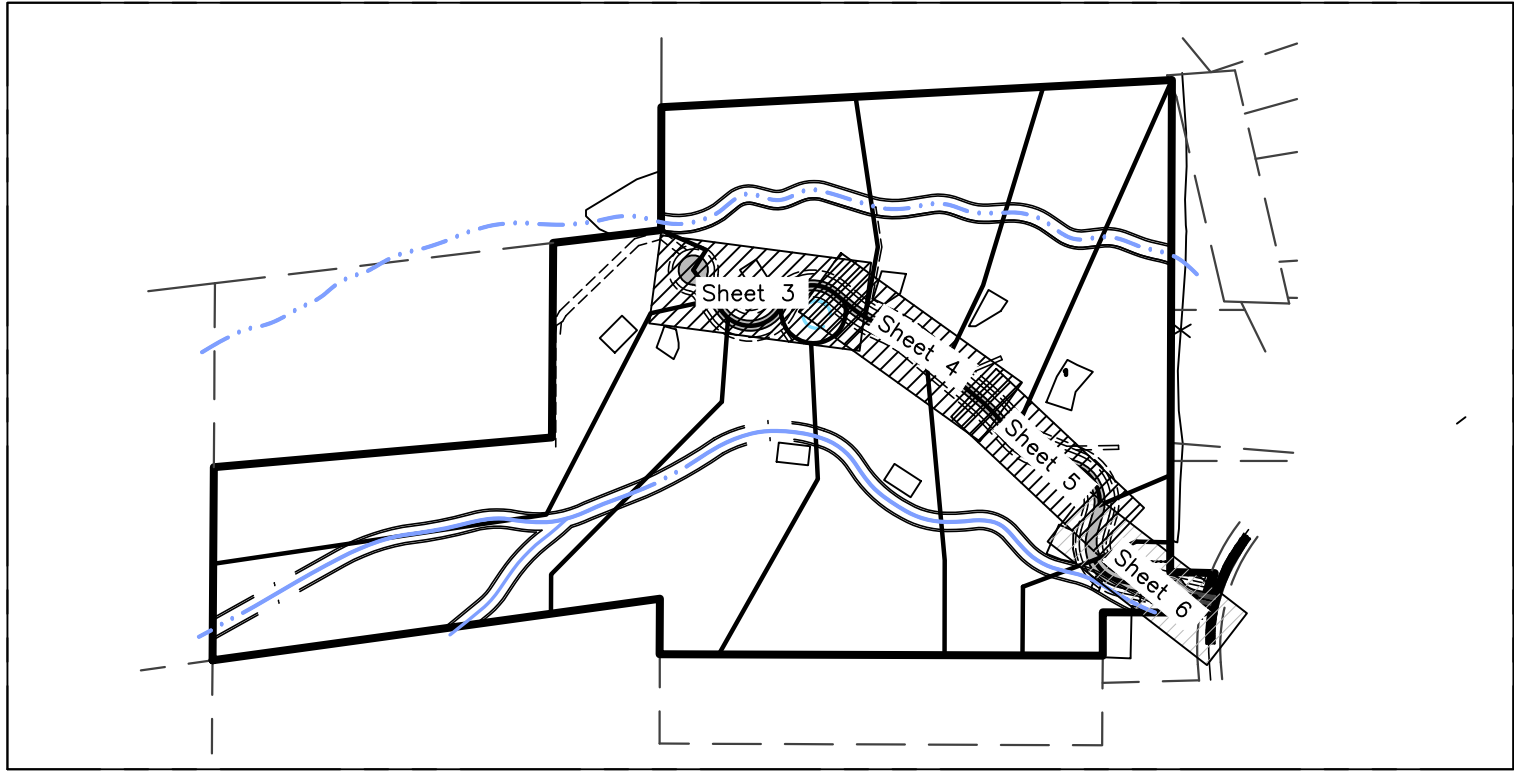


Project Narrative/Notes/Revisions

- 08/21/2023 ZD - COMPLETED DESIGN FOR CLIENT & COUNTY REVIEW.
- 12/21/2023 ZD - CLIENT COMMENTS
- 04/04/2024 ZD - COUNTY COMMENTS



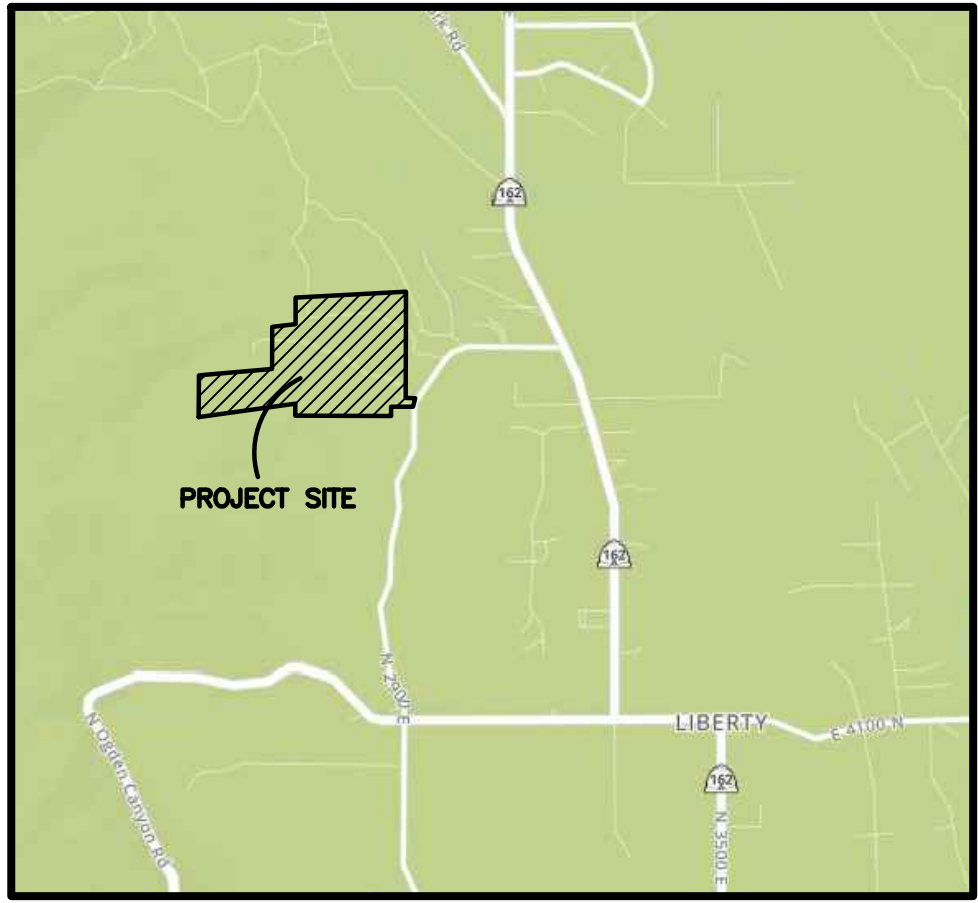
Sheet Index Key Map
NOT TO SCALE

Sheet Index

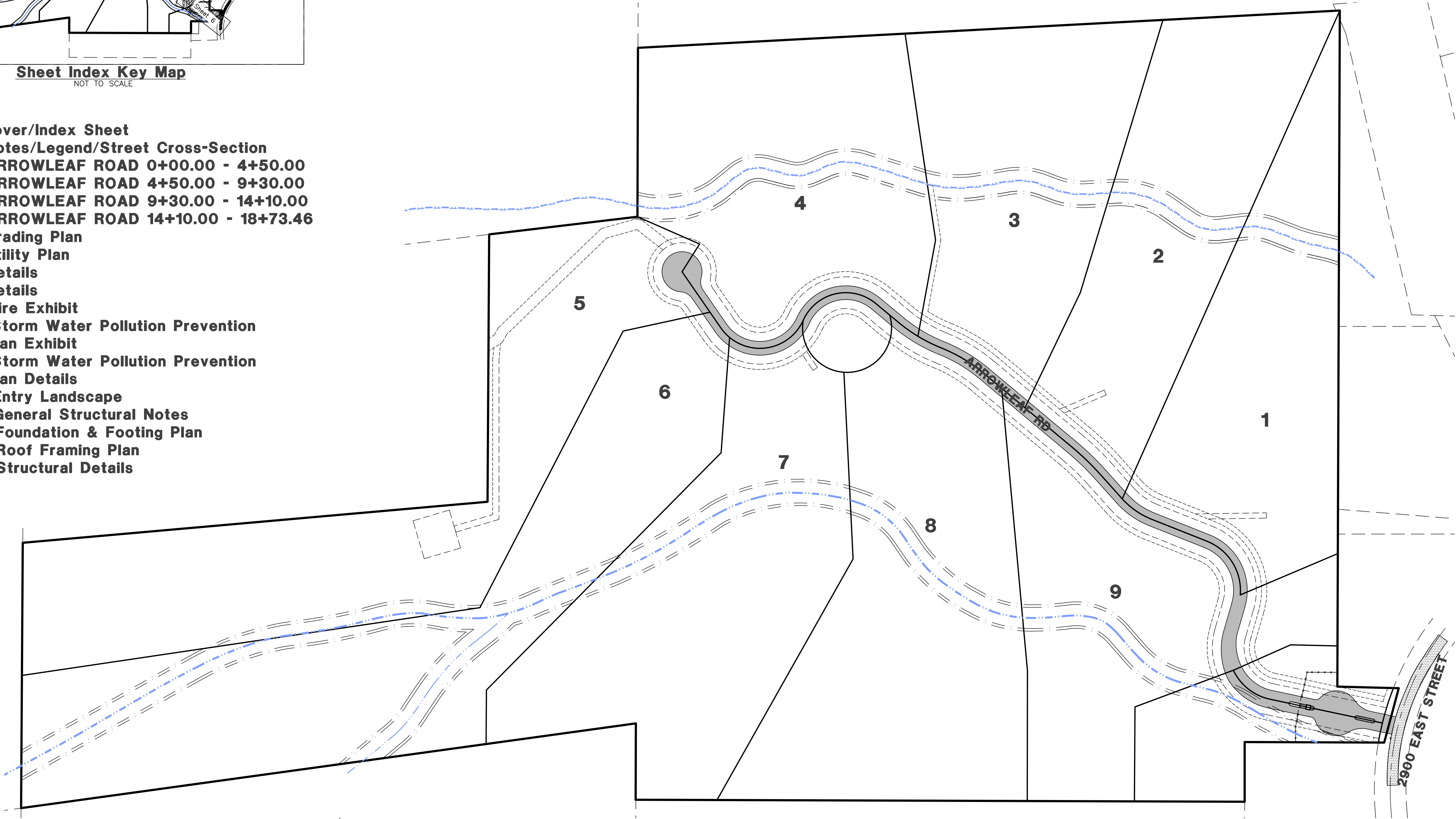
- Sheet 1 - Cover/Index Sheet
- Sheet 2 - Notes/Legend/Street Cross-Section
- Sheet 3 - ARROWLEAF ROAD 0+00.00 - 4+50.00
- Sheet 4 - ARROWLEAF ROAD 4+50.00 - 9+30.00
- Sheet 5 - ARROWLEAF ROAD 9+30.00 - 14+10.00
- Sheet 6 - ARROWLEAF ROAD 14+10.00 - 18+73.46
- Sheet 7 - Grading Plan
- Sheet 8 - Utility Plan
- Sheet 9 - Details
- Sheet 10- Details
- Sheet 11 - Fire Exhibit
- Sheet 12 - Storm Water Pollution Prevention Plan Exhibit
- Sheet 13 - Storm Water Pollution Prevention Plan Details
- Sheet 14 - Entry Landscape
- Sheet S1 - General Structural Notes
- Sheet S2 - Foundation & Footing Plan
- Sheet S3 - Roof Framing Plan
- Sheet S4 - Structural Details

ARROWLEAF Improvement Plans

EDEN, WEBER COUNTY, UTAH
FEBUARY, 2023

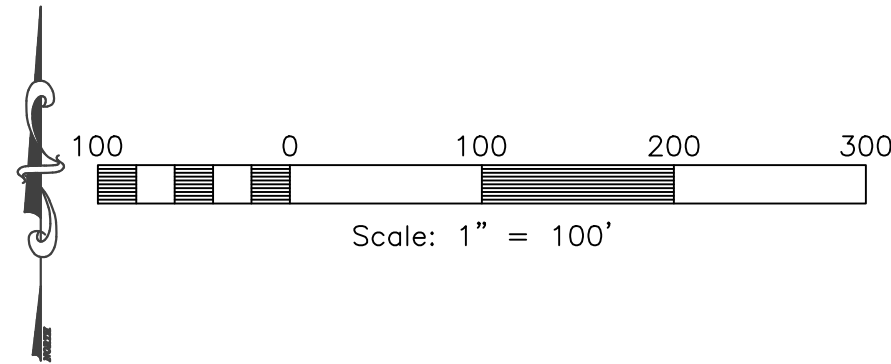


Vicinity Map
NOT TO SCALE



Engineer's Notice To Contractors:

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED FROM AVAILABLE INFORMATION PROVIDED BY OTHERS. THE LOCATIONS SHOWN ARE APPROXIMATE AND SHALL BE CONFIRMED IN THE FIELD BY THE CONTRACTOR, SO THAT ANY NECESSARY ADJUSTMENT CAN BE MADE IN ALIGNMENT AND/OR GRADE OF THE PROPOSED IMPROVEMENT. THE CONTRACTOR IS REQUIRED TO CONTACT THE UTILITY COMPANIES AND TAKE DUE PRECAUTIONARY MEASURE TO PROTECT ANY UTILITY LINES SHOWN, AND ANY OTHER LINES OBTAINED BY THE CONTRACTOR'S RESEARCH, AND OTHERS NOT OF RECORD OR NOT SHOWN ON THESE PLANS.



Scale: 1" = 100'



Surveyor:

Jason Felt
Reeve & Associates, Inc.
5160 South 1500 West
Riverdale, Utah, 84405
PH:(801) 621-3100

Developer Contact:

Dave & Sara Chugg
1648 Farr West Dr.
Ogden, UT, 84404
PH: (801) 420-8814

Project Contact:

Jeremy Draper
Reeve & Associates, Inc.
5160 South 1500 West
Riverdale, Utah, 84405
PH:(801) 621-3100



REVISIONS	DATE	DESCRIPTION
03-18-24 ZD	County Comments	
04-04-24 ZD	County Comments	

Arrowleaf
PART OF THE SECTION 18, T.7N., R.1E., S.1B. & M., U.S. SURVEY
EDEN, WEBER COUNTY, UTAH
Cover/Index Sheet



Project Info.
Engineer:
JEREMY A. DRAPER, P.E.
Drafter:
Z. DECARIA
Begin Date:
FEBRUARY 2023
Name:
ARROWLEAF
Number: 7895-01

1. ALL CONSTRUCTION MUST STRICTLY FOLLOW THE STANDARDS AND SPECIFICATIONS SET FORTH BY: GOVERNING UTILITY MUNICIPALITY,
GOVERNING CITY OR COUNTY (IF UN-INCORPORATED), INDIVIDUAL PRODUCT MANUFACTURERS, AMERICAN PUBLIC WORKS
ASSOCIATION (APWA), AND THE DESIGN ENGINEER. THE ORDER LISTED ABOVE IS ARRANGED BY SENIORITY, IF A CONSTRUCTION
2. CONTRACTOR IS NOT REGISTERED FOR SUCH WORK, THE CONTRACTOR MUST CONTACT DESIGN ENGINEER FOR DIRECTION.
CONTRACTOR TO STRICTLY FOLLOW GEOTECHNICAL RECOMMENDATIONS FOR THIS PROJECT. ALL GRADING INCLUDING BUT NOT
LIMITED TO CUT, FILL, COMPACTION, ASPHALT SECTION, SUBBASE, TRENCH EXCAVATION/BACKFILL, SITE GRUBBING, RETAINING WALLS
AND FOOTINGS MUST BE COORDINATED DIRECTLY WITH THE PROJECT GEOTECHNICAL ENGINEER.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING AND NOTIFYING ENGINEER TO CURRENT GOVERNING AGENCIES TRANSPORTATION ENGINEER'S MANUAL
AND MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
4. ANY AREA OUTSIDE THE LIMIT OF WORK THAT IS DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO COST TO
OWNER.
5. CONSULT ALL OF THE DRAWINGS AND SPECIFICATIONS FOR COORDINATION REQUIREMENTS BEFORE COMMENCING CONSTRUCTION.
6. AT ALL LOCATIONS WHERE EXISTING PAVEMENT ABUTS NEW CONSTRUCTION, THE EDGE OF THE EXISTING PAVEMENT SHALL BE
SAW-CUT TO A CLEAN, SMOOTH EDGE.
7. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE MOST RECENT, ADOPTED EDITION OF ADA ACCESSIBILITY
GUIDELINES.
8. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING SURE THAT ALL REQUIRED PERMITS
AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED
THROUGHOUT REVIEWED PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.
9. COVERING OR REMOVAL OF EXISTING UTILITIES SHALL BE THE RESPONSIBILITY OF THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADVANCE
COVERING UP ANY PHASE OF CONSTRUCTION REQUIRING OBSERVATION.
10. ANY WORK IN THE PUBLIC RIGHT-OF-WAY WILL REQUIRE PERMITS FROM THE APPROPRIATE CITY, COUNTY OR STATE AGENCY.
11. ALL DIMENSIONS, GRADES & UTILITY DESIGNS SHOWN ON THE PLANS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO
CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH CONSTRUCTION FOR
NECESSARY PLAN OR GRADE CHANGES.
12. VERIFY ALL EXISTING CONDITIONS BEFORE BIDDING AND BRING UP ANY QUESTIONS BEFOREHAND.
13. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET
FORTH BY THE GEOTECHNICAL ENGINEER.
14. CATCH SLOPES SHALL BE GRADED AS SPECIFIED ON GRADING PLANS.
15. ALL SLOPES SHALL BE RESPONSIBLE FOR ALL FLAGGING, CAUTION SIGNS, LIGHTS, BARRICADES, FLAGMEN, AND ALL OTHER
DEVICES NECESSARY FOR PUBLIC SAFETY.
16. CONTRACTOR SHALL, AT THE TIME OF BIDDING AND THROUGHOUT THE PERIOD OF THE CONTRACT, BE LICENSED IN THE STATE
WHERE THE PROJECT IS LOCATED AND SHALL BE BONDED FOR AN AMOUNT EQUAL TO, OR GREATER THAN THE AMOUNT BID AND
FOR THE TYPE OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED LICENSES, SKILLED AND REGULARLY
ENGAGED IN THE GENERAL CLASS AND TYPE OF WORK CALLED FOR IN THE PLANS AND SPECIFICATIONS.
17. CONTRACTOR SHALL INSPECT THE SITE OF THE WORK PRIOR TO BIDDING TO SATISFY HIMSELF BY PERSONAL EXAMINATION OR BY
SUCH OTHER MEANS AS HE MAY PREFER OF THE LOCATIONS OF THE PROPOSED WORK AND OF THE ACCESS CONDITIONS OF AND
TO THE TYPE OF WORK. DURING THE COURSE OF THE EXAMINATION, A BIDDER FINDS FACTS OR CONDITIONS WHICH APPEAR TO
HIM TO BE IN CONFLICT WITH THE LETTER OR SPIRIT OF THE PROJECT PLANS AND SPECIFICATIONS, HE SHALL CONTACT THE
ENGINEER FOR ADDITIONAL INFORMATION AND EXPLANATION BEFORE SUBMITTING HIS BID. SUBMISSION OF A BID BY THE
CONTRACTOR SHALL CONSTITUTE AN ACKNOWLEDGMENT OF THE ACCURACY OF THE INFORMATION AND DATA ON HIS
OWN EXAMINATION OF (1) THE SITE OF THE WORK, (2) ACCESS TO THE SITE, AND (3) ALL OTHER DATA AND MATTERS RELATING
TO THE FULFILLMENT OF THE WORK AND ON HIS OWN KNOWLEDGE OF EXISTING FACILITIES ON AND IN THE VICINITY OF THE SITE
OF THE WORK TO BE CONSTRUCTED UNDER THIS CONTRACT. THE INFORMATION PROVIDED BY THE ENGINEER IS NOT INTENDED TO
BE A SUBSTITUTE FOR, OR SUPPLEMENT TO, THE INDEPENDENT VERIFICATION OF THE CONTRACTOR TO THE EXTENT THAT SUCH
INVESTIGATION OR INVESTIGATION OF SITE CONDITIONS IS CONSIDERED DESIRABLE BY THE CONTRACTOR. THE CONTRACTOR SHALL
ACKNOWLEDGE THAT HE HAS NOT RELIED SOLELY UPON OWNER- OR ENGINEER-FURNISHED INFORMATION REGARDING THE EXISTING
CONDITIONS IN PREPARING AND SUBMITTING HIS BID.
18. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL WATER, POWER, SANITARY FACILITIES AND TELEPHONE SERVICES AS
REQUIRED FOR THE CONTRACTOR'S USE DURING CONSTRUCTION.
19. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE
OWNER, ENGINEER, AND/OR GOVERNING AGENCIES.
20. CONTRACTOR SHALL EXERCISE DUE CAUTION AND SHALL CAREFULLY PRESERVE BENCH MARKS, CONTROL POINTS, REFERENCE
POINTS, AND ALL SURVEY DATA. CONTRACTOR SHALL BEAR ALL EXPENSES FOR REPLACEMENT AND/OR ERRORS CAUSED BY THE
UNNECESSARY LOSS OR DISTURBANCE.
21. CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOBSITE CONDITIONS DURING THE COURSE OF
CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY
WHETHER OR NOT LIABILITY IS LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE
OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF
WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
22. CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY SCHEDULING INSPECTION AND TESTING OF ALL FACILITIES CONSTRUCTED
UNDER THIS CONTRACT. TESTING SHALL CONFORM WITH THE REGULATORY AGENCY'S STANDARD SPECIFICATIONS. ALL TESTING AND
INSPECTION SHALL BE PAID FOR BY THE OWNER; ALL RE-TESTING AND/OR RE-INSPECTION SHALL BE PAID FOR BY THE
CONTRACTOR.
23. IF EXISTING IMPROVEMENTS NEED TO BE DISTURBED AND/OR REMOVED FOR THE PROPER PLACEMENT OF IMPROVEMENTS TO BE
CONSTRUCTED BY THE CONTRACTOR, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF SUCH IMPROVEMENTS. THE
COST OF REPLACING OR REPAIRING EXISTING IMPROVEMENTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEMS
REQUIRING REMOVAL AND/OR REPLACEMENT. THERE WILL BE NO EXTRA COST DUE TO THE CONTRACTOR FOR REPLACING OR
REPAIRING EXISTING IMPROVEMENTS.
24. WHENEVER EXISTING FACILITIES ARE REMOVED, DAMAGED, BROKEN, OR CUT IN THE INSTALLATION OF THE WORK COVERED BY
THIS CONTRACT, THE CONTRACTOR SHALL REPLACE AND/OR REPAIR SUCH FACILITIES AT THE CONTRACTOR'S EXPENSE WITH MATERIALS EQUAL
TO OR BETTER THAN THE MATERIALS USED IN THE ORIGINAL EXISTING FACILITIES. THE FINISHED PRODUCT SHALL BE SUBJECT TO
THE APPROVAL OF THE OWNER, THE ENGINEER, AND THE RESPECTIVE REGULATORY AGENCY.
25. CONTRACTOR SHALL MAINTAIN A NEATLY MARKED SET OF FULL-SIZE AS-BUILT RECORD DRAWINGS SHOWING THE FINAL LOCATION
AND DEPTH OF ALL UTILITIES AND STRUCTURES INSTALLED AND ALL CHANGES, REVISIONS, AND ADJUSTMENTS. THE CONTRACTOR
ACCOMMODATIONS, AND ADJUSTMENTS TO ALL IMPROVEMENTS CONSTRUCTED. WHERE NECESSARY, SUPPLEMENTAL DRAWINGS SHALL
BE PREPARED AND SUBMITTED BY THE CONTRACTOR. PRIOR TO ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL DELIVER TO
THE ENGINEER A COMPLETE SET OF AS-BUILT RECORD DRAWINGS SHOWING ALL INFORMATION REQUIRED ABOVE. THE CONTRACTOR
AS-BUILT RECORD DRAWINGS SHALL BE REVIEWED AND THE COMPLETE AS-BUILT RECORD DRAWING SET SHALL BE CURRENT WITH
ALL CHANGES AND DEVIATIONS REDLINED AS A PRECONDITION TO THE FINAL PROGRESS PAYMENT APPROVAL AND/OR FINAL
ACCEPTANCE.
26. WHERE THE PLANS OR SPECIFICATIONS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL, IT
IS THE UNDERSTANDING THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE
HIGHEST QUALITY ARE TO BE USED.
27. CONTRACTOR SHALL BE SKILLED AND REGULARLY ENGAGED IN THE GENERAL CLASS AND TYPE OF WORK CALLED FOR IN THE
PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RELIABLELY OBTAINING ALL MATERIALS, EQUIPMENT, AND
CONTRACTOR. PRICES PROVIDED WITHIN THE CONTRACT DOCUMENTS SHALL INCLUDE ALL LABOR AND MATERIALS NECESSARY AND
PROPER FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THE TRUE INTENT AND
PURPOSE OF THESE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL BE COMPETENT, KNOWLEDGEABLE AND HAVE SPECIAL
SKILLS IN THE TYPE OF WORK TO BE PERFORMED. CONTRACTOR SHALL ALSO
ACKNOWLEDGE THAT THERE ARE CERTAIN PECULIAR AND INHERENT CONDITIONS EXISTENT IN THE CONSTRUCTION OF THE
PARTICULAR FACILITIES WHICH MAY CREATE, DURING THE CONSTRUCTION PROGRAM, UNUSUAL OR UNSAFE CONDITIONS HAZARDOUS
TO PERSONS, PROPERTY AND THE ENVIRONMENT. CONTRACTOR SHALL BE AWARE OF SUCH PECULIAR RISKS AND HAVE THE SKILL
AND KNOWLEDGE TO DESIGN AND ADOPT PROTECTIVE MEASURES TO ADEQUATELY AND SAFELY PERFORM THE CONSTRUCTION
WORK WITH RESPECT TO SUCH HAZARDS.
28. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL STRIPPING AND/OR PAVEMENT MARKINGS NECESSARY TO THE
EXISTING STRIPING INTO FUTURE STRIPING. METHOD OF REMOVAL SHALL BE BY GRINDING OR SANDBLASTING.
29. CONTRACTOR SHALL SHORTLY AFTER THE COMPLETION OF THE PROJECT, PROVIDE A PROTECTIVE WORKMEN FOR ALL
AREAS TO BE EXCAVATED TO A DEPTH OF 4 FEET OR MORE. FOR EXCAVATIONS 4 FEET OR MORE IN DEPTH, THE
CONTRACTOR SHALL COMPLY WITH LOCAL, STATE AND NATIONAL SAFETY CODES, ORDINANCES, OR REQUIREMENTS FOR EXCAVATION
AND TRENCHES.
30. ALL FENCING GATES AND FENCES TO REMAIN UNLESS OTHERWISE NOTED ON PLANS. PROTECT ALL GATES AND FENCES FROM
DAMAGE.

1. CONTRACTOR SHALL COORDINATE LOCATION OF NEW "DRY UTILITIES" WITH THE APPROPRIATE UTILITY COMPANY, INCLUDING BUT NOT LIMITED TO: TELEPHONE SERVICE, GAS SERVICE, CABLE, POWER, INTERNET.
2. EXISTING UTILITIES HAVE BEEN SHOWN ON THE PLANS USING A COMBINATION OF ON-SITE SURVEYS (BY OTHERS), PRIOR TO EXCAVATION OF ANY NEW UTILITIES, AND TO HAVE EXISTING UTILITY COMPANY LOCATIONS. THE CONTRACTOR SHALL FIELD THEIR MAIN AND SERVICE LINES 48 HOURS IN ADVANCE OF PERFORMING ANY EXCAVATION. THE CONTRACTOR SHALL RECORD THE BLUE STAKES ORDER NUMBER AND FURNISH ORDER NUMBER TO OWNER AND ENGINEER PRIOR TO ANY EXCAVATION. IT WILL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO DIRECTLY CONTACT ANY OTHER UTILITY COMPANIES THAT ARE NOT MEMBERS OF BLUE STAKES. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROTECT ALL EXISTING UTILITIES SO THAT NO DAMAGE OCCURS TO THEM. IF ANY DAMAGE TO EXISTING UTILITIES OCCURS, THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR AND BE PAID FOR BY THE CONTRACTOR. THE CONTRACTOR SHALL BE REQUIRED TO COOPERATE WITH OTHER CONTRACTORS AND UTILITY COMPANIES INSTALLING NEW STRUCTURES, UTILITIES AND SERVICE TO THE PROJECT.
3. CONTRACTOR SHALL POT HOLE ALL UTILITIES TO DETERMINE IF CONFLICTS EXIST PRIOR TO BEGINNING ANY EXCAVATION. NOTIFY THE ENGINEER OF ANY CONFLICT. CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR AND BE PAID FOR BY THE CONTRACTOR. ALL EXISTING UTILITIES WILL BE CONNECTED. PRIOR TO COMMENCING ANY EXCAVATION WORK THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES IN ACCORDANCE WITH THE REQUIRED PROCEDURES.
4. CARE SHOULD BE TAKEN IN ALL EXCAVATIONS DUE TO POSSIBLE EXISTENCE OF UNRECORDED UTILITY LINES. EXCAVATION REQUIREMENTS FOR PROXIMITY TO EXISTING UTILITIES SHALL BE DONE BY HAVING CONTRACTOR'S REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT HIS EXPENSE.
5. ALL VALVES AND MANHOLE COVERS SHALL BE RAISED OR LOWERED TO MEET FINISHED GRADE.
6. CONTRACTOR SHALL CUT PIPES OFF FLUSH WITH THE INSIDE WALL OF THE BOX OR MANHOLE.
7. CONTRACTOR SHALL GROUT AT CONNECTION OF PIPE TO BOX WITH NON-SHRINKING GROUT, INCLUDING PIPE VOIDS LEFT BY CUTTING PROCESS, TO A SMOOTH FINISH.
8. CONTRACTOR SHALL GROUT WITH NON-SHRINK GROUT BETWEEN GRADE RINGS AND BETWEEN BOTTOM OF INLET LID FRAME AND TOP OF CONCRETE BOX.
9. SILL AND ALBERS IS TO BE CLEANED OUT OF ALL STORM DRAIN BOVS, CATCH BASINS ARE TO BE MAINTAINED IN A CLEANED CONDITION AS NECESSARY UNTIL AFTER THE FINAL BOND RELEASE INSPECTION.
10. CONTRACTOR SHALL CLEAN ASPHALT, TAR OR OTHER ADHESIVES OFF OF ALL MANHOLE LIDS AND INLET GRATES TO ALLOW ACCESS.
11. EACH TRENCH SHALL BE EXCAVATED SO THAT THE PIPE CAN BE LAID TO THE ALIGNMENT AND GRADE AS REQUIRED. THE TRENCH WALL SHALL BE SO BRACED THAT THE WORKMEN MAY WORK SAFELY AND EFFICIENTLY. ALL TRENCHES SHALL BE DRAINED SO THE PIPE LAYING MAY TAKE PLACE IN DE-WATERED CONDITIONS.
12. CONTRACTOR SHALL PROVIDE AND MAINTAIN AT ALL TIMES AMPLE MEANS AND DEVICES WITH WHICH TO REMOVE PROMPTLY AND TO PROPERLY DISPOSE OF ALL WATER EXPOSED DURING EXCAVATION.
13. MAINTAIN A MINIMUM 18" VERTICAL SEPARATION DISTANCE BETWEEN ALL UTILITY CROSSINGS.
14. CONTRACTOR SHALL START INSTALLATION AT LOW POINT OF ALL NEW GRAVITY UTILITY LINES.
15. ALL BOLTED FITTINGS MUST BE GREASED AND WRAPPED.
16. ALL SLEEVES PARALLEL TO AND NOT OTHERWISE MAINTAIN AT LEAST 2 FEET COVER OVER ALL STORM DRAIN LINES AT ALL TIMES (INCLUDING DURING CONSTRUCTION).
17. ALL WATER LINES SHALL BE INSTALLED A MINIMUM OF 60" BELOW FINISHED GRADE.
18. ALL SEWER LINES AND SEWER SERVICES SHALL HAVE A MINIMUM SEPARATION OF 10 FEET, PIPE EDGE TO PIPE EDGE, FROM THE WATER LINES. IF A 10 FOOT SEPARATION CAN NOT BE MAINTAINED, THE SEWER LINE AND WATER LINE SHALL BE LAID IN SEPARATE TRENCHES WITH A MINIMUM 18" VERTICAL SEPARATION BETWEEN THE TOP OF THE SEWER LINE AND THE TOP OF THE WATER LINE.
19. CONTRACTOR SHALL INSTALL THRUST BLOCKING AT ALL WATERLINE ANGLE POINTS AND TEES.
20. ALL UNDERGROUND UTILITIES SHALL BE IN PLACE PRIOR TO INSTALLATION OF CURB, GUTTER, SIDEWALK AND STREET PAVING.
21. CONTRACTOR SHALL INSTALL MAGNETIC LOCATING TAP CONTINUOUSLY OVER ALL NONMETALLIC PIPE.
22. ALL UTILITY FITTINGS AND JOINTS SHALL BE PROTECTED BY INSTALLING BLUE BOLTS AND FITTINGS USING BLUE BOLTS. PROTECT ALL BOLTS FROM BEING ENCASED IN CONCRETE. INSTALL PER MANUFACTURER RECOMMENDATIONS.

