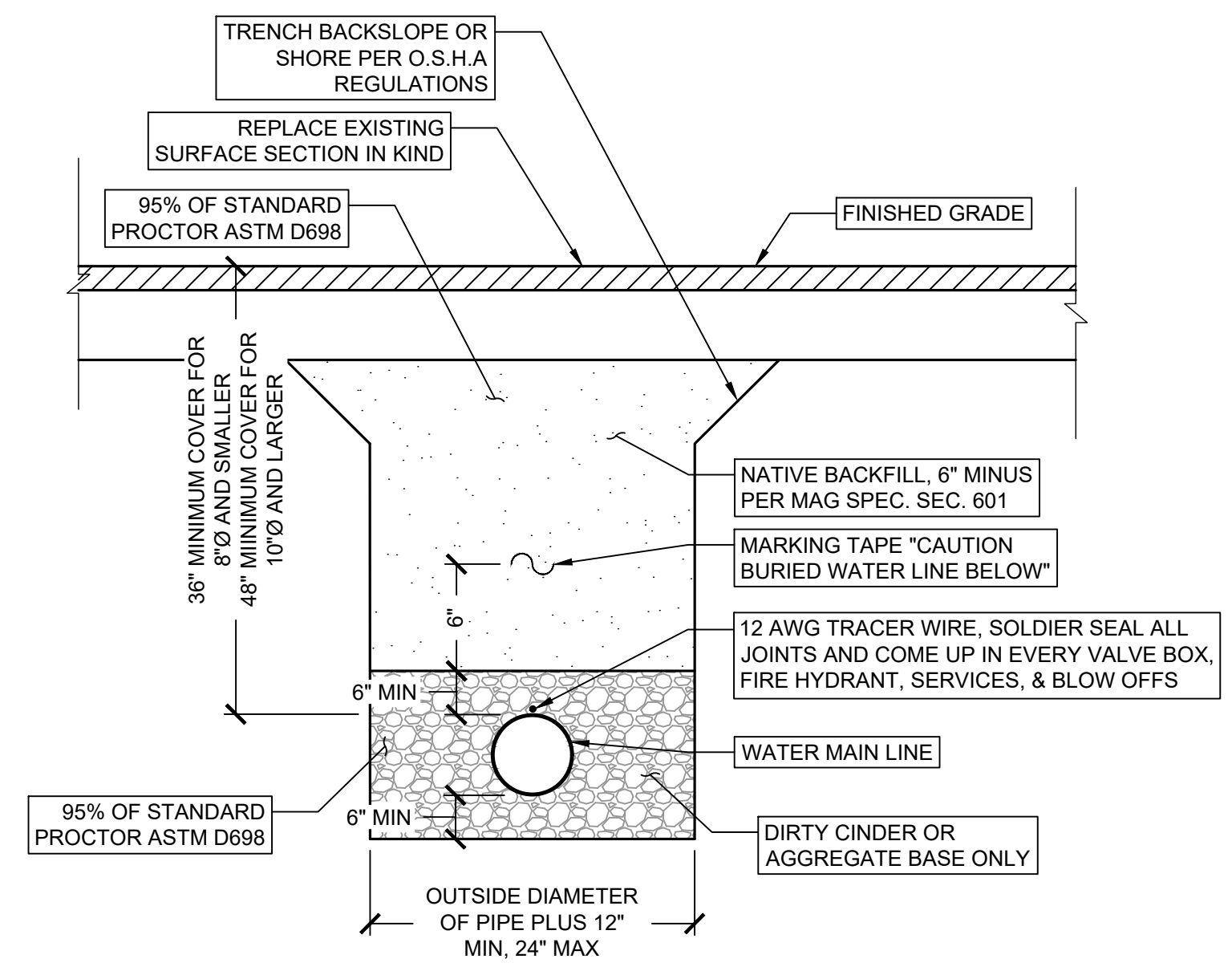


F PORTALOGIC FS-22 PANEL WITH DUAL OUTLET & CONCRETE PAD DETAILS
NTS



- NOTE:**
- MEGA LUGS ARE REQUIRED: LENGTH OF RESTRAINT TO BE DETERMINED BY DESIGN ENGINEER.

