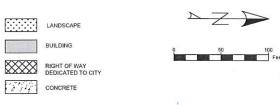
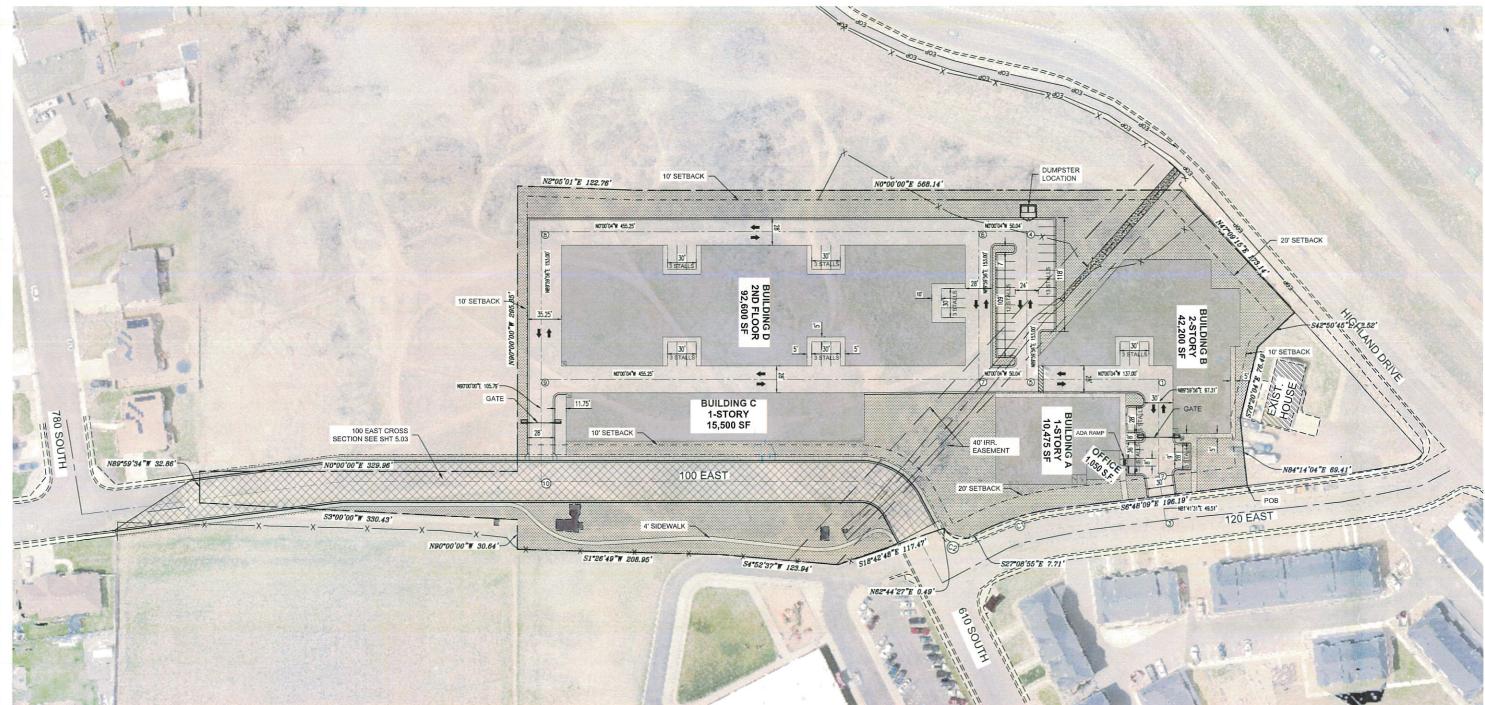


CITADEL SANTAQUIN STORAGE UNITS

120 EAST HIGHLAND DRIVE SANTAQUIN, UTAH





BOUNDARY DESCRIPTION

A PARCEL OF LAND SITUATE IN THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

1 EASY, SALT LAKE BASE & MERIDIAN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT LOCATED ON THE WESTERLY RIGHT-OF-WAY OF 120 EAST STREET, SAID POINT IS
469.22 FEET'S 00°04'06' E ALONG THE SECTION LINE AND 1081.99 FEET EAST FROM THE NORTHWEST
CORNER OF SAID SECTION 12, AND RUNNING THENCE ALONG SAID RIGHT-OF-WAY THE FOLLOWING FIVE
COURSES: 19, 50 6'48'09' E 196.19 FEET TO THE BEGINNING OF A CURVE, 2) ALONG SAID CURVE TURNING
TO THE LIEFT THROUGH AN ANGLE OF 20°21'00', HAVING A RADIUS OF 255.98 FEET, AND WHOSE LONG
CHORD BEARS S 16'5837' E 90.44 FEET, 3 5'276'95' E 7.71 FEET TO THE BEGINNING OF A CURVE, 4)
ALONG SAID CURVE TURNING TO THE RIGHT THROUGH AN ANGLE OF 89'55'00', HAVING A RADIUS OF 2.00
FEET, AND WHOSE LONG CHORD BEARS 8' 17'510'0' W. 22.8 FEET TO A POINT OF INTERSECTION WITH A
NON-TANGENTIAL LINE, 5) S 62'44'2" W 0.49 FEET, THENCE S 10'24'0' E 117.47 FEET, THENCE S 04'52'37'
W 12.34 FEET, 5 0'12'64'9' W 20.95 FEET, THENCE NO"00'00' W 30-64 FEET, THENCE S 05'00'00' W 30-45
FEET TO A POINT ON THE NORTHERLY BOUNDARY OF COUNTRYSIDE ESTATES PLAT D OF OFFICIAL
RECORDS, THENCE ALONG SAID BOUNDARY N 86'59'37' W 32.86 FEET, THENCE N 00'0000' E 369.86 FEET,
THENCE N 90'00'00' W 295.65 FEET, THENCE N 02'05'01' E 122.76 FEET, THENCE N 00'0000' E 369.14 FEET,
THENCE N 84'14'04' E 50'.41 FEET T. THENCE S 42'50'5' E 5.25 FEET, THENCE N 06'0000' E 76.49 FEET,

SAID PARCEL CONTAINS 6.52 ACRES (283,797 SQ. FT.)

NOTE: BASIS OF BEARING IS A MODIFIED NAD 83, UTAH CENTRAL ZONE, S 00°04'06" E ALONG THE SECTION LINE IN BETWEEN THE NORTHWEST CORNER AND THE WEST QUARTER CORNER OF SAID SECTION 12.

	Easting	Northing	Point #						
	1561188.3463	7156589.8180	1						
	1561285.6523	7156589.8199	2						
	1561334.6395	7156596.9733	3						
	1561035.3491	7156452.8150	4						
	1561188.3490	7156452.8180	5						
	1561035.3500	7156402.7742	6						
H	1561188.3500	7156402.7772	7		Ε	RVE TABL	CU		
	1561035.3589	7155947.5230	8	DELTA	CHORD BRG.	CHORD DIST.	RADIUS	LENGTH	CURVE
lŀ	1561188.3589	7155947.5260	9	20'21'00"	N16'58'37"W	90.44'	255.98'	90.92'	C1
	1561294.1511	7155947.5280	10	89'59'00"	N17"51'00"E	28.28'	20.00'	31.41'	C2

SANTAQUIN SANTAQUIN, UTAH SITE PLAN **NDEL**

Point Table

PROJECT NO.

2023.018 SHEET NO. 1.00

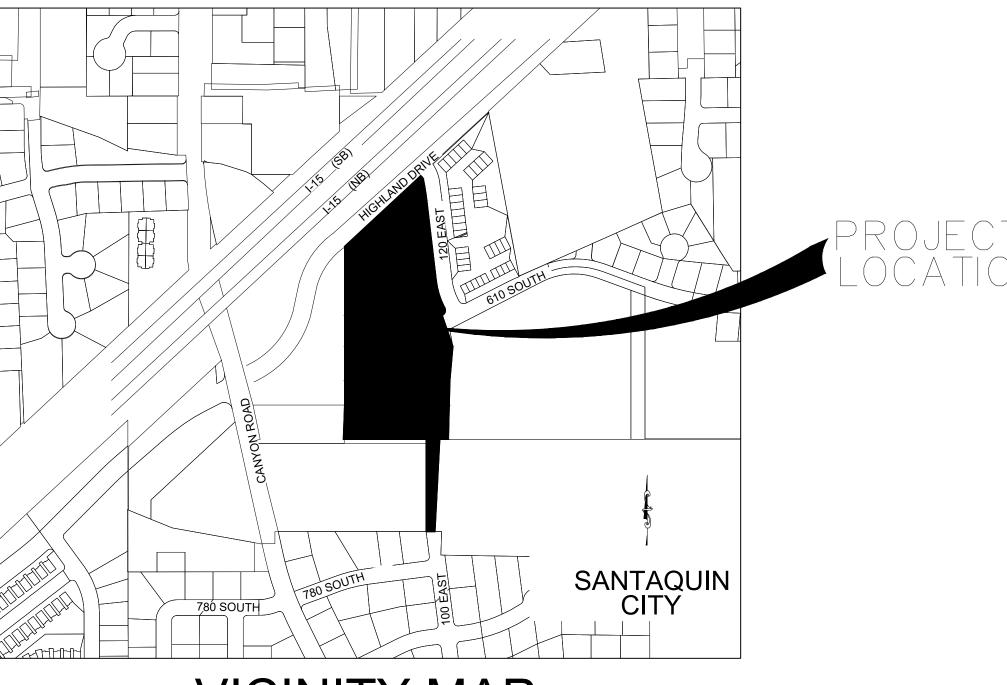
GENERAL NOTES

- EXISTING WATER, SANITARY, AND STORM SEWER LINES ARE SHOWN BASED ON BEST AVAILABLE INFORMATION. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY PERTINENT LOCATIONS AND ELEVATIONS SPECIFICALLY AT CONNECTION POINTS AND AT POTENTIAL POINTS OF CONFLICT. ALL INFORMATION SHALL BE SUPPLIED TO THE ENGINEER PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR:
- (A) CONTRACTOR SHALL OBTAIN ALL PERMITS FOR STREET CUTS, UTILITIES CONSTRUCTION AND GRADING. THE COST OF ALL PERMITS SHALL BE INCLUDED AS PART OF THE CONTRACTOR'S BID INCLUDING. BUT NOT LIMITED TO THE NOI & NOT PERMITS AND ASSOCIATED SWPPP.
- COORDINATING WITH ALL UTILITY COMPANIES INVOLVED WITH REGARD TO RELOCATIONS OR ADJUSTMENTS OF EXISTING UTILITIES DURING CONSTRUCTION TO ASSURE THAT THE WORK IS ACCOMPLISHED IN A TIMELY FASHION AND WITH A MINIMUM DISRUPTION OF SERVICE.
- ALL PROJECT SAFETY INCLUDING, BUT NOT LIMITED TO, TRENCH EXCAVATION AND SHORINGS, TRAFFIC CONTROL
- COORDINATING ALL WORK AND INSPECTIONS AS REQUIRED BY THE CITY OR THE STATE
- OBTAINING NECESSARY PERMITS FROM UDOT FOR ALL WORK IN AND ADJACENT TO UDOT RIGHT-OF-WAY.
- RECORDING AS-BUILT INFORMATION ON A SET OF RECORD DRAWINGS KEPT ON THE CONSTRUCTION SITE. AS-BUILTS SHALL INCLUDE UNDERGROUND UTILITIES AS WELL AS ANY FIELD MODIFICATIONS OF THE PLANS.
- (G) KEEPING ADJACENT STREETS FREE AND CLEAN OF ALL DEBRIS AND DIRT FROM THE JOB SITE
- IF DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED WHICH INDICATE AN UNIDENTIFIED SITUATION IS PRESENT, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY.
- THE CONTRACTOR SHALL PREPARE ALL TRAFFIC CONTROL PLANS PRIOR TO THE ISSUANCE OF ANY CONSTRUCTION PERMITS FOR WORK WITHIN THE CITY, COUNTY, OR STATE RIGHT-OF-WAYS. THE PLAN SHALL BE PREPARED IN ACCORDANCE WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND AS MODIFIED BY THE UDOT SUPPLEMENT TO THE MUTCD. THE PLAN SHALL ADDRESS THE REQUIREMENTS FOR ALL SIGNS, BARRICADES, FLAGMEN, LIGHTS, HOURS OF CONSTRUCTION, AND OTHER DEVICES AS NECESSARY FOR SAFE TRAFFIC CONTROL
- TWO WORKINGS DAYS BEFORE YOU DIG, GRADE, OR EXCAVATE, CALL THE UTILITY NOTIFICATION CENTER OF UTAH FOR THE MARKING OF MEMBER UNDERGROUND UTILITIES. THE UTILITIES SHOWN ON THESE PLANS ARE PLOTTED BASED ON AVAILABLE INFORMATION. M.W. BROWN ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITY LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION, AND REPAIR OF ANY EXISTING UTILITIES WHETHER SHOWN ON THE PLANS OR NOT. ANY UTILITY DAMAGED BY CONSTRUCTION SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF THE SANTAQUIN CITY STANDARD SPECIFICATIONS AND DRAWINGS. THE CONTRACTOR SHALL HAVE COPIES OF CITY AND STATE SPECIFICATIONS ON THE SITE AT ALL TIMES.
- THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH ALL UTILITY COMPANIES INVOLVED AND THE CITY OF SANTAQUIN WITH REGARD TO RELOCATIONS OR ADJUSTMENTS OR EXISTING UTILITIES DURING CONSTRUCTION TO ASSURE THAT THE WORK IS ACCOMPLISHED IN A TIMELY FASHION AND WITH A MINIMUM DISRUPTION OF SERVICE.
- ADVANCE COORDINATION BY THE CONTRACTOR TO ALL UTILITY COMPANIES INVOLVED SHALL BE REQUIRED FOR ANY SERVICE INTERRUPTIONS. CONTRACTOR SHALL NOTIFY THE ENGINEER. PROJECT MANAGER AND THE UTILITY COMPANY 48 HOURS PRIOR TO START OF CONSTRUCTION. NO UTILITY TAPS SHALL BE MADE WITHOUT WRITTEN AUTHORIZATION BY THE UTILITY COMPANY AND THE CITY.
- MAINTAIN 10-FOOT HORIZONTAL SEPARATION BETWEEN WATER AND SEWER PIPELINES
- 10. UTILITY TRENCHES ARE TO BE SLOPED OR BRACED AND SHEETED AS NECESSARY FOR THE SAFETY OF THE WORKMEN AND THE PROTECTION OF OTHER UTILITIES IN COMPLIANCE WITH APPLICABLE STATE AND FEDERAL REQUIREMENTS.
- 11. CONTRACTOR SHALL NOTIFY THE ENGINEER AND THE CITY BUILDING INSPECTION DEPARTMENT 48 HOURS PRIOR TO THE START OF
- 12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH UTILITY COMPANIES TO OBTAIN TEMPORARY POWER AND TELEPHONE SERVICE DURING CONSTRUCTION. ALL COSTS FOR TEMPORARY SERVICES SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- 13. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL LABOR AND MATERIALS NECESSARY FOR COMPLETION OF INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR DESIGNATED BY NOTE TO BE "PROVIDED", "INSTALLED" OR "CONSTRUCTED" UNLESS SPECIFICALLY NOTED OTHERWISE.
- 14. CONTRACTOR WILL HAVE A COPY OF APPROVED SOILS REPORTS FOR PAVEMENT DESIGN AND COMPACTION REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING ALL RECOMMENDATIONS CONTAINED WITHIN THE SOILS REPORT AND SHALL SUBMIT A PAVEMENT DESIGN TO THE PAYSON CITY ENGINEERING DEPARTMENT PRIOR TO ANY PAVING.
- 15. SUBGRADE DENSITY SHALL BE TESTED BY A PRIVATE SOILS TESTING FIRM AND APPROVED BY THE SOILS ENGINEER PRIOR TO INSTALLING BASE COURSE OR CONCRETE. BASE COURSE DENSITY SHALL ALSO BE TESTED BY THE PRIVATE SOILS FIRM AND APPROVED BY THE SOILS ENGINEER PRIOR TO INSTALLING PAVEMENT.
- 16. THESE GENERAL NOTES SHALL BE APPLICABLE TO ALL SHEETS WITHIN THIS SET OF DRAWINGS.
- 17. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE APPROVED PLANS, ONE (1) COPY OF THE APPROPRIATE STANDARDS AND SPECIFICATIONS AND A COPY OF ANY PERMITS AND EXTENSION AGREEMENTS NEEDED AT THE JOB SITE AT ALL TIMES. EACH SUBCONTRACTOR (INCLUDING THE SURVEYOR) SHALL HAVE A SIGNED COPY OF THE PLANS AND THE APPROPRIATE STANDARDS AND SPECIFICATIONS IN HIS POSSESSION AT ALL TIMES WHEN IMPROVEMENTS ARE BEING INSTALLED.
- 18. THE SITE WORK SHALL MEET OR EXCEED THE LATEST EDITION OF THE CITY DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION. THE CONTRACTOR SHALL HAVE A COPY OF THE STANDARDS ON SITE AT ALL TIMES.
- 19. BENCHMARK VERIFICATION: CONTRACTOR SHALL USE BENCHMARKS AND DATUMS SHOWN HEREON TO SET PROJECT BENCHMARK(S), BY RUNNING A LEVEL LOOP BETWEEN AT LEAST TWO BENCHMARKS, AND SHALL PROVIDE SURVEY NOTES OF SUCH TO PROJECT ENGINEER PRIOR TO COMMENCING CONSTRUCTION.
- 20. COORDINATES ARE GIVEN TO AID THE CONTRACTOR/SURVEYOR IN LOCATING PROPOSED IMPROVEMENTS. THE CONTRACTOR/ SURVEYOR IS RESPONSIBLE FOR CHECKING THE LOCATIONS OF IMPROVEMENTS LAID OUT WITH COORDINATES USING DIMENSIONS AND OFFSETS GIVEN. IF A PERTINENT DIMENSION OR OFFSET IS NOT SHOWN ON THE PLAN, CONTACT THE ENGINEER FOR INFORMATION.