SCALE: NONE

**Reeve
& Associates, Inc.**
5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405
TEL: (801) 621-3100 www.reeve.co

LAND PLANNERS • CIVIL ENGINEERS • LAND SURVEYORS
TRAFFIC ENGINEERS • STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS



REVISIONS		
DATE	DESCRIPTION	
03-18-24	ZD	County Comments
04-04-24	ZD	County Comments

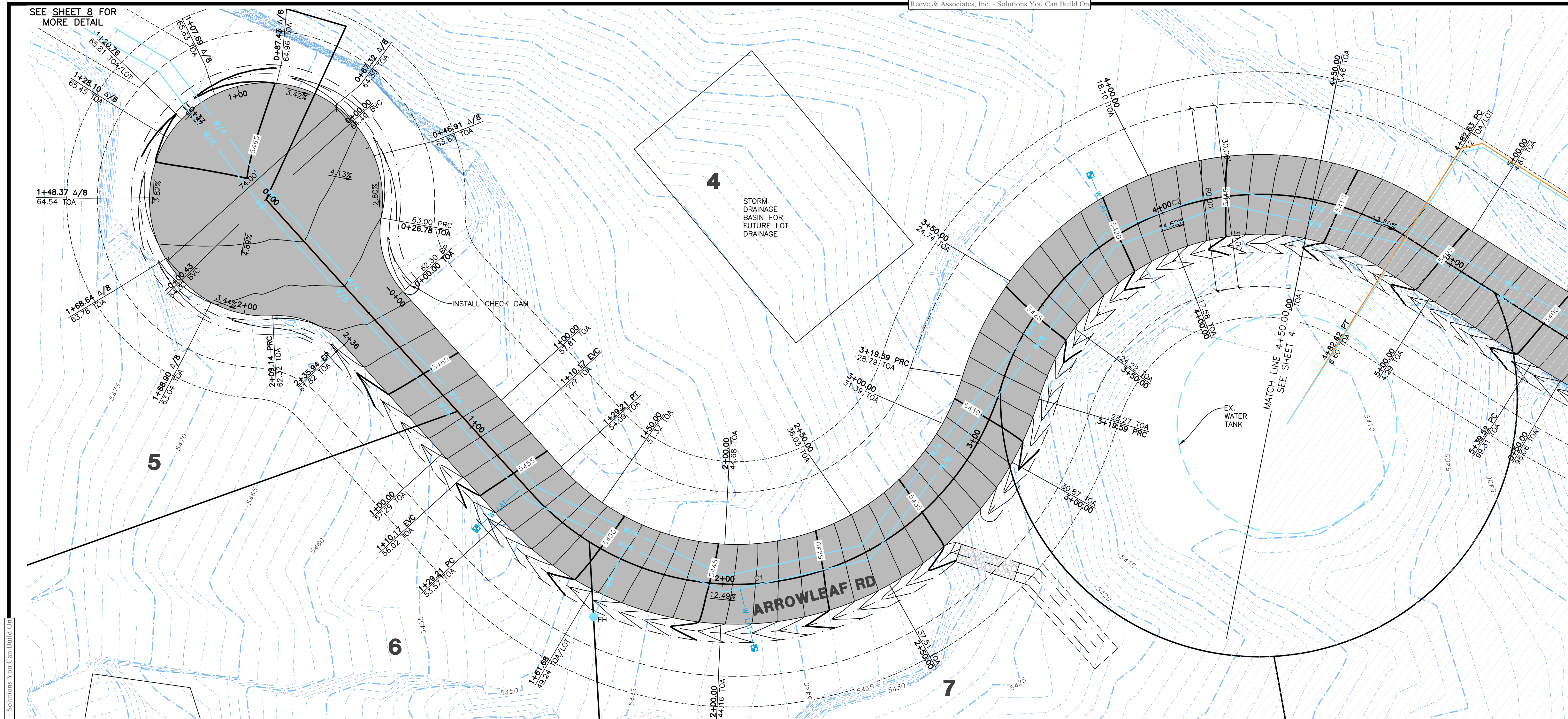
Arrowleaf

PART OF THE SECTION 18. T.7N., R.1E., S.1B & M., U.S. SURVEY

EDEN. WEBER COUNTY, UTAH

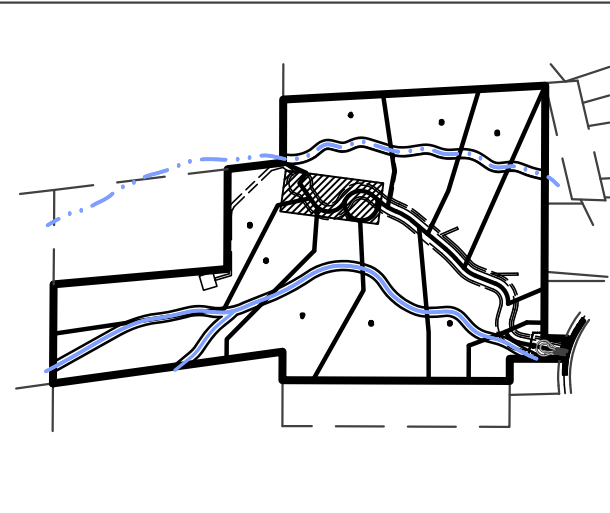
**Notes/Legend/
Street Cross-Section**

Number: 7895-0



Key Map

NOT TO SCALE



Construction Notes:

1) ALL CONSTRUCTION IS TO CONFORM TO THE CITY STANDARD DRAWINGS AND SPECIFICATIONS.

CULINARY WATER

NOTE: 5' MIN. COVER REQUIRED OVER CW LINES

W/4 - 4" DIP W/POLY WRAP WATER LINE

W/6 - 6" DIP W/POLY WRAP WATER LINE

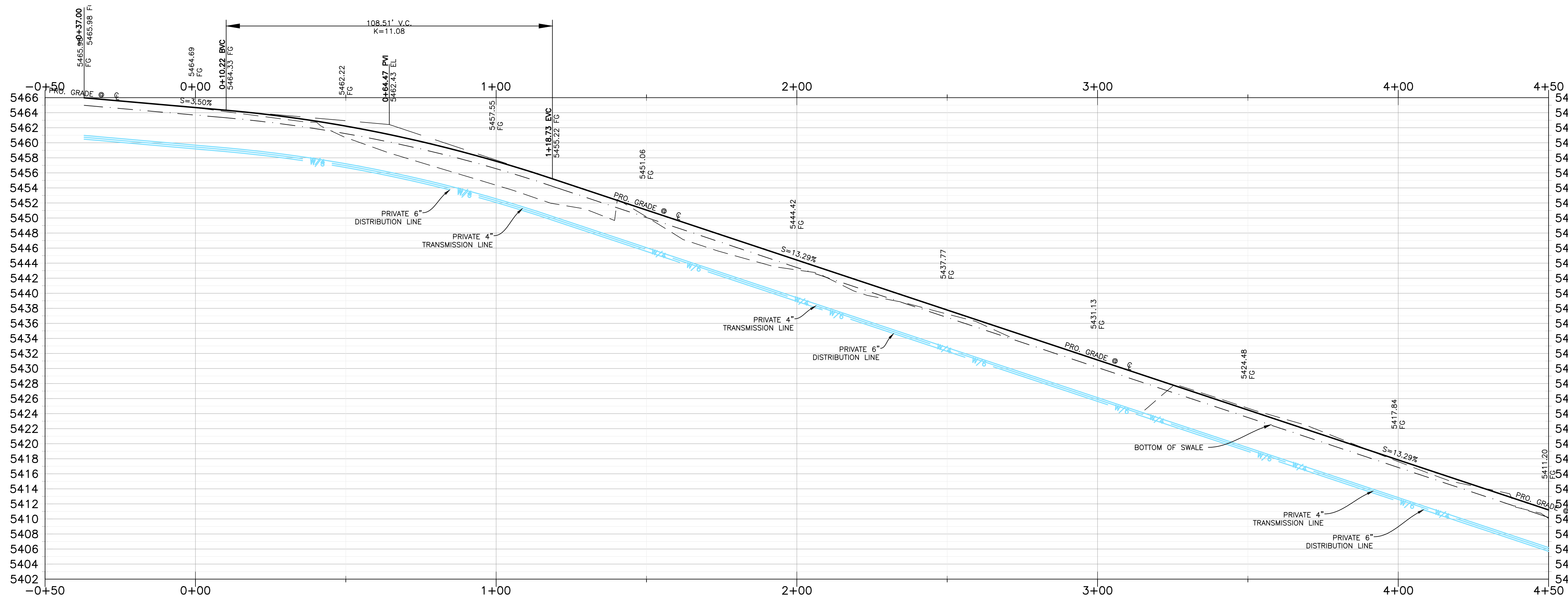
W - 1" TYPE K COPPER SERVICE LATERAL

STORM DRAIN

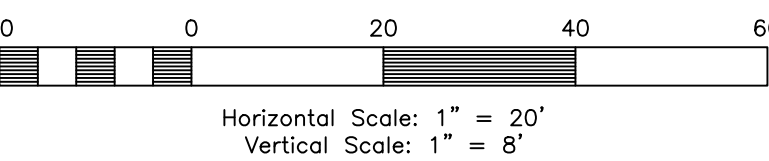
SD/15 - 15" RCP CLASS III STORM DRAIN
15" RCP CULVERTS TO BE INSTALLED AT DRIVEWAY LOCATIONS

Centerline Curve Data

#	Delta	Radius	Length	Tangent	Chord	CH Length
C1	121°12'07"	90.00'	190.38'	159.73'	N84°43'51"E	156.82'
C2	105°36'57"	88.45'	163.04'	116.56'	N76°56'16"E	140.91'



ARROWLEAF RD 0+00.00 - 4+50.00

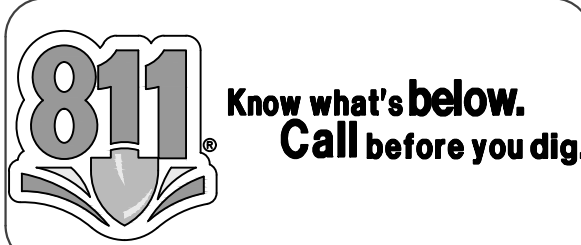


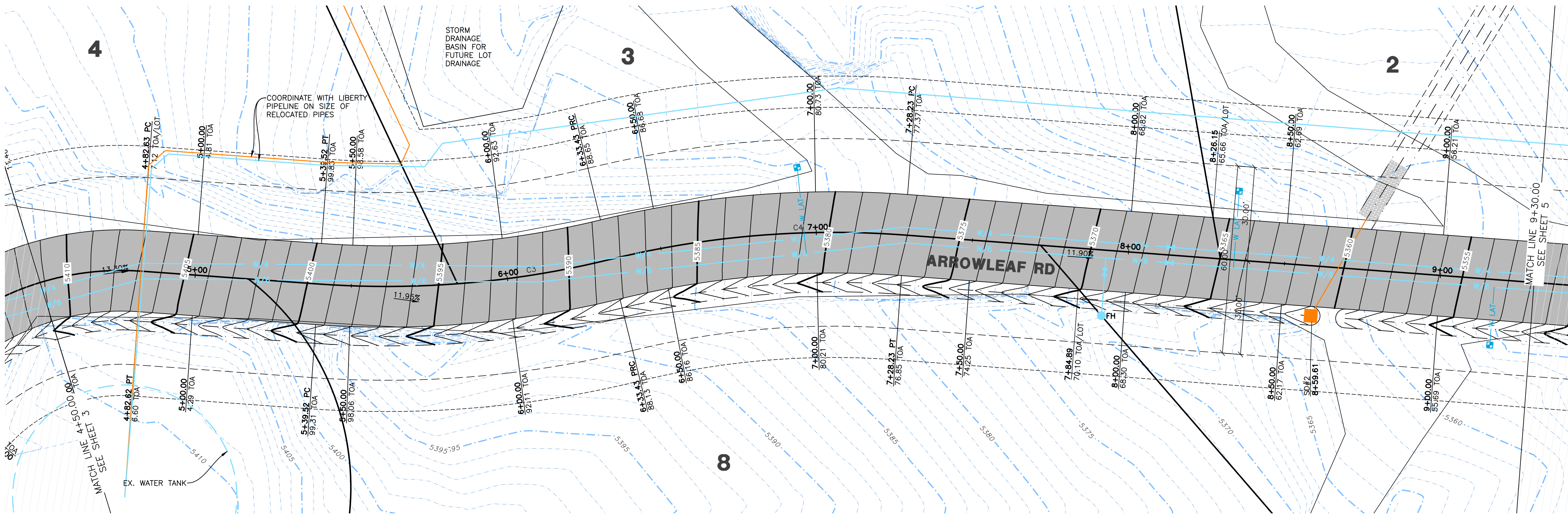
REVISIONS	DATE	DESCRIPTION
03-18-24	ZD	County Comments
04-04-24	ZD	County Comments

Arrowleaf
PART OF THE SECTION 18, T.7N., R.1E., S.LB & M., U.S. SURVEY
EDEN, WEBER COUNTY, UTAH
ARROWLEAF RD 0+00.00 - 4+50.00



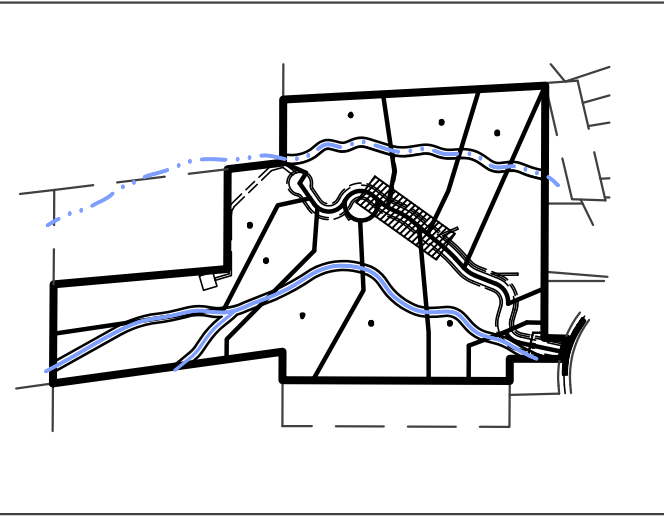
Project Info.
Engineer:
JEREMY A. DRAPER, P.E.
Drafted:
Z. DECARIA
Begin Date:
FEBRUARY 2023
Name:
ARROWLEAF
Number: 7895-01





Key Map

NOT TO SCALE



Construction Notes:

- 1) ALL CONSTRUCTION IS TO CONFORM TO THE CITY STANDARD DRAWINGS AND SPECIFICATIONS.

CULINARY WATER

NOTE: 5" MIN. COVER REQUIRED OVER CW LINES

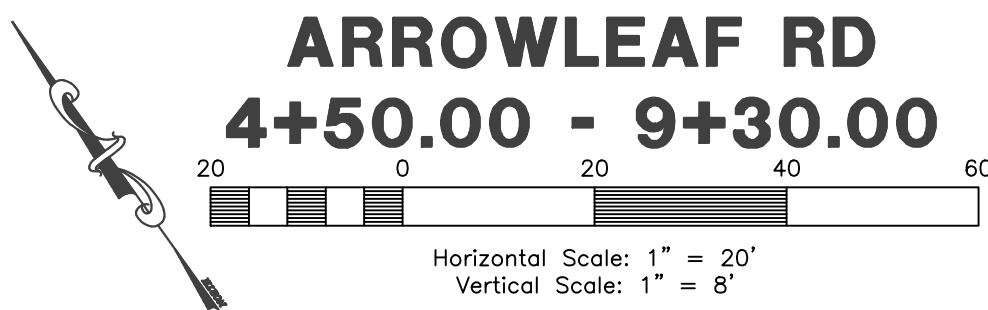
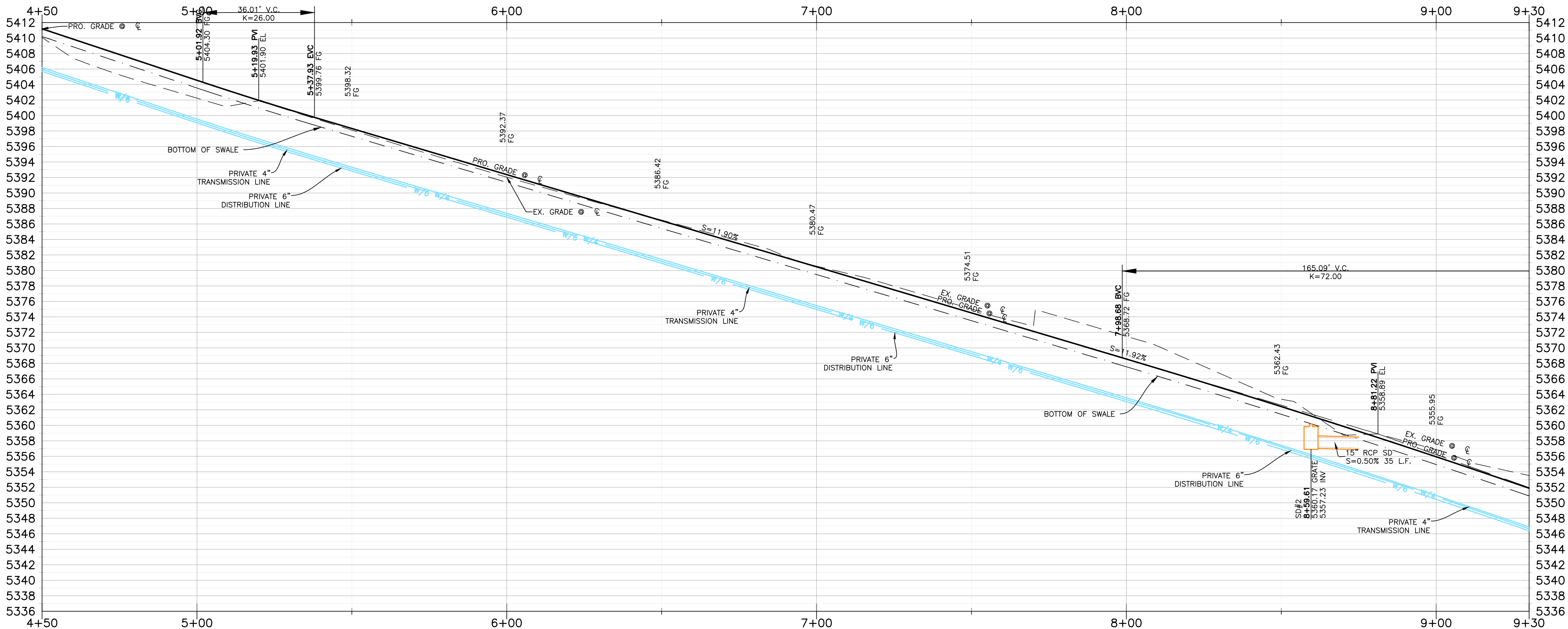
- W/4 - 4" DIP W/POLY WRAP WATER LINE
- W/6 - 6" DIP W/POLY WRAP WATER LINE
- W - 1" TYPE K COPPER SERVICE LATERAL

STORM DRAIN

SD/15 - 15" RCP CLASS III STORM DRAIN
SD/24 - 24" RCP CLASS III STORM DRAIN
15" RCP CULVERTS TO BE INSTALLED AT DRIVEWAY LOCATIONS

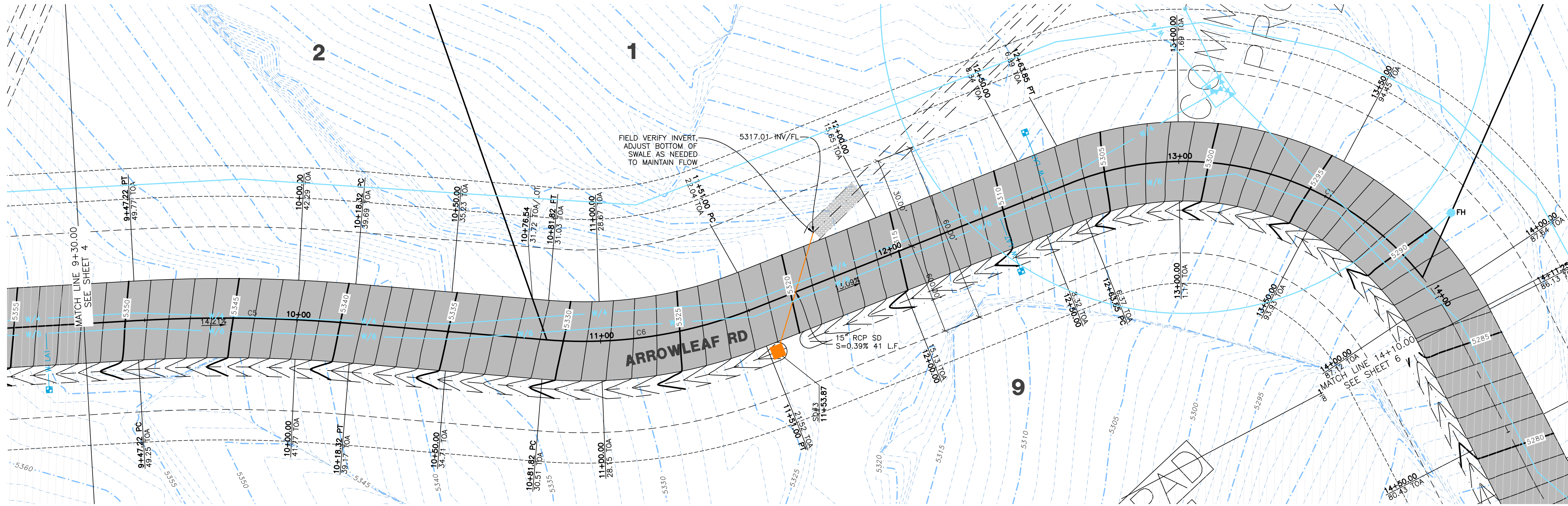
Centerline Curve Data

#	Delta	Radius	Length	Tangent	Chord	CH Length
C3	17°56'07"	300.00'	93.91'	47.34'	S59°13'19"E	93.53'
C4	18°06'20"	300.00'	94.80'	47.80'	S59°08'12"E	94.41'



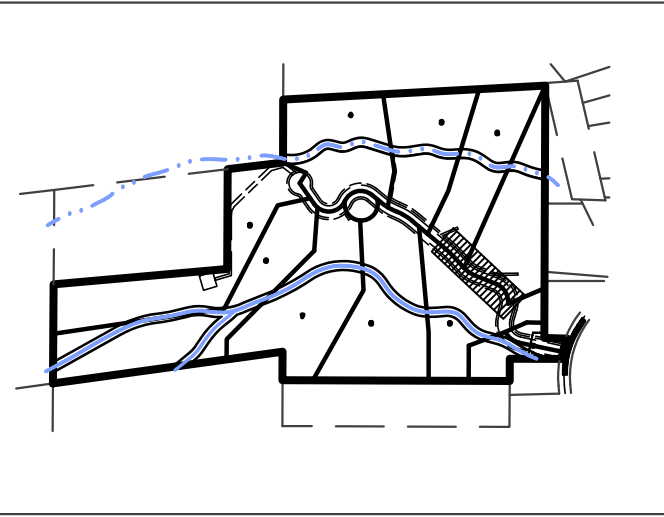
REVISIONS	DATE	DESCRIPTION
03-18-24	JD	County Comments
04-04-24	JD	County Comments





Key Map

NOT TO SCALE



Construction Notes:

1) ALL CONSTRUCTION IS TO CONFORM TO THE CITY STANDARD DRAWINGS AND SPECIFICATIONS.

CULINARY WATER

NOTE: 5' MIN. COVER REQUIRED OVER CW LINES

W/4 - 4" DIP W/POLY WRAP WATER LINE

W/6 - 6" DIP W/POLY WRAP WATER LINE

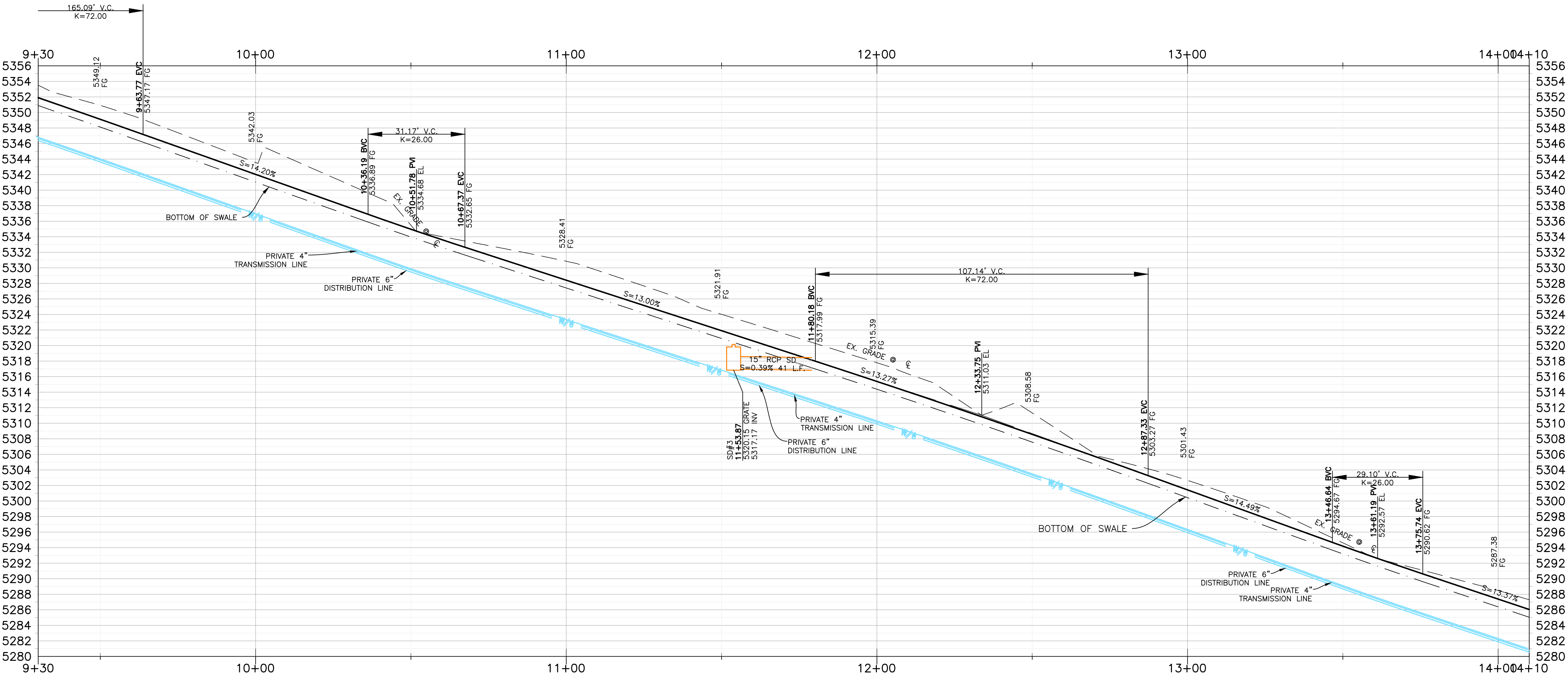
W - 1" TYPE K COPPER SERVICE LATERAL

STORM DRAIN

SD/15 - 15" RCP CLASS III STORM DRAIN
15" RCP CULVERTS TO BE INSTALLED AT DRIVEWAY LOCATIONS

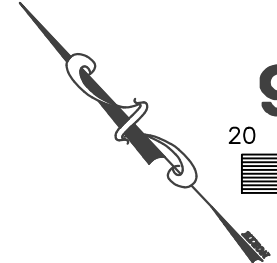
Centerline Curve Data

#	Delta	Radius	Length	Tangent	Chord	CH Length
C5	8°08'51"	500.00'	71.10'	35.61'	S46°00'37"E	71.04'
C6	26°25'34"	150.00'	69.18'	35.22'	S55°08'59"E	68.57'
C7	84°27'19"	100.00'	147.40'	90.76'	S26°08'06"E	134.42'



ARROWLEAF RD

9+30.00 - 14+10.00



Horizontal Scale: 1" = 20'

Vertical Scale: 1" = 8'



Know what's below.
Call before you dig.

REVISIONS

DATE	DESCRIPTION
03-18-24 ZD	County Comments
04-04-24 ZD	County Comments

Arrowleaf

PART OF THE SECTION 18, T.7N., R.1E., S.LB & M., U.S. SURVEY
EDEN, WEBER COUNTY, UTAH

ARROWLEAF RD 9+30.00 - 14+10.00



Project Info.

Engineer:
JEREMY A. DRAPER, P.E.