H BLOWOFF DETAIL
NTS



E STANDARD WATER TRENCH SECTION
NTS

- USER INSTRUCTIONS:**
- ENTER TRUCK ID NUMBER INTO THE KEYPAD, OR SWIPE ACCESS CARD (CONFIGURED AND ASSIGNED THROUGH PORTALOGIC MANAGEMENT SOFTWARE).
 - ENTER APPROPRIATE PIN (IF REQUIRED).
 - ENTER REQUIRED VOLUME.
 - UPON APPROVAL, THE VALVE WILL OPEN AND WATER WILL BEGIN DISPENSING.
 - TOTALIZED FLOW WILL BE SHOWN ON THE DISPLAY WHILE THE STATION IS DISPENSING.
 - THE FLOW OF WATER WILL STOP AUTOMATICALLY ONCE THE REQUIRED VOLUME HAS BEEN DISPENSED, OF IF THE HAULER PRESSED THE 'STOP' BUTTON.
 - THE SYSTEM IS NOW READY TO PROCESS THE NEXT TRANSACTION.
 - IF A FAULT OCCURS WHEN A LOAD IS IN PROCESS, THE DISPLAY WILL IDENTIFY THE FAULT. THE VALVE WILL CLOSE, AND THE USER WILL BE LOGGED OUT OF THE SYSTEM. THE SYSTEM WILL PRINT A RECEIPT SHOWING THE FAULT ID.

DATE		DESCRIPTION		NO.		REVISIONS	

IRON SIDE
ENGINEERING & DEVELOPMENT
P.O. BOX 1358
SHOW LOW, AZ. 85902
(928) 532 - 0880

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ADEQ TECHNICAL ASSISTANCE
AZ0401349

DETAILS

CLIENT: ADEQ	DRAWN BY: JCL	DESIGNER: JCL	REVIEWER: ZMB	PROJECT #: 44802
SHEET C07 07 OF 08				

NO	DESCRIPTION OF REVISION	MADE BY	DATE
1	2024 UPDATE	RL / T.J.	02/2024
2			
3			
4			

GENERAL NOTES:

- THE LENGTHS OF RESTRAINT OR CONTINUOUS PIPE CALLED OUT IN THE FOLLOWING TABLES ARE FOR INSTALLATION OF MECHANICALLY RESTRAINT FITTINGS AND ARE CALCULATED BASED ON THE FOLLOWING PARAMETERS:
 - THE PIPE MATERIAL IS POLYVINYL CHLORIDE (PVC).
 - THE SOIL TYPE IS "ML" AS DEFINED BY THE UNIFIED SOIL CLASSIFICATION, ASTM STANDARD D2487.
 - THE SAFETY FACTOR RATIO IS 1.5 TO 1.
 - THE TRENCH IS TYPE 5, AS PER ANSI/AWWA C 150/A21.5, TRENCH CONDITIONS.
 - THE DEPTH OF COVER IS AS SHOWN ON THE FOLLOWING TABLES.
 - THE TEST PRESSURE OF THE WATER SYSTEM IS ONE HUNDRED AND FIFTY POUNDS PER SQUARE INCH (150 PSI).
- EBAA IRON INC., RESTRAINT LENGTH CALCULATOR (VERSION 5.0.2) PROGRAM WAS USED ALONG WITH THE ABOVE LISTED DESIGN PARAMETERS TO CALCULATE THE LENGTHS SHOWN IN THE TABLES ON THE FOLLOWING SHEETS.
- CONSERVATIVE ASSUMPTIONS HAVE BEEN MADE IN THE DESIGN OF THE FOLLOWING TABLES. DESIGN ENGINEERS MAY OPT TO PROVIDE THEIR OWN CALCULATIONS PROVIDED THAT THE CALCULATIONS ARE STAMPED BY AN ARIZONA REGISTERED PROFESSIONAL ENGINEER.