CITADEL SANTAQUIN STORAGE UNITS CONSTRUCTION PLANS

120 East Highland Drive Santaquin, Utah

NOVEMBER 03, 2023



VICINITY MAP

CITY NOTES:

THE DEVELOPER AND THE GENERAL CONTRACTOR UNDERSTAND THAT IT IS HIS/HER RESPONSIBILITY TO ENSURE THAT ALL IMPROVEMENMTS INSTALLED WITHIN THIS DEVELOPMENT ARE CONSTRUCTED IN FULL COMPLIANCE WITH ALL STATE AND SANTAQUIN CITY CODES, ORDINANCES AND STANDARDS. THESE PLANS ARE NOT ALL INCLUSIVE OF ALL MINIMUM CODES, ORDINANCES AND STANDARDS. THIS FACT DOES NOT RELIEVE THE DEVELOPER OR GENERAL CONTRACTOR FROM FULL COMPLIANCE WITH ALL MINIMUM STATE AND SANTAQUIN CITY CODES, ORDINANCES AND STANDARDS.

ALL RECOMMENDATIONS MADE IN A PERTINENT GEOTECHNICAL REPORT/STUDY SHALL BE FOLLOWED EXPLICITLY DURING CONSTRUCTION OF BUILDINGS AND SITE IMPROVEMENTS.

JORDAN ARCHITECTS DAVID MEINECKE 949-388-8090 131 CALLE IGLESIA, SUITE 100 SAN CLEMENTE, CALIFORNIA 92672 GEOTECHNICAL ENGINEER: **CMT TECHNICAL SERVICES** JEFFREY EGBERT, P.E.

801-810-8193 496 E 1750 N SUITE B VINEYARD, UTAH 84057

FIRE SUPRESSION NFPA-13 Sprinkler System SITE TABULATIONS SQ. FT. ACRES 303,856 63,099 PARKING LOT AREA 1.45 LANDSCAPE AREA 83,622 1.92

32,863

CONC. WALK AREAS | 8,976 | 0.21

0.75

SITE INFORMATION

PROJECT DATA

Self Storage

Type IIB

S-1

1 & 2

DESCRIPTION

TYPE OF BLDG

TYPE OF CONSTRUCTION

TYPE OF OCCUPANY

NUMBER OF STORIES

BUILDING AREA TABULATIONS (SF) SELF STORAGE 1,050 11,525 BLDG A - 1 STORY 10,475 BLDG B - 2 STORY 42,200 42,200 **BUILDING C - 1 STORY** 15,500 15,500 **BUILDING D - 2 STORY** 92,600 92,600 TOTAL GROSS AREA 160,025 1,050 161,075

PARKING TABULATIONS						
DESCRIPTION	REQUIRED	PROVIDED				
OFFICE SPACE	4*	6				
ADA	1	1**				
TOTAL PARKING		52				
* 1 STALL / 300 SF (1,050 SF PROPOSED)						
** INCLUDES 1 VAN	ACCESSIBIL	E STALLS				

ENGINEER:

SHEET

CV

1.00

1.02

2.00-2.09

2.10-2.11

3.00

4.00-4.01

5.00-5.05

COVER

SITE PLAN

GRADING PLAN

UTILITY PLAN

SD PROFILES

DETAIL SHEETS

EXISTING CONDITIONS

PLAN & PROFILE SHEETS

SCI&CC IRRIGATION PLAN & PROFILE

RETAINING WALL PLAN SHEETS

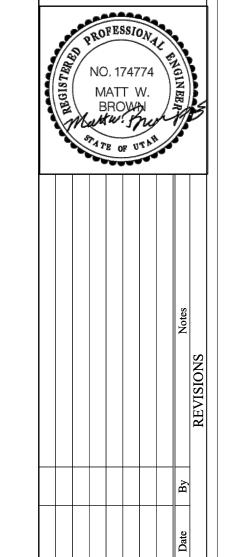
DESCRIPTION

M.W. BROWN ENGINEERING MATT W. BROWN P.E. 801-377-1790 **578 EAST 770 NORTH OREM, UTAH 84097**

OWNER:

RIDGEPOINT MANAGEMENT GROUP, LLC **HEATH JOHNSTON** 801-764-9191 947 SOUTH 500 EAST #100 AMERICAN FORK, UTAH 84003



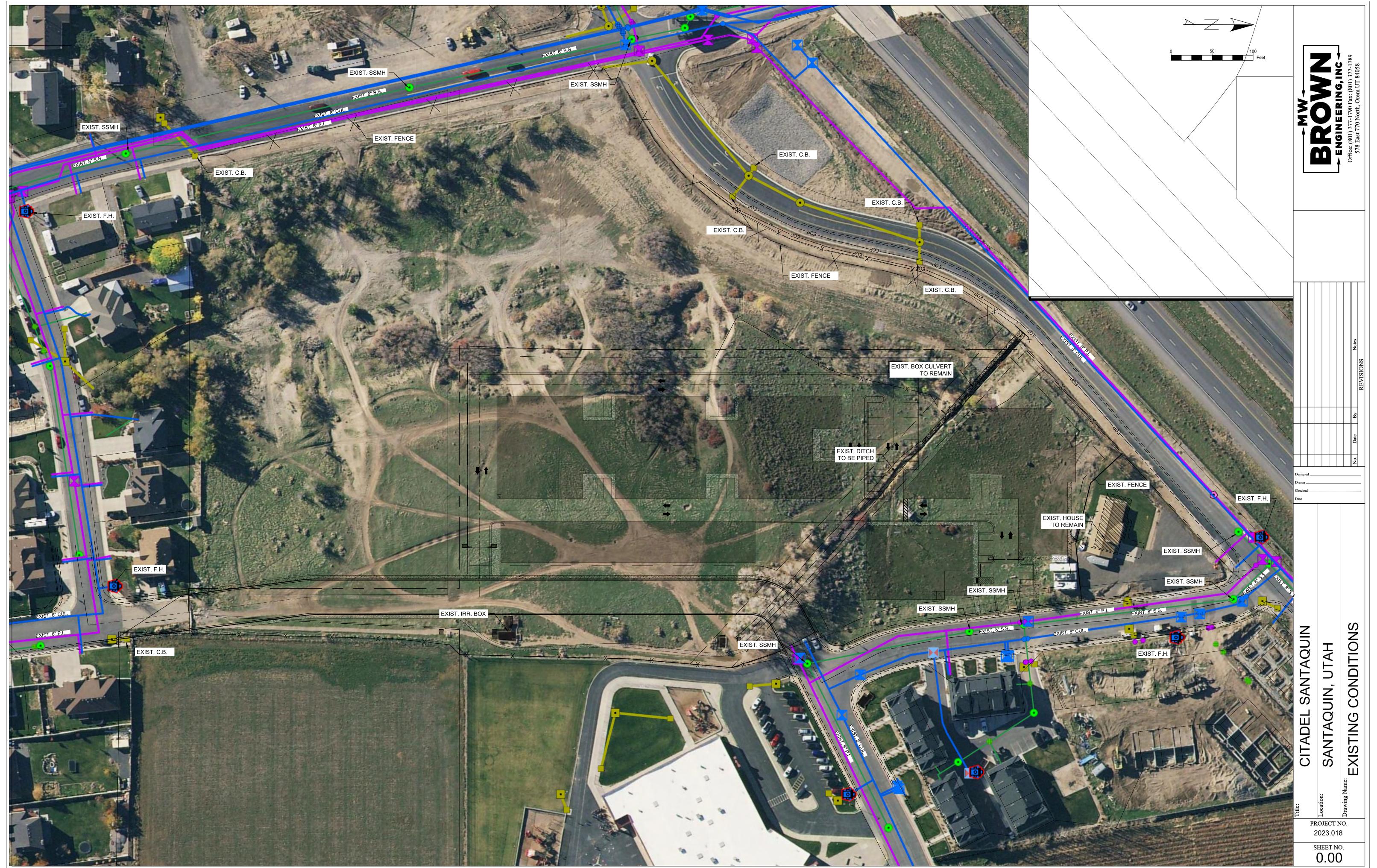


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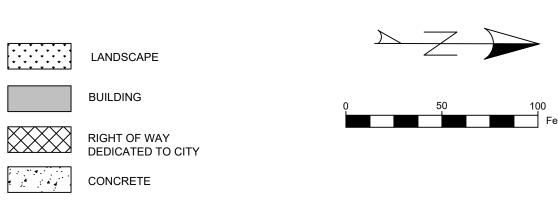
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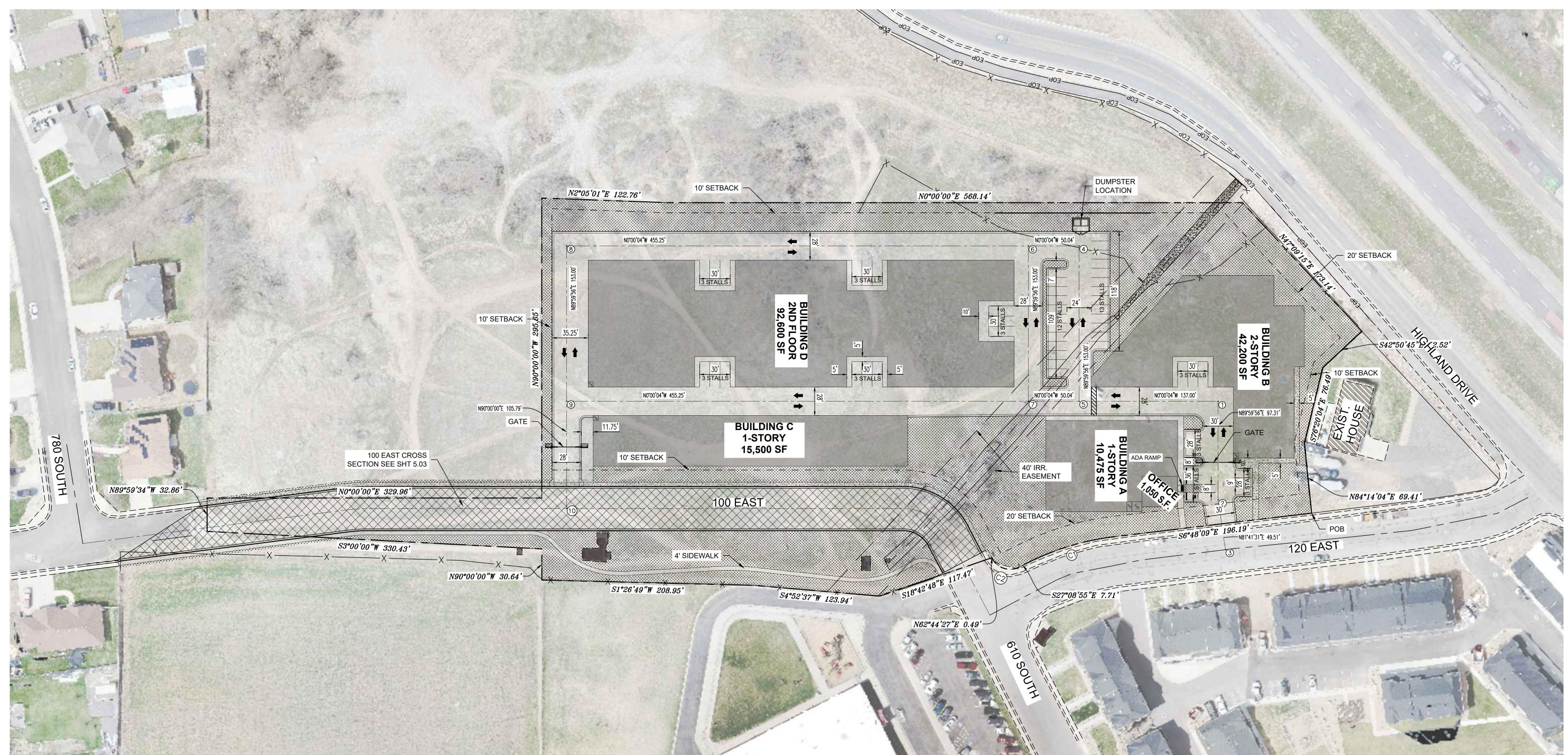
SHEET NO. CV