Drafter:
Z. DECARIA

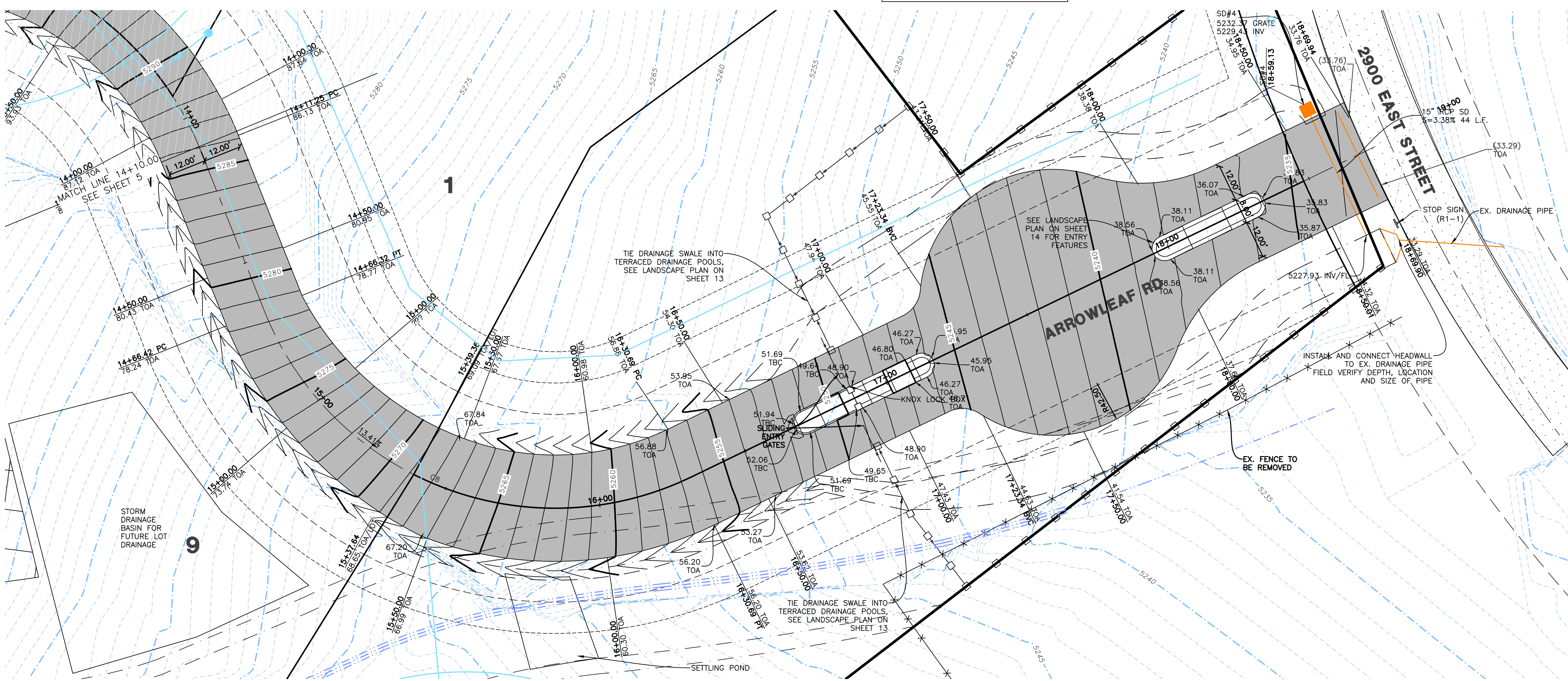
Begin Date:
FEBRUARY 2023

Name:
ARROWLEAF

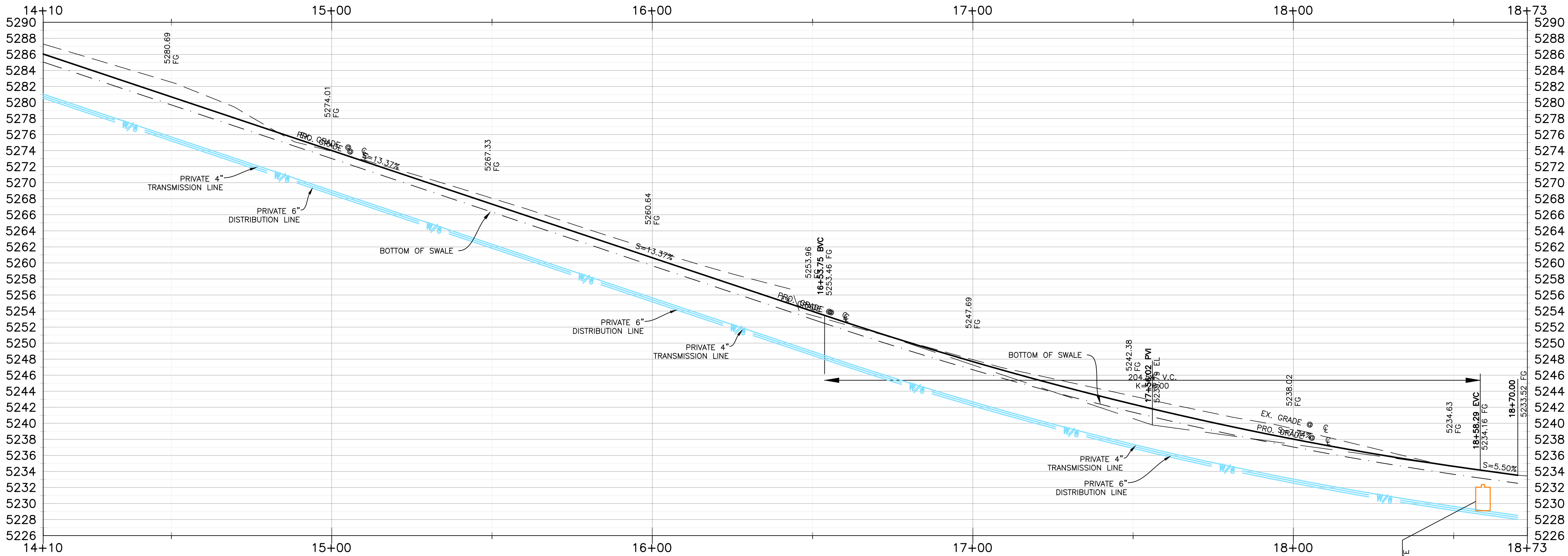
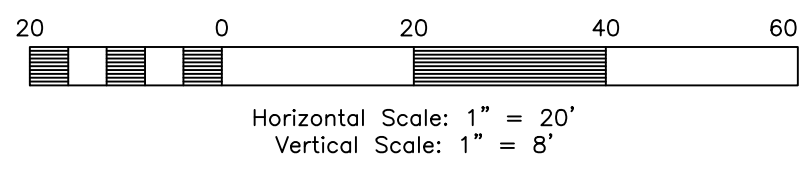
Number: 7895-01

5

14 Total Sheets

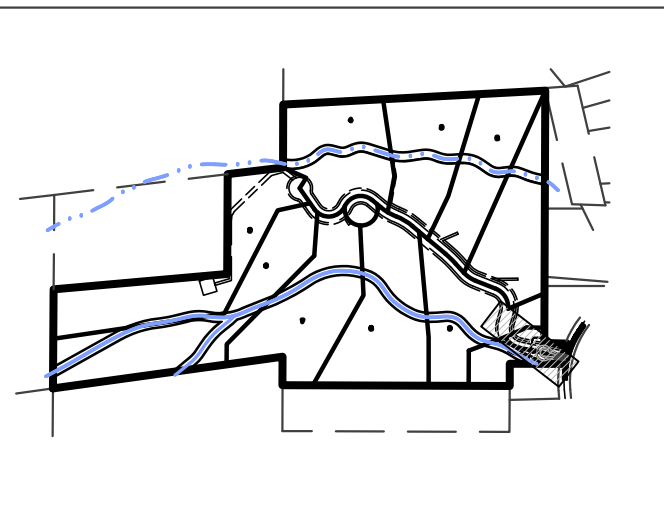


ARROWLEAF RD 14+10.00 - 18+73.46



Key Map

NOT TO SCALE



Construction Notes:

1) ALL CONSTRUCTION IS TO CONFORM TO THE CITY STANDARD DRAWINGS AND SPECIFICATIONS.

CULINARY WATER

NOTE: 5' MIN. COVER REQUIRED OVER CW LINES

W/4 - 4" DIP W/POLY WRAP WATER LINE

W/6 - 6" DIP W/POLY WRAP WATER LINE

W - 1" TYPE K COPPER SERVICE LATERAL

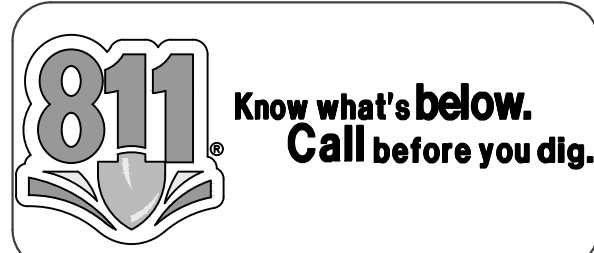
STORM DRAIN

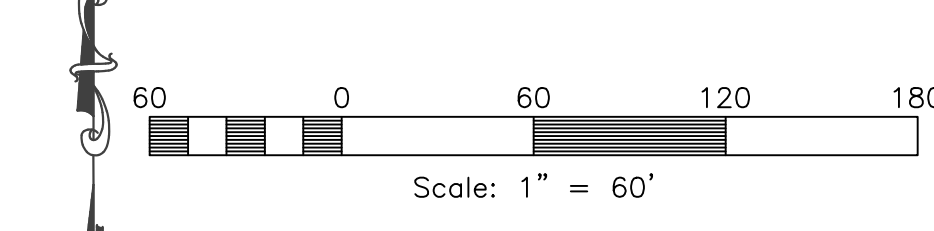
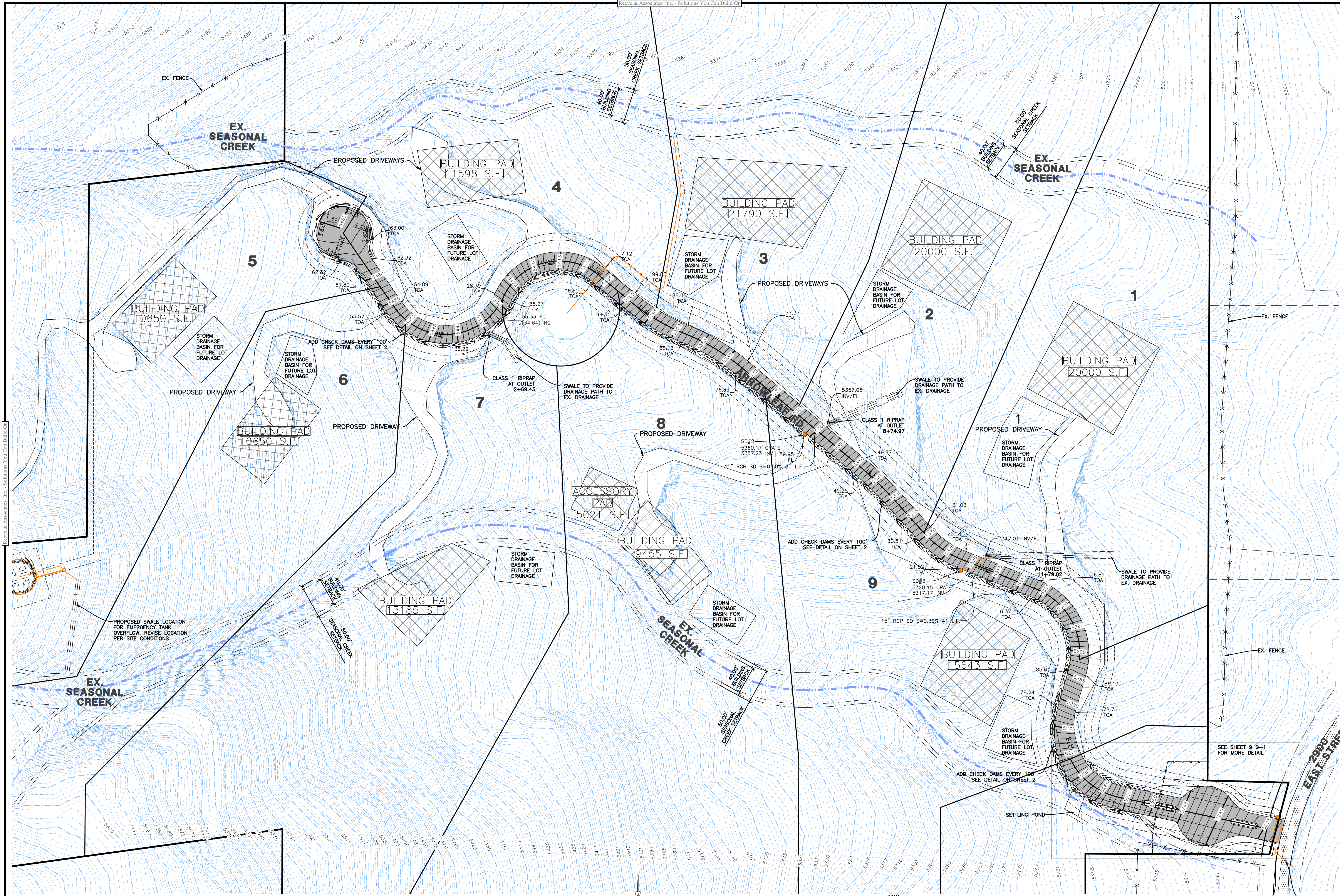
SD/15 - 15" RCP CLASS III STORM DRAIN
15" RCP CULVERTS TO BE INSTALLED AT DRIVEWAY LOCATIONS

Centerline Curve Data

#	Delta	Radius	Length	Tangent	Chord	CH Length
C8	94°07'16"	100.00'	164.27'	107.46'	S30°58'05"E	146.41'

REVISIONS	DATE	DESCRIPTION
03-18-24	ZD	County Comments
04-04-24	ZD	County Comments





NOTE:
PROPOSED DRIVEWAY LOCATIONS TO BE FINALIZED WITH INDIVIDUAL LOT SITE PLANS.
PROPOSED DRIVEWAYS TO HAVE A 15" CULVERT PIPE INSTALLED WHERE IT CROSSES THE ROAD SIDE SWALE.
PROPOSED DRIVEWAYS TO HAVE CULVERTS INSTALLED WHERE THEY CROSS EX. SEASONAL CREEK. FINAL LOCATION AND SIZE TO BE DETERMINED AND FINALIZED WITH INDIVIDUAL LOT SITE PLANS.

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF REEVE & ASSOCIATES, INC., 5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405, AND SHALL NOT BE PHOTOCOPIED, RE-DRAWN, OR USED ON ANY PROJECT OTHER THAN THE PROJECT SPECIFICALLY DESIGNED FOR, WITHOUT THEIR WRITTEN PERMISSION. THE OWNERS AND ENGINEERS OF REEVE & ASSOCIATES, INC. DISCLAIM ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE PLANS OR THE DESIGN THEREON WITHOUT THEIR CONSENT.

Reeve & Associates, Inc.
5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405
TEL: (801) 621-3100 www.reeve.co

RA

REVISIONS	DATE	DESCRIPTION
03-18-24	2D	County Comments
04-04-24	2D	County Comments

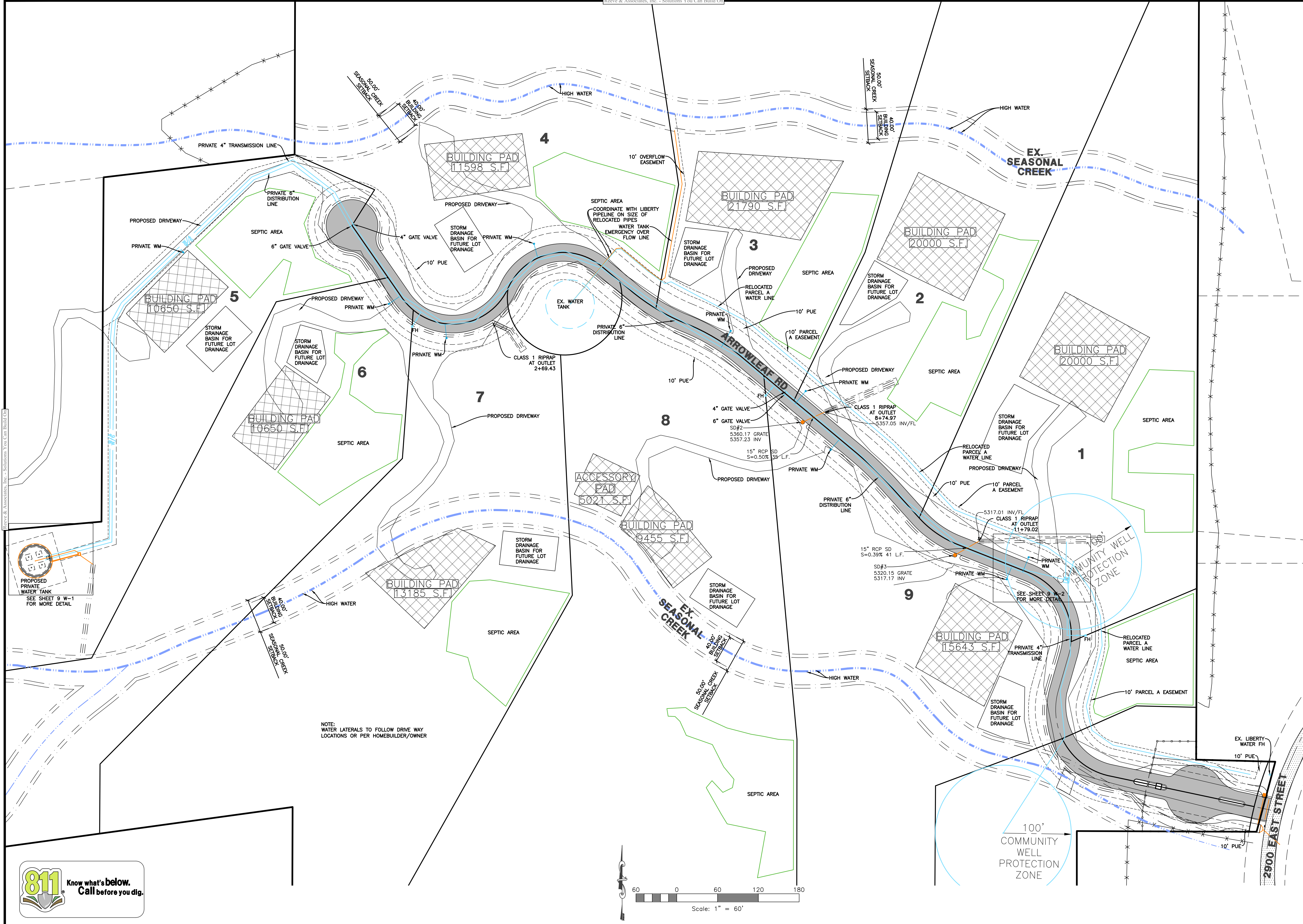
Arrowleaf

PART OF THE SECTION 18, T.7N., R.1E., S.1B. & M., U.S. SURVEY
EDEN, WEBER COUNTY, UTAH

Grading Plan



Project Info.	
Engineer:	JEREMY A. DRAPER, P.E.
Drafter:	Z. DECARIA
Begin Date:	FEBRUARY 2023
Name:	ARROWLEAF
Number:	7895-01



Reeve & Associates, Inc. - Solutions You Can Build On

Reeve & Associates, Inc.

5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405
TEL: (801) 621-3100 www.reeve.co

LAND PLANNERS • CIVIL ENGINEERS • LAND SURVEYORS
TRAFFIC ENGINEERS • STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS

REVISED PROFESSIONAL ENGINEER
JEREMY A. DRAPER
04/04/2024
STATE OF UTAH

Project Info.

Engineer:
JEREMY A. DRAPER, P.E.

Drafter:
Z. DECARIA

Begin Date:
FEBRUARY 2023

Name:
ARROWLEAF

Number:
7895-01

8

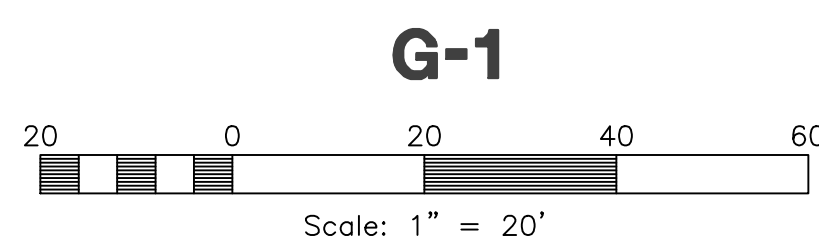
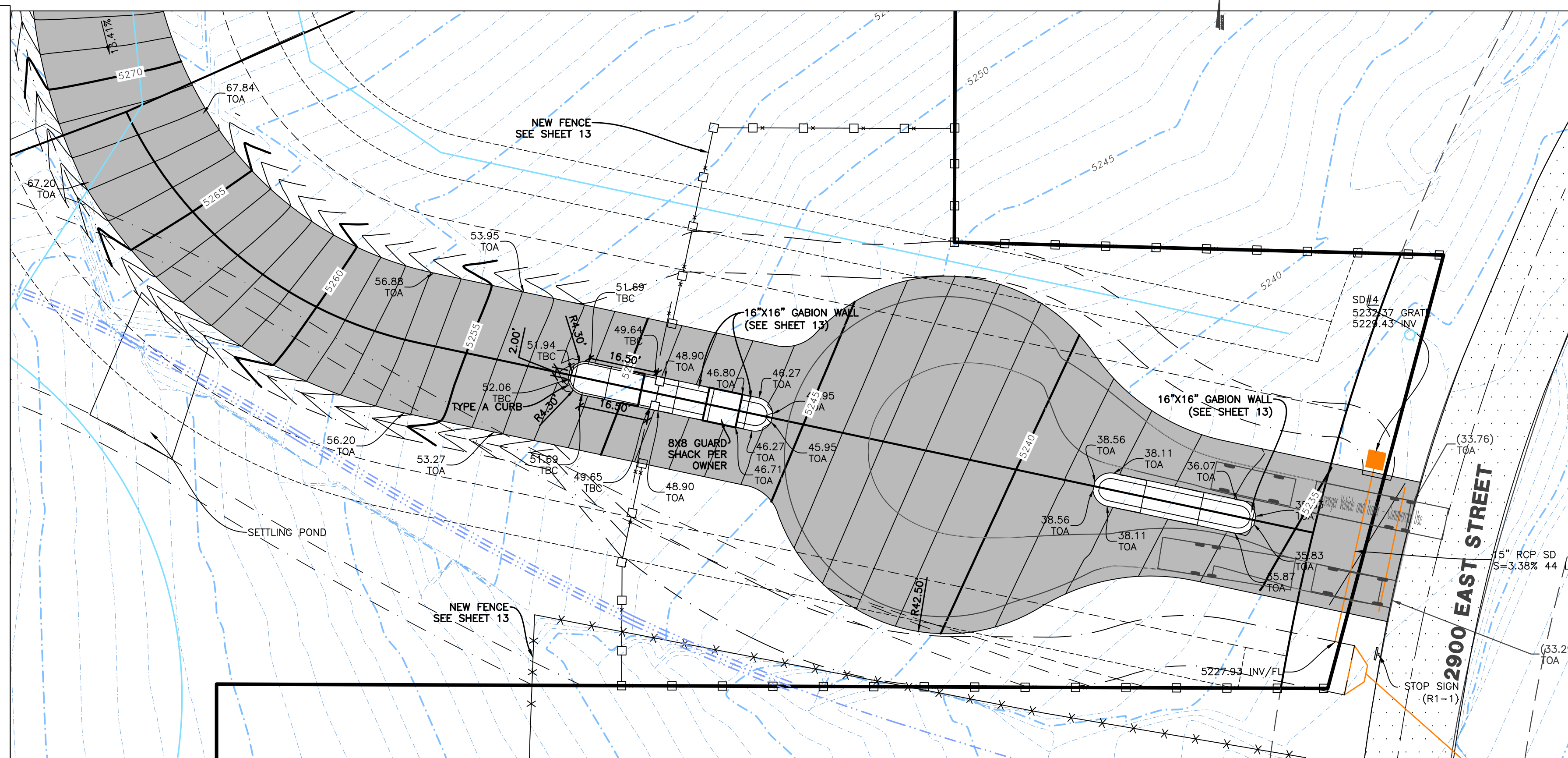
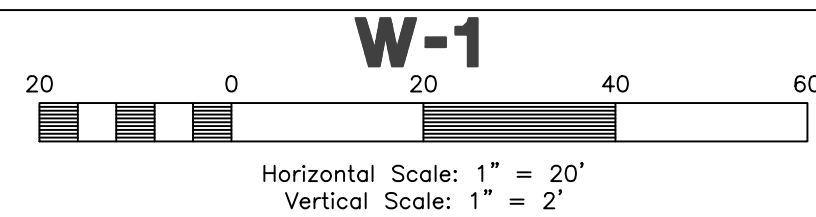
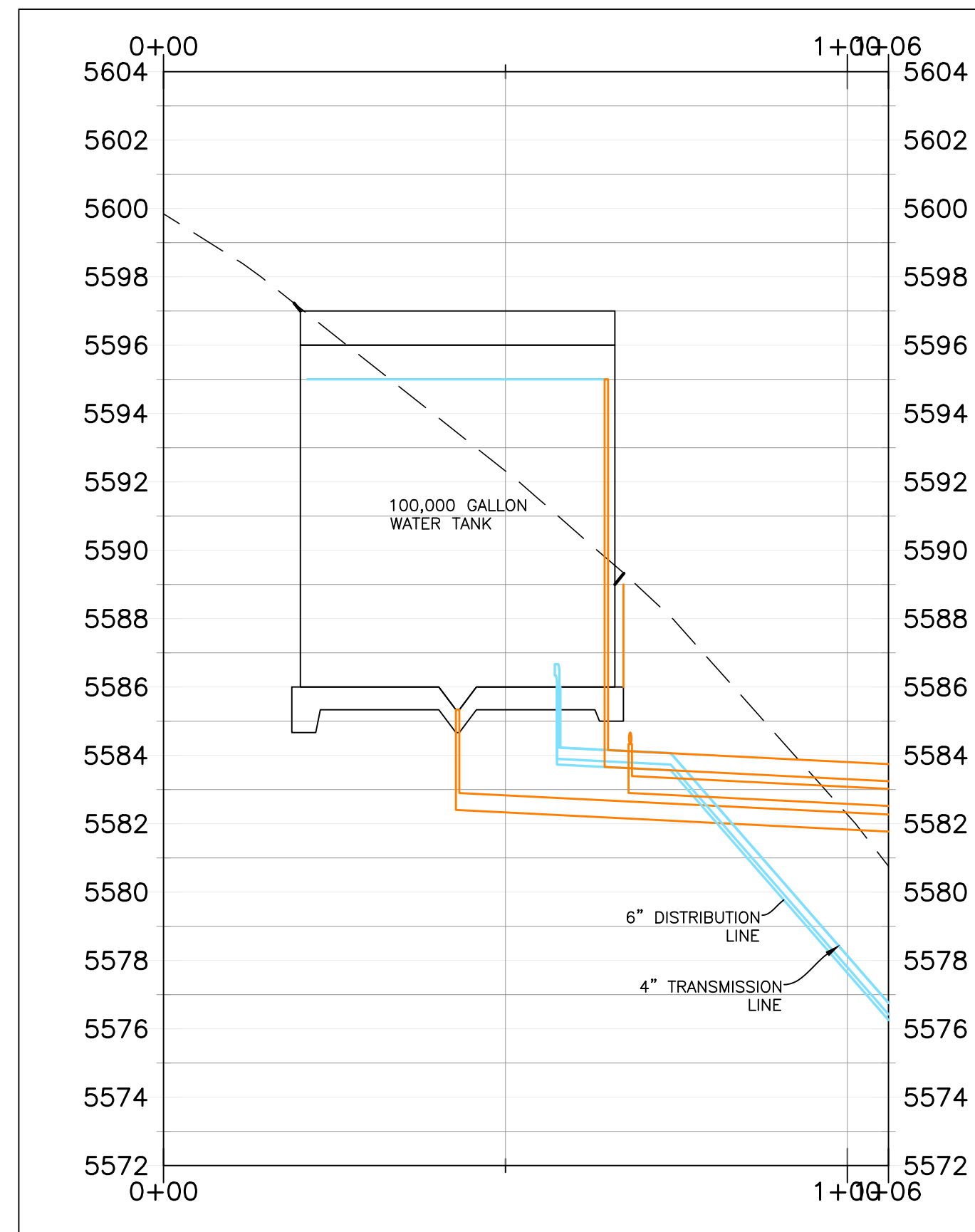
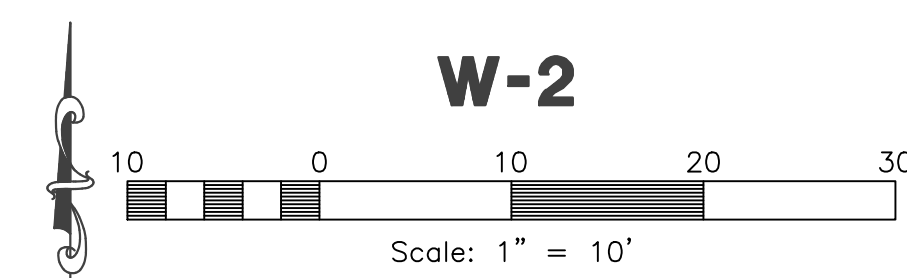
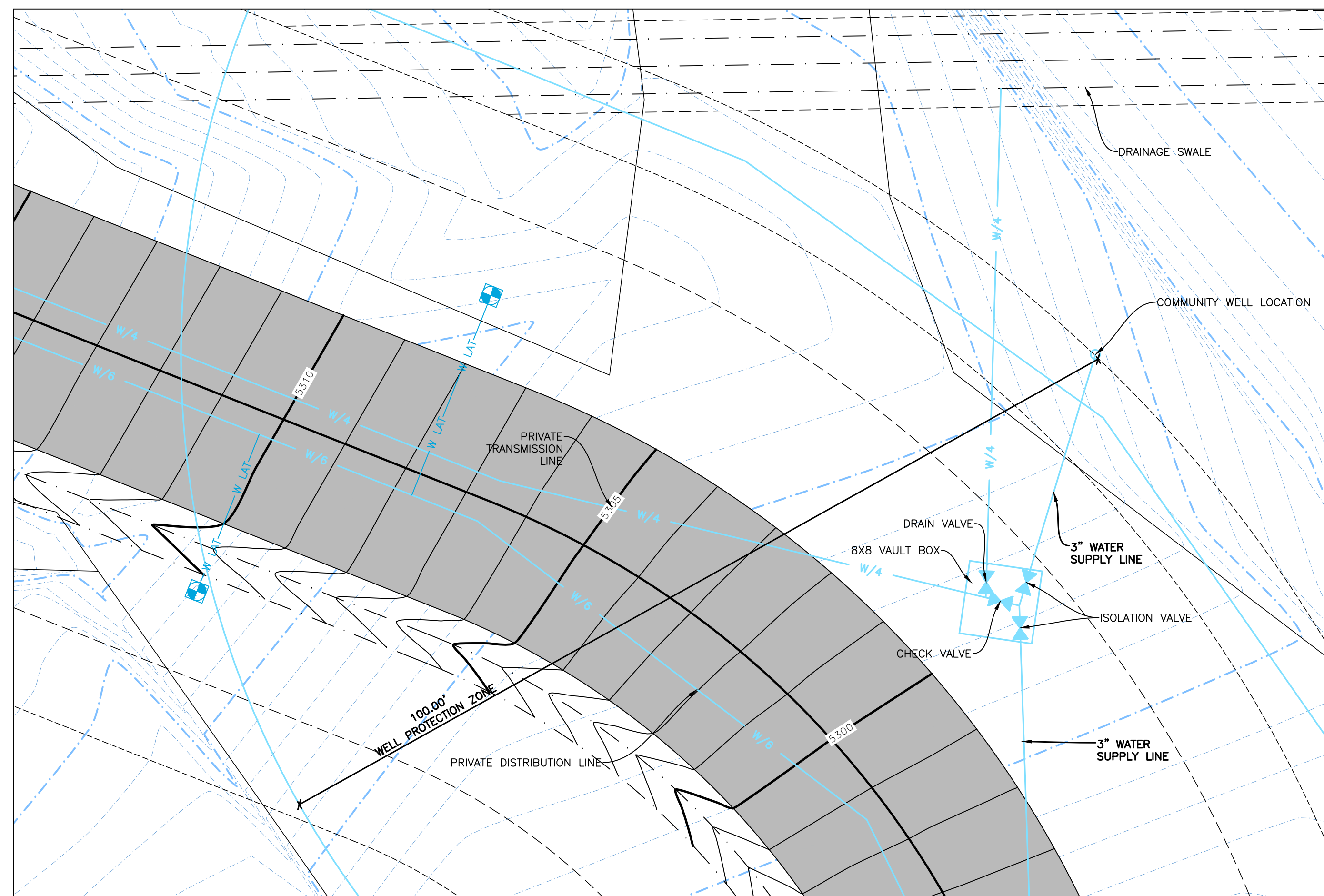
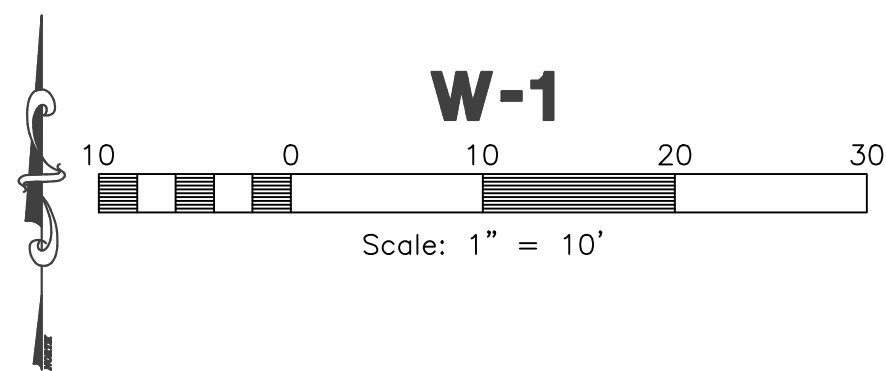
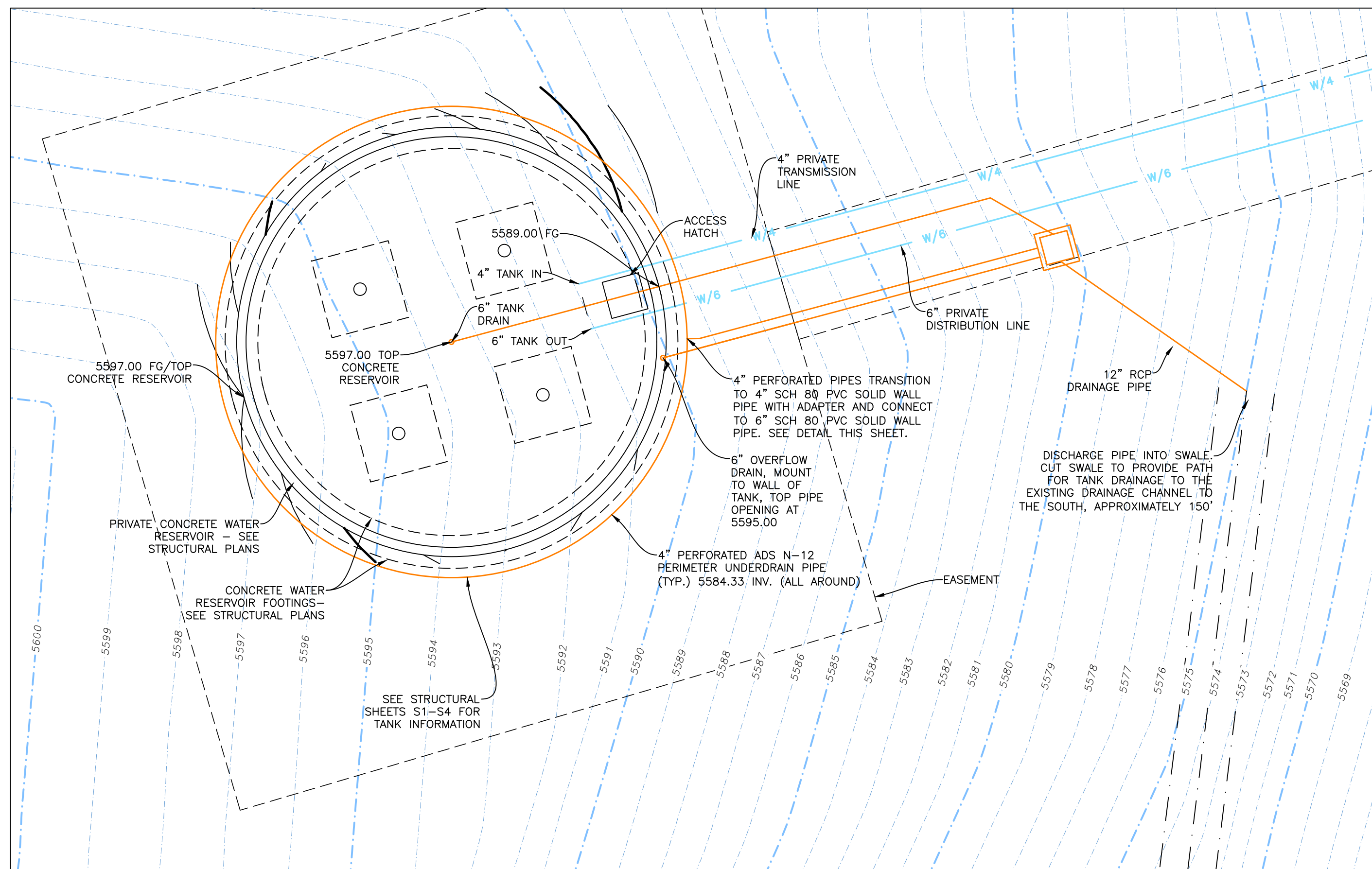
14 Total Sheets