DETAIL NO.		STANDARD DETAIL
W-13A		WATER PIPE LENGTH RESTRAINT TABLES DETAIL
SHEET 1 OF 6		GENERAL NOTES
		APPROVED BY

NO	DESCRIPTION OF REVISION	MADE BY	DATE
1	2024 UPDATE	RL / T.J.	02/2024
2			
3			
4			

BENDS

3' COVER

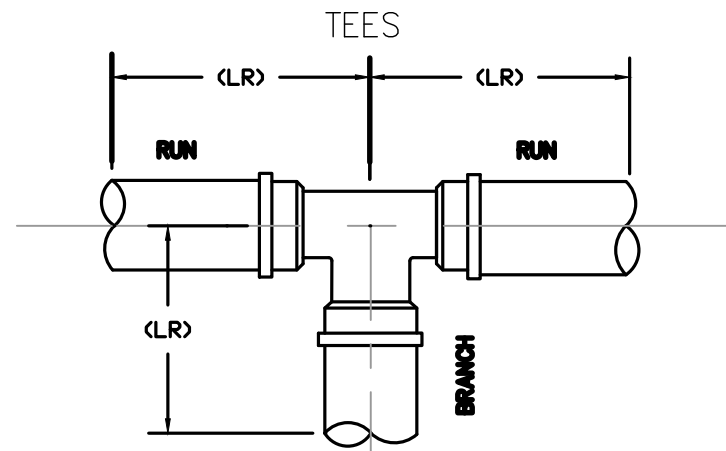
PIPE SIZE & MATERIAL	HORIZONTAL BENDS				VERTICAL BENDS		
	11.25°	22.5°	45°	90°	11.25°	22.5°	45°
PVC	4"	2'	4'	7'	16'	6'	11'
	6"	3'	5'	9'	22'	8'	15'
	8"	3'	6'	12'	29'	10'	20'

4' COVER

PIPE SIZE & MATERIAL	HORIZONTAL BENDS				VERTICAL BENDS		
	11.25°	22.5°	45°	90°	11.25°	22.5°	45°
PVC	12"	3'	7'	12'	31'	11'	21'
	16"	4'	8'	17'	39'	14'	27'

DETAIL NO.		STANDARD DETAIL
W-13D		WATER PIPE LENGTH RESTRAINT TABLES DETAIL
SHEET 4 OF 6		BENDS
		APPROVED BY

NO	DESCRIPTION OF REVISION	MADE BY	DATE
1	2024 UPDATE	RL / T.J.	02/2024
2			
3			
4			



3' COVER

TEE SIZE & PIPE MATERIAL	MINIMUM ATTACHED LENGTH OF PIPE (LR)										
	0'	2'	4'	6'	8'	10'	12'	14'	16'	18'	20'
	LENGTH OF RESTRAINT BRANCH										
PVC	4x4	51'	37'	23'	20'	20'	20'	20'	20'	20'	20'
	6x4	48'	29'	20'	20'	20'	20'	20'	20'	20'	20'
	6x6	71'	57'	43'	30'	20'	20'	20'	20'	20'	20'
	8x4	45'	21'	20'	20'	20'	20'	20'	20'	20'	20'
	8x6	68'	50'	33'	20'	20'	20'	20'	20'	20'	20'
	8x8	93'	79'	65'	51'	37'	23'	20'	20'	20'	20'

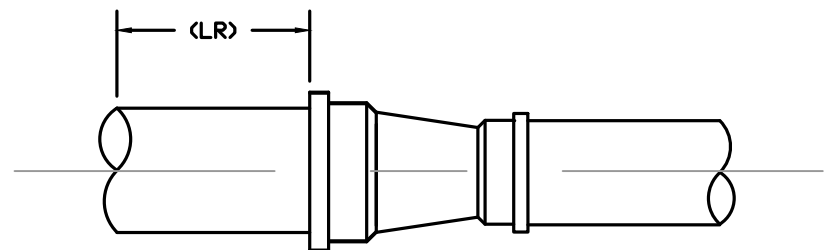
4' COVER

TEE SIZE & PIPE MATERIAL	MINIMUM ATTACHED LENGTH OF PIPE (LR)										
	0'	2'	4'	6'	8'	10'	12'	14'	16'	18'	20'
	LENGTH OF RESTRAINT BRANCH										
PVC	12x6	48'	24'	20'	20'	20'	20'	20'	20'	20'	20'
	12x8	67'	47'	27'	20'	20'	20'	20'	20'	20'	20'
	12x12	101'	87'	73'	59'	45'	30'	20'	20'	20'	20'
	16x8	61'	36'	20'	20'	20'	20'	20'	20'	20'	20'
	16x12	95'	77'	59'	41'	22'	20'	20'	20'	20'	20'
	16x16	130'	116'	101'	87'	73'	58'	44'	30'	20'	20'