CITADEL SANTAQUIN STORAGE UNITS

SANTAQUIN, UTAH





A PARCEL OF LAND SITUATE IN THE NORTHWEST QUARTER OF SECTION 12, TOWNSHIP 10 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT LOCATED ON THE WESTERLY RIGHT-OF-WAY OF 120 EAST STREET, SAID POINT IS 469.22 FEET S 00^04'06" E ALONG THE SECTION LINE AND 1081.99 FEET EAST FROM THE NORTHWEST CORNER OF SAID SECTION 12, AND RUNNING THENCE ALONG SAID RIGHT-OF-WAY THE FOLLOWING FIVE COURSES: 1) S 06°48'09" E 196.19 FEET TO THE BEGINNING OF A CURVE, 2) ALONG SAID CURVE TURNING TO THE LEFT THROUGH AN ANGLE OF 20°21'00", HAVING A RADIUS OF 255.98 FEET, AND WHOSE LONG CHORD BEARS S 16°58'37" E 90.44 FEET, 3) S 27°08'55" E 7.71 FEET TO THE BEGINNING OF A CURVE, 4) ALONG SAID CURVE TURNING TO THE RIGHT THROUGH AN ANGLE OF 89°59'00", HAVING A RADIUS OF 20.00 FEET, AND WHOSE LONG CHORD BEARS S 17°51'00" W 28.28 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENTIAL LINE, 5) S 62°44'27" W 0.49 FEET, THENCE S 18°42'48" E 117.47 FEET, THENCE S 04°52'37" W 123.94 FEET, S 01°26'49" W 208.95 FEET, THENCE N 90°00'00" W 30.64 FEET, THENCE S 03°00'00" W 330.43 FEET TO A POINT ON THE NORTHERLY BOUNDARY OF COUNTRYSIDE ESTATES PLAT D OF OFFICIAL RECORDS, THENCE ALONG SAID BOUNDARY N 89°59'34" W 32.86 FEET, THENCE N 00°00'00" E 329.96 FEET, THENCE N 90°00'00" W 295.65 FEET, THENCE N 02°05'01" E 122.76 FEET, THENCE N 00°00'00" E 568.14 FEET, THENCE N 47°09'15" E 173.14 FEET, THENCE S 42°50'45" E 52.52 FEET, THENCE S 76°20'04" E 76.49 FEET, THENCE N 84°14'04" E 69.41 FEET TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINS 6.52 ACRES (283,797 SQ. FT.)

NOTE: BASIS OF BEARING IS A MODIFIED NAD 83, UTAH CENTRAL ZONE, S 00^04'06" E ALONG THE SECTION LINE IN BETWEEN THE NORTHWEST CORNER AND THE WEST QUARTER CORNER OF SAID

						Point Table	е	
						Point #	Northing	Easting
						1	7156589.8180	1561188.3463
						2	7156589.8199	1561285.6523
						3	7156596.9733	1561334.6395
						4	7156452.8150	1561035.3491
						5	7156452.8180	1561188.3490
						6	7156402.7742	1561035.3500
		CU	RVE TABL	E		7	7156402.7772	1561188.3500
CURVE	LENGTH	RADIUS	CHORD DIST.	CHORD BRG.	DELTA	8	7155947.5230	1561035.3589
C1	90.92'	255.98'	90.44	N16°58'37"W	20*21'00"	9	7155947.5260	1561188.3589
C2	31.41'	20.00'	28.28'	N17°51'00"E	89°59'00"	10	7155947.5280	1561294.1511