Arrowleaf

PART OF THE SECTION 18, T.7N., R.1E., S.1B. & M., U.S. SURVEY
EDEN, WEBER COUNTY, UTAH

Utility Plan

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF REEVE & ASSOCIATES, INC., 5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405, AND SHALL NOT BE PHOTOCOPIED, RE-DRAWN, OR USED ON ANY PROJECT OTHER THAN THE PROJECT SPECIFICALLY DESIGNED FOR, WITHOUT THEIR WRITTEN PERMISSION. THE OWNERS AND ENGINEERS OF REEVE & ASSOCIATES, INC. DISCLAIM ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE PLANS OR THE DESIGN THEREON WITHOUT THEIR CONSENT.



Post Storm Runoff Calculation Arrowleaf

3/18/2024 BAG

The following stormwater storage calculations are based on the Rainfall Intensity data for the Ogden, Utah area taken from the NOAA Atlas 14 database. Calculations have been completed for the 100-yr 24-hr storm event. Storm water runoff has been calculated for a fully developed site with no release rate. Each lot will provide its own retention for the listed volume.

Lot	C	I (in/hr)	Area (ac)	Volume (cf)
1	0.9	0.21	0.32	5240
2	0.9	0.21	0.22	3624
3	0.9	0.21	0.23	3711
4	0.9	0.21	0.41	6756
5	0.9	0.21	0.33	5444
6	0.9	0.21	0.37	5973
7	0.9	0.21	0.27	4376
8	0.9	0.21	0.44	7260
9	0.9	0.21	0.39	6342

Arrowleaf

PART OF THE SECTION 18, T.7N., R.1E., S.1B. & M., U.S. SURVEY
EDEN, WEBER COUNTY, UTAH

Details



Project Info.

Engineer: JEREMY A. DRAPER, P.E.

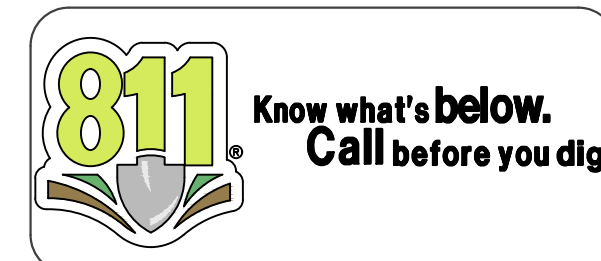
Drafter: Z. DECARIA

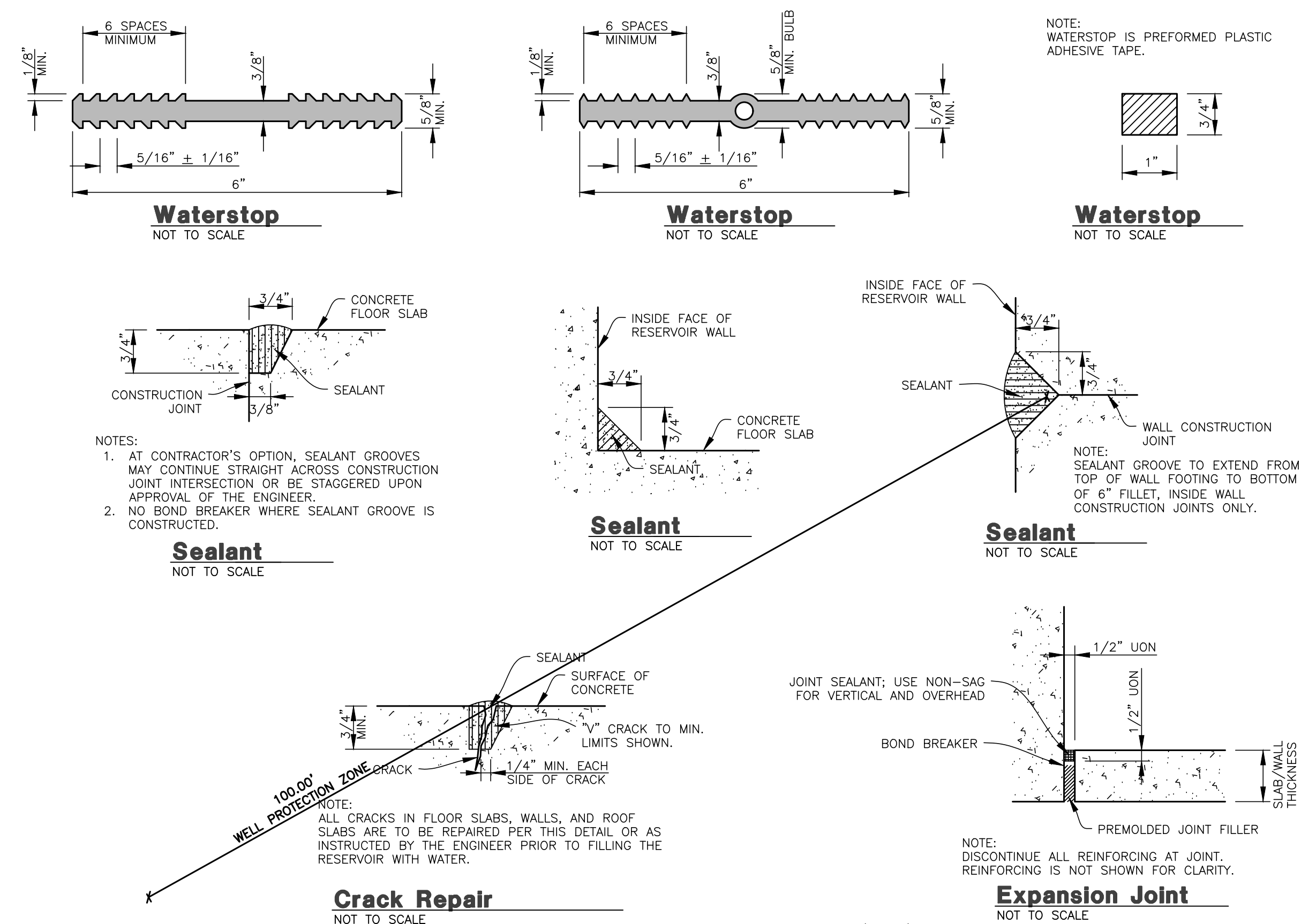
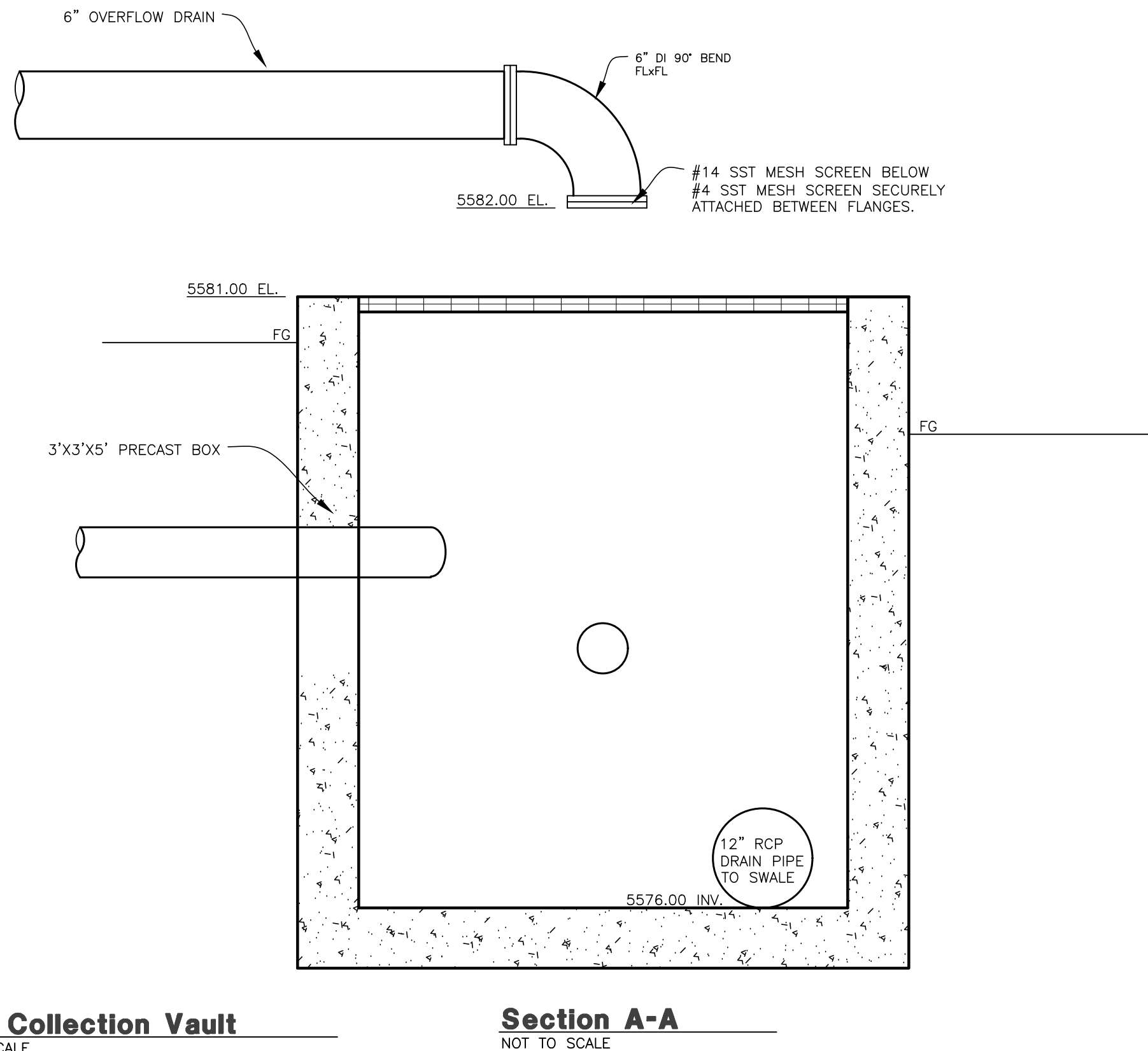
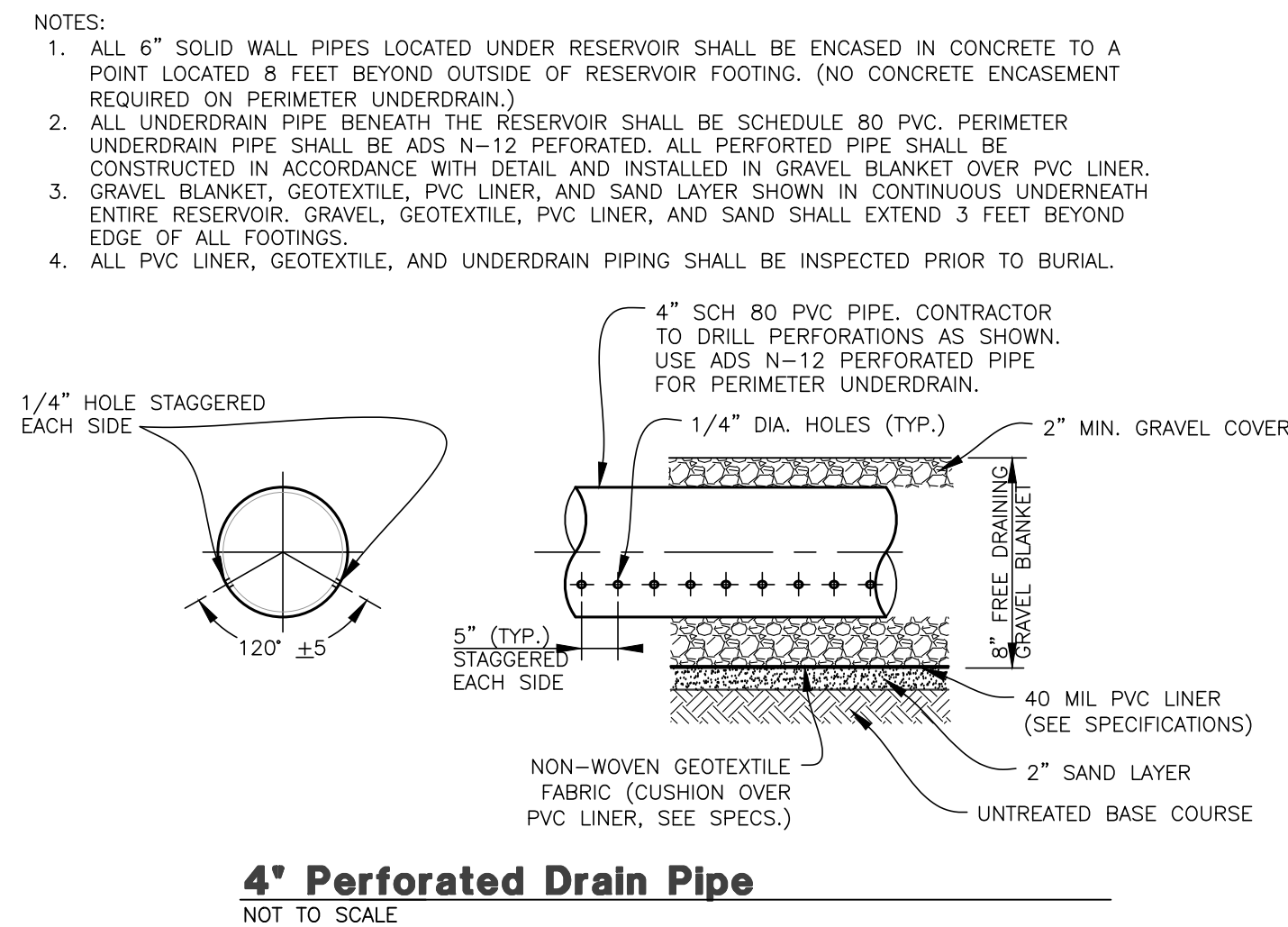
Begin Date: FEBRUARY 2023

Name: ARROWLEAF

Number: 7895-01

REVISIONS	DATE	DESCRIPTION
03-18-24	ZD	County Comments
04-04-24	ZD	County Comments

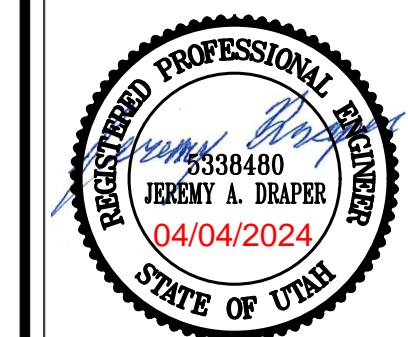




REVISIONS	
DATE	DESCRIPTION
03-18-24	ZD County Comments
04-04-24	ZD County Comments

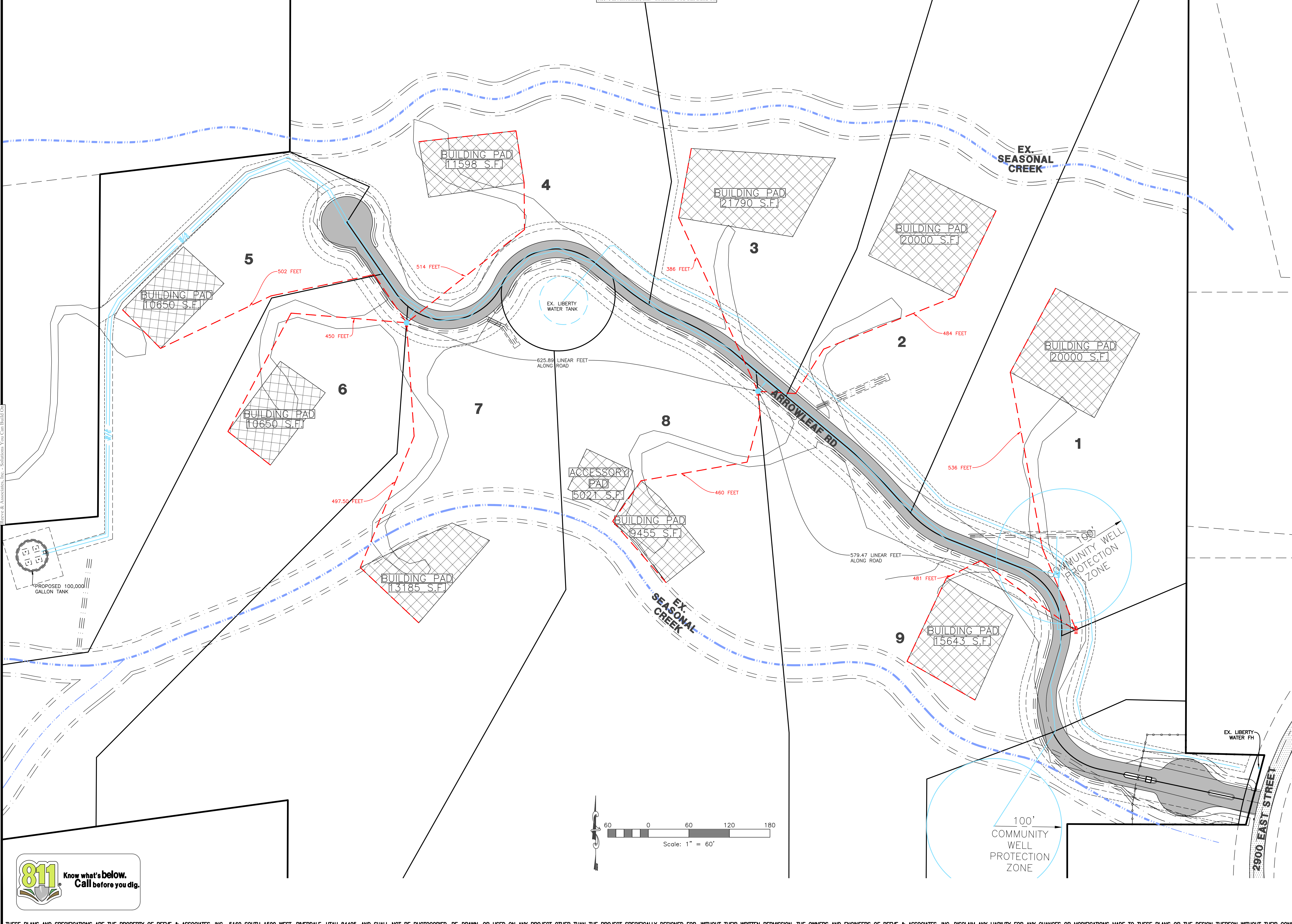
Arrowleaf
PART OF THE SECTION 18, T.7N., R.1E., S.1B & M., U.S. SURVEY
EDEN, WEBER COUNTY, UTAH

Details



Project Info.
Engineer:
JEREMY A. DRAPER, P.E.
Drafter:
Z. DECARIA
Begin Date:
FEBRUARY 2023
Name:
ARROWLEAF
Number: 7895-01

10	
14	Total Sheets



Reeve & Associates, Inc. - Solutions You Can Build On

Reeve & Associates, Inc. - Solutions You Can Build On

Reeve & Associates, Inc.

5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405
TEL: (801) 621-3100 www.reeve.co

LAND PLANNERS • CIVIL ENGINEERS • LAND SURVEYORS
TRAFFIC ENGINEERS • STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS

RA

REVIEWS	DESCRIPTION
DATE	County Comments
03-18-24 ZD	County Comments
04-04-24 ZD	County Comments

Arrowleaf

PART OF THE SECTION 18, T.7N., R.1E., S.1B. & M., U.S. SURVEY
EDEN, WEBER COUNTY, UTAH

Fire Exhibit



Project Info.	
Engineer:	JEREMY A. DRAPER, P.E.
Drafter:	Z. DECARIA
Begin Date:	FEBRUARY 2023
Name:	ARROWLEAF
Number:	7895-01

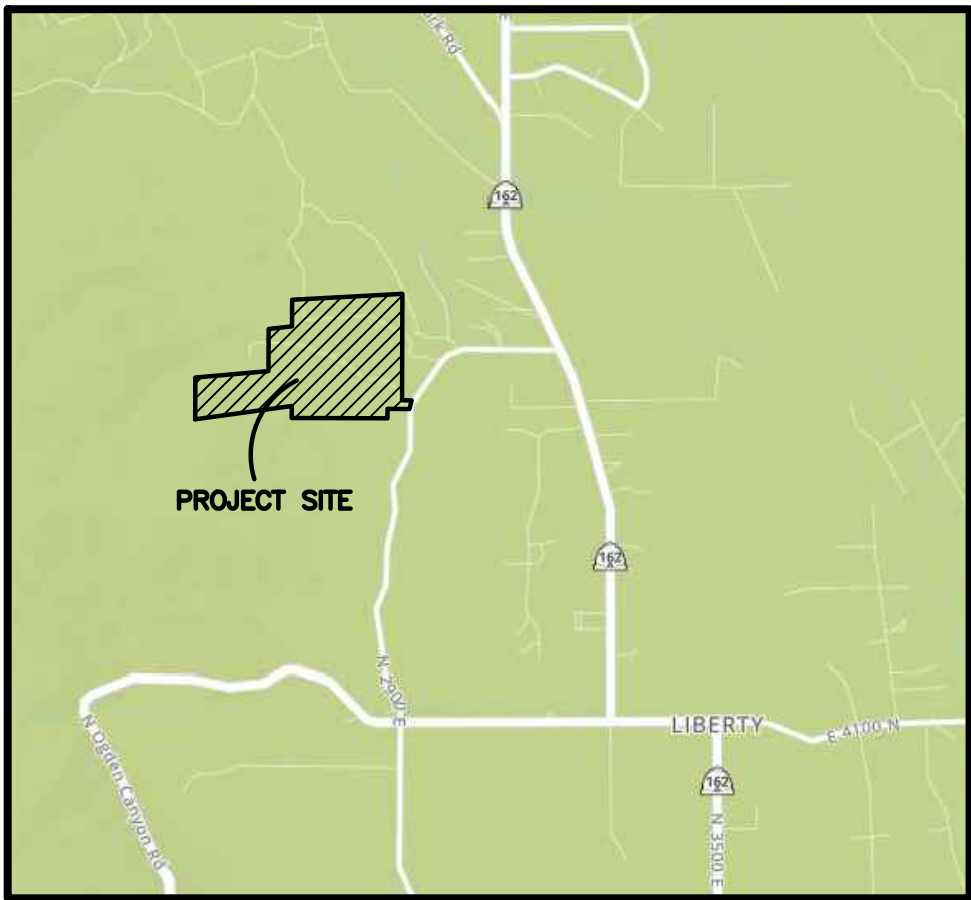


Reeve & Associates, Inc. - Solutions You Can Build On

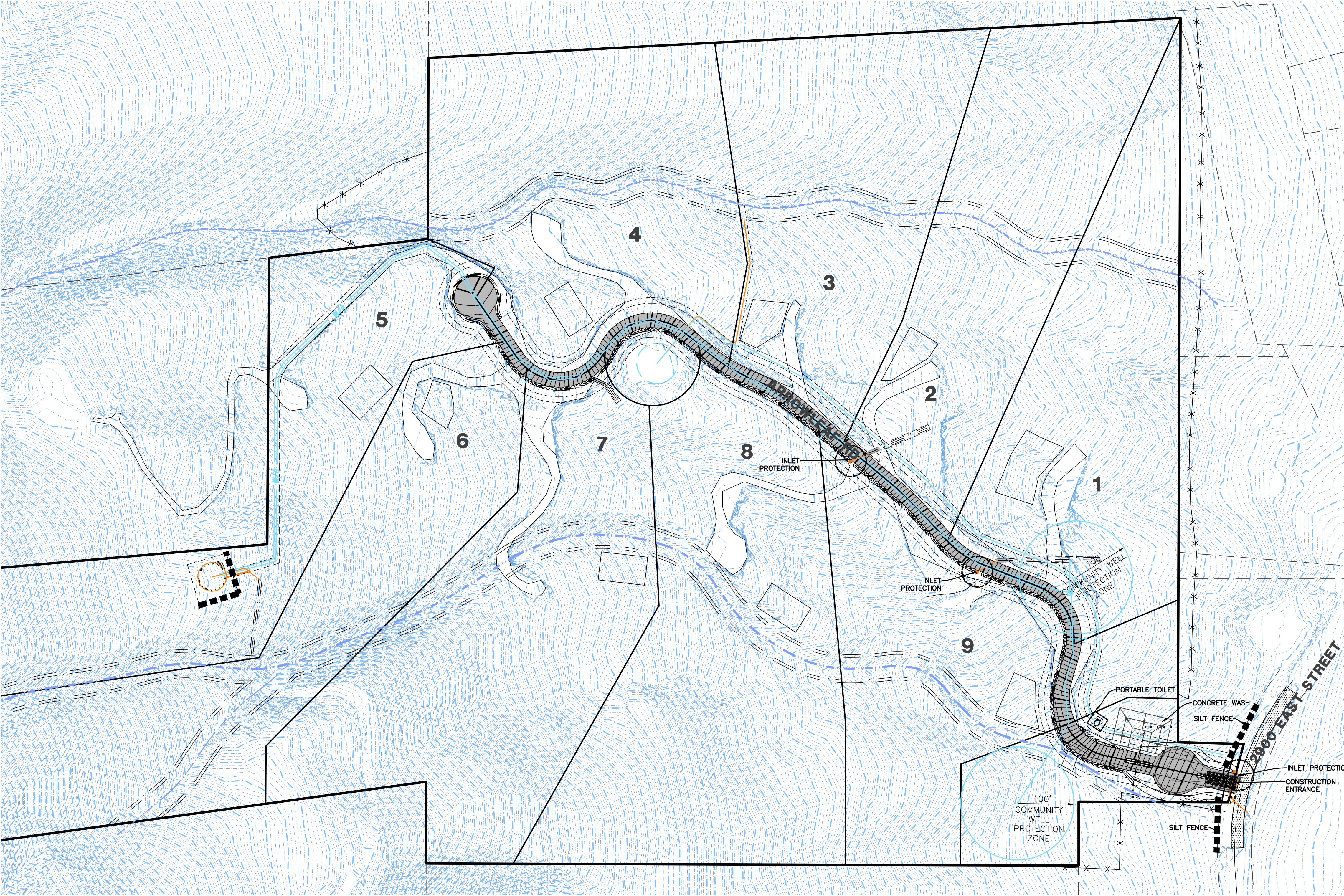
ARROWLEAF

Storm Water Pollution Prevention Plan Exhibit

EDEN, WEBER COUNTY, UTAH
FEBUARY, 2023



Vicinity Map
NOT TO SCALE



SWPPP Legend

- = PORTABLE TOILET
- = INLET PROTECTION TYP. (SEE DETAIL)
- = SILT FENCE (SEE DETAIL)
- = 50'x20' CONSTRUCTION ENTRANCE W/8" CLEAN GRAVEL
- = CONCRETE WASH AREA (SEE DETAIL) OR AS SELECTED BY CONTRACTOR

- SWPPP NOTES:
1. ALL VEHICLES EXITING SITE TO PROCEED THROUGH CONSTRUCTION ENTRANCE TO REDUCE AMOUNTS OF SEDIMENT TRACKED ONTO ROADWAYS.
 2. STREETS TO BE SWEEPED WITHIN 1000 FEET OF CONSTRUCTION ENTRANCE DAILY IF NECESSARY

Construction Activity Schedule

- PROJECT LOCATION.....EDEN, WEBER COUNTY, UTAH
- PROJECT BEGINNING DATE.....JANUARY 2023
- BMP'S DEPLOYMENT DATE.....JANUARY 2023
- STORM WATER MANAGEMENT CONTACT / INSPECTOR.....DAVE & SARA CHUGG (801)420-8814
- SPECIFIC CONSTRUCTION SCHEDULE INCLUDING BMP CONSTRUCTION SCHEDULE TO BE INCLUDED WITH SWPPP BY OWNER/DEVELOPER

Reeve & Associates, Inc.
5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405
TEL: (801) 621-3100 www.reeve.co

PA

LAND PLANNERS • CIVIL ENGINEERS • LAND SURVEYORS
TRAFFIC ENGINEERS • STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS

REVISIONS	DATE	DESCRIPTION
03-18-24	ZD	County Comments
04-04-24	ZD	County Comments

Arrowleaf
PART OF THE SECTION 18, T.7N., R.1E., S.1B. & M., U.S. SURVEY
EDEN, WEBER COUNTY, UTAH

Storm Water Pollution Prevention Plan Exhibit



Project Info.
Engineer: JEREMY A. DRAPER, P.E.
Drafter: Z. DECARIA
Begin Date: FEBRUARY 2023
Name: ARROWLEAF
Number: 7895-01

Notes:

1. Describe all BMP's to protect storm water inlets:
All storm water inlets to be protected by straw wattle barriers, or gravel bags (see detail).
2. Describe BMP's to eliminate/reduce contamination of storm water from:
 - a. Equipment / building / concrete wash areas:
To be performed in designated areas only and surrounded with silt fence barriers.
 - b. Soil contaminated by soil amendments:
If any contaminants are found or generated, contact environmental engineer and contacts listed.
 - c. Areas of contaminated soil:
If any contaminants are found or generated, contact environmental engineer and contacts listed.
 - d. Fueling area:
To be performed in designated areas only and surrounded with silt fence.
 - e. Vehicle maintenance areas:
To be performed in designated areas only and surrounded with silt fence.
 - f. Vehicle parking areas:
To be performed in designated areas only and surrounded with silt fence.
 - g. Equipment storage areas:
To be performed in designated areas only and surrounded with silt fence.
 - h. Materials storage areas:
To be performed in designated areas only and surrounded with silt fence.
 - i. Waste containment areas:
To be performed in designated areas only and surrounded with silt fence.
 - j. Service areas:
To be performed in designated areas only and surrounded with silt fence.
3. BMP's for wind erosion:
Stockpiles and site as needed to be watered regularly to eliminate / control wind erosion
4. Construction Vehicles and Equipment:
 - a. Maintenance
 - Maintain all construction equipment to prevent oil or other fluid leaks.
 - Keep vehicles and equipment clean, prevent excessive build-up of oil and grease.
 - Regularly inspect on-site vehicles and equipment for leaks, and repair immediately.
 - Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment on-site.
 - Segregate and recycle wastes, such as greases, used oil or oil filters, antifreeze, cleaning solutions, automotive batteries, hydraulic, and transmission fluids.
 - b. Fueling
 - If fueling must occur on-site, use designated areas away from drainage.
 - Locate on-site fuel storage tanks within a bermed area designed to hold the tank volume.
 - Cover retention area with an impervious material and install in a manner to ensure that any spills will be contained in the retention area. To catch spills or leaks when removing or changing fluids.
 - Use drip pans for any oil or fluid changes.
 - c. Washing
 - Use as little water as possible to avoid installing erosion and sediment controls for the wash area.
 - If washing must occur on-site, use designated, bermed wash areas to prevent waste water discharge into storm water, creeks, rivers, and other water bodies.
 - Use phosphate-free, biodegradable soaps.
 - Do not permit steam cleaning on-site.
5. Spill Prevention and Control
 - a. Minor Spills:
Minor spills are those which are likely to be controlled by on-site personnel. After contacting local emergency response agencies, the following actions should occur upon discovery of a minor spill:
 - Contain the spread of the spill.
 - If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (i.e. absorbent materials, cat litter, and / or rags).
 - If the spill occurs in dirt areas, immediately contain the spill by constructing an earth dike. Dig up and properly dispose of contaminated soil.
 - If the spill occurs during rain, cover the impacted area to avoid runoff.
 - b. Major Spills:
On-site personnel should not attempt to control major spills until the appropriate and qualified emergency response staff have arrived at the site. For spills of federal reportable quantities, also notify the National Response Center at (800) 424-8802. A written report should be sent to all notified authorities. Failure to report major spills can result in significant fines and penalties.
6. Post Roadway / Utility Construction
 - a. Maintain good housekeeping practices.
 - b. Enclose or cover building material storage areas.
 - c. Properly store materials such as paints and solvents.
 - d. Store dry and wet materials under cover, away from drainage areas.
 - e. Avoid mixing excess amounts of fresh concrete or cement on-site.
 - f. Perform washout of concrete trucks offsite or in designated areas only.
 - g. Do not wash out concrete trucks into storm drains, open ditches, streets or streams.
 - h. Do not place material or debris into streams, gutters or catch basins that stop or reduce the flow of runoff water.
 - i. All public streets and storm drain facilities shall be maintained free of building materials, mud and debris caused by grading or construction operations. Roads will be swept within 1000' of construction entrance daily, if necessary.
 - j. Install straw wattle around all inlets contained within the development and all others that receive runoff from the development.
7. Erosion Control Plan Notes
 - a. The contractor will designate an emergency contact that can be reached 24 hours a day 7 days a week.
 - b. A stand-by crew for emergency work shall be available at all times during potential rain or snow runoff events. Necessary materials shall be available on site and stockpiled at convenient locations to facilitate rapid construction of emergency devices when rain or runoff is eminent.
 - c. Erosion control devices shown on the plans and approved for the project may not be removed without approval of the engineer of record. If devices are removed, no work may continue that have the potential of erosion without consulting the engineer of record. If deemed necessary erosion control should be reestablished before this work begins.
 - d. Graded areas adjacent to fill slopes located at the site perimeter must drain away from the top of the slope at the conclusion of each working day. This should be confirmed by survey or other means acceptable to the engineer of record.
 - e. All silt and debris shall be removed from all devices within 24 hours after each rain or runoff event.
 - f. Except as otherwise approved by the inspector, all removable protective devices shown shall be in place at the end of each working day and through weekends until removal of the system is approved.
 - g. All loose soil and debris, which may create a potential hazard to offsite property, shall be removed from the site as directed by the engineer of record of the governing agency.
 - h. The placement of additional devices to reduce erosion damage within the site is left to the discretion of the engineer of record.
 - i. Desilting basins may not be removed or made inoperable without the approval of the engineer of record and the governing agency.
 - j. Erosion control devices will be modified as need as the project progresses and plans of these changes submitted for approval by the engineer of record and the governing agency.
8. Conduct a minimum of one inspection of the erosion and sediment controls every two weeks. Maintain documentation on site.
 - a. Part III.D.4 of general permit UTRC00000 identifies the minimum inspection requirements.
 - b. Part II.D.4.C identifies the minimum inspection report requirements.
 - c. Failure to complete and/or document storm water inspections is a violation of part III.D.4 of Utah General Permit UTR 300000.

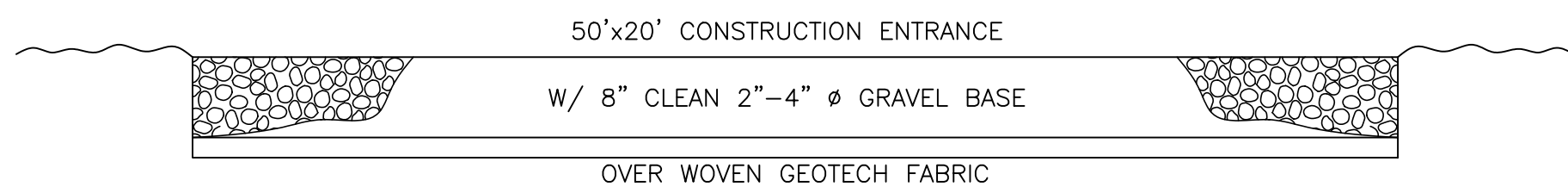
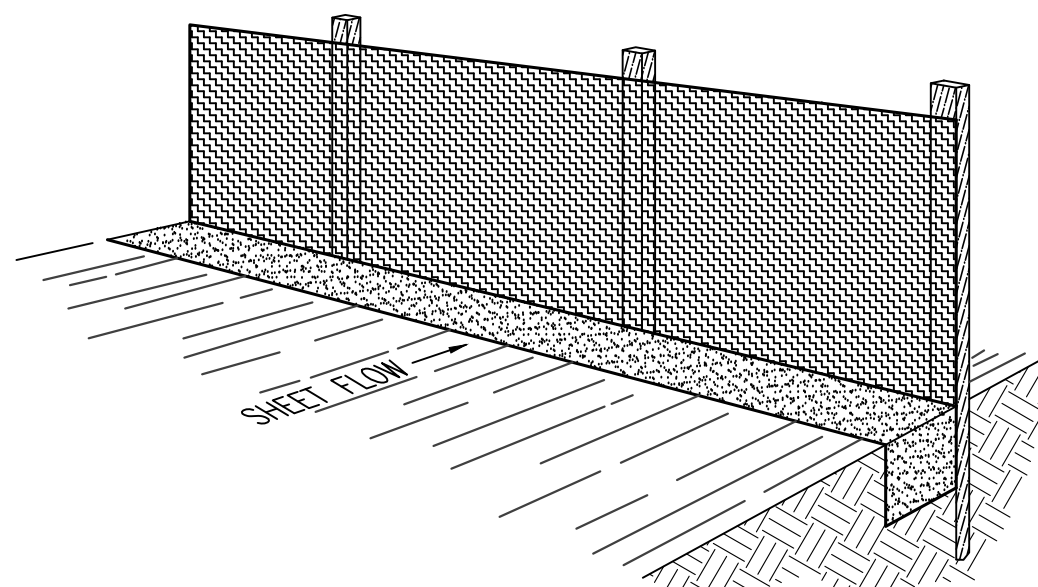
**Cross Section 50' x 20' Construction Entrance****Perspective View**

Figure 2

INSTALLATION

The silt fence should be installed prior to major soil disturbances in the drainage area. The fence should be placed across the slope along a line of uniform elevation wherever flow of sediment is anticipated. Table 1 shows generally-recommended maximum slope lengths (slope spacing between fences), at various site grades for most silt fence applications.

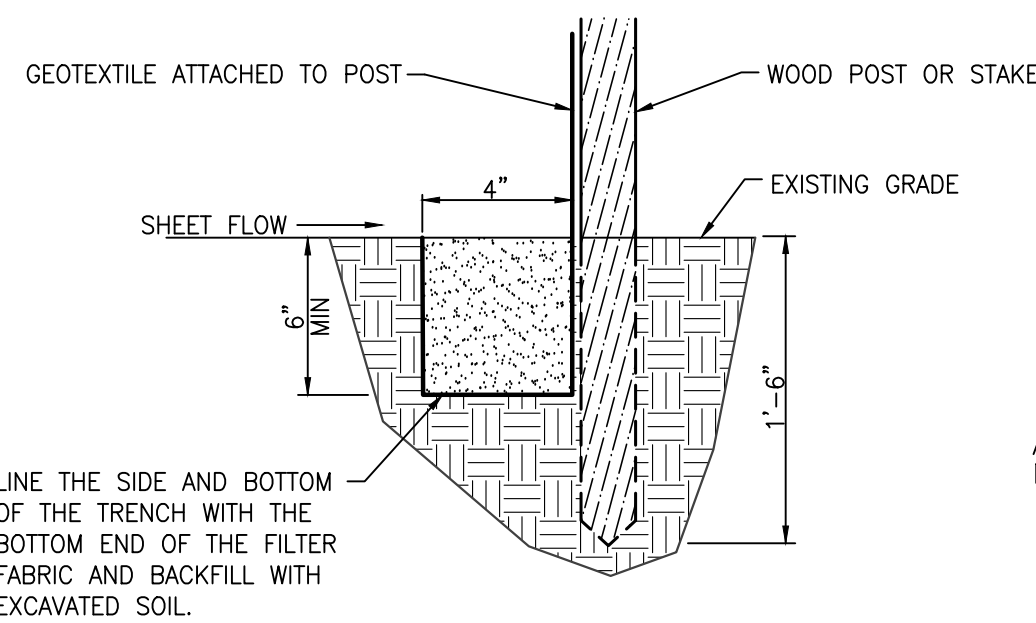
TABLE 1: Recommended Maximum Slope Lengths for Silt Fence (Richardson & Middlebrooks, 1991)		
Slope Steepness (%)	Max. Slope Length m (ft)	
<2%	30.5m (100ft)	
2-5%	22.9m (75ft)	
5-10%	15.2m (50ft)	
10-20%	7.6m (25ft)	
>20%	4.5m (15ft)	

PREFABRICATED SILT FENCE ROLLS

- *Excavate a minimum 15.2cm x 15.2cm (6"x6") trench at the desired location.
- *Unroll the silt fence, positioning the post against the downstream wall of the trench.
- *Adjacent rolls of silt fence should be joined by nesting the end post of one fence into the other. Before nesting the end posts, rotate each post until the geotextile is wrapped completely around the post, then abut the end posts to create a tight seal as shown in Figure 1.
- *Drive posts into the ground until the required fence height and/or anchorage depth is obtained.
- *Bury the loose geotextile at the bottom of the fence in the upstream trench and backfill with natural soil, tamping the backfill to provide good compaction and anchorage. Figure 2 illustrates a typical silt fence installation and anchor trench placement.

FIELD ASSEMBLY:

- *Excavate a minimum 15.2cm x 15.2cm (6"x6") trench at the desired location.
- *Drive wooden posts, or steel posts with fastening projections, against the downstream wall of the trench. Maximum post spacing should be 2.4-3.0m (8-10ft). Post spacing

**Section**

should generally be less than three (3) times the height of the fence.

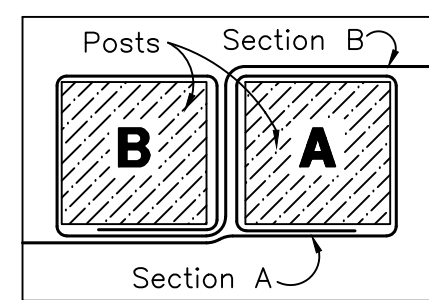
- *If a steel or plastic mesh is required to reinforce the geotextile, it shall have a minimum mesh opening of 15.2cm (6").
- *Fasten the mesh to the upslope side of the posts using heavy duty wire staples, tie wires or hog strings. Extend the mesh into the bottom of the trench.
- *The geotextile shall then be stapled or wired to the posts. An extra 20-50cm (8-20") of geotextile shall extend into the trench.

INSPECTION

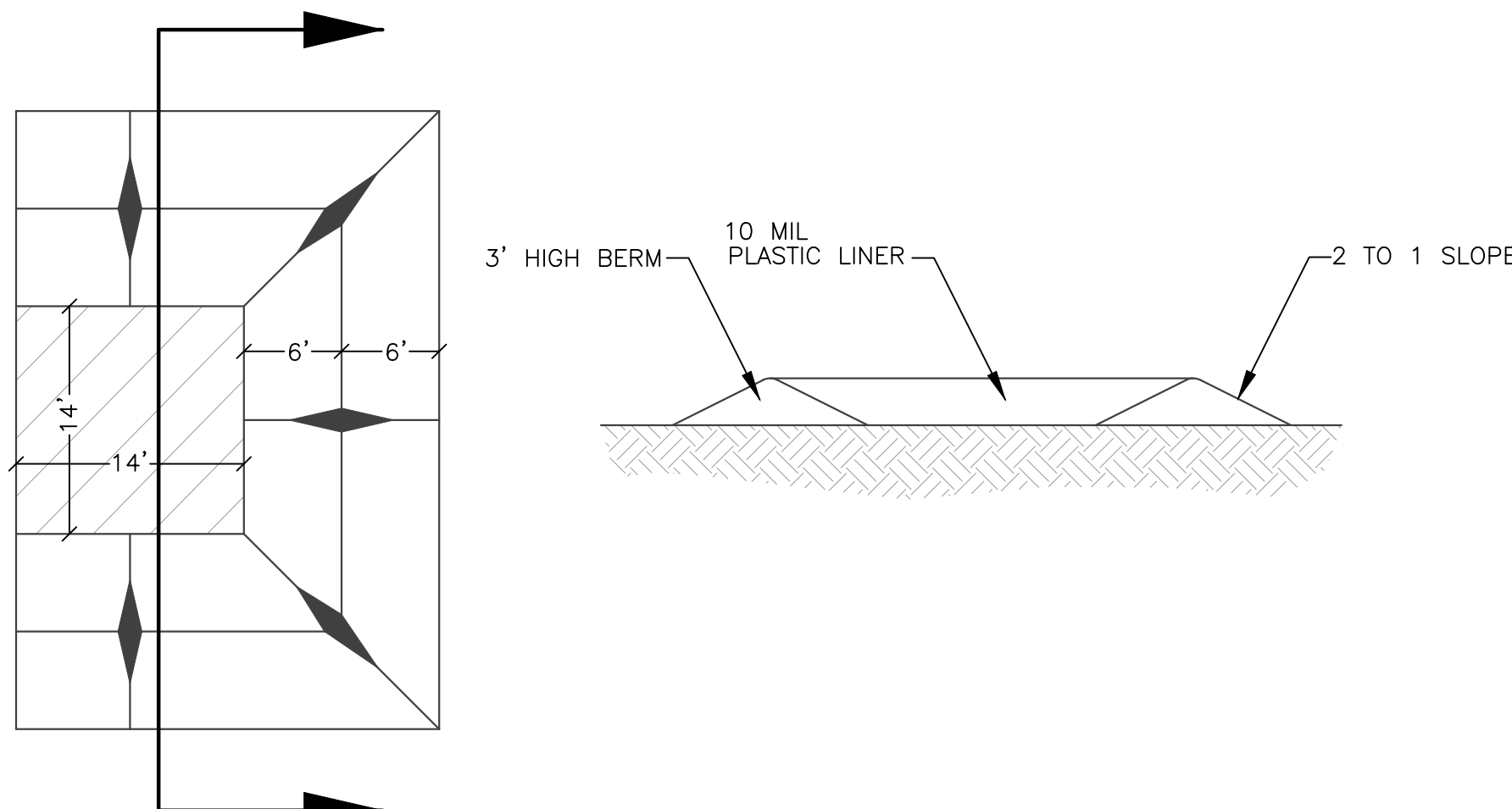
- *Inspect the silt fence daily during periods of rainfall, immediately after significant rainfall event and weekly during periods of no rainfall. Make any repairs immediately.
- *When sediment deposits behind the silt fence are one-third of the fence height, remove and properly dispose of the silt accumulations. Avoid damage to the fabric during cleanout.

REMOVAL

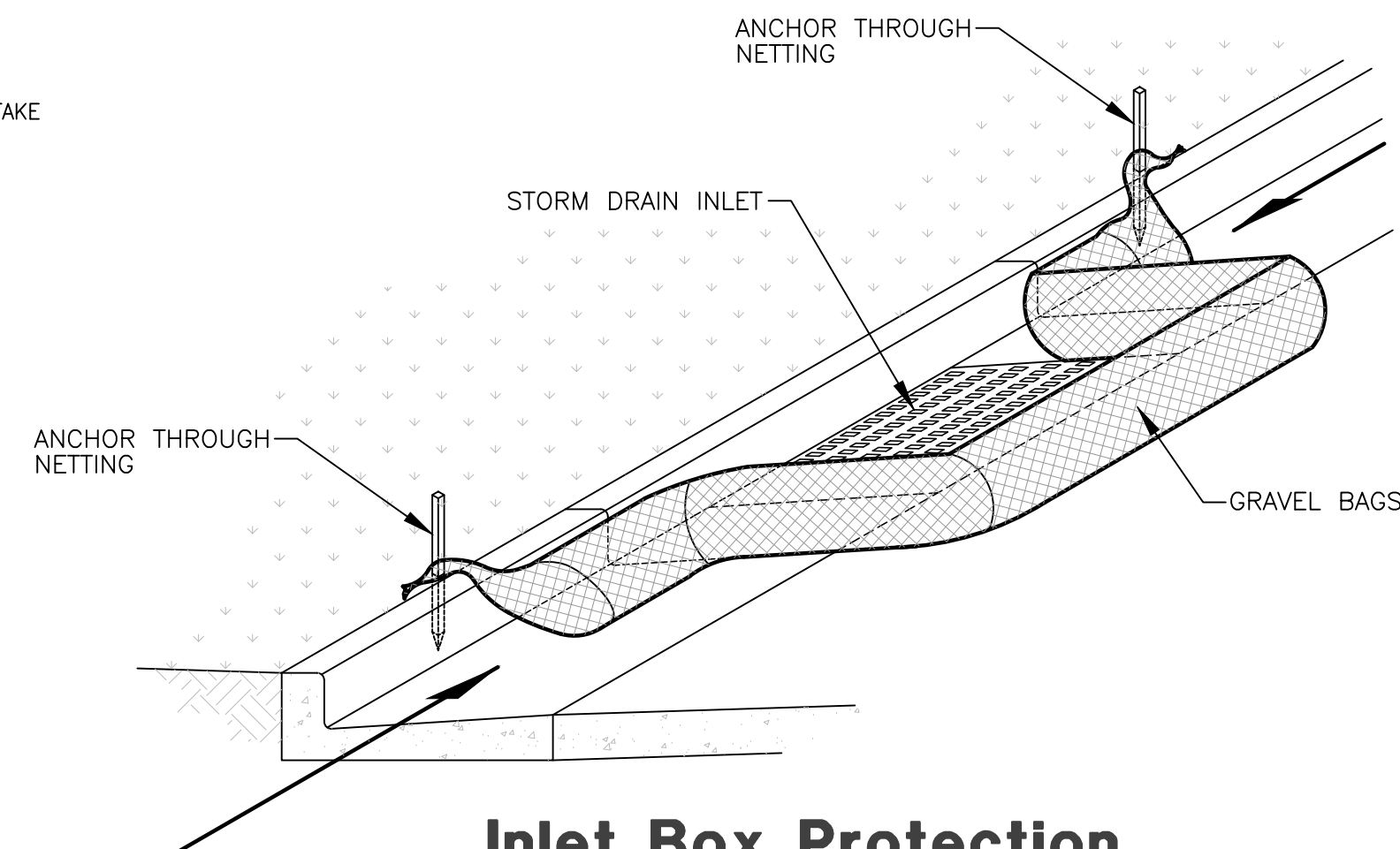
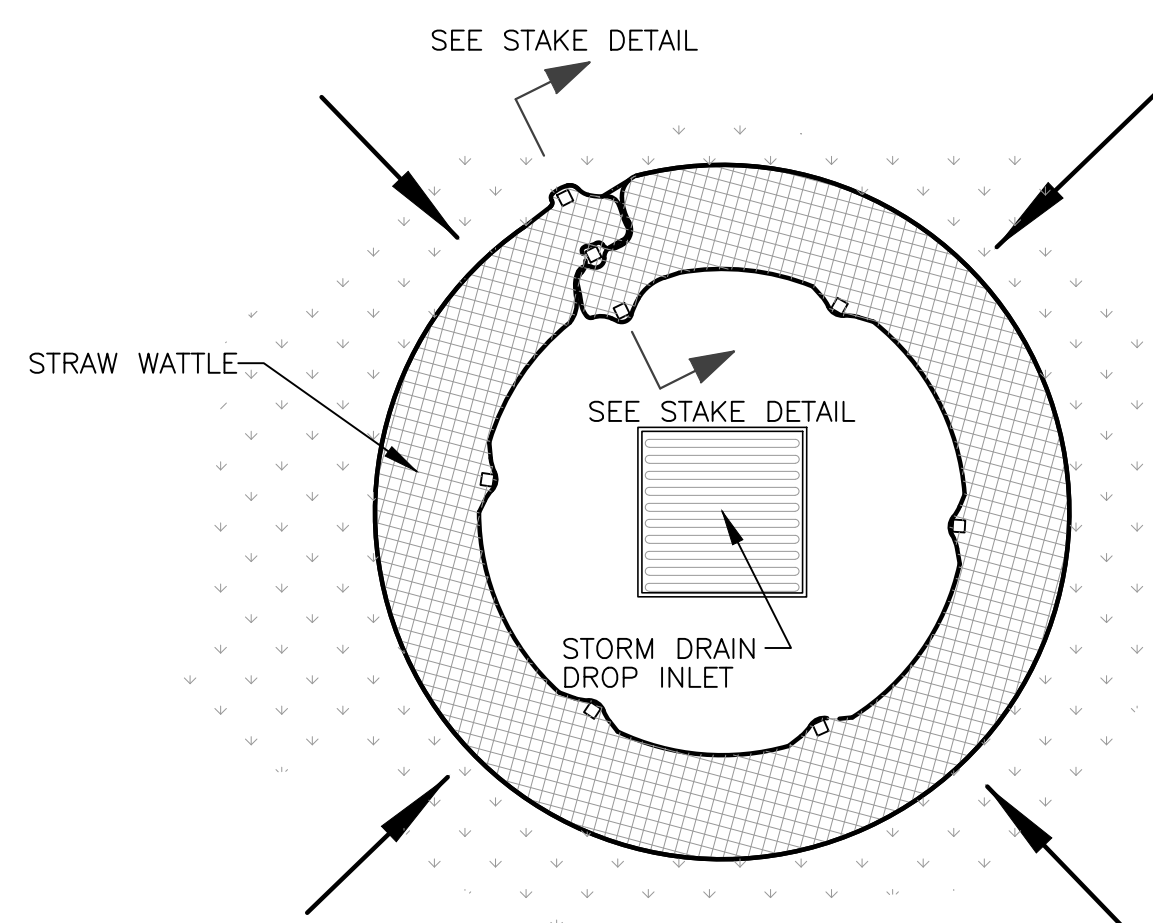
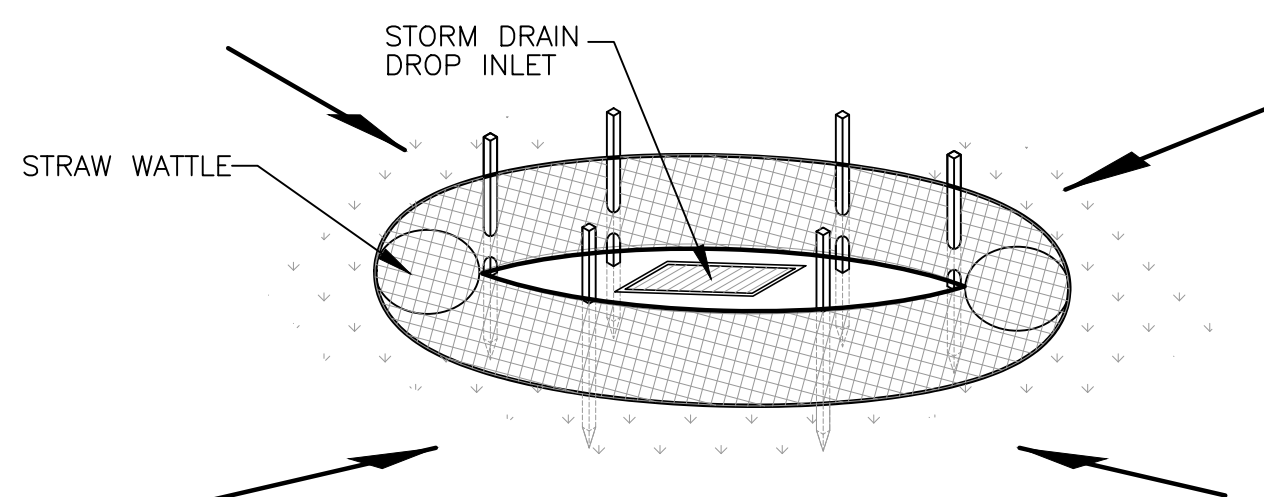
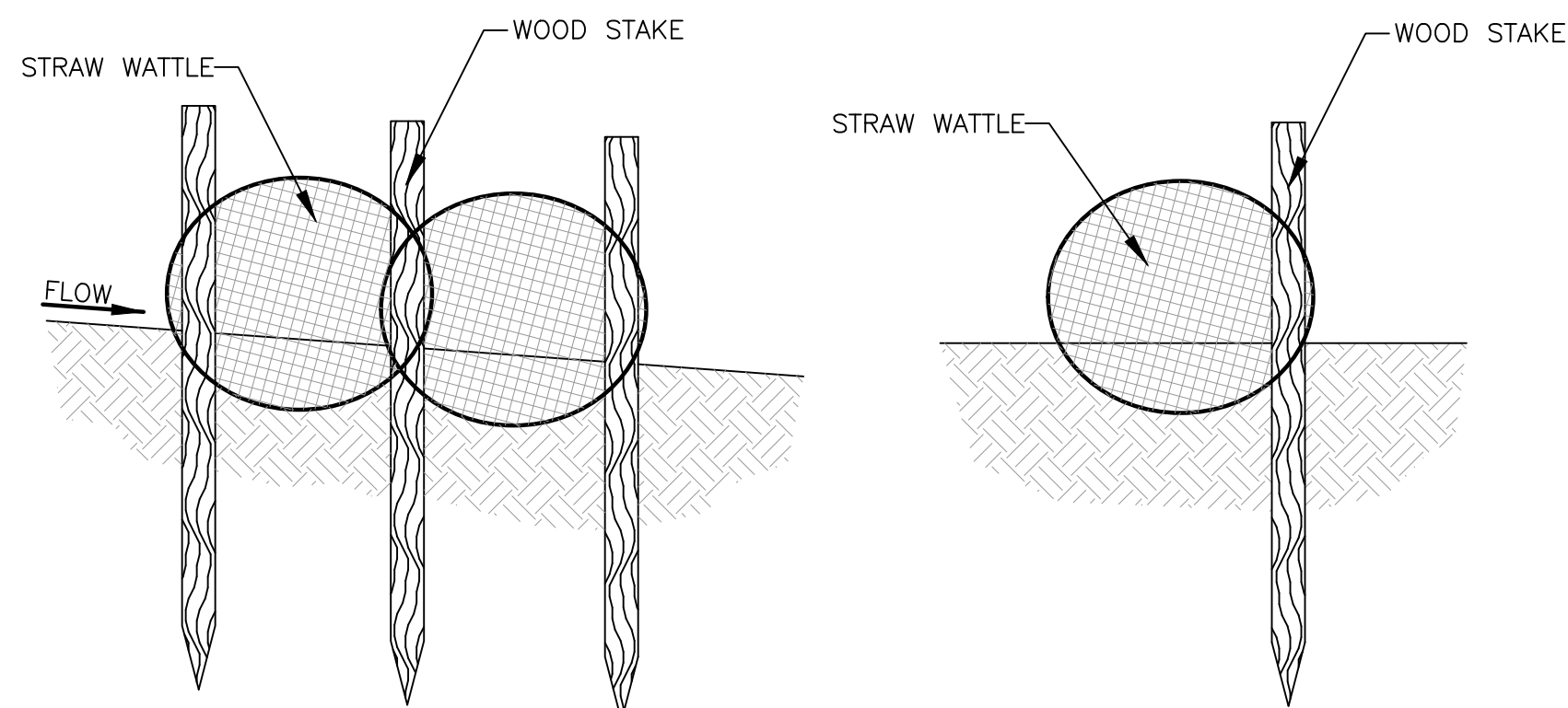
- *Silt fence should not be removed until construction ceases and the upslope area has been properly stabilized and/or revegetated.

Figure 1:
Top View of
Roll-to-Roll Connection**Silt Fence Detail**

SCALE: NONE

**Concrete Washout Area
w/ 10 mil Plastic Liner**

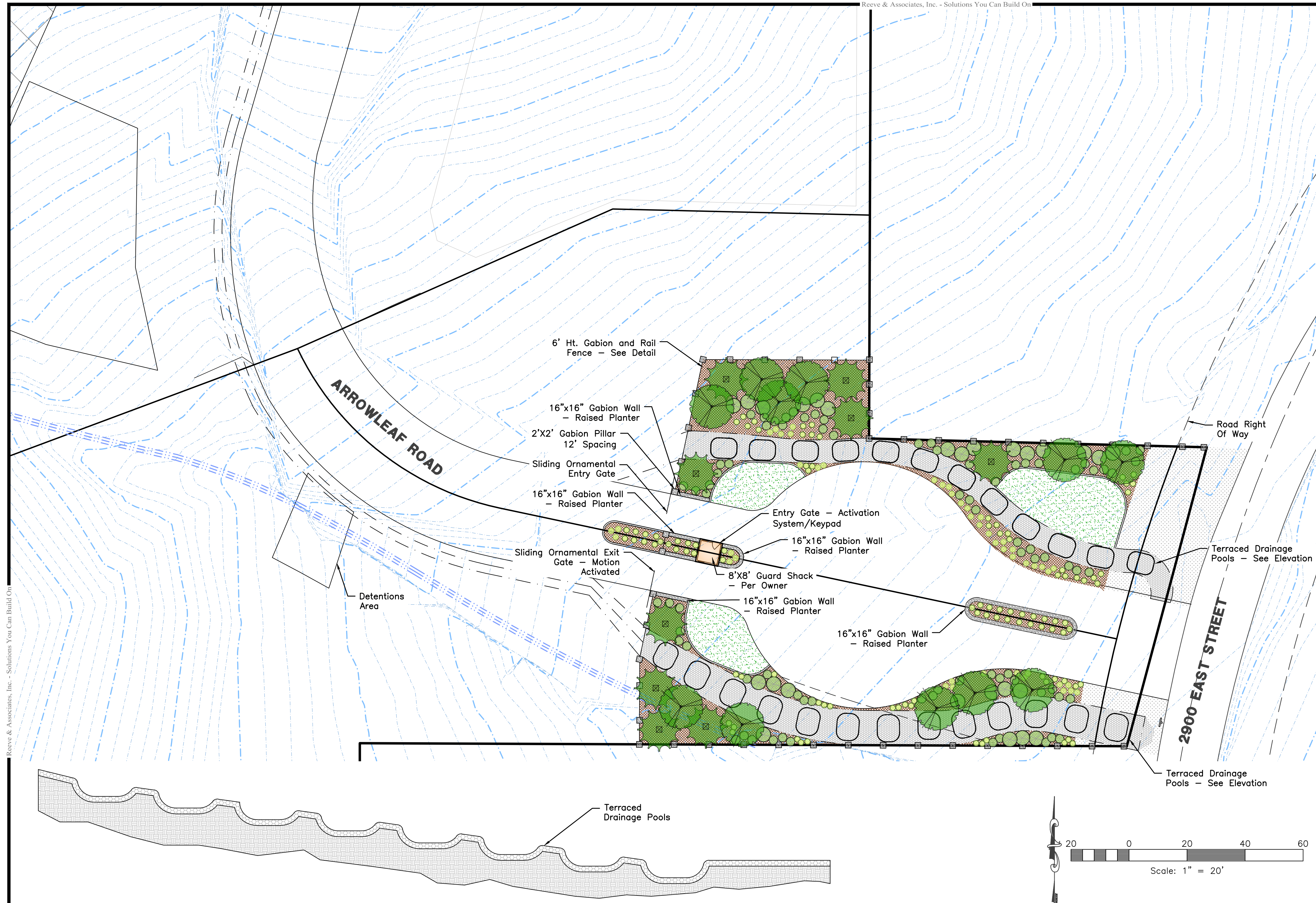
SCALE: NONE

**Inlet Box Protection****Plan View****Drop Inlet Protection****Stake Detail**

REVISIONS	DATE	DESCRIPTION
03-18-24	ZD	County Comments
04-04-24	ZD	County Comments

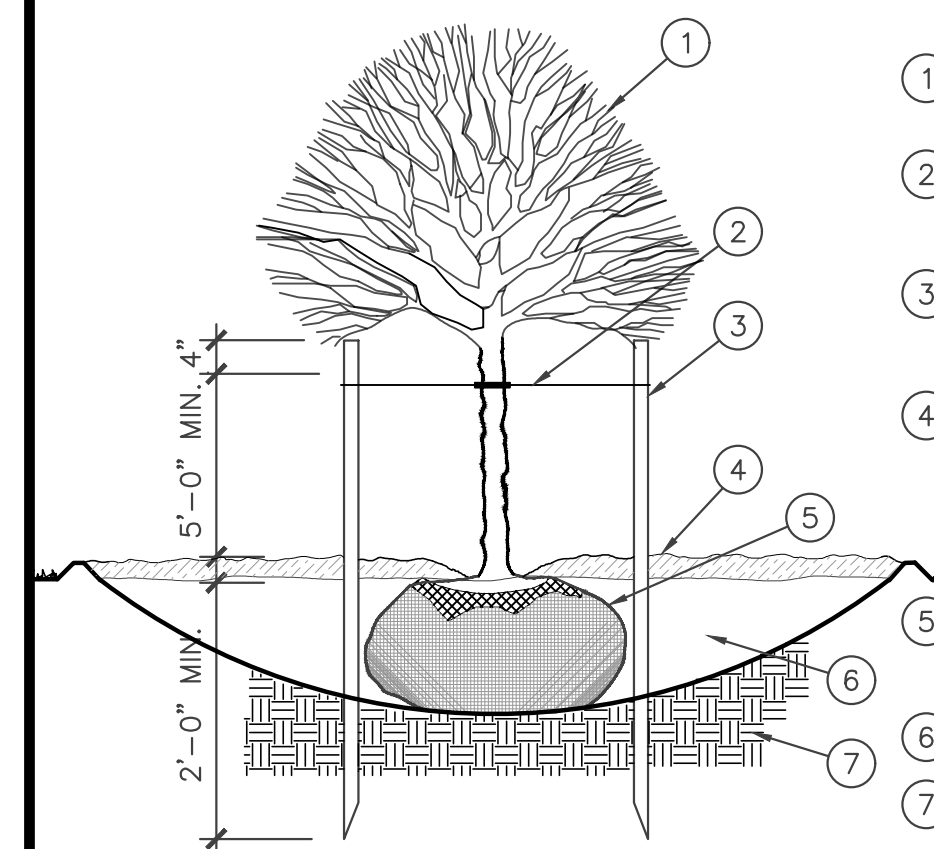
**Storm Water Pollution
Prevention Plan Details**

Project Info.
Engineer:
JEREMY A. DRAPER, P.E.
Drafter:
Z. DECARIA
Begin Date:
FEBRUARY 2023
Name:
ARROWLEAF
Number: 7895-01



TERRACED DRAINAGE

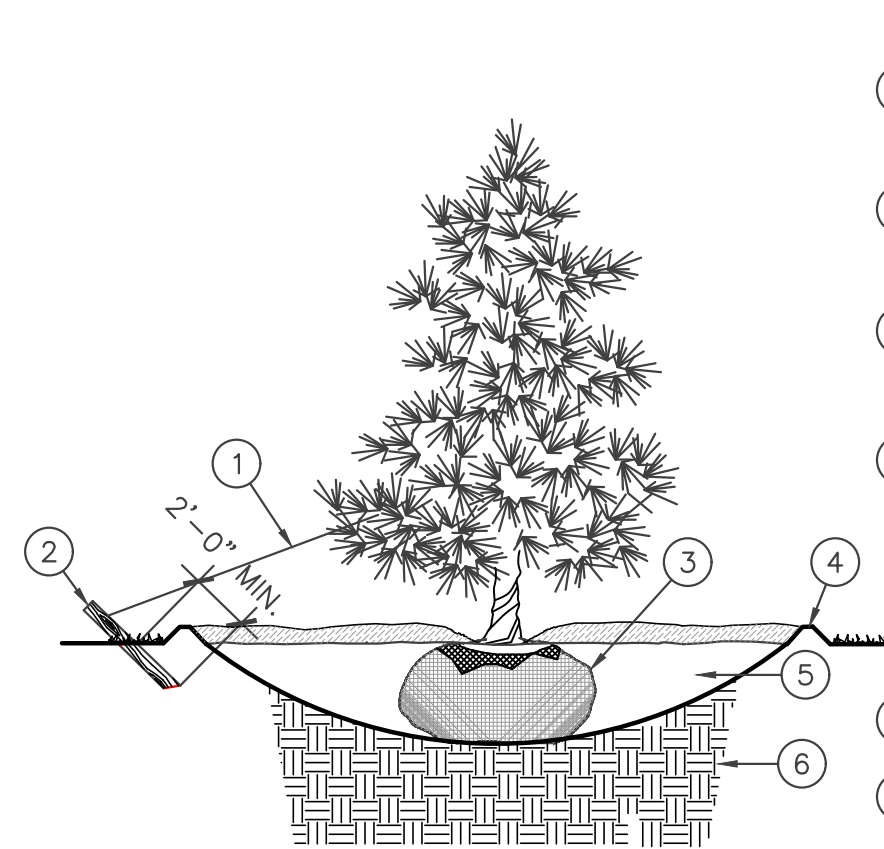
NTS - ELEVATION



NOTE: DIG HOLE THREE TIMES THE
WIDTH AND AS DEEP AS
ROOTBALL, EXCEPT WHERE NOTED.

DECIDUOUS TREE PLANTING

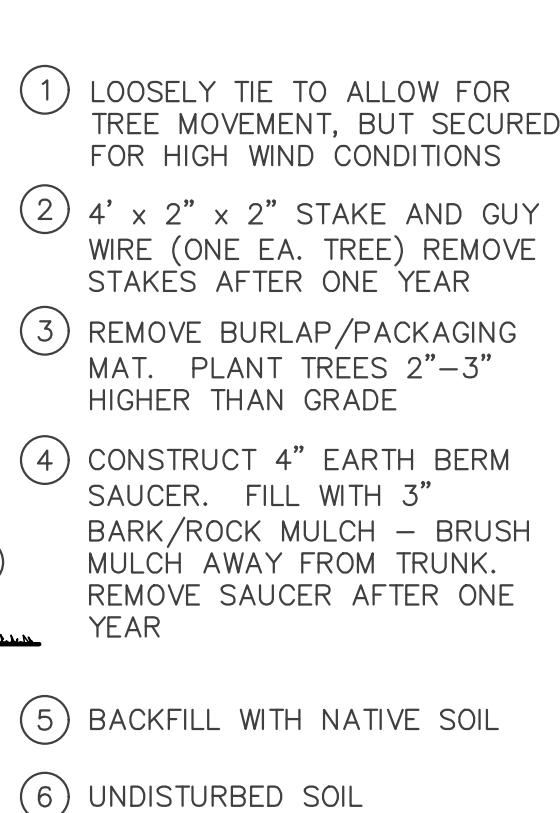
NTS



NOTE: DIG HOLE THREE TIMES THE WIDTH
AND AS DEEP AS ROOTBALL, EXCEPT
WHERE NOTED.

CONIFEROUS TREE PLANTING

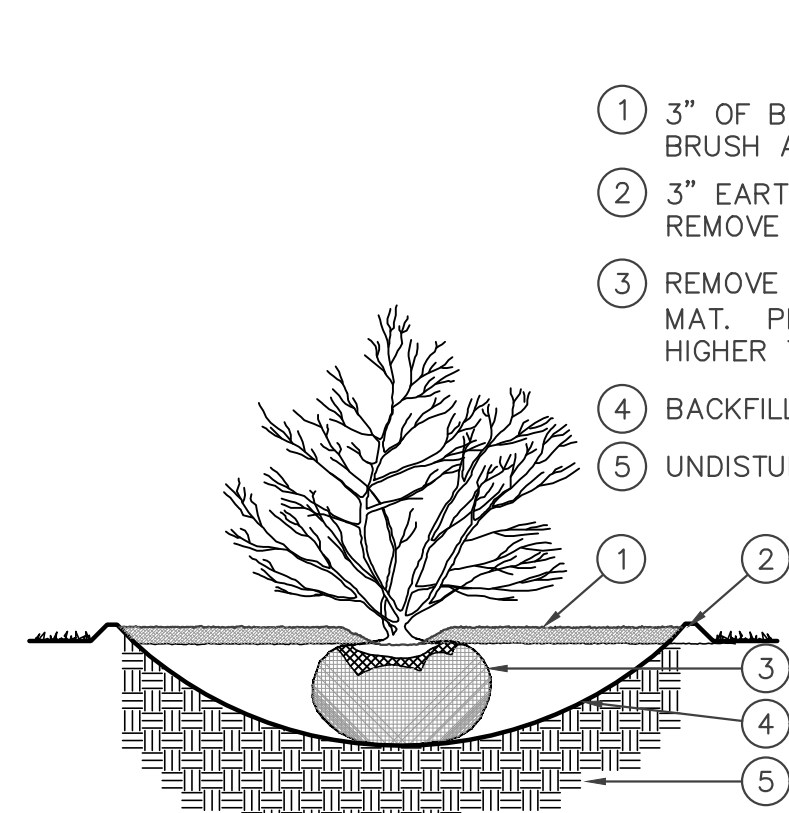
NTS



- ① LOOSELY TIE TO ALLOW FOR TREE MOVEMENT, BUT SECURED FOR HIGH WIND CONDITIONS
- ② 4' x 2" x 2" STAKE AND GUY WIRE (ONE EA. TREE) REMOVE STAKES AFTER ONE YEAR
- ③ REMOVE BURLAP/PACKAGING MAT. PLANT TREES 2"-3" HIGHER THAN GRADE
- ④ CONSTRUCT 4" EARTH BERM SAUCER. FILL WITH 3" BARK/ROCK MULCH – BRUSH MULCH AWAY FROM TRUNK. REMOVE SAUCER AFTER ONE YEAR
- ⑤ BACKFILL WITH NATIVE SOIL
- ⑥ UNDISTURBED SOIL

SHRUB PLANTING

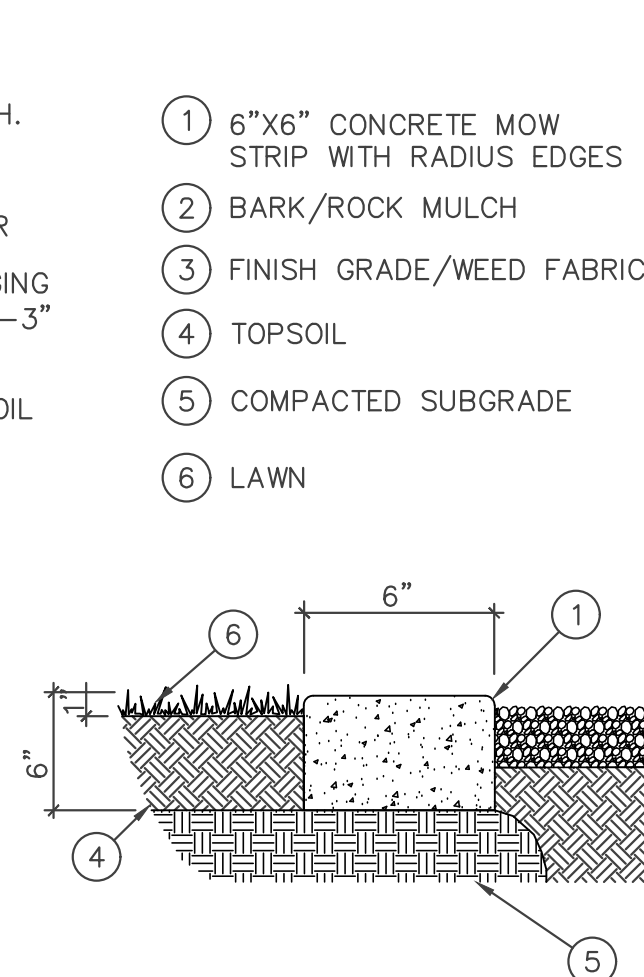
NTS



NOTE: DIG HOLE THREE TIMES THE WIDTH
AND AS DEEP AS ROOTBALL, EXCEPT
WHERE NOTED.

CONCRETE MOW STRIP

NTS





PLANTING NOTES



1. This planting plan is diagrammatic and plant locations are approximate.
2. Field survey, stake, and string the layout and locations of site construction features for approval before actual construction. The layout shall conform to the exact location and grades of the intended work to be done.
3. Coordinate all aspects of the planting plans with the irrigation system and call the attention of the owners representative to any conflict in placement of plants in relation to sprinkler heads, lines and valves at the time the landscape installation phase takes place.
4. Finish grade of soil in lawn areas shall be 2" below pads, walks, paving, headers and curbs to accommodate sod. Grades in areas when seeded shall be 1" lower than adjacent edge.
5. Native topsoil shall be stockpiled and stored on site whenever possible for use in landscape areas.
6. All soil areas shall receive a minimum 4" depth of native topsoil and shrub beds shall receive a minimum of 8" of native topsoil.
7. Imported topsoil, when required, shall come from a reputable source, have a loam consistency and be free of weeds and debris.
8. Face each shrub to give the most pleasing look as seen from a line perpendicular to the wall or walk to/from which it is viewed.
9. Edging or Curbing shall be installed as shown on the plan to separate grass from shrub beds.
10. Shrub beds shall drain properly to prevent standing water from occurring. Call improperly draining planters or planting beds to the attention of the owners representative before planting. Provide positive drainage away from all structures and walls. Slope landscape areas 2% minimum.
11. Place mulch in all shrub beds and perennial areas. See schedule for depth and type. Do not crowd out small perennial plants with excessive mulch.
12. Provide a 36" diameter circle "tree ring" around trees that are placed within lawn areas. Place a 3" min. depth of mulch. Use shredded bark mulch or match mulch being used for shrub beds.
13. The contractor shall maintain all work until work is complete and accepted by the Owner. The contractor shall maintain and guarantee all work for a period of THIRTY DAYS from the date of final acceptance by the Owner. Maintenance shall include mowing, weeding, fertilizing and irrigating.

PLANT TABLE



TREES

Quantity	Symbol	Scientific Name	Common Name	Size
11		Acer ginnala 'Flame'	Amur Maple	2" cal.
9		Picea pungens 'Fastigiata'	Columnar Blue Spruce	6' Ht






SHRUBS

Quantity	Symbol	Scientific Name	Common Name	Size
26		Cornus sericea 'Insanti'	Insanti Dwarf Dogwood	5 gal.
80		Potentilla fruticosa 'Gold Drop'	Gold Drop Cinquefoil	5 gal.

PERENNIALS

Quantity	Symbol	Scientific Name	Common Name	Size
99		Balsamorhiza sagittata	Arrow-leaved balsamroot	1 gal.
46		Nepeta x faassenii 'Walker's Low'	Walker's Low Catmint	1 gal.

OTHER

Symbol	Description	Type
	Turf Grass – Sod Kentucky Bluegrass Mix – 3 Species Minimum	Sod
	Wood Mulch – Medium Chunk Place mulch over 5 ounce Professional weed barrier cloth in all planting beds. Contractor to provide samples to owner for approval prior to delivery.	1" Diameter 3" Depth
	Rock Mulch Place mulch over 5 ounce Professional weed barrier cloth in all planting beds. Contractor to provide samples to owner for approval prior to delivery.	4" Diameter 3" Depth
	Concrete Mow Strip	6"x6"
	Seed Mix – Non-Irrigated seed mix – see schedule	Hydroseed

Seed Mix

Type	Botanical Name	Common Name	% by weight
Grass	<i>Bromus marginatus</i>	Mountain Brome	30
Grass	<i>Elymus trachycaulus</i> ssp. <i>Trachycaulus</i>	Slender Wheatgrass	25
Grass	<i>Poa secunda</i> ssp. <i>Sandbergii</i>	Sandberg Bluegrass	5
Grass	<i>Poa secunda</i> ssp. <i>Ampla</i>	Big Bluegrass	5
Grass	<i>Festuca ovina</i>	Sheep fescue	5
Grass	<i>Pascopyrum smithii</i>	Western Wheatgrass	20
Grass	<i>Pseudoroegneria spicata</i> ssp. <i>Inermis</i>	Beardless Bluebunch Wheatgrass	10

Note: Hydroseed 25 lbs of seed per Acre

SPECIAL INSPECTION REQUIREMENTS

- SOILS
 - CONCRETE
 - SEE SPECIFIC DISCIPLINE DRAWINGS FOR ADDITIONAL DESIGNATED SEISMIC SYSTEMS REQUIRING SPECIAL INSPECTION WHICH ARE NOT CONTAINED IN THE STRUCTURAL DRAWINGS.
- SPECIAL INSPECTION AND TESTING AS REQUIRED BY THE IBC SHALL BE PROVIDED BY AN INDEPENDENT AGENCY EMPLOYED BY THE OWNER UNLESS WAIVED BY THE BUILDING OFFICIAL. THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH THE REQUIRED INSPECTIONS/TESTS AS INDICATED BELOW, REFERRING TO THE IBC SECTION INDICATED AS APPROPRIATE.
 - SPECIAL INSPECTION REPORTS FROM THE INSPECTOR SHALL BE SENT TO THE ARCHITECT/ENGINEER AND BUILDING OFFICIAL.
 - BRING ANY DISCREPANCIES TO THE CONTRACTOR'S IMMEDIATE ATTENTION.
 - NOTIFY THE ENGINEER OF ANY NON-PASSING WORK THAT THE CONTRACTOR CANNOT READILY CORRECT.
 - ANY UNCORRECTED DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER AND BUILDING OFFICIAL PRIOR TO COMPLETION OF THAT PHASE OF THE WORK.
 - A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTIONS OF ANY DISCREPANCIES SHALL BE PROVIDED.
 - SPECIAL INSPECTORS
 - SPECIAL INSPECTORS SHALL BE QUALIFIED PERSONS WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION.

REQUIRED SPECIAL INSPECTION AND TESTS OF CONCRETE CONSTRUCTION TABLE 1705.3				
TYPE	FREQUENCY OF INSPECTION		REFERENCE FOR CRITERIA	
	CONTINUOUS	PERIODIC	REFERENCED STANDARD	IBC REFERENCE
1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.	-	X	ACI 318: CH. 20, 25.2, 25.3, 26.6.1-26.6.3	1908.4
2. REINFORCING BAR WELDING: a. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706; b. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16"; AND c. INSPECT ALL OTHER WELDS	X	X	AWS D1.4, ACI 318: 26.6.4	-
3. INSPECT ANCHORS CAST IN CONCRETE	-	X	ACI 318: 17.8.2	-
4. INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS a. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS b. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.a	X	X	ACI 318: 17.8.2.4	-
5. VERIFY USE OF REQUIRED DESIGN MIX.	-	X	ACI 318: CH. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	-	ASTM C172 ASTM C31 ACI 318: 26.5, 26.12	1908.10
7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	X	-	ACI 318: 26.5	1908.6, 1908.7, 1908.8
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	-	X	ACI 318: 26.5.3-26.5.5	1908.9
9. INSPECT PRESTRESSED CONCRETE FOR: a. APPLICATION OF PRESTRESSING FORCES; AND b. GROUTING OF BONDED PRESTRESSING TENDONS.	X	-	ACI 318: 26.10	-
10. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS	-	X	ACI 318: 26.9	-
11. VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST - TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS	-	X	ACI 318: 26.11.2	-
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED	-	X	ACI 318: 26.11.2(b)	-
FOR 5/8" INCH = 25.4MM. a. WHERE APPLICABLE, SEE SECTION 1705.12, SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE. b. SPECIFIC REQUIREMENTS FOR SPECIAL INSPECTION SHALL BE INCLUDED IN THE RESEARCH REPORT FOR THE ANCHOR ISSUED BY AN APPROVED SOURCE IN ACCORDANCE WITH 17.8.2 IN ACI 318, OR OTHER QUALIFICATION PROCEDURES. WHERE SPECIFIC REQUIREMENTS ARE NOT PROVIDED, SPECIAL INSPECTION REQUIREMENTS SHALL BE SPECIFIED BY THE REGISTERED DESIGN PROFESSIONAL AND SHALL BE APPROVED BY THE BUILDING OFFICIAL PRIOR TO THE COMMENCEMENT OF THE WORK.				

REQUIRED SPECIAL INSPECTIONS AND TESTS OF SOILS TABLE 1705.6		
TASK	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	-	X
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	-	X
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	-	X
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	-
5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	-	X

GENERAL NOTES:

- VISITS TO THE JOB SITE BY REPRESENTATIVES OF THE ENGINEER DO NOT SUBSTITUTE APPROVAL OF THE WORK PERFORMED BY THE CONTRACTOR OR HIS SUBCONTRACTORS AND ARE MERELY FOR THE PURPOSE OF OBSERVING THE WORK PERFORMED.
- CONTRACTOR SHALL NOTIFY ENGINEER/ARCHITECT OF ANY DISCREPANCIES, OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND/OR SPECIFICATIONS BEFORE PROCEEDING WITH ANY WORK INVOLVED. IN ALL CASES, UNLESS OTHERWISE DIRECTED, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN AND BE PERFORMED.
- CONTRACTOR SHALL VERIFY ALL CONDITIONS, DIMENSIONS AND ELEVATIONS, ETC., AT THE SITE AND SHALL COORDINATE WORK PERFORMED BY ALL TRADES. SEE ARCHITECT'S PLANS FOR DIMENSIONS. DO NOT SCALE DRAWINGS
- SHOP DRAWINGS SHALL BE REVIEWED BY THE ENGINEER/ARCHITECT PRIOR TO FABRICATION OR ERECTION FOR ANY PREFABRICATED OR MANUFACTURER-DESIGNED COMPONENTS AND SHALL BE STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THIS STRUCTURE RESIDES.
- SIZES, LOCATIONS, LOADS, AND ANCHORAGES OF EQUIPMENT SHALL BE VERIFIED IN THE FIELD WITH EQUIPMENT MANUFACTURERS (SUPPLIERS) PRIOR TO FABRICATION OR INSTALLATION OF SUPPORTING STRUCTURES.
- TEMPORARY BRACING SHALL BE PROVIDED WHEREVER NECESSARY TO TAKE CARE OF ALL LOADS TO WHICH THE STRUCTURE MAY BE SUBJECTED, INCLUDING WIND. SUCH BRACING SHALL BE LEFT IN PLACE AS LONG AS MAY BE REQUIRED FOR SAFETY, OR UNTIL ALL THE STRUCTURAL ELEMENTS ARE INSTALLED.
- DURING AND AFTER CONSTRUCTION THE CONTRACTOR AND/OR OWNER SHALL KEEP LOADS ON THE STRUCTURE WITHIN THE LIMITS OF THE DESIGN LOAD.
- CONTRACTOR AND ALL SUBCONTRACTORS SHALL PERFORM THEIR TRADES AND DUTIES IN A MANNER CONFORMING TO THE PROCEDURES AND REQUIREMENTS AS STATED IN THE 2021 INTERNATIONAL BUILDING CODE, (OR LATEST ACCEPTED CODE ADOPTED BY THE LOCAL BUILDING OFFICIALS).
- ANY SPECIAL INSPECTIONS REQUIRED BY THE BUILDING OFFICIAL OR THE INTERNATIONAL BUILDING CODE ARE THE RESPONSIBILITY OF THE OWNER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SAFETY AND PROTECTION WITHIN AND ADJACENT TO THE JOB SITE.

FOOTINGS, FOUNDATIONS AND SLAB ON GRADE NOTES:

- ALL FOOTING SIZES ARE BASED ON AN ALLOWABLE SOIL BEARING PRESSURE AS SHOWN IN THE DESIGN CRITERIA. ANY SOIL CONDITION ENCOUNTERED DURING EXCAVATION THAT IS CONTRARY TO THOSE USED FOR DESIGN OF FOOTINGS AS OUTLINED IN WORKING DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING.
- SOIL PREPARATION UNDER FOOTINGS AND SLABS ON GRADE SHALL BE IN ACCORDANCE WITH THE SOILS REPORT. FOR PROJECTS WITHOUT A SOILS REPORT CONTRACTOR/OWNER IS TO VERIFY ADEQUATE SOIL CONDITIONS ARE PROVIDED.
- ALL FOOTINGS SHALL BEAR ON UNDISTURBED NATIVE SOIL OR ENGINEERED GRANULAR FILL COMPACTED TO 95% OF MAX. DENSITY, BASED ON ASTM D 1557 METHOD OF COMPACTION. FILL SHALL BE PLACED IN LAYERS NOT TO EXCEED SIX INCHES IN DEPTH AFTER COMPACTION AND SHALL EXTEND DOWN TO IN-SITU SOILS. FILL SHALL BE COMPACTED UNDER ALL CONCRETE WORK ON THE SITE.
- NO FOOTINGS SHALL BE PLACED IN WATER, SNOW, FROZEN GROUND, OR UNSTABLE SOILS.
- ALL EXCAVATIONS ADJACENT TO AND BELOW FOOTING ELEVATION FOR OTHER TRADES SHALL BE ACCOMPLISHED PRIOR TO POURING ANY FOOTINGS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR Laterally Supporting All Retaining Type Foundation Walls While Compacting Behind Walls and Until All Supporting Members Have Been Placed (Such As Floor).
- ALL REINFORCEMENTS SHALL BE SECURELY TIED IN PLACE PRIOR TO POURING CONCRETE.
- PROVIDE DOWELS IN FOOTING AND FOUNDATIONS TO MATCH ALL VERTICAL BARS IN WALLS AND COLUMNS ABOVE, UNLESS NOTED OTHERWISE.
- PROVIDE CONTROL JOINTS IN SLABS AT A MAX. OF 15 FT. O.C. EACH WAY AND AS SHOWN ON PLANS. AT EXTERIOR SLABS AND GARAGE FLOORS POUR SLABS BETWEEN CONTROL JOINTS SO THAT ADJACENT POURS ARE STAGGERED AT LEAST TWO DAYS APART.
- ALL EXTERIOR FOOTINGS MUST BEAR AT OR BELOW FROST DEPTH, MEASURED FROM LOWEST ADJACENT FINAL GRADE.
- UNLESS NOTED OTHERWISE, ALL FOOTINGS AT COLUMNS TO BE CENTERED BELOW COLUMNS.
- UNLESS NOTED OTHERWISE, ALL FOOTINGS SHALL HAVE VERTICAL FACES FORMED WITH STANDARD FORMING MATERIALS (WOOD, METAL, ETC.) WITH PRIOR APPROVAL OF ARCHITECT AND ENGINEER. CONCRETE FOR FOOTINGS CAN BE PLACED IN EXCAVATED "SOIL" FORMS PROVIDED THAT THE DIMENSIONS ARE INCREASED 3" ON EACH SIDE.
- SLABS ON GRADE SHALL BE 4 INCHES THICK CONCRETE UNDERLAIN BY FREE DRAINING MATERIAL.

CONCRETE NOTES:

- ALL COLUMNS, RETAINING WALLS AND ALL EXTERIOR FLATWORK, CURBS, GUTTERS, ETC., SHALL BE NORMAL WEIGHT CONCRETE WITH A COMPRESSIVE STRENGTH EQUAL TO AT LEAST 4,000 LBS. PER SQUARE INCH WITHIN 28 DAYS AFTER POURING.
- ALL SUSPENDED SLABS AND BEAMS SHALL BE NORMAL WEIGHT CONCRETE WITH A COMPRESSIVE STRENGTH EQUAL TO AT LEAST 4,500 LBS. PER SQUARE INCH WITHIN 28 DAYS AFTER POURING.
- ALL FOOTINGS, FOUNDATIONS, INTERIOR SLABS ON GRADE, AND SUSPENDED SLABS ON DECK SHALL BE NORMAL WEIGHT CONCRETE WITH A COMPRESSIVE STRENGTH EQUAL TO A LEAST 3,000 LBS. PER SQUARE INCH WITHIN 28 DAYS AFTER POURING.
- UNLESS OTHERWISE NOTED, ALL FOUNDATION WALL VERTICAL COLD JOINTS SHALL BE KEVED WITH A KEY 1-1/2" DEEP, A LENGTH 2" LESS THAN THE MEMBER, AND A WIDTH 1/2 OF THE MEMBER. REINFORCING SHALL BE CONTINUOUS THRU JOINT.
- ALL OPENINGS IN CONCRETE WALLS SHALL BE REINFORCED WITH (2) #5 BARS EXTENDING 2'-0" MIN. BEYOND THE EDGE OF THE OPENING AT EACH FACE OF OPENING.
- ALL CONCRETE WORK SHALL BE PLACED, CURED, STRIPPED, AND PROTECTED AS DIRECTED BY THE SPECIFICATIONS AND ACI STANDARDS AND PRACTICES.
- BEFORE CONCRETE IS POURED CHECK WITH ALL TRADES TO INSURE PROPER PLACEMENT OF ALL OPENINGS, SLEEVES, CURBS, CONDUITS, BOLTS, INSERTS, ETC. RELATIVE TO WORK.
- CONTRACTOR IS RESPONSIBLE FOR ALL SHORING AND FORMWORK.
- REFER TO ARCHITECTURAL DRAWINGS FOR MOLDS, GROOVES, ORNAMENT, CLIPS OR GROUNDS, REQUIRED TO BE ENCASED IN CONCRETE AND FLOOR LOCATION OF FLOOR FINISHES AND SLAB DEPRESSIONS.
- FOR STEPS IN FOUNDATION GREATER THAN 2 FEET, WRAP CORNER W/(2) #4 BARS EXTENDING 18" EACH DIRECTION.
- STRUCTURAL CONCRETE HAS BEEN DESIGNED AT 2,500 LBS. PER SQUARE INCH AND SPECIFIED AT A HIGHER STRENGTH CONCRETE AS STATED ABOVE. NO SPECIAL INSPECTIONS ARE REQUIRED PER IBC SECTION 1705.3.

REINFORCING STEEL NOTES:




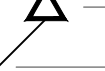


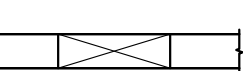

- ALL REINFORCING BARS SHALL CONFORM TO ASTM STANDARD A-615 GRADE 60. ALL WELDED WIRE FABRIC SHALL CONFORM TO ASTM STANDARD A-185, SHALL BE SUPPLIED IN FLAT SHEETS AND SHALL HAVE A MIN. SIDE LAP OF 8 INCHES. ADEQUATELY TIE AND SUPPORT ALL REINFORCING STEEL AS SPECIFIED BY ACI 315 TO MAINTAIN EXACT REQUIRED POSITION. ALL FIELD BENT DOVELS SHALL BE GRADE 40 WITH SPACING INDICATED REDUCED BY 1/3.
- REINFORCEMENT SHALL HAVE THE FOLLOWING CONCRETE COVERAGE:
A. CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH _____ 3"
B. EXPOSED TO EARTH OR WEATHER:
#6 & LARGER _____ 2"
#5 & SMALLER _____ 1 1/2"
C. NOT EXPOSED TO WEATHER OR EARTH:
SLABS, WALLS, JOISTS, #11 & SMALLER _____ 3/4"
BEAMS, COLUMNS: MAIN REINFORCING OR TIES _____ 1 1/2"
D. SLAB ON GRADE:
PLACE REINFORCING AT CENTER OF SLAB UNLESS INDICATED OTHERWISE.
- EXCEPT WHERE NOTED, CONTINUOUS REINFORCEMENT SHALL BE SPLICED AT POINTS OF MIN. STRESS BY LAPPING 44 BAR DIAMETERS IN CONCRETE AND 50 BAR DIAMETERS IN MASONRY.
- ALL VERTICAL REINFORCING SHALL BE DOWELED TO FOOTINGS OR STRUCTURE BELOW WITH DOWELS TO MATCH. SPLICE LENGTHS SHALL COMPLY WITH NOTE 3. DOWELS INTO FOOTINGS SHALL TERMINATE WITH A STANDARD HOOK, AND SHALL EXTEND TO WITHIN 4" OF THE BOTTOM OF THE FOOTING, BUT NOT MORE THAN 20" INTO FOOTING.
- DO NOT WELD REINFORCING EXCEPT AS NOTED ON PLANS. WHERE REINFORCING IS WELDED, USE ASTM A706 REINFORCING.

BASIS OF DESIGN

- GOVERNING CODE _____ 2021 IBC
- ROOF LOADS
2.A. LIVE _____ 100 PSF
2.B. DEAD _____ 150 PSF
2.C. SOIL _____ H = 135 PSF
- ROOF SNOW LOAD DATA
3.A. GROUND SNOW LOAD _____ P_g = 82 PSF
- EARTHQUAKE DESIGN DATA
4.A. RISK CATEGORY _____ III
4.B. SEISMIC IMPORTANCE FACTOR _____ I_e = 1.25
4.C. MAPPED SPECTRAL RESPONSE ACCELERATION PERAMETERS _____ S_{ps} = 1.155g
S_{ds} = 0.422g
4.D. SITE CLASS _____ D (ASSUMED)
4.E. DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS _____ S_{0.2s} = 0.924g
S_{0.1s} = 0.528g
- SEISMIC DESIGN CATEGORY _____ D
- BASIC SEISMIC FORCE-RESISTING SYSTEM _____ WOOD SHEAR WALL
- DESIGN BASE SHEAR _____ V = C_sW
- SEISMIC RESPONSE COEFFICIENT _____ CS = 0.616
- RESPONSE MODIFICATION COEFFICIENT _____ R = 1.5
- ANALYSIS PROCEDURE USED _____ EQUIVALENT LATERAL FORCE PROCEDURE
- GEOTECHNICAL INFORMATION
5.A. SOIL REPORT BY: NA
REPORT #:
DATE:
5.A. FROST DEPTH _____ 40" MIN.
5.B. SOIL BEARING PRESSURE _____ 1500 PSF

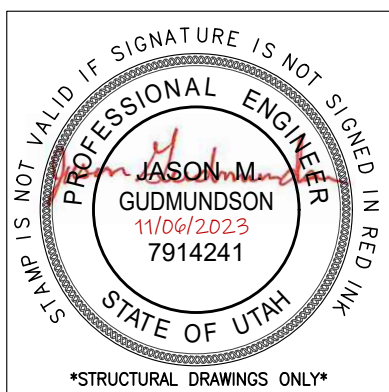
LEGEND OF SYMBOLS AND ABBREVIATIONS

- | | | |
|---------|---|-----------------------------|
| AB. | = | ANCHOR BOLT |
| ABV. | = | ABOVE |
| ARCH. | = | ARCHITECT |
| BN. | = | BOUNDARY NAILING |
| BLW. | = | BELOW |
| CL. | = | CENTERLINE |
| CMU. | = | CONCRETE MASONRY UNIT |
| COL. | = | COLUMN |
| CONC. | = | CONCRETE |
| CONT. | = | CONTINUOUS |
| DBA. | = | DEFORMED BAR ANCHOR |
| EN. | = | EDGE NAILING |
| EQ. | = | EQUAL |
| ELEV. | = | ELEVATION |
| EW. | = | EACH WAY |
| FDN. | = | FOUNDATION |
| FN. | = | FIELD NAILING |
| FTG. | = | FOOTING |
| GLB. | = | GLUELAM BEAM |
| HORIZ. | = | HORIZONTAL |
| IBC. | = | INTERNATIONAL BUILDING CODE |
| HSA. | = | HEADED STUD ANCHOR |
| LLH. | = | LONG LEG HORIZONTAL |
| LLV. | = | LONG LEG VERTICAL |
| MAX. | = | MAXIMUM |
| MECH. | = | MECHANICAL |
| MIN. | = | MINIMUM |
| OAE. | = | OR APPROVED EQUAL |
| O.C. | = | ON CENTER |
| OPP. | = | OPPOSITE |
| PSW. | = | PERFORATED SHEAR WALL |
| PL. | = | PLATE |
| PLM. | = | PARALLAM |
| REINF. | = | REINFORCEMENT |
| REQD. | = | REQUIRED |
| SCHED. | = | SCHEDULE |
| STRUCT. | = | STRUCTURAL |
| SW. | = | SHEAR WALL |
| SIM. | = | SIMILAR |
| SQ. | = | SQUARE |
| TN. | = | TOE NAIL |
| TYP. | = | TYPICAL |
| UNO. | = | UNLESS NOTED OHERWISE |
| VERT. | = | VERTICAL |

- | | |
|---------------------------------------------------------------------------------------|--------------------------------------------|
| S _____ S | FOOTING STEP |
|  | SECTION MARK |
|  | SHEET NUMBER |
|  | ELEVATION |
|  | HOLDOWN ANCHOR LOCATION |
|  | HOLDOWN ANCHOR TYPE |
|  | OVERBUILD AREA |
|  | DEPRESS FOUNDATION WALL AND POUR SLAB OVER |
|  | WOOD BEAM |

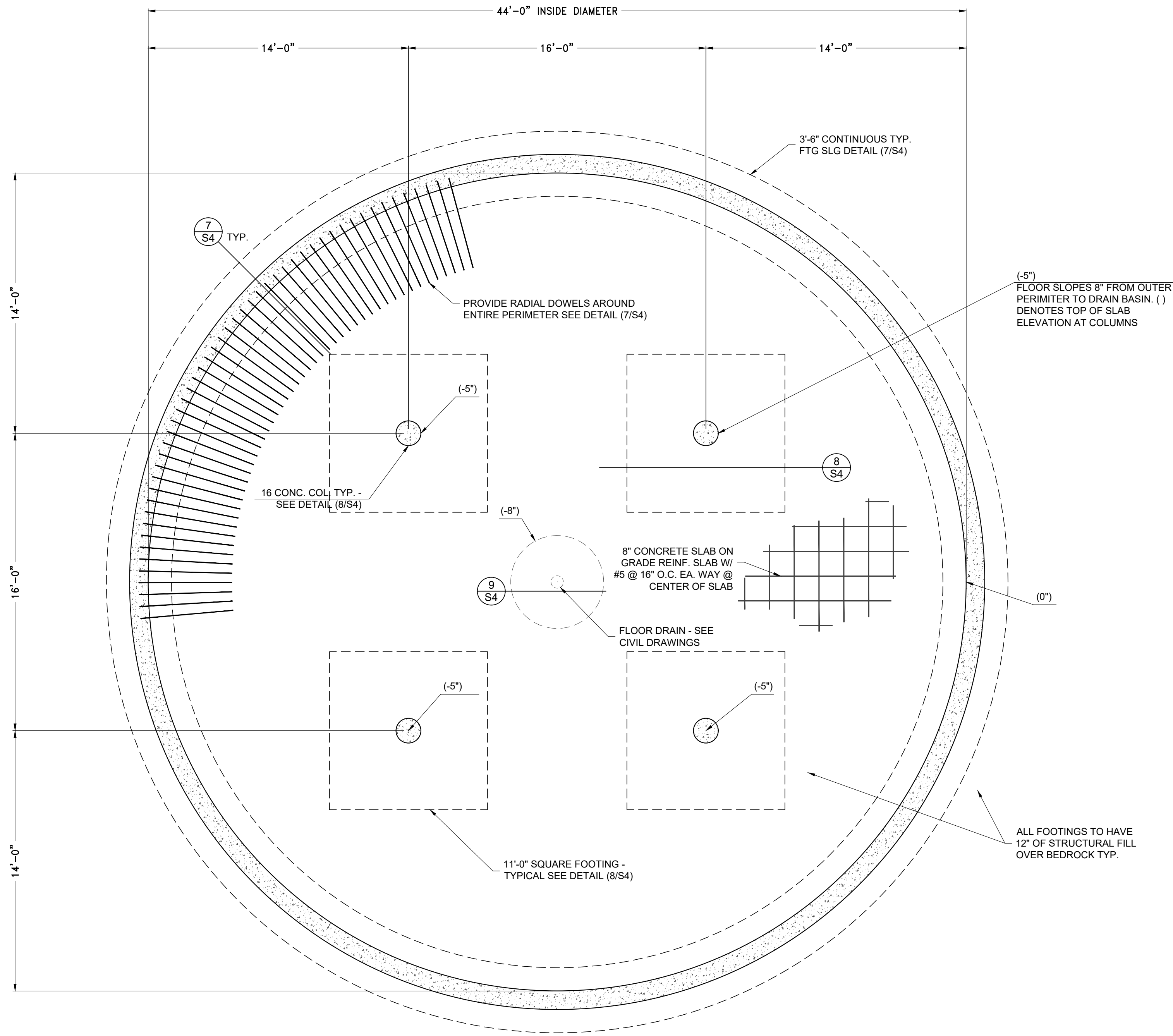
100,000 GALLON CONCRETE WATER TANK
ARROWLEAF SUBDIVISION - 4665 N. 2900 EAST EDEN, UTAH

GENERAL STRUCTURAL
NOTES



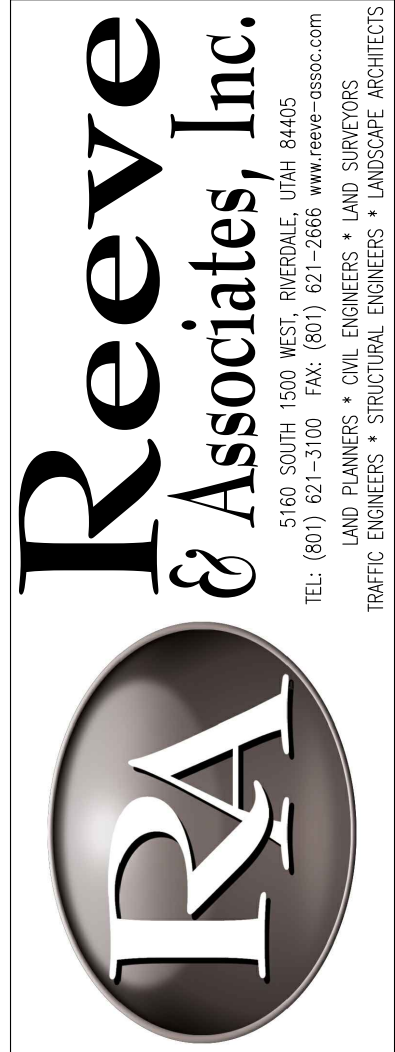
Project Info.

Engineer: J.M.G.
Drafter: A.W.B.
Begin Date:
NOVEMBER 6, 2023
Number: 7895-01



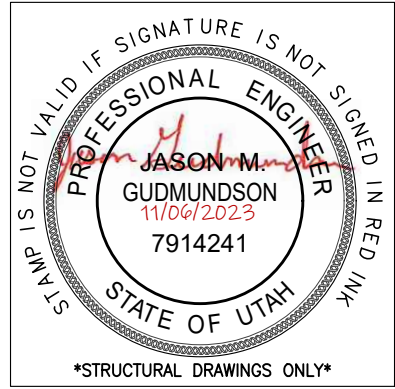
1 FOOTING & FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

CONCRETE FOOTING NOTES:
1. PLACE ALL FOOTING REINFORCING IN BOTTOM OF FOOTING WITH 3" CLEAR CONCRETE COVER UNLESS NOTED OTHERWISE.
2. TOP REINFORCING, WHERE SPECIFIED, SHALL BE PLACED IN THE TOP OF THE FOOTING WITH 2" MINIMUM CONCRETE COVER.
3. IF FOOTINGS ARE EARTH FORMED, FOOTING WIDTH AND LENGTH SHALL BE 6" WIDER AND LONGER THAN SCHEDULED.
4. SEE GENERAL STRUCTURAL NOTES FOR ALL OTHER REQUIREMENTS.



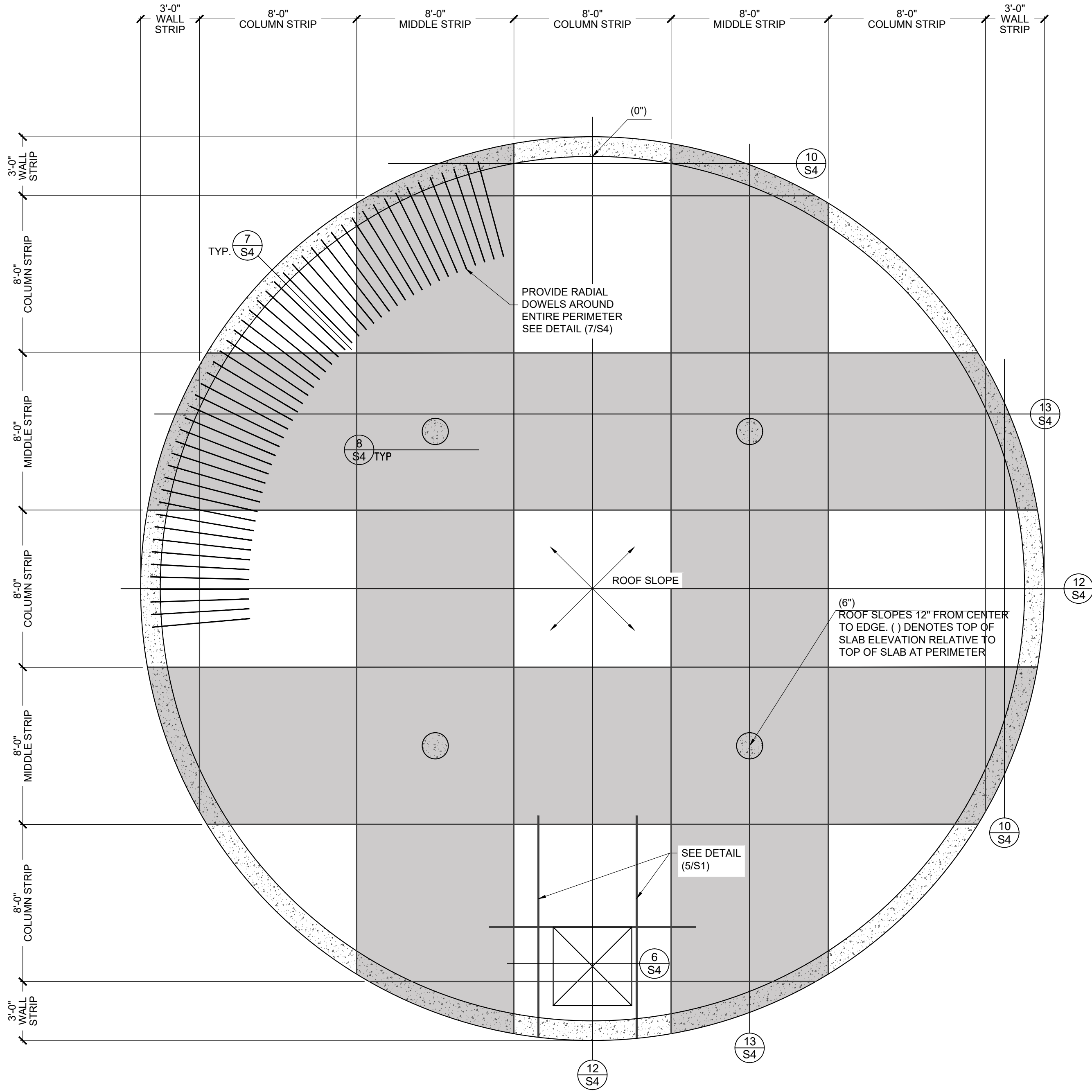
Revisions	Description
Date:	

100,000 GALLON CONCRETE WATER TANK
ARROWLEAF SUBDIVISION - 4665 N. 2900 EAST EDEN, UTAH
FOOTING & FOUNDATION
PLAN



Project Info:
Engineer: J.M.G.
Drafter: A.W.B.
Begin Date: NOVEMBER 6, 2023
Number: 7895-01

Sheet
S2 S4
Sheets



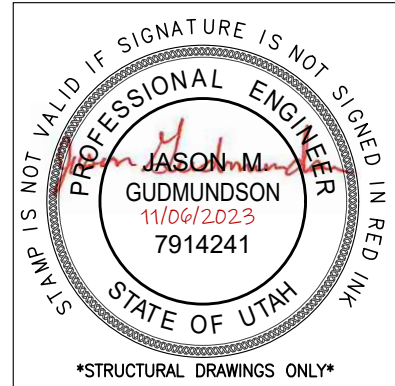
1 ROOF SLAB PLAN
SCALE: 1/4" = 1'-0"



Reeve & Associates, Inc.
5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405
TEL: (801) 621-3100 FAX: (801) 621-2665 www.reeve-assoc.com
LAND PLANNERS • CIVIL ENGINEERS • LAND SURVEYORS
TRAFFIC ENGINEERS • STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS

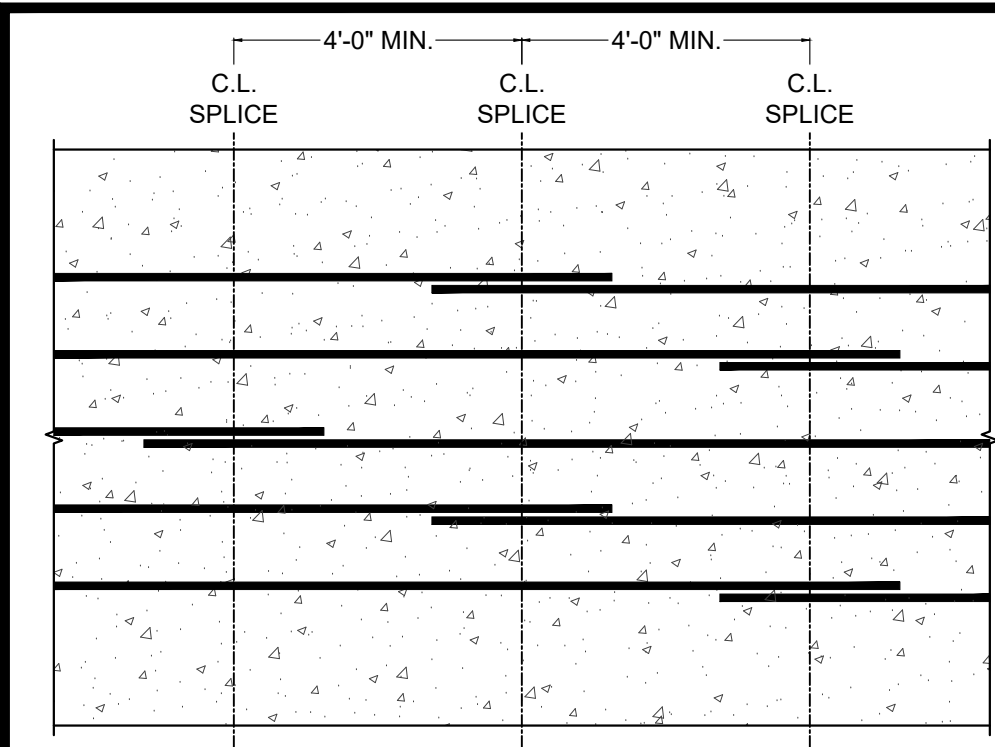
Revisions:	Description:
Date:	

100,000 GALLON CONCRETE WATER TANK
ARROWLEAF SUBDIVISION - 4665 N. 2900 EAST EDEN, UTAH
ROOF FRAMING
PLAN



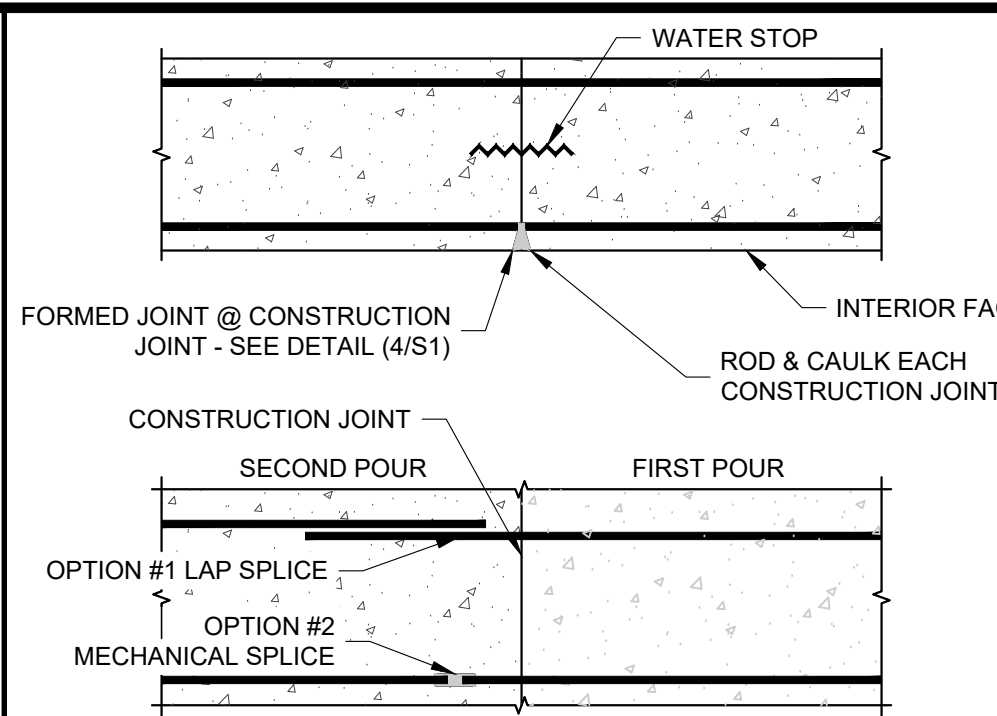
Project Info.
Engineer: J.M.G.
Drafter: A.W.B.
Begin Date: NOVEMBER 6, 2023
Number: 7895-01

Sheet
S3
S4
Sheets



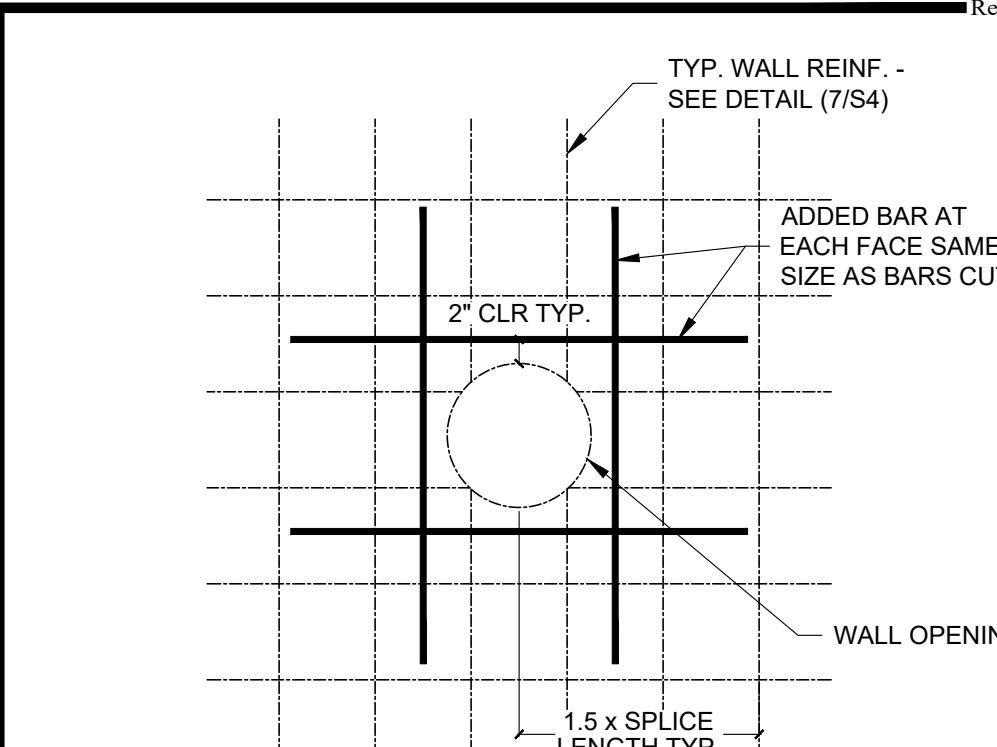
NOTES:
SPICES MAY NOT COINCIDE VERTICALLY MORE FREQUENTLY THAN EVERY THIRD BAR.
SPICE LENGTHS
#5 BARS - 39"
#6 BARS - 46"

1 REIN. BAR SPLICE DETAIL TYP.
SCALE: NONE



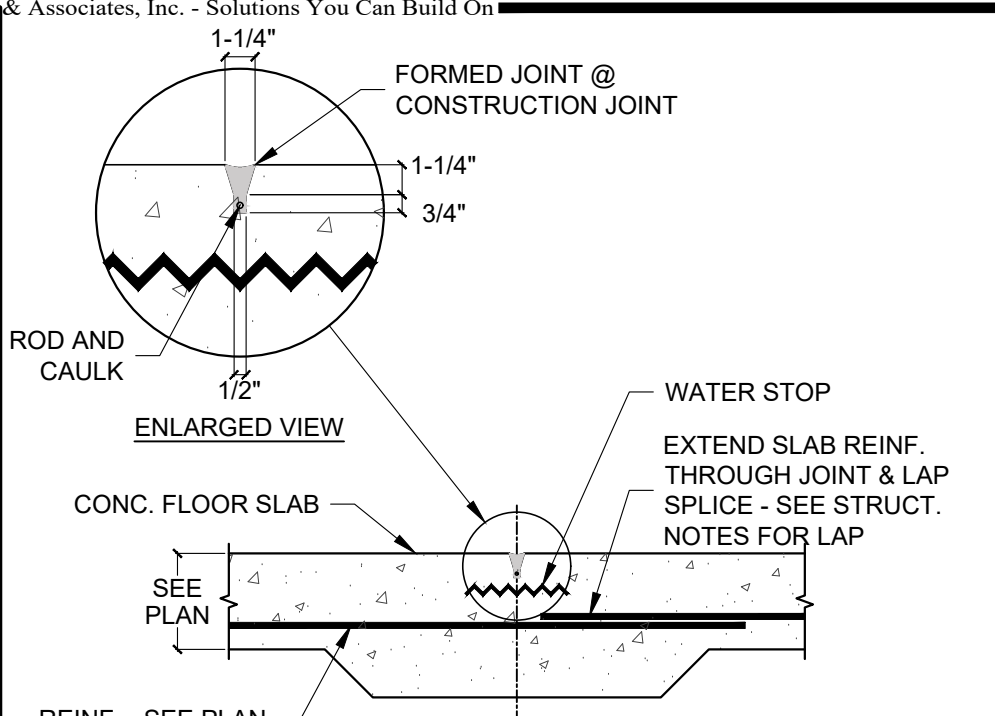
NOTES:
1. FOR OPTION #1 - SPLICE LENGTHS ARE
A. #5 BARS - 39"
B. #6 BARS - 46"
2. FOR OPTION #2 - USE MECHANICAL CONNECTORS WHICH ACHIEVE 125% OF THE STRENGTH OF THE BARS BEING SPLICED. SUBMIT A CURRENT ICC RESEARCH REPORT FOR APPROVAL PRIOR TO CONSTRUCTION.