DETAIL NO.		STANDARD DETAIL
W-13B		WATER PIPE LENGTH RESTRAINT TABLES DETAIL
SHEET 2 OF 6		TEES
		APPROVED BY

NO	DESCRIPTION OF REVISION	MADE BY	DATE
1	2024 UPDATE	RL / T.J.	02/2024
2			
3			
4			

REDUCERS



REDUCERS

THE MINIMUM PIPE LENGTH RESTRAINT (LR) TO BE RESTRAINT ON THE LARGE SIDE OF THE REDUCER SHALL BE DERIVED FROM THE TABLES BELOW.

3' COVER

REDUCER SIZE & PIPE MATERIAL	MINIMUM LENGTH RESTRAINT
PVC	6x4
	8x4
	8x6

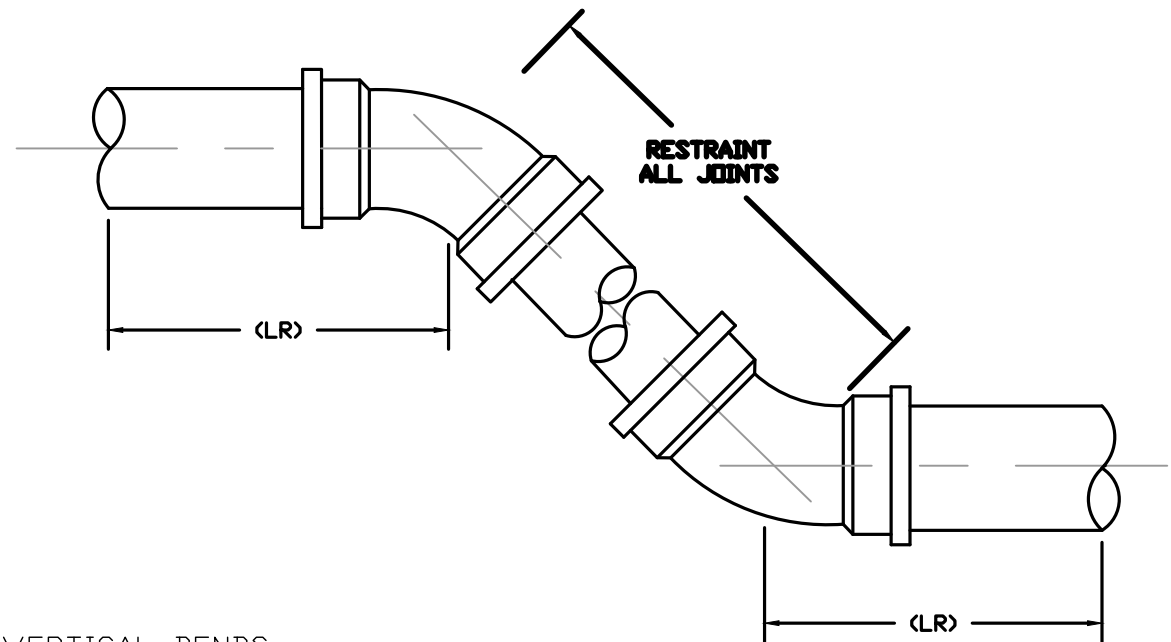
4' COVER

REDUCER SIZE & PIPE MATERIAL	MINIMUM LENGTH RESTRAINT
PVC	12x4
	12x6
	12x8
	16x6
	16x8
	16x12

DETAIL NO.		STANDARD DETAIL
W-13E		WATER PIPE LENGTH RESTRAINT TABLES DETAIL
SHEET 5 OF 6		REDUCERS
		APPROVED BY

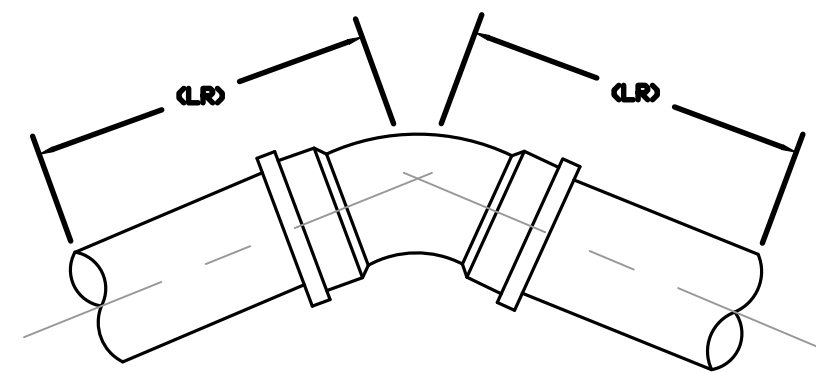
NO	DESCRIPTION OF REVISION	MADE BY	DATE
1	2024 UPDATE	RL / T.J.	02/2024
2			
3			
4			

BENDS



VERTICAL BENDS

THE MINIMUM PIPE LENGTH RESTRAINT (LR) TO BE RESTRAINT ON BOTH SIDES OF THE VERTICAL OFFSET SHALL BE DERIVED FROM THE TABLES ON DETAIL NO. W-13E.



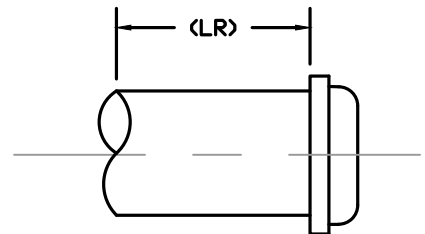
HORIZONTAL BENDS