SANTAQUIN

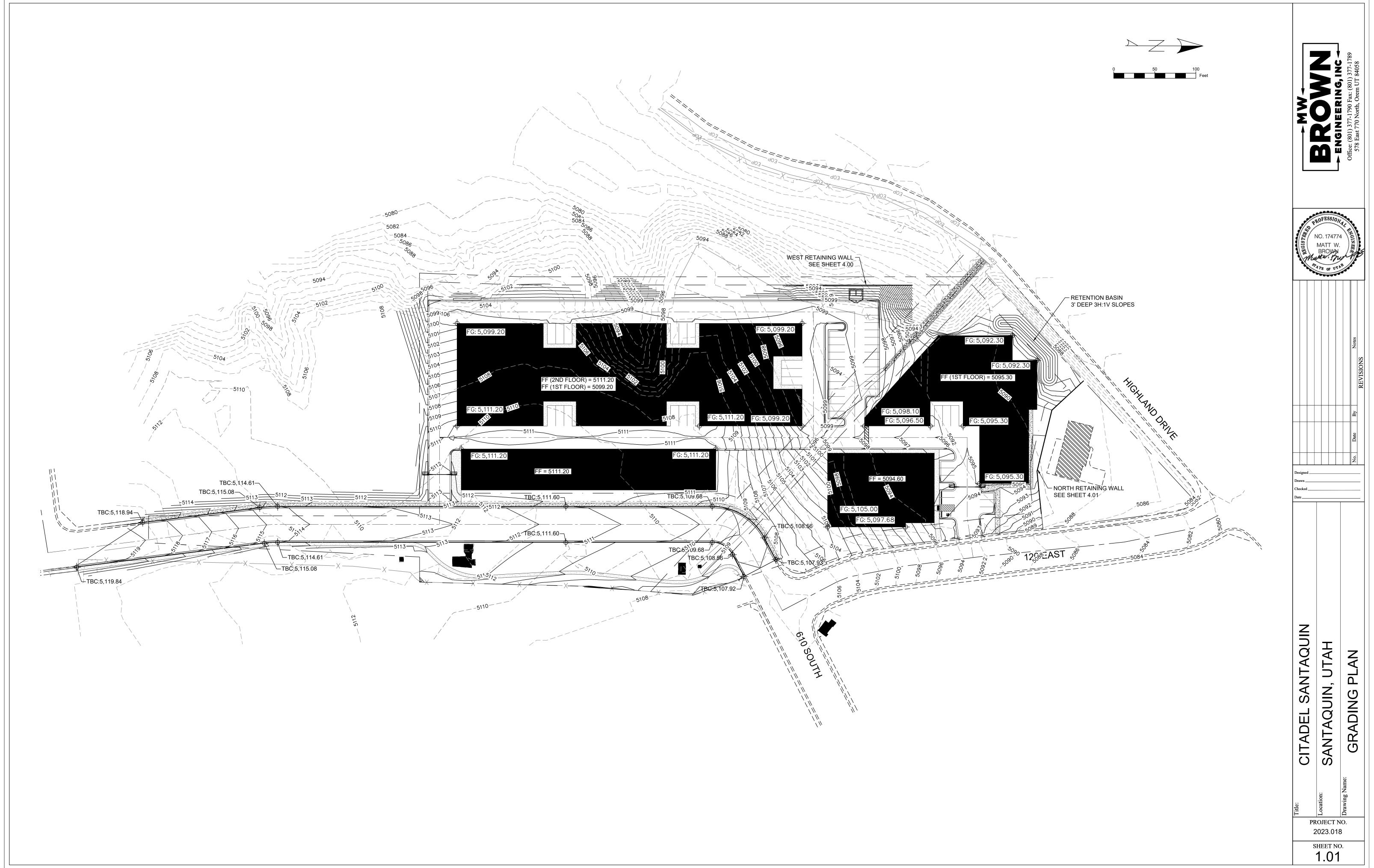
SANTAQUIN,

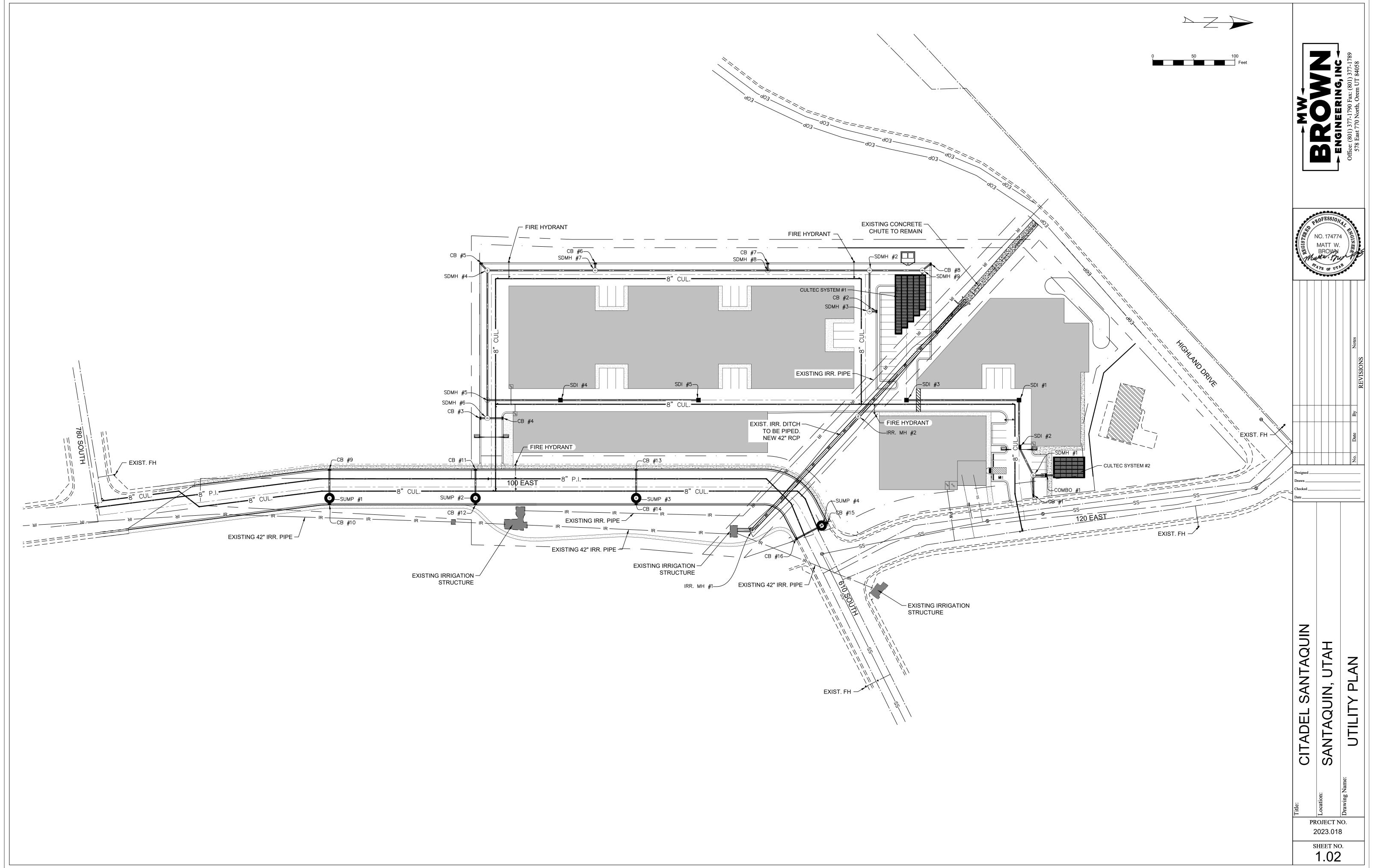
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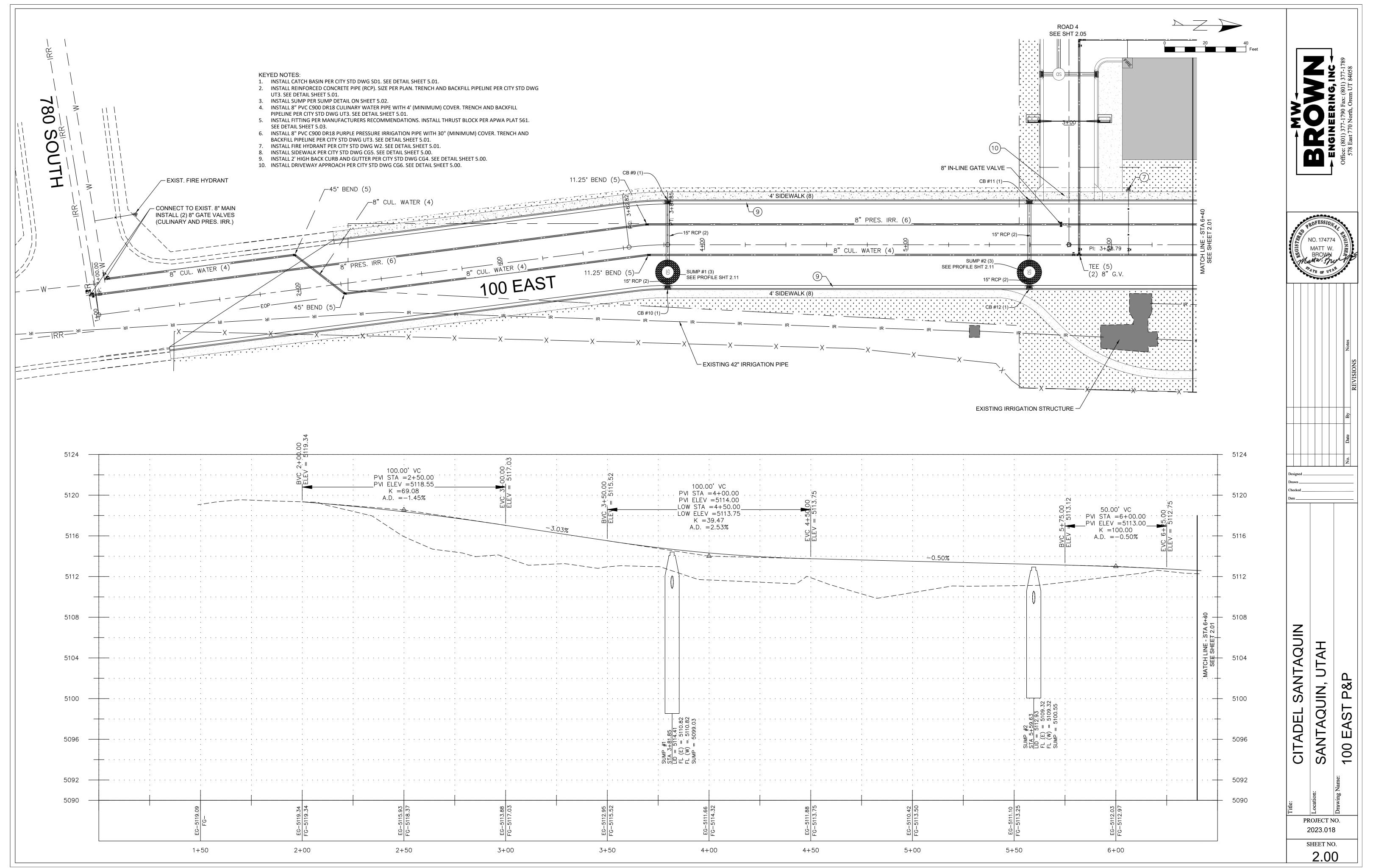
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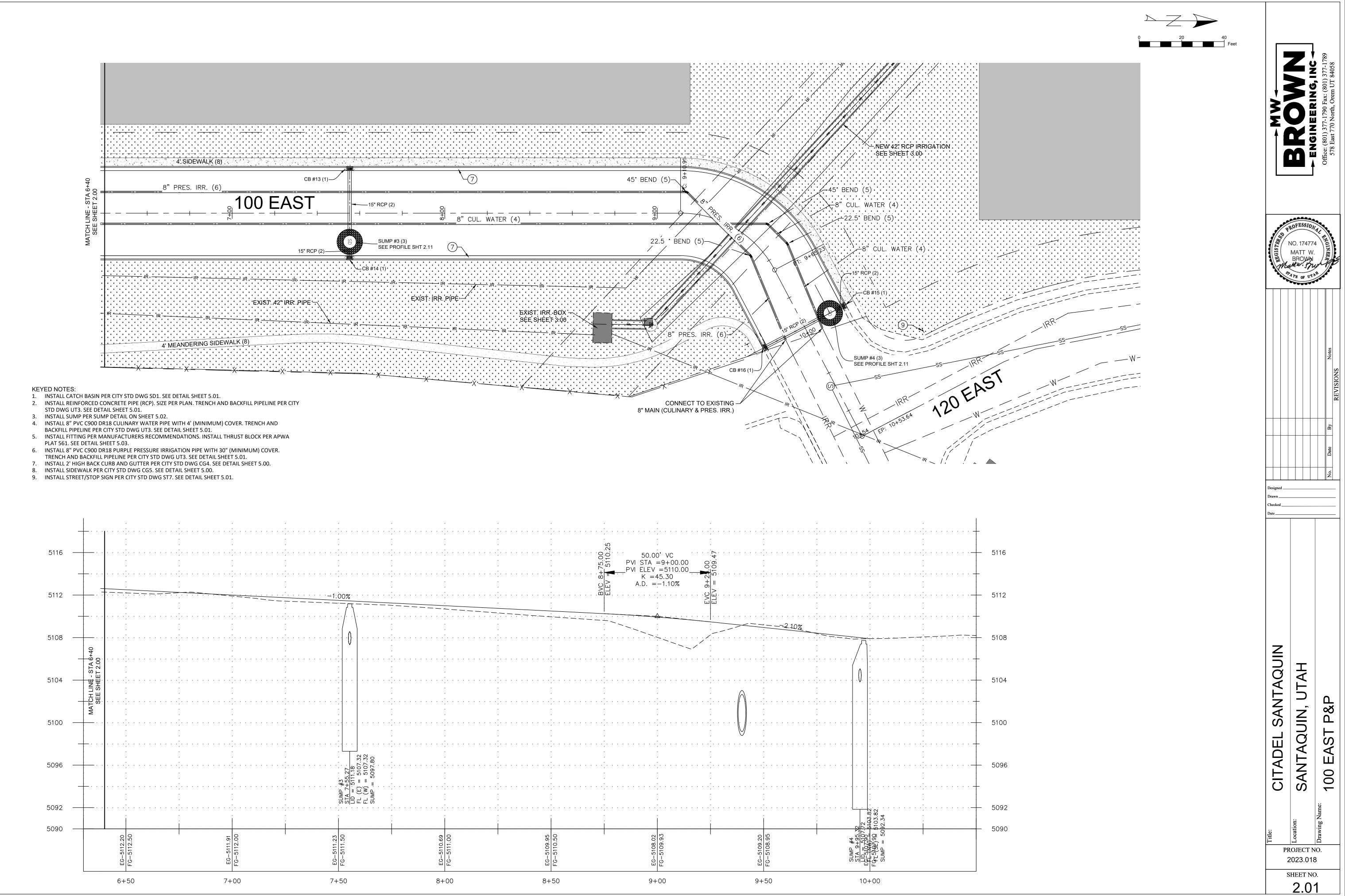
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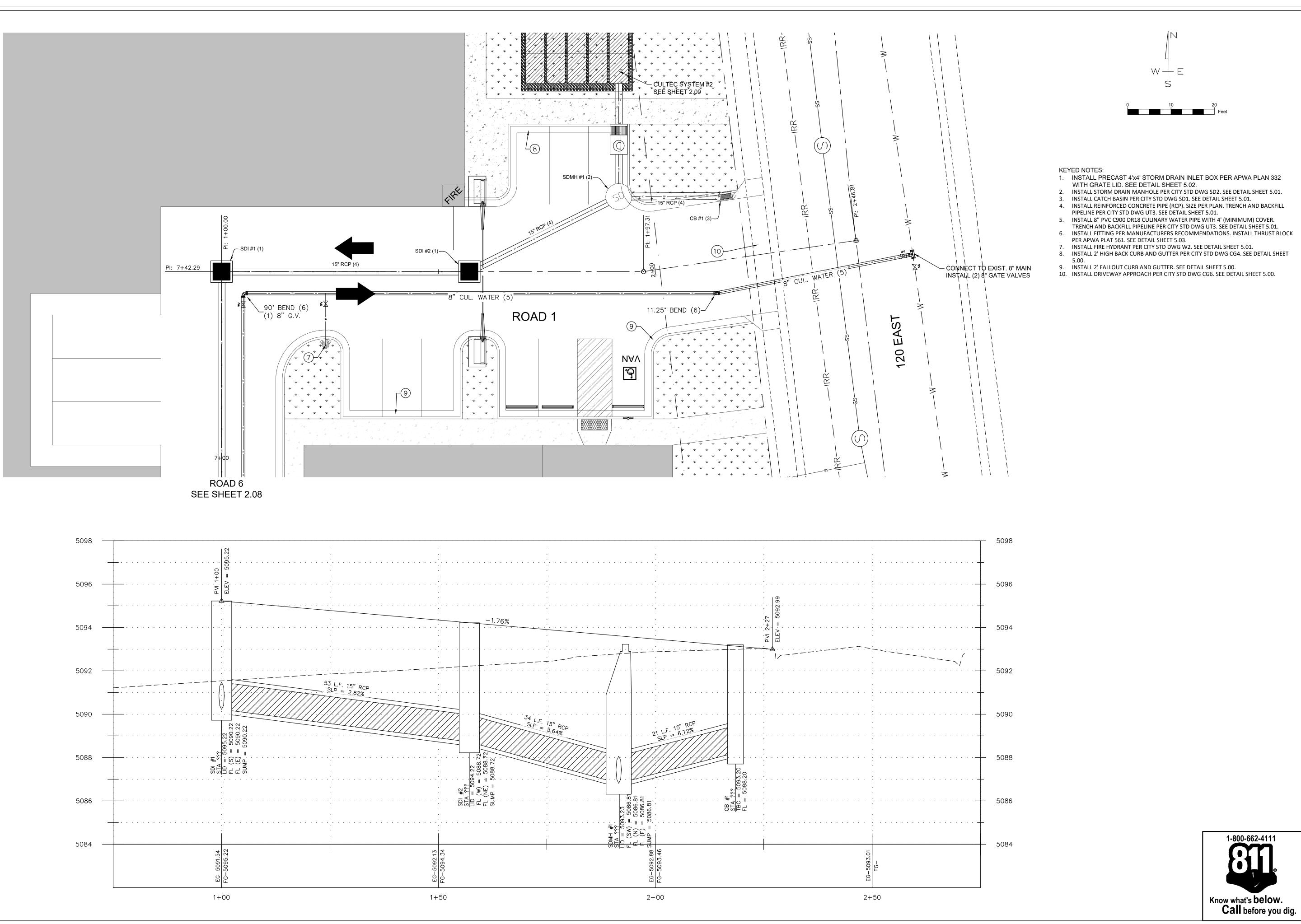
PLAN





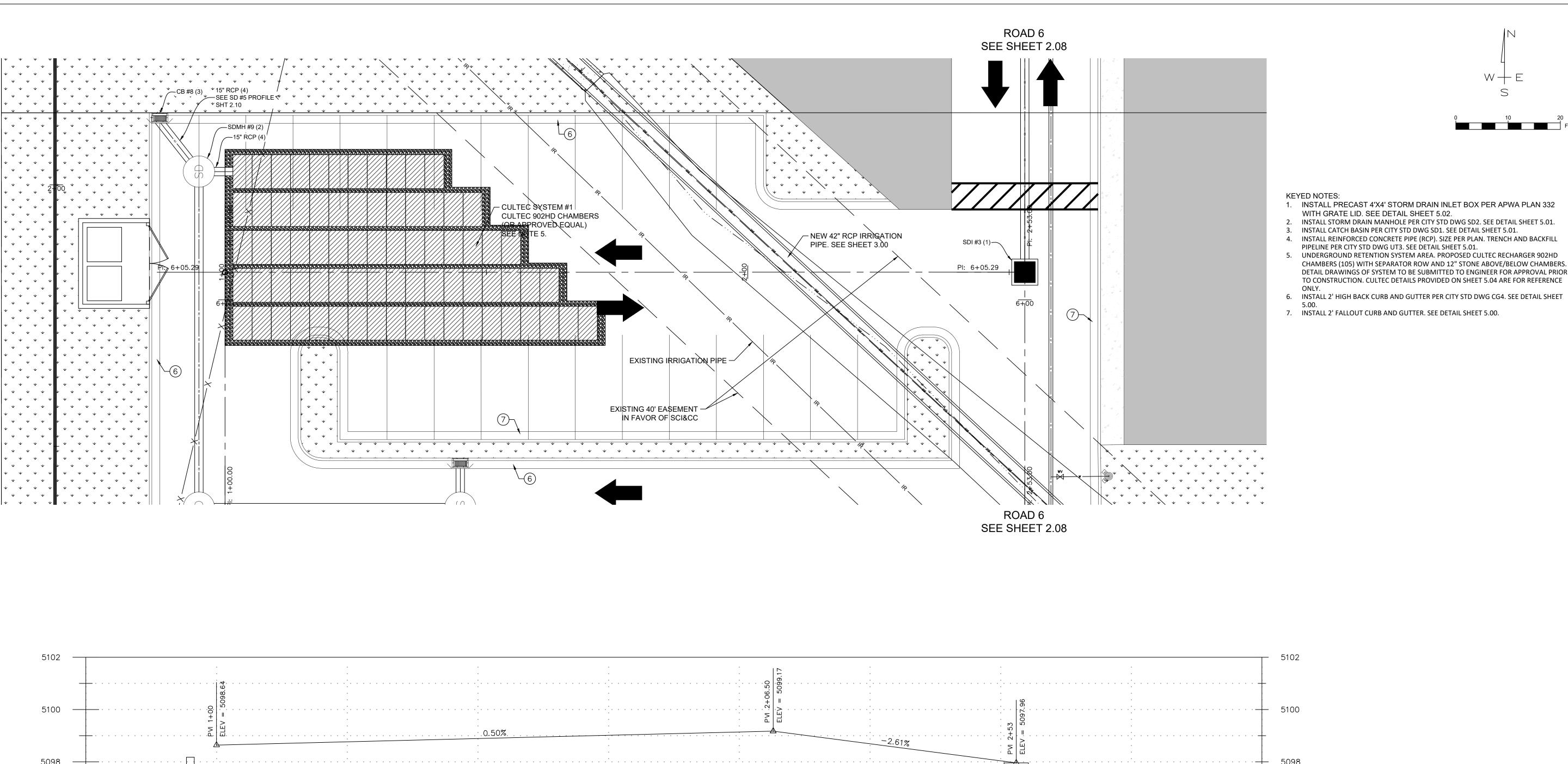




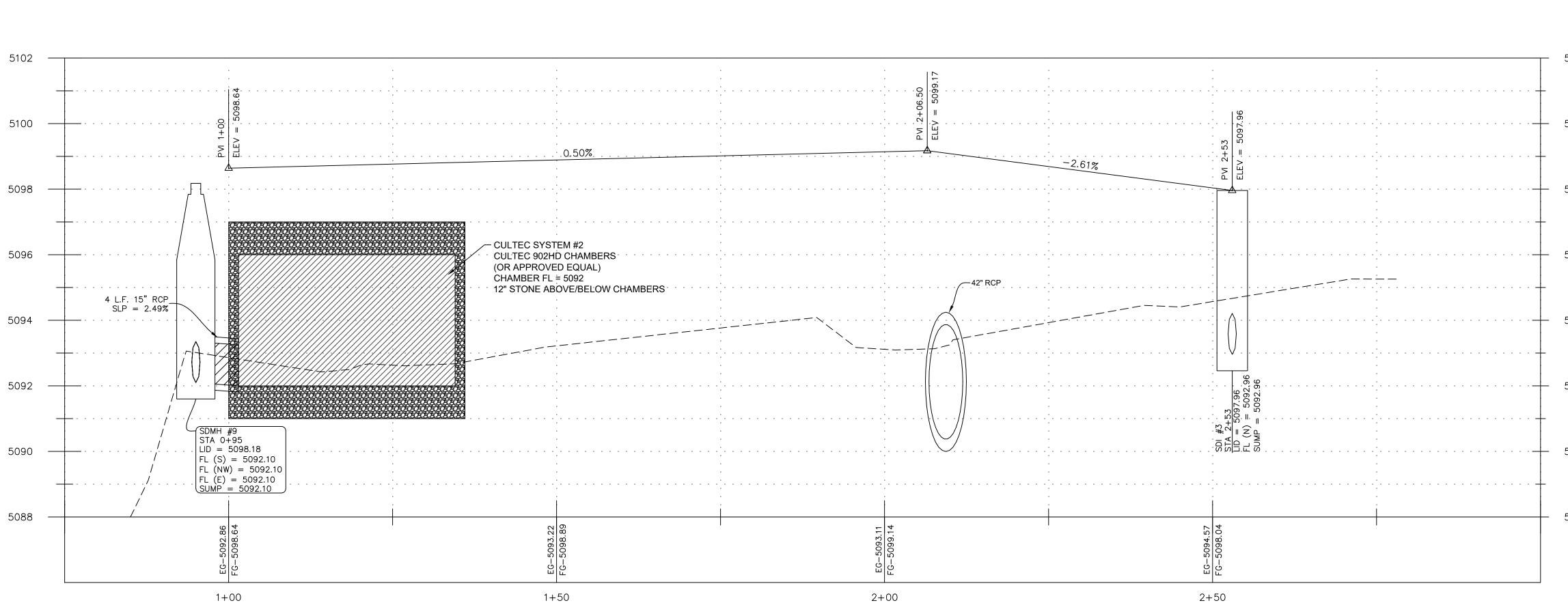


PROJECT NO. 2023.018

SHEET NO.



- 1. INSTALL PRECAST 4'X4' STORM DRAIN INLET BOX PER APWA PLAN 332
- WITH GRATE LID. SEE DETAIL SHEET 5.02. 2. INSTALL STORM DRAIN MANHOLE PER CITY STD DWG SD2. SEE DETAIL SHEET 5.01.
- INSTALL CATCH BASIN PER CITY STD DWG SD1. SEE DETAIL SHEET 5.01. 4. INSTALL REINFORCED CONCRETE PIPE (RCP). SIZE PER PLAN. TRENCH AND BACKFILL
- PIPELINE PER CITY STD DWG UT3. SEE DETAIL SHEET 5.01. 5. UNDERGROUND RETENTION SYSTEM AREA. PROPOSED CULTEC RECHARGER 902HD CHAMBERS (105) WITH SEPARATOR ROW AND 12" STONE ABOVE/BELOW CHAMBERS. DETAIL DRAWINGS OF SYSTEM TO BE SUBMITTED TO ENGINEER FOR APPROVAL PRIOR
- 6. INSTALL 2' HIGH BACK CURB AND GUTTER PER CITY STD DWG CG4. SEE DETAIL SHEET
- 7. INSTALL 2' FALLOUT CURB AND GUTTER. SEE DETAIL SHEET 5.00.

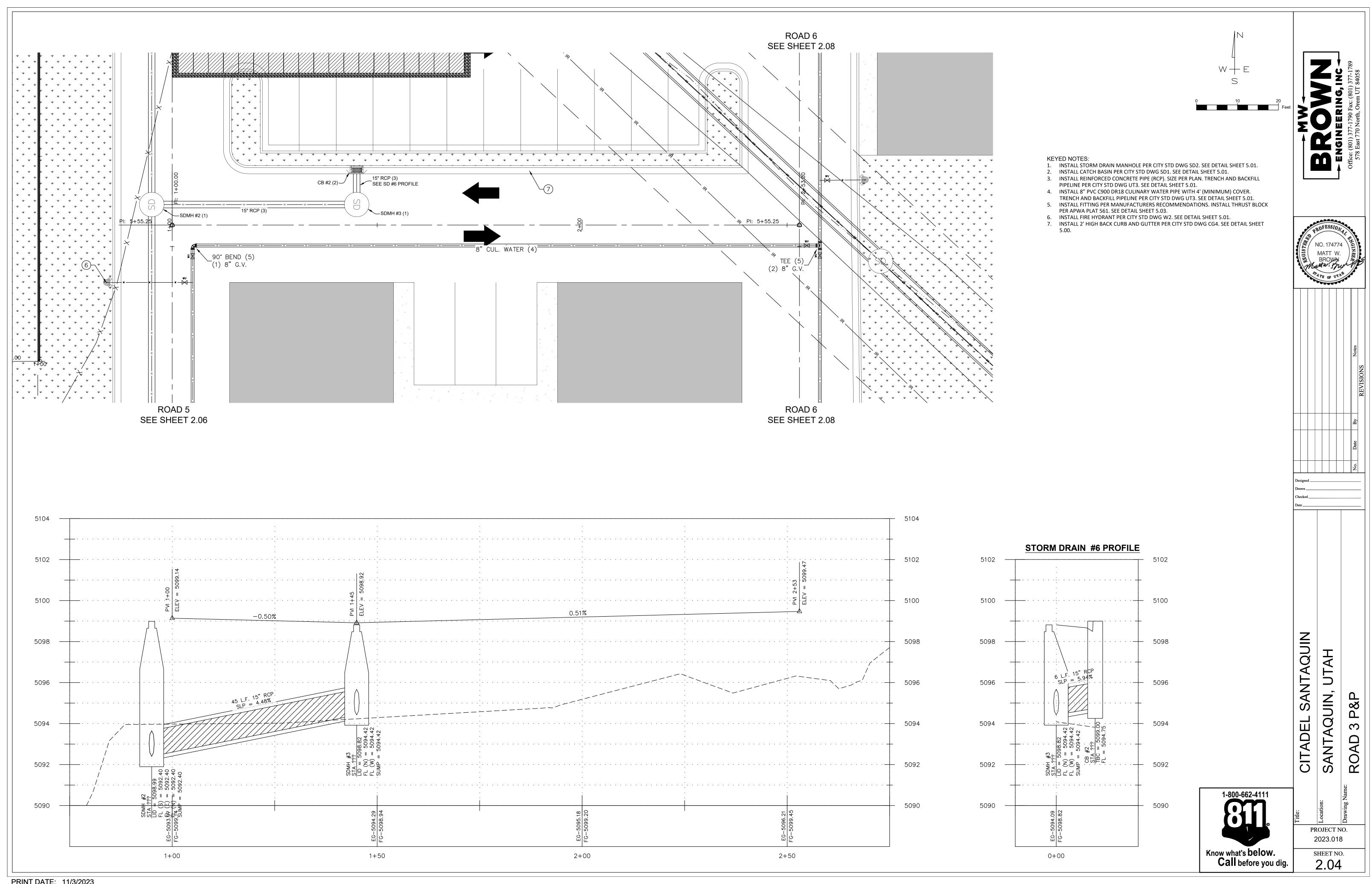


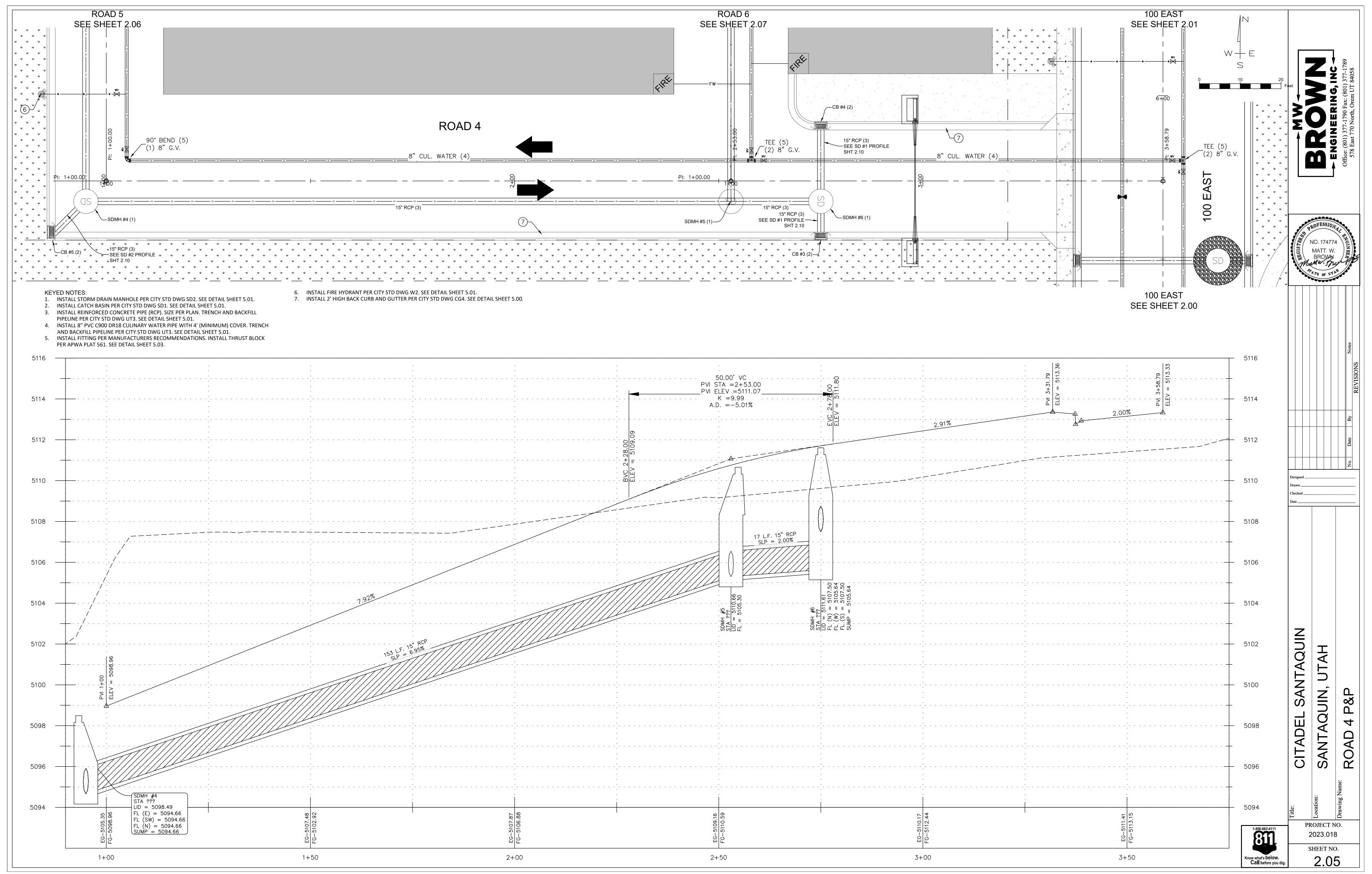


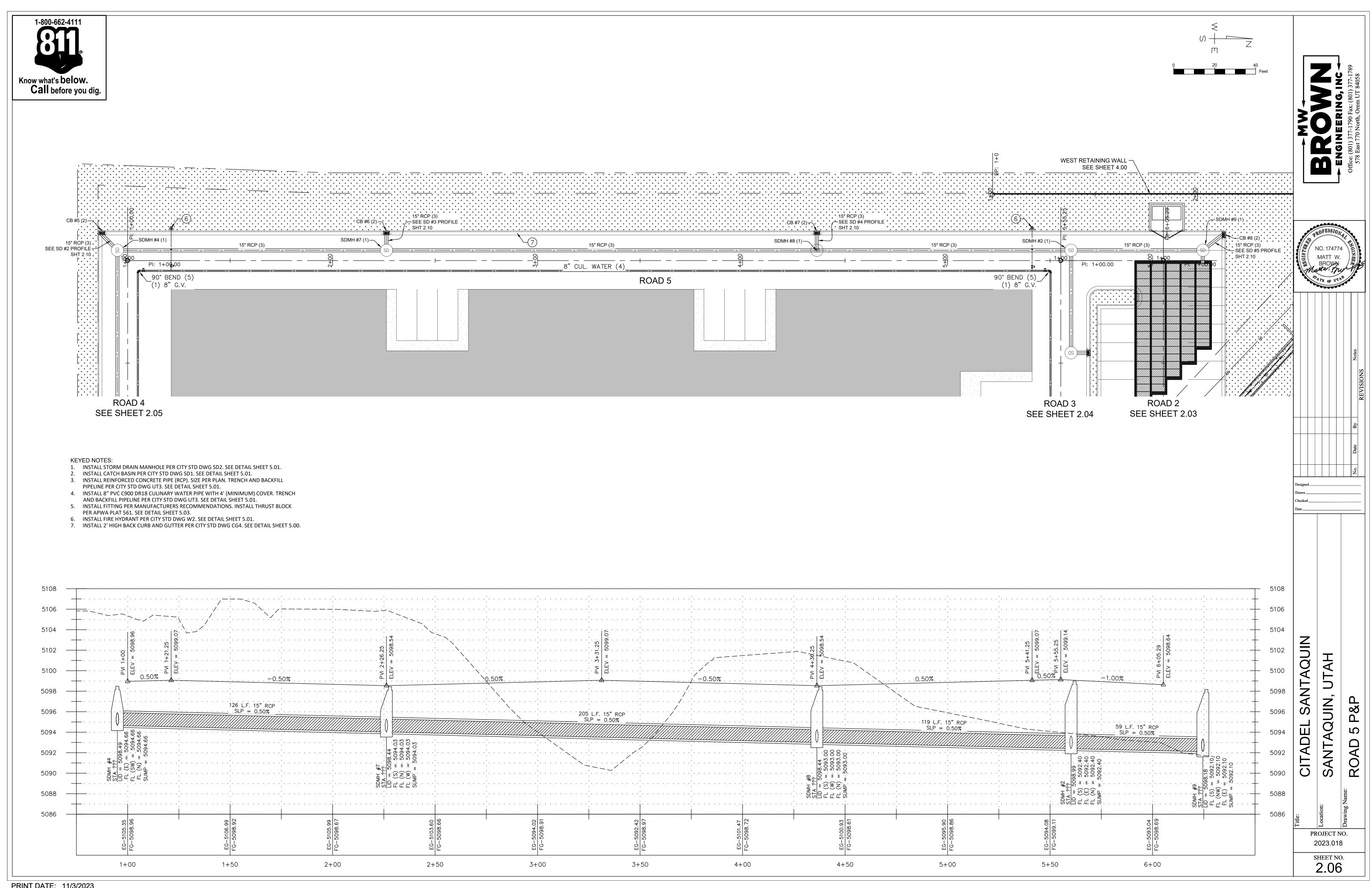
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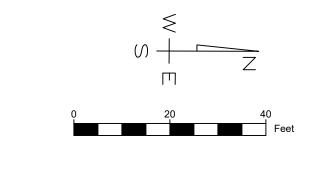
SHEET NO.

NO. 174774



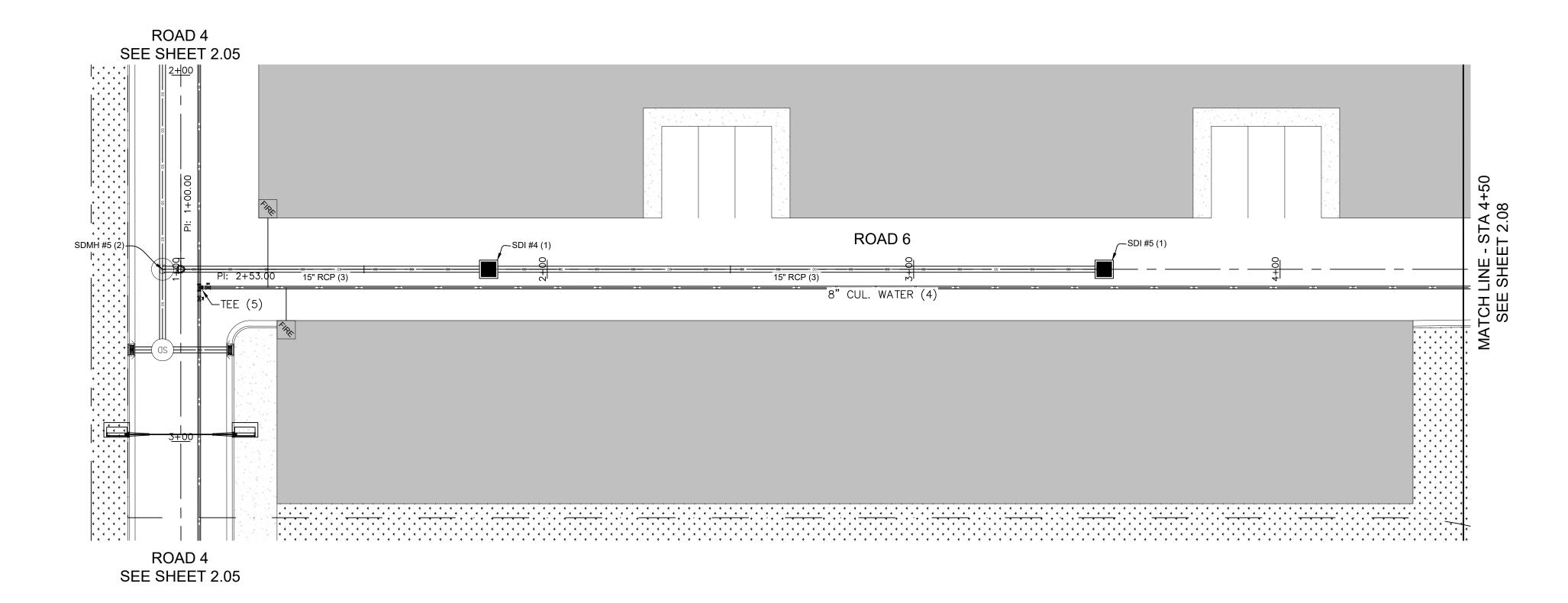


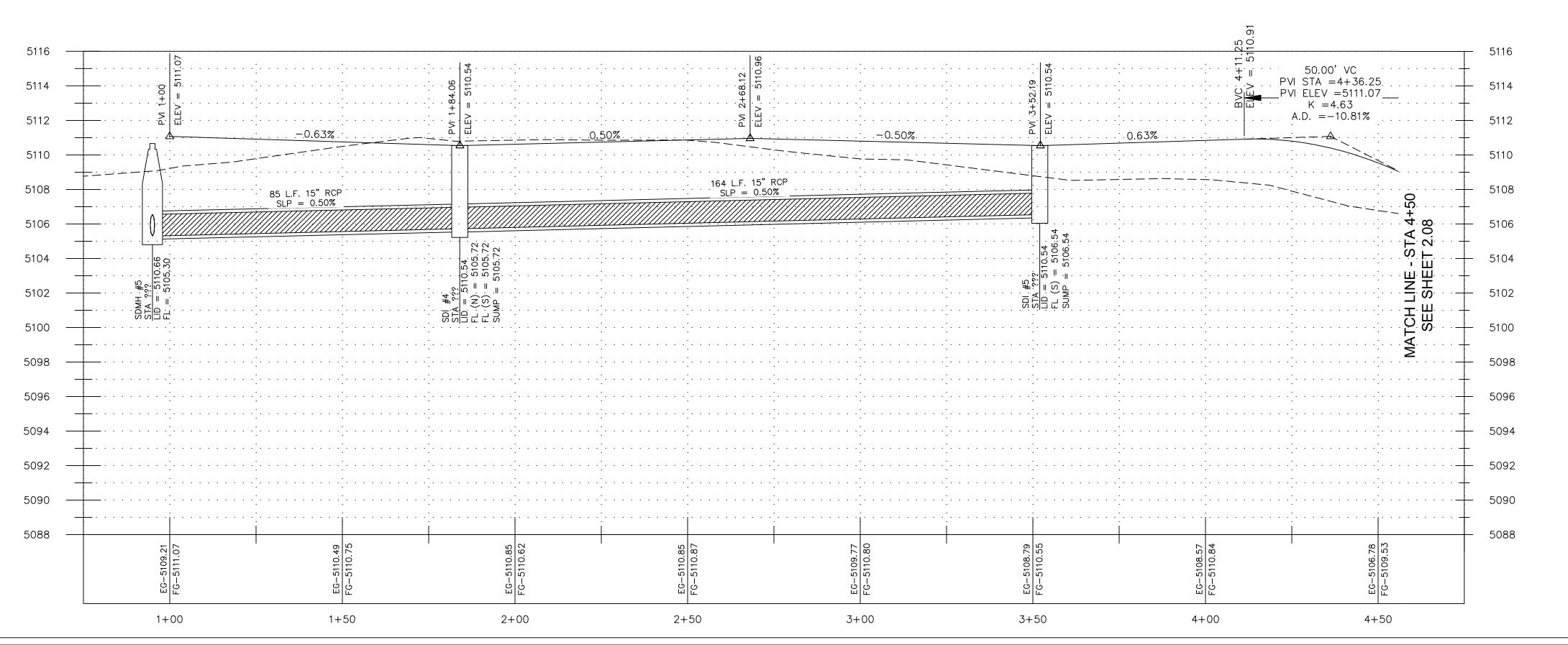




KEYED NOTES:

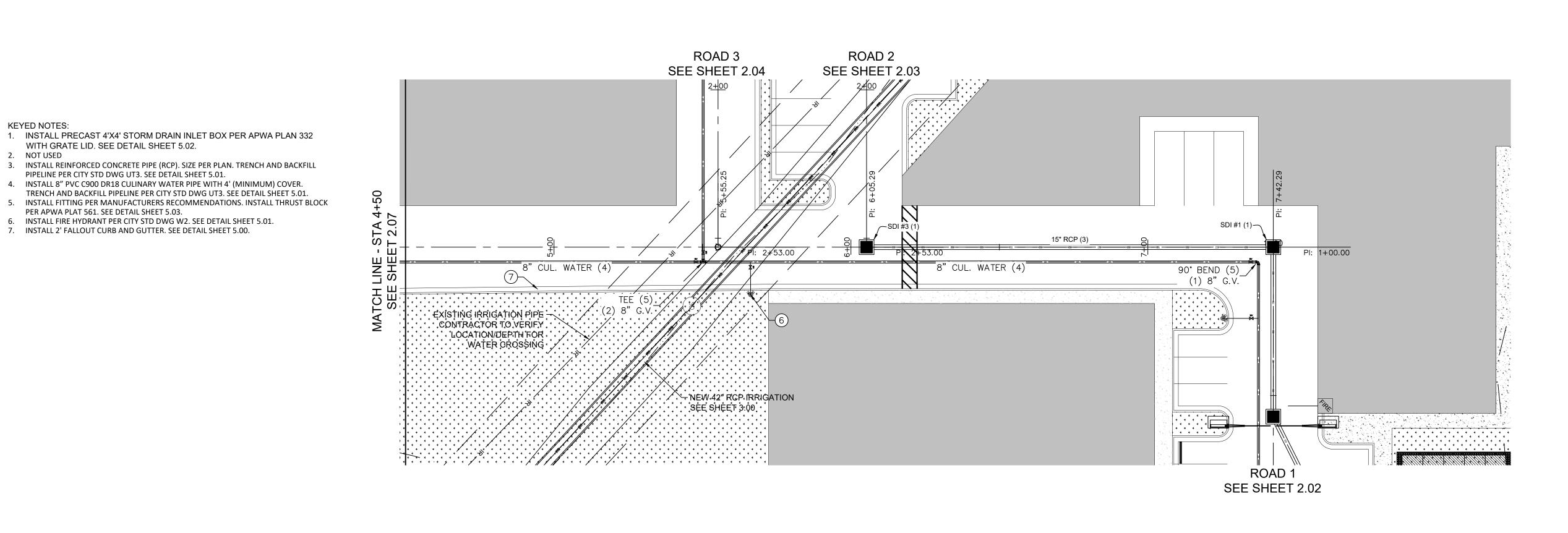
- 1. INSTALL PRECAST 4'X4' STORM DRAIN INLET BOX PER APWA PLAN 332 WITH GRATE LID. SEE DETAIL SHEET 5.02.
- INSTALL STORM DRAIN MANHOLE PER CITY STD DWG SD2. SEE DETAIL SHEET 4.01.
- INSTALL REINFORCED CONCRETE PIPE (RCP). SIZE PER PLAN. TRENCH AND BACKFILL PIPELINE PER CITY STD DWG UT3. SEE DETAIL SHEET 5.01.
- 4. INSTALL 8" PVC C900 DR18 CULINARY WATER PIPE WITH 4' (MINIMUM) COVER.
- TRENCH AND BACKFILL PIPELINE PER CITY STD DWG UT3. SEE DETAIL SHEET 5.01. INSTALL FITTING PER MANUFACTURERS RECOMMENDATIONS. INSTALL THRUST
- BLOCK PER APWA PLAT 561. SEE DETAIL SHEET 5.03.

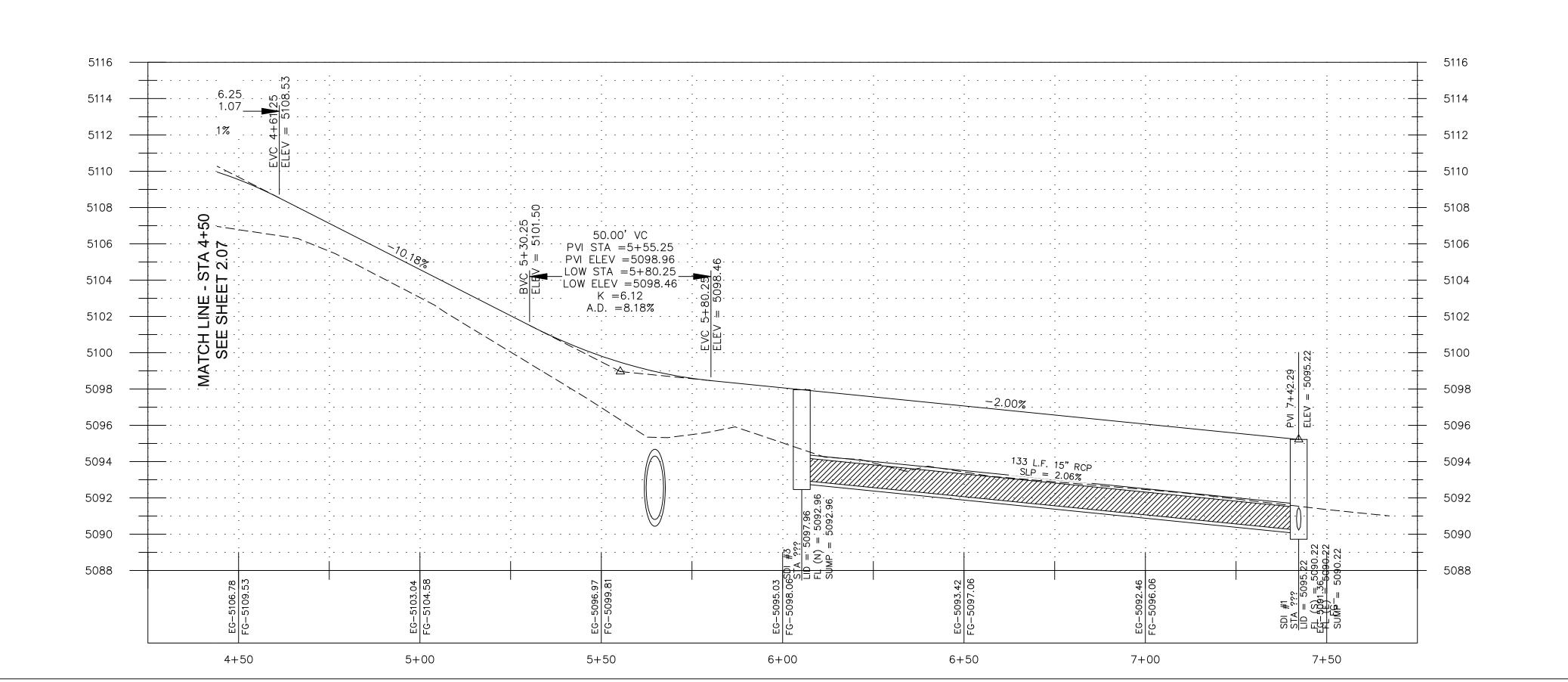


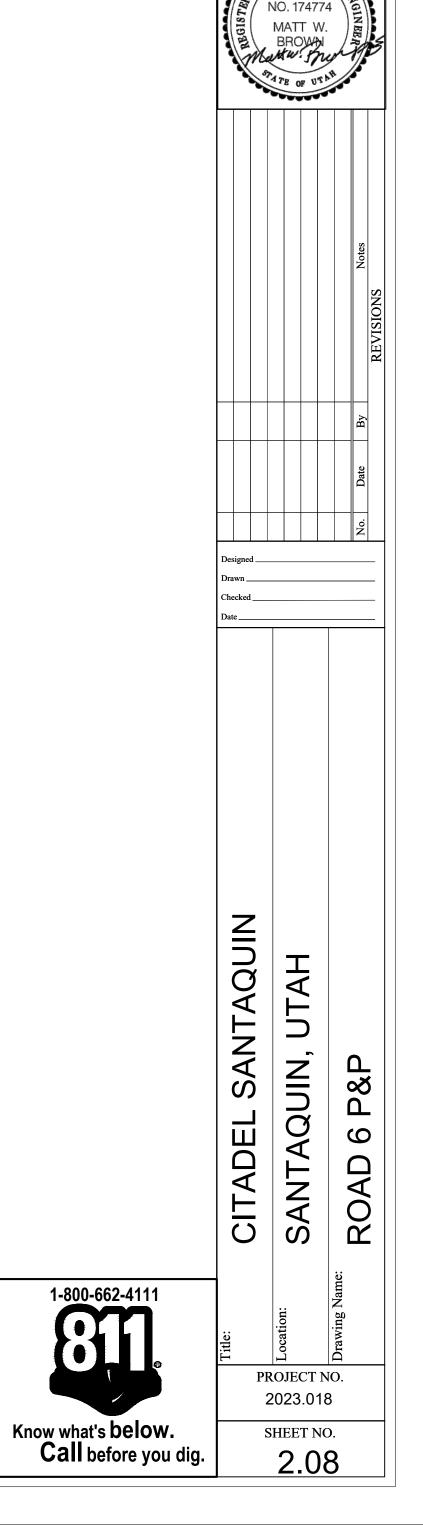




PROJECT NO. 2023.018 SHEET NO.







KEYED NOTES:

NOT USED

WITH GRATE LID. SEE DETAIL SHEET 5.02.

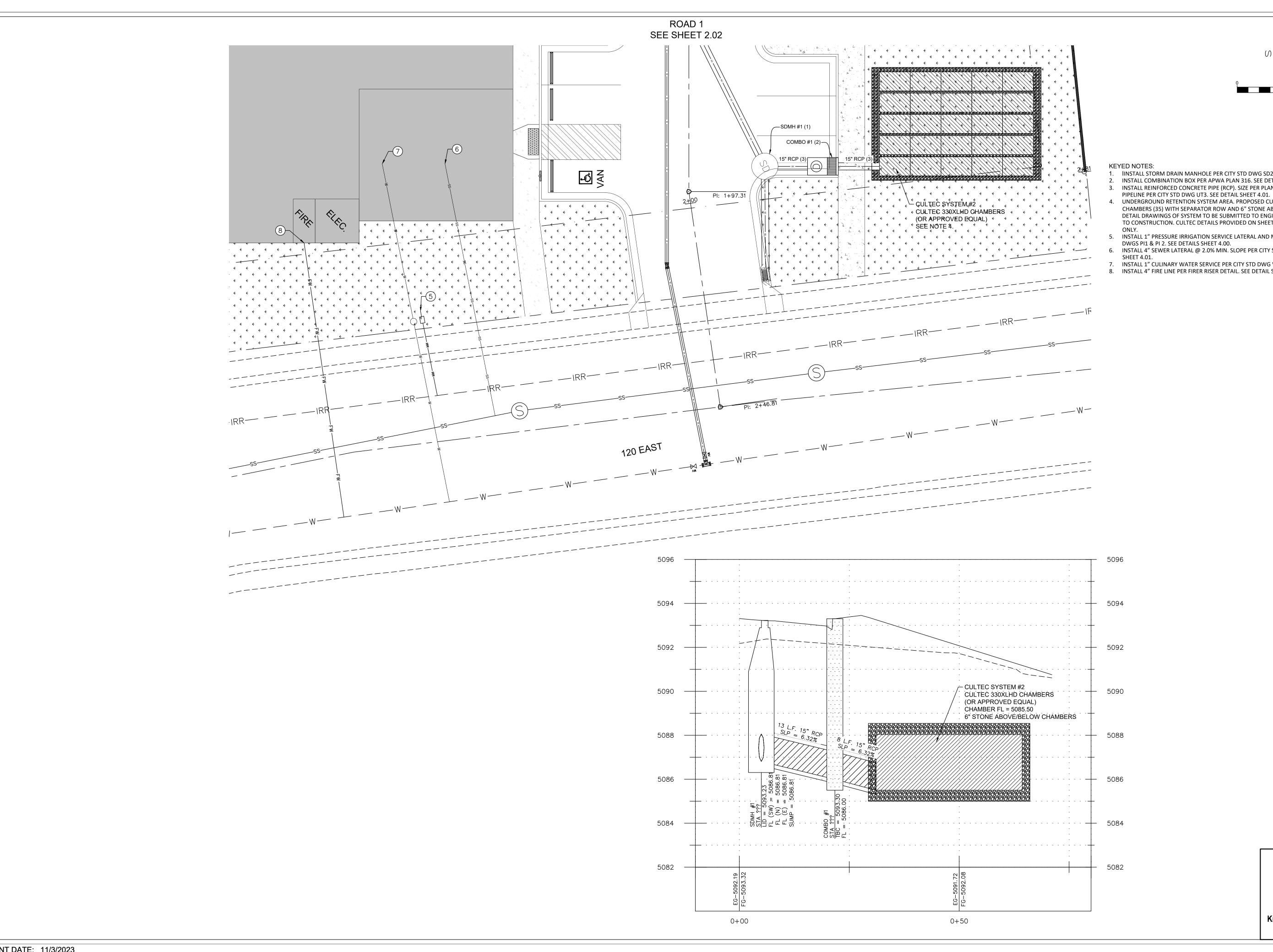
PER APWA PLAT 561. SEE DETAIL SHEET 5.03.

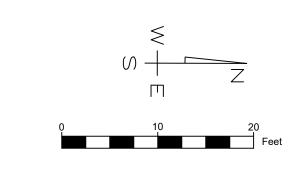
PIPELINE PER CITY STD DWG UT3. SEE DETAIL SHEET 5.01.

7. INSTALL 2' FALLOUT CURB AND GUTTER. SEE DETAIL SHEET 5.00.

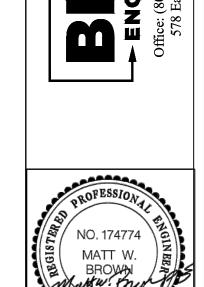
4. INSTALL 8" PVC C900 DR18 CULINARY WATER PIPE WITH 4' (MINIMUM) COVER.

6. INSTALL FIRE HYDRANT PER CITY STD DWG W2. SEE DETAIL SHEET 5.01.





- 1. IINSTALL STORM DRAIN MANHOLE PER CITY STD DWG SD2. SEE DETAIL SHEET 4.01. 2. INSTALL COMBINATION BOX PER APWA PLAN 316. SEE DETAIL SHEET 4.02.
- 3. INSTALL REINFORCED CONCRETE PIPE (RCP). SIZE PER PLAN. TRENCH AND BACKFILL
- 4. UNDERGROUND RETENTION SYSTEM AREA. PROPOSED CULTEC RECHARGER 330XLHD CHAMBERS (35) WITH SEPARATOR ROW AND 6" STONE ABOVE/BELOW CHAMBERS.
- DETAIL DRAWINGS OF SYSTEM TO BE SUBMITTED TO ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION. CULTEC DETAILS PROVIDED ON SHEET 4.05 ARE FOR REFERENCE 5. INSTALL 1" PRESSURE IRRIGATION SERVICE LATERAL AND METER BOX PER CITY STD
- 6. INSTALL 4" SEWER LATERAL @ 2.0% MIN. SLOPE PER CITY STD DWG S2. SEE DETAIL
- 7. INSTALL 1" CULINARY WATER SERVICE PER CITY STD DWG W1. SEE DETAIL SHEET 4.01.
- 8. INSTALL 4" FIRE LINE PER FIRER RISER DETAIL. SEE DETAIL SHEET 4.02.



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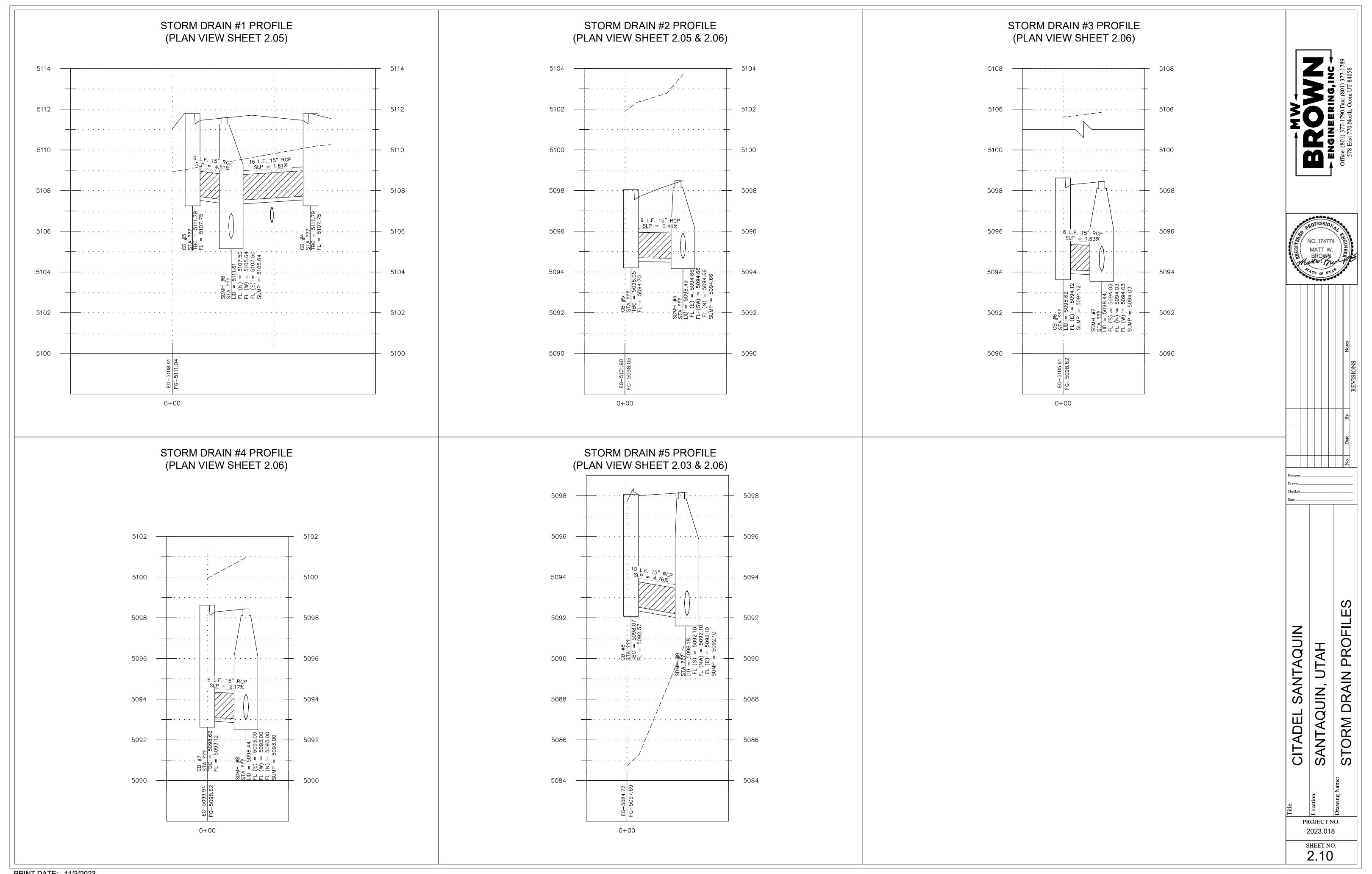
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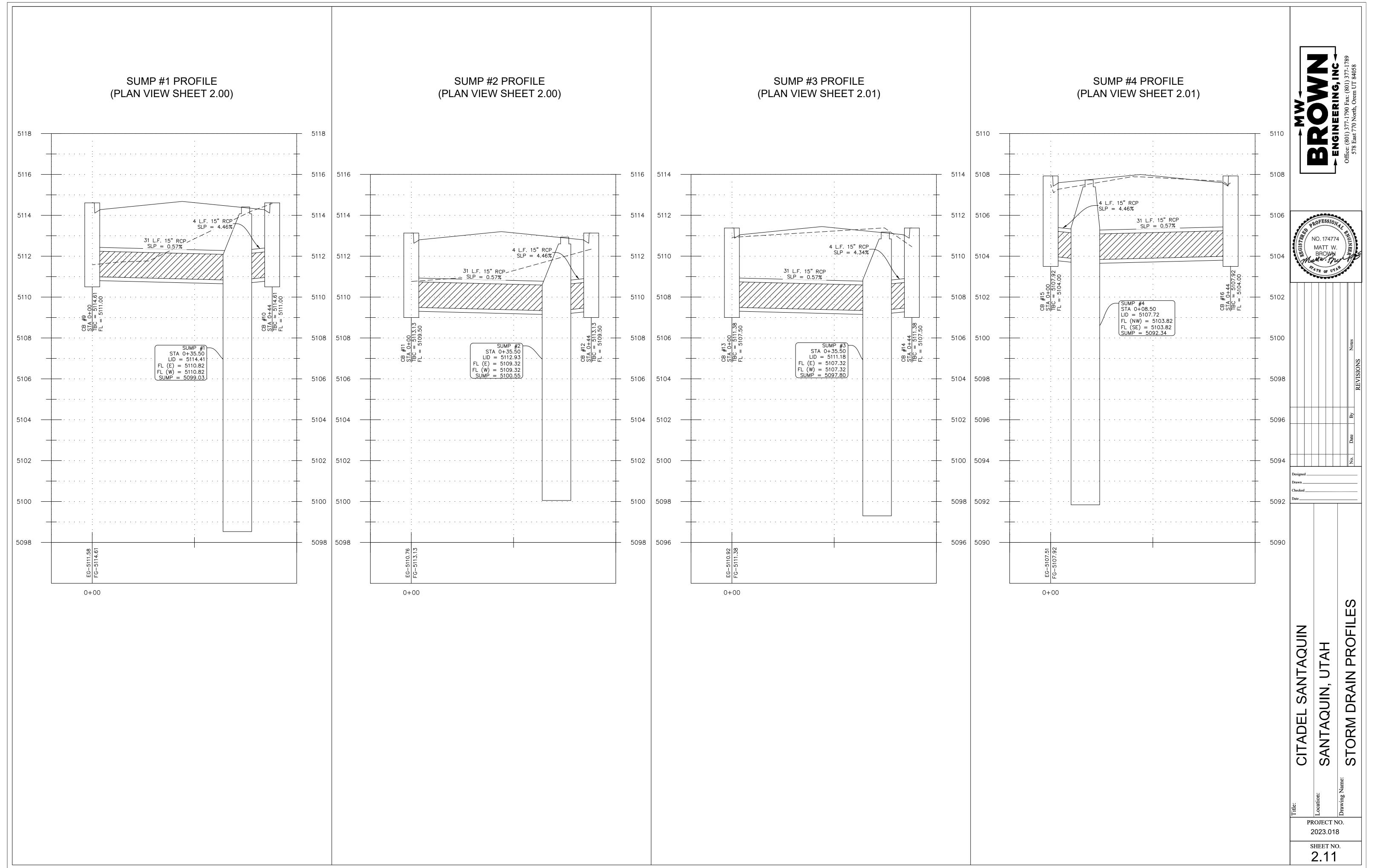
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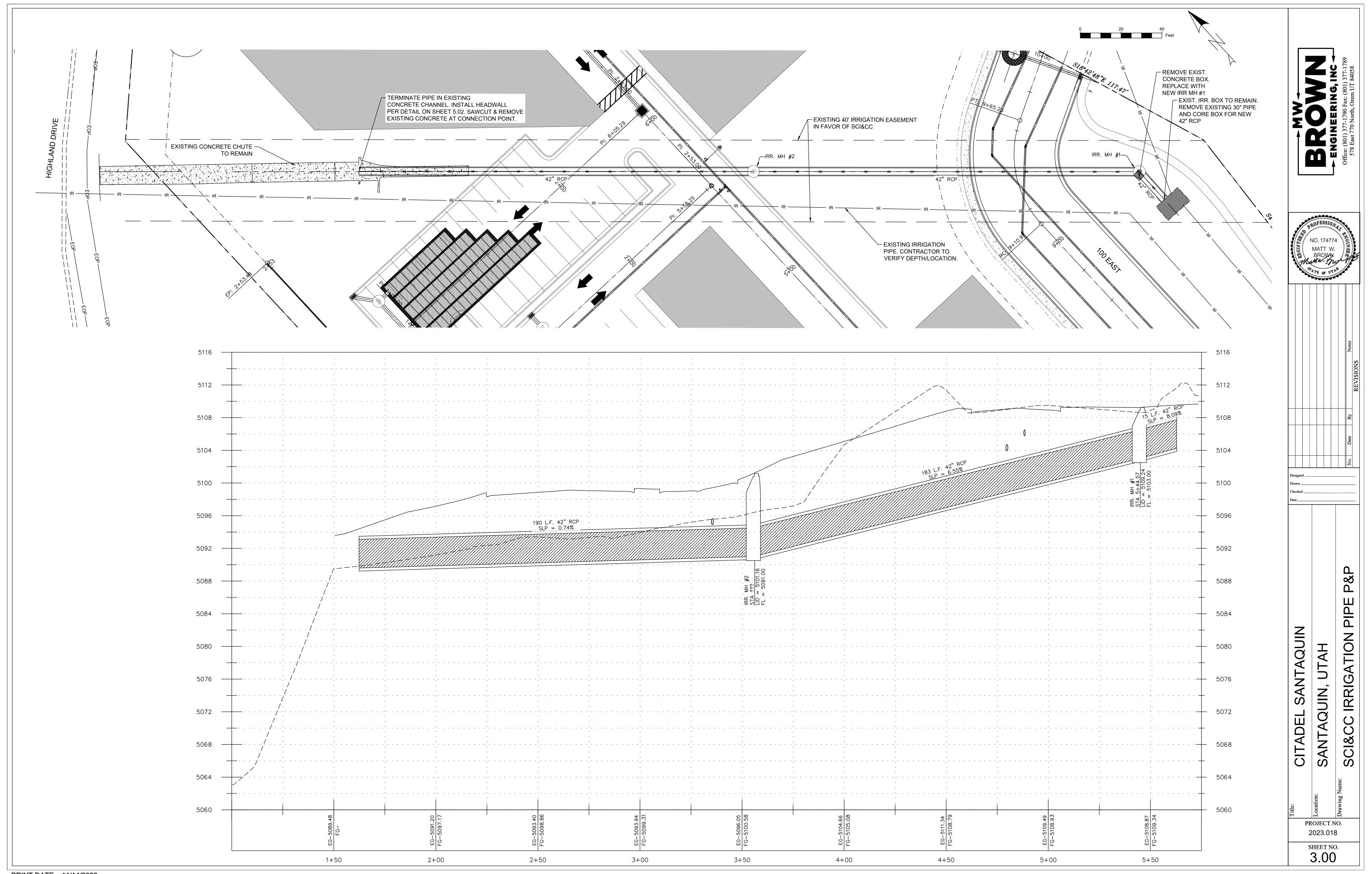
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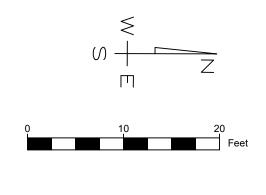
Know what's below.
Call before you dig.

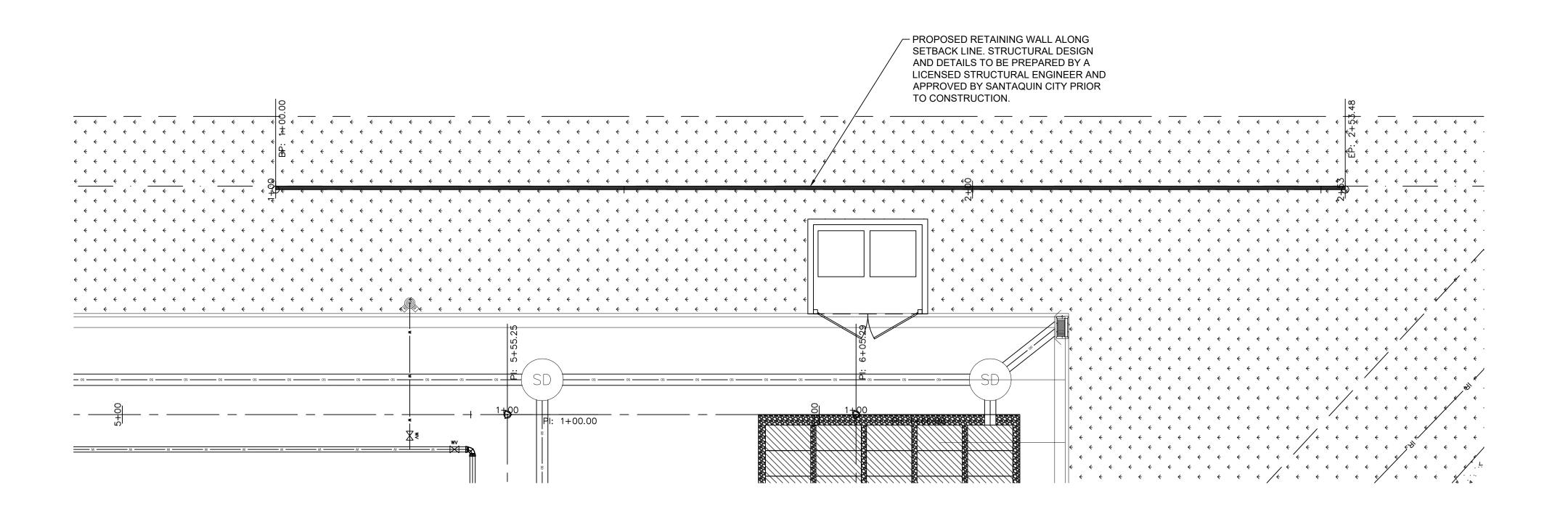


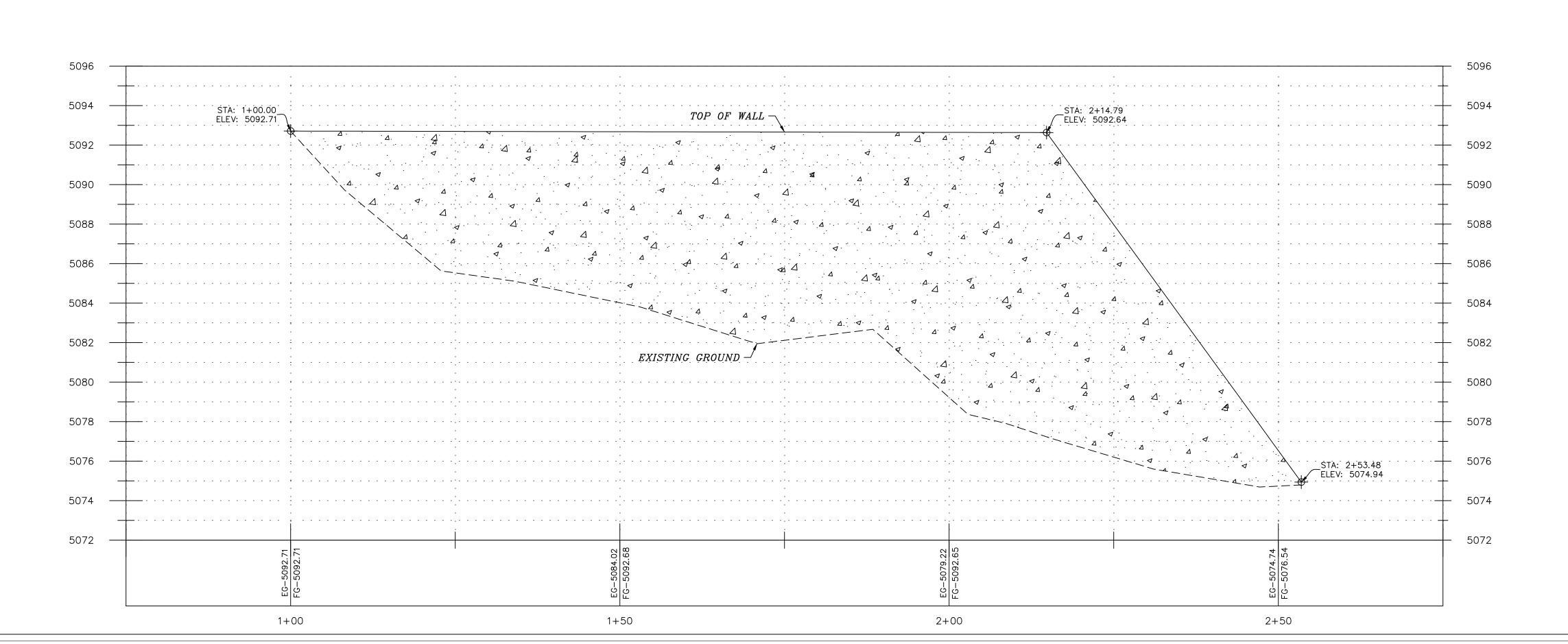




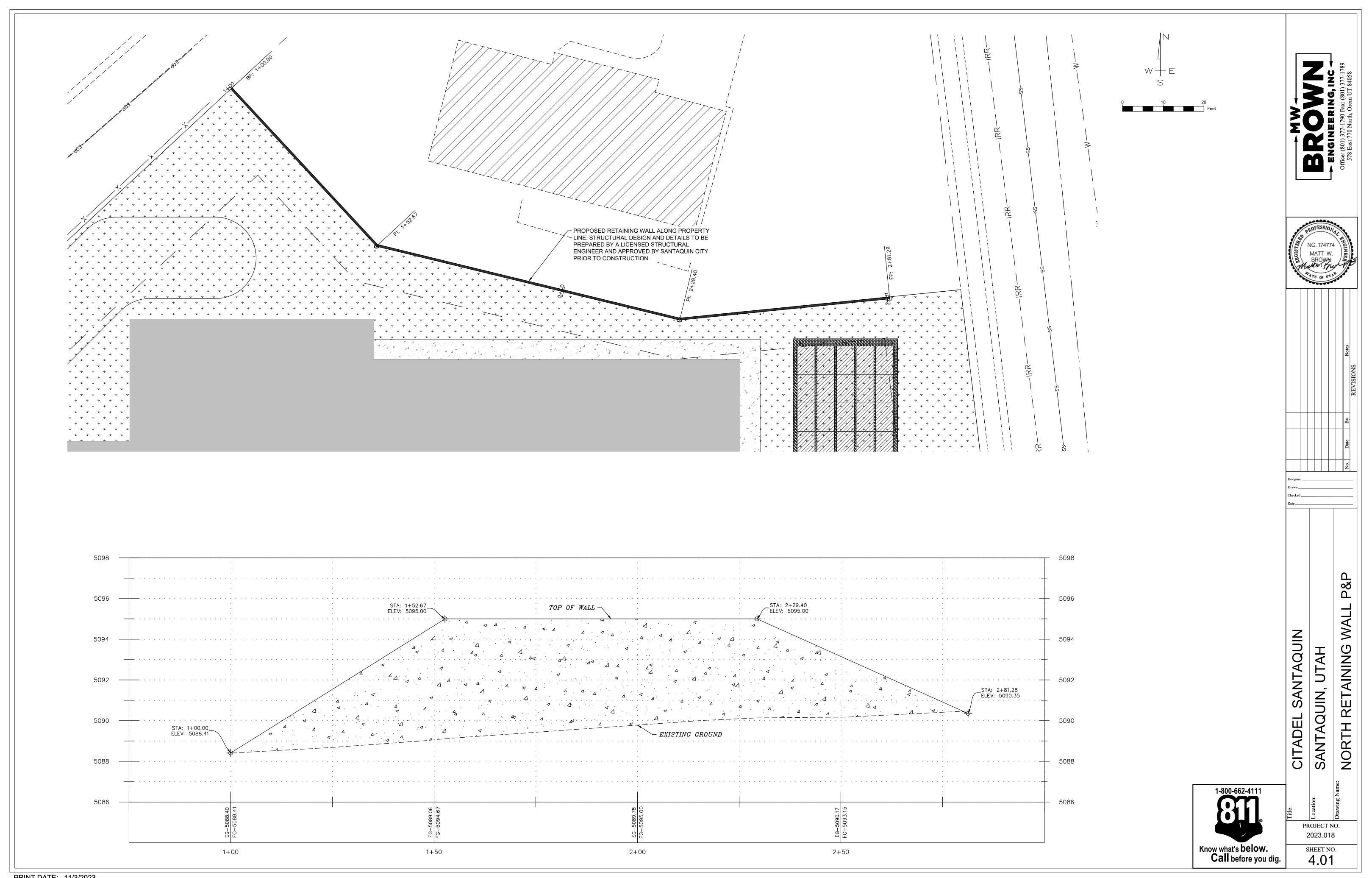








Location:
SANTAQUIN, UTAH
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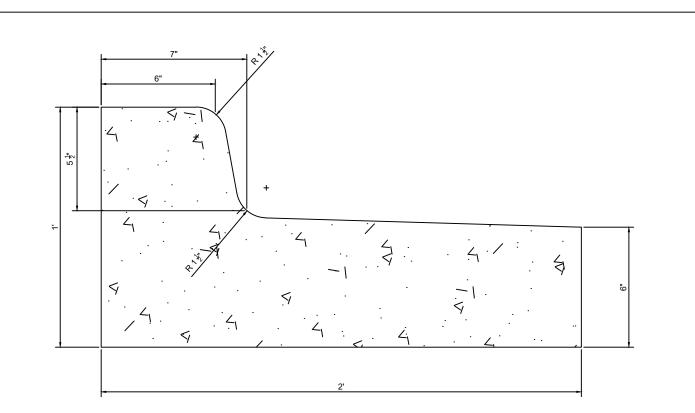