2 CONST. JOINT IN WALL DETAIL TYP.
SCALE: NONE



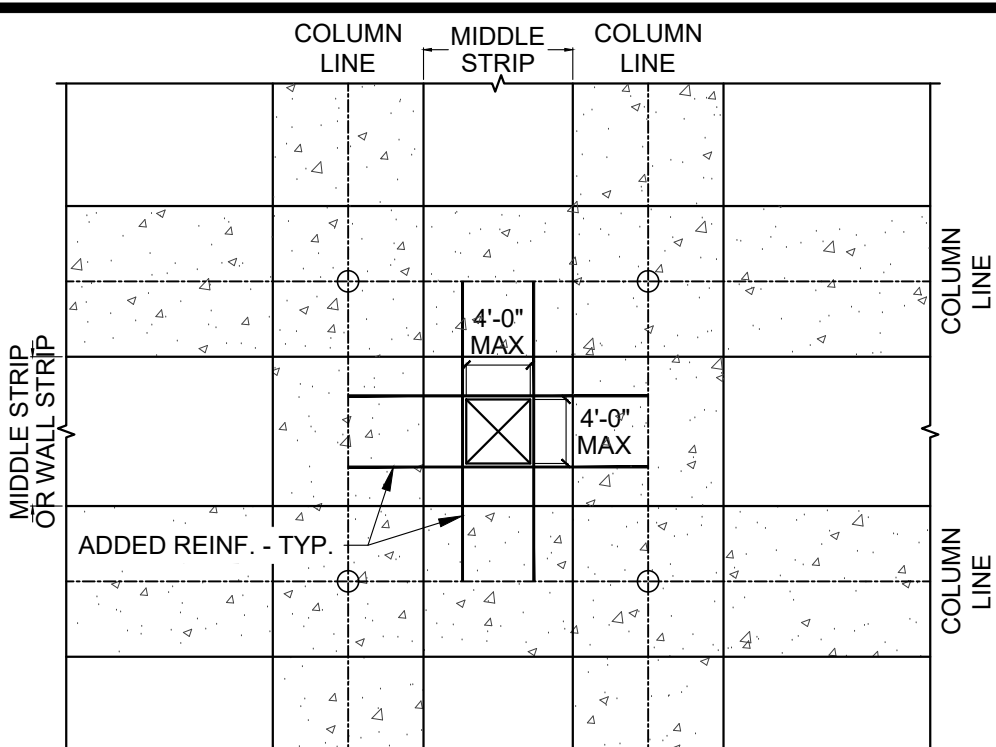
NOTES:
NO MORE THAN (2) BARS EA. DIRECTION CAN BE CUT. MAX. OPENING SIZE = (3x BAR SPACING) - 4" - SEE CIVIL DRAWINGS FOR EXACT LOCATIONS OF OPENINGS

3 TYPICAL WALL OPENING DETAIL
SCALE: NONE



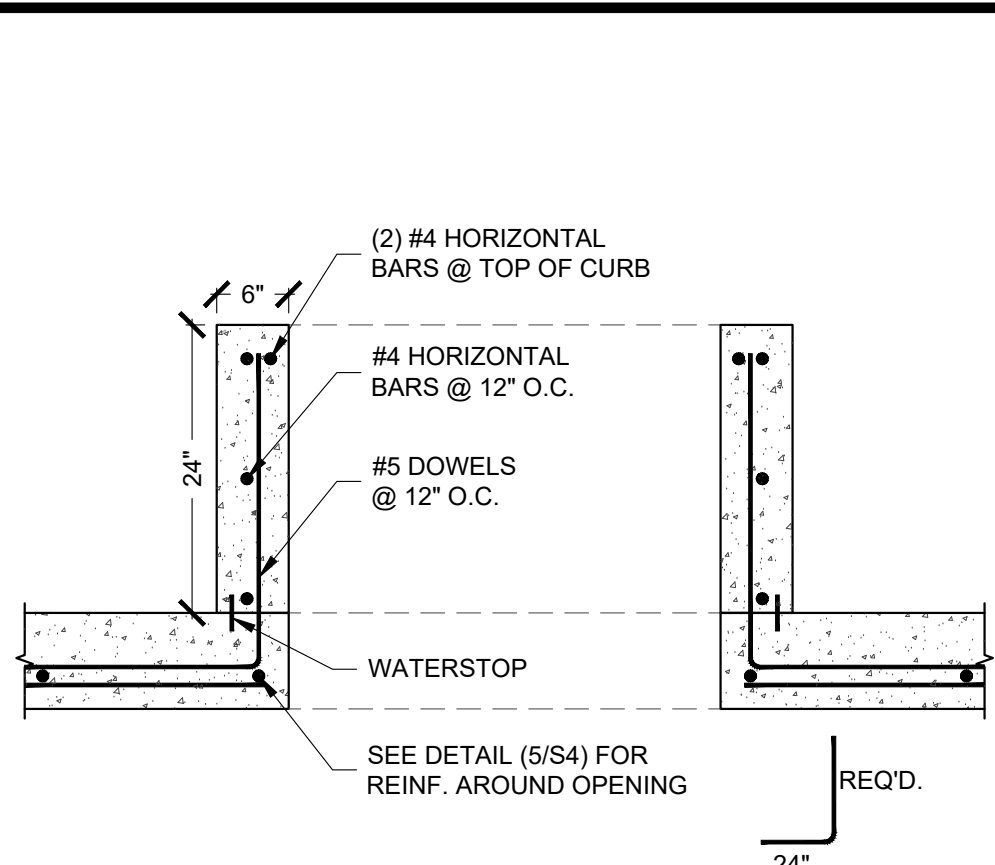
NOTES:
IT IS NOT ANTICIPATED THAT THIS DETAIL WILL BE REQ'D. IT IS ONLY PROVIDED TO GIVE THE CONTRACTOR THE OPTION OF POURING THE FLOOR WITH MULTIPLE POURS

4 TYP. CONST. JOINT IN FLOOR SLAB DETAIL
SCALE: NONE

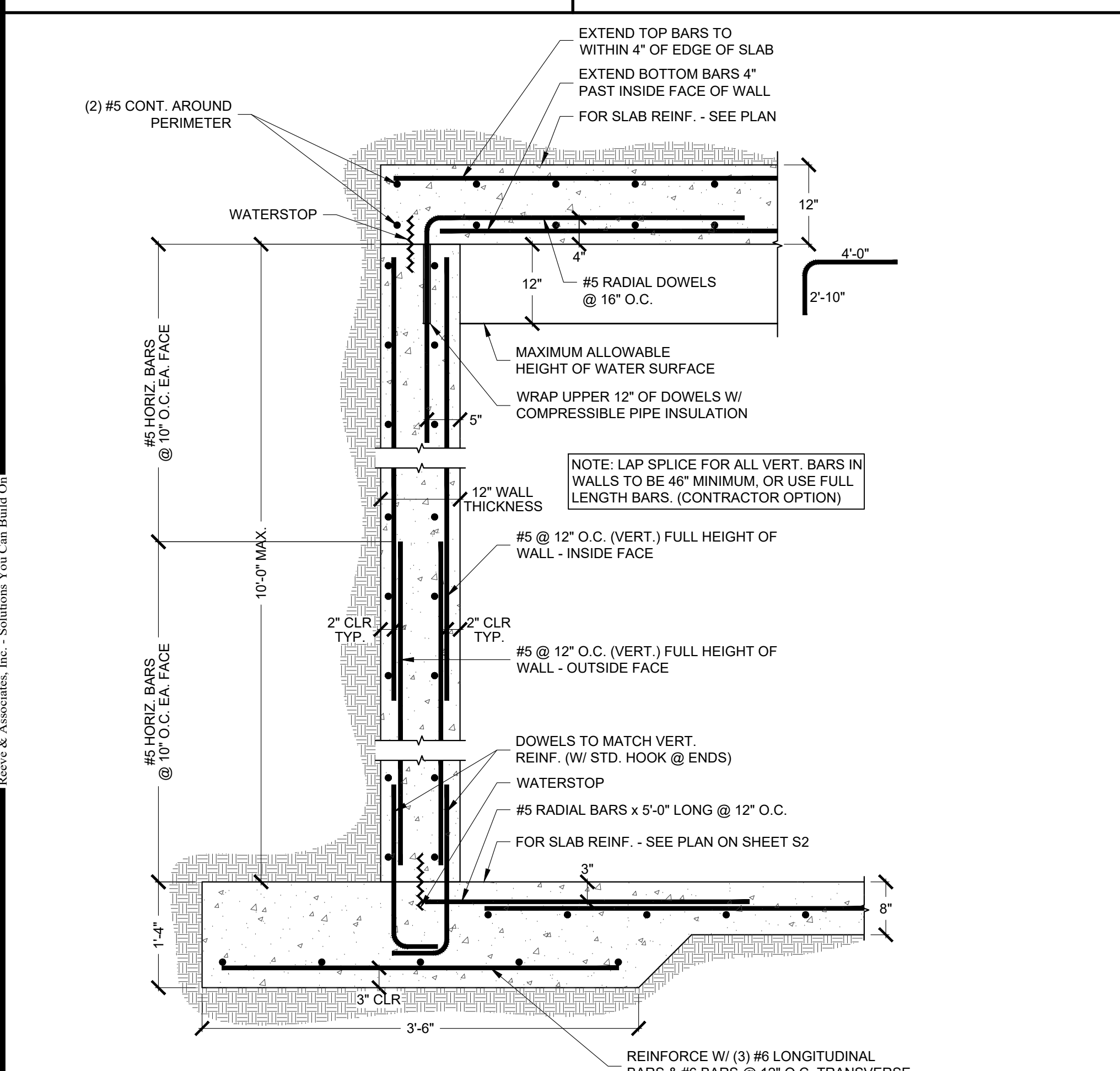


NOTES:
1. ADD REINFORCING ON ALL SIDES OF OPENING EQUAL TO 1/2 THE AMOUNT CUT IN THAT DIRECTIONS. ADDED BARS TO EXTEND TO COLUMN LINES AS SHOWN.
2. OPENINGS MAY ONLY OCCUR @ INTERSECTIONS OF MIDDLE STRIPS (OR INTERSECTION OF MIDDLE STRIP WITH WALL STRIP) AS SHOWN.

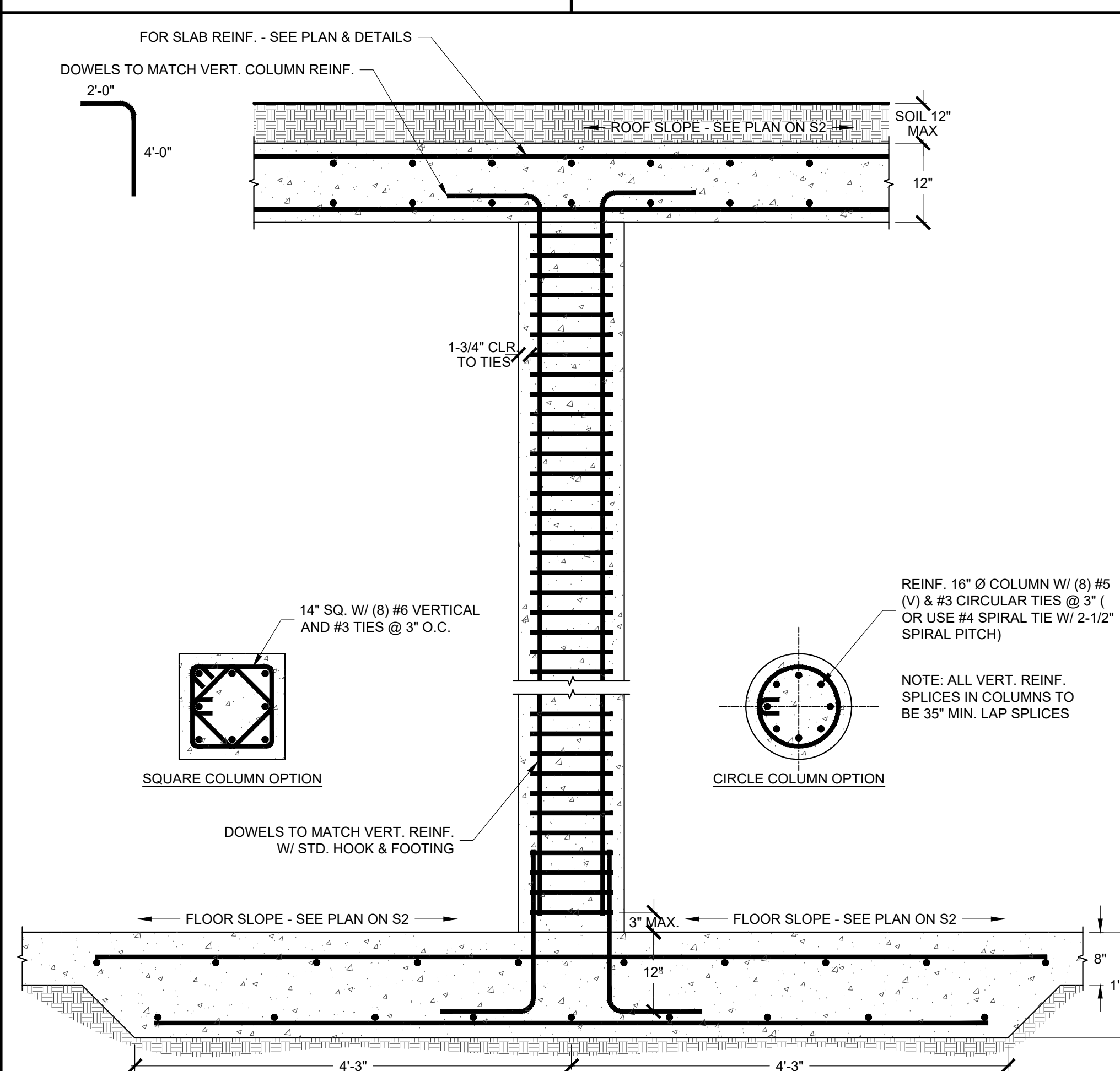
5 ROOF OPENING DETAIL TYP.
SCALE: NONE



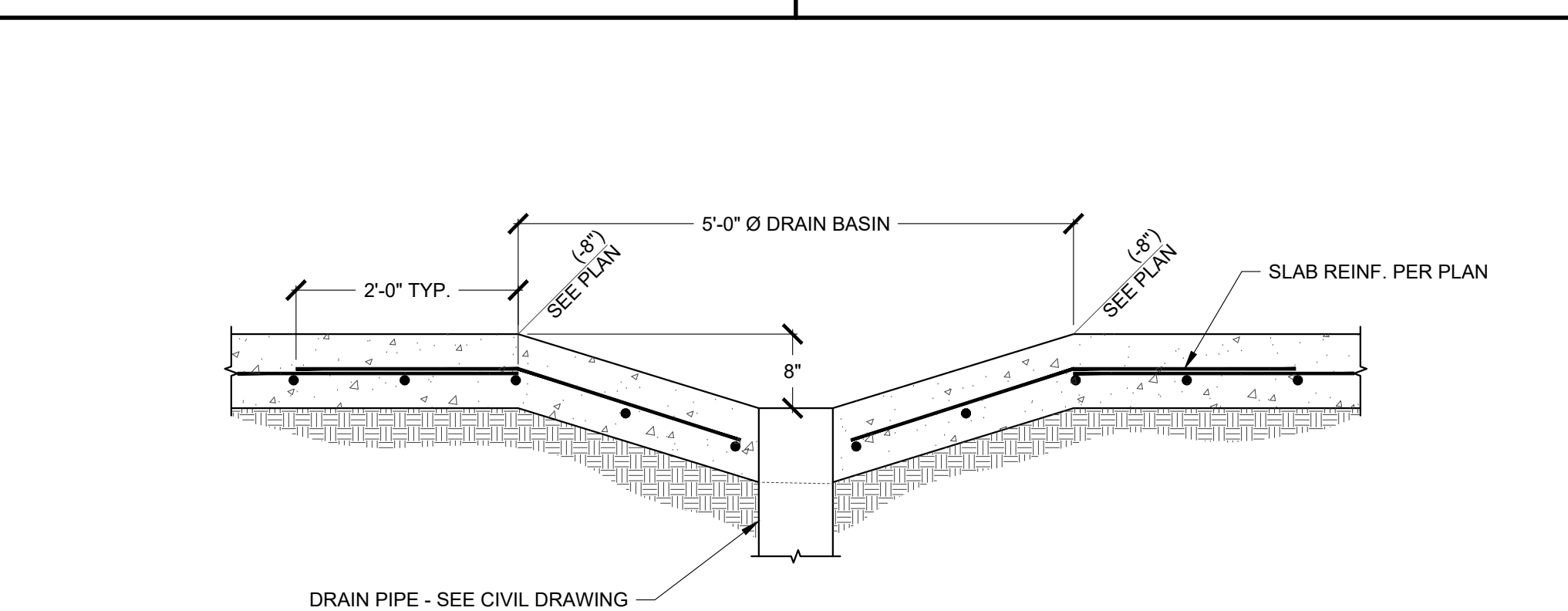
6 WALL SECTION AT ROOF OPENING
SCALE: NONE



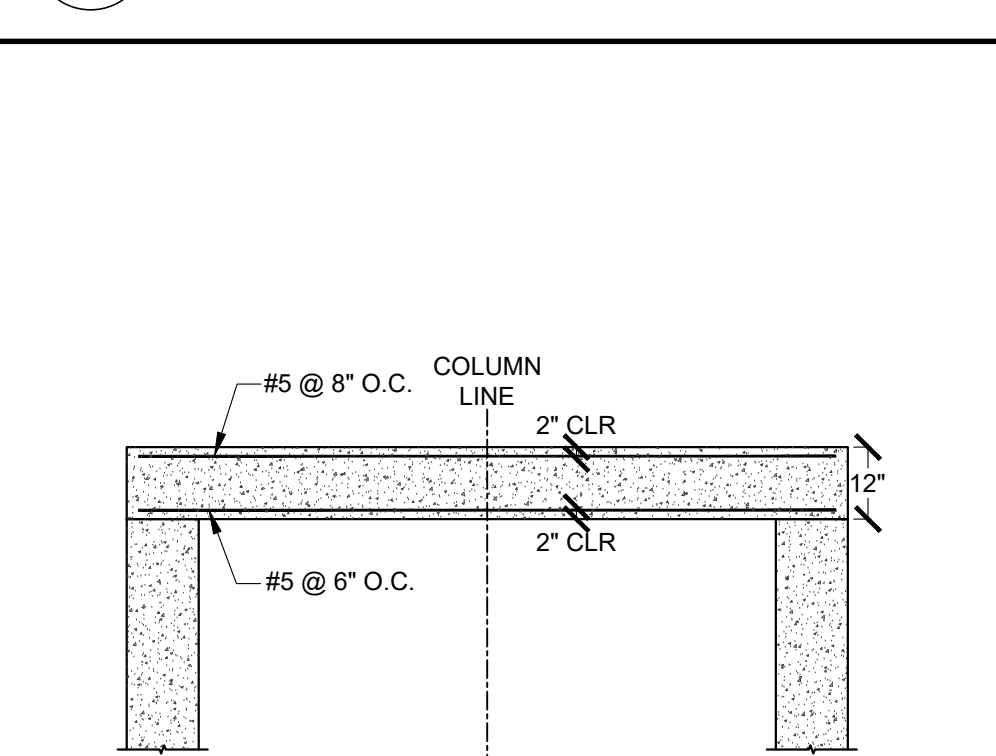
7 TYPICAL RESERVOIR WALL SECTION
SCALE: NONE



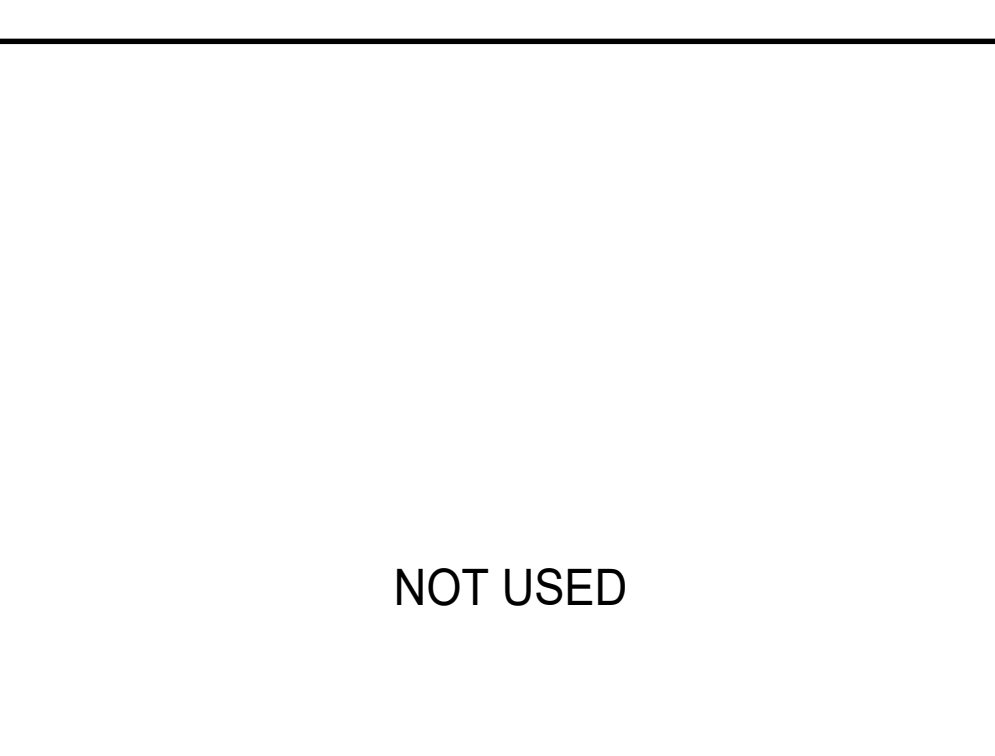
8 TYPICAL INTERIOR COLUMN
SCALE: NONE



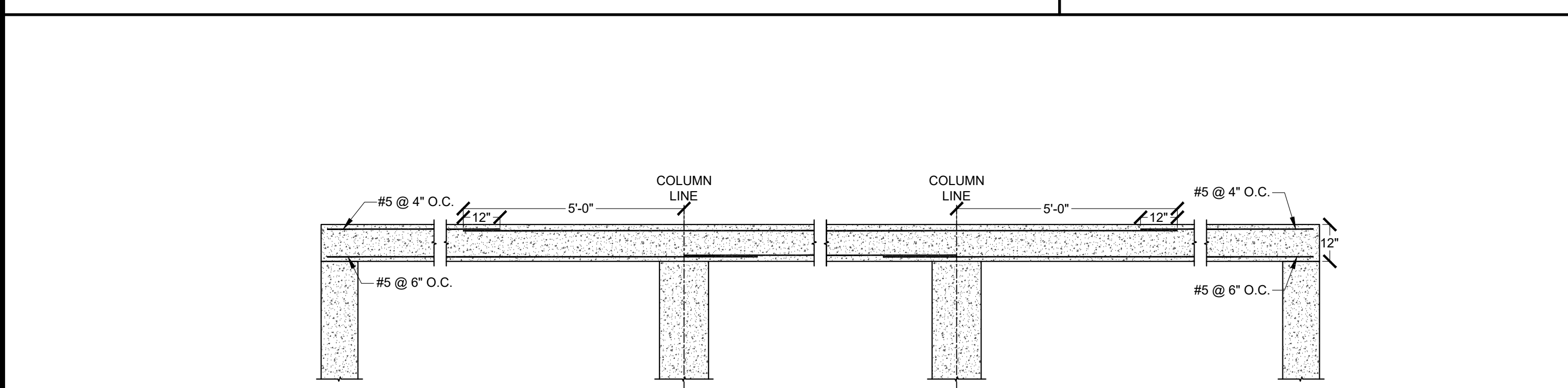
9 DRAIN BASIN
SCALE: NONE



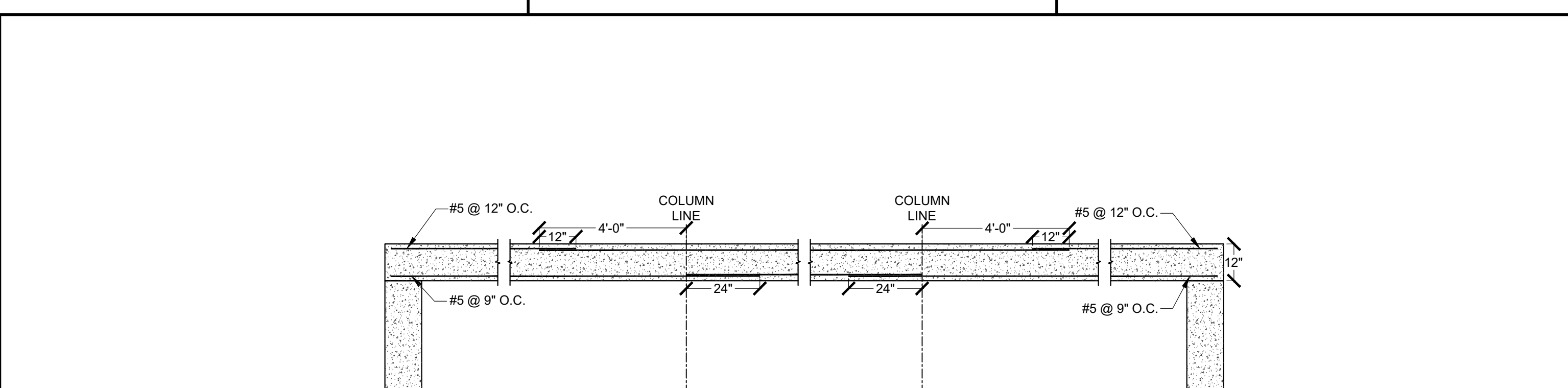
10 WALL STRIP (EACH DIRECTION)
SCALE: NONE



11 DETAIL
SCALE: NONE



12 COLUMN STRIP (EACH DIRECTION)
SCALE: NONE



13 MIDDLE STRIP (EACH DIRECTION)
SCALE: NONE

Reeve & Associates, Inc.
5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405
TEL: (801) 821-3100 FAX: (801) 821-2868 www.reeve-assoc.com
LAND PLANNERS • CIVIL ENGINEERS • LAND SURVEYORS
TRAFFIC ENGINEERS • STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS

Revisions	Description:
Date:	

100,000 GALLON CONCRETE WATER TANK
ARROWLEAF SUBDIVISION - 4665 N. 2900 EAST EDEN, UTAH
STRUCTURAL DETAILS

SEAL
NOT VALID IF SIGNATURE IS NOT SIGNED IN RED INK
PROFESSIONAL ENGINEER
JASON M. GUMUNDSON
1100612025
7914241
STATE OF UTAH
STRUCTURAL DRAWINGS ONLY

Project Info.
Engineer: J.M.G.
Drafter: A.W.B.
Begin Date: NOVEMBER 6, 2023
Number: 7895-01

Sheet
S4
Sheets