THE MINIMUM PIPE LENGTH RESTRAINT (LR) TO EXTEND IN BOTH DIRECTIONS FROM THE HORIZONTAL BEND SHALL BE DERIVED FROM THE TABLES ON DETAIL NO. W-13E.

DETAIL NO.		STANDARD DETAIL
W-13C		WATER PIPE LENGTH RESTRAINT TABLES DETAIL
SHEET 3 OF 6		BENDS
		APPROVED BY

NO	DESCRIPTION OF REVISION	MADE BY	DATE
1	2024 UPDATE	RL / T.J.	02/2024
2			
3			
4			

DEAD ENDS



DEAD ENDS

THE MINIMUM PIPE LENGTH RESTRAINT (LR) TO BE RESTRAINT ON A DEAD END SHALL BE DERIVED FROM THE TABLES BELOW.

3' COVER

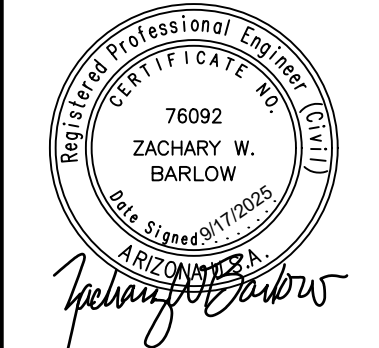
DEAD END SIZE & PIPE MATERIAL	MINIMUM LENGTH RESTRAINT
PVC	4"
	6"
	8"

4' COVER

DEAD END SIZE & PIPE MATERIAL	MINIMUM LENGTH RESTRAINT
PVC	12"
	16"

DETAIL NO.		STANDARD DETAIL
W-13F		WATER PIPE LENGTH RESTRAINT TABLES DETAIL
SHEET 6 OF 6		DEAD ENDS
		APPROVED BY

IRON SIDE
ENGINEERING & DEVELOPMENT
P.O. BOX 1358
SHOW LOW, AZ. 85902
(928) 532 - 0880



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ADEQ TECHNICAL ASSISTANCE
AZ0401349
DETAILS

CLIENT: ADEQ
DRAWN BY: JCL
DESIGNER: JCL
REVIEWER: ZMB
PROJECT #: 44802

SHEET
C08
08 OF 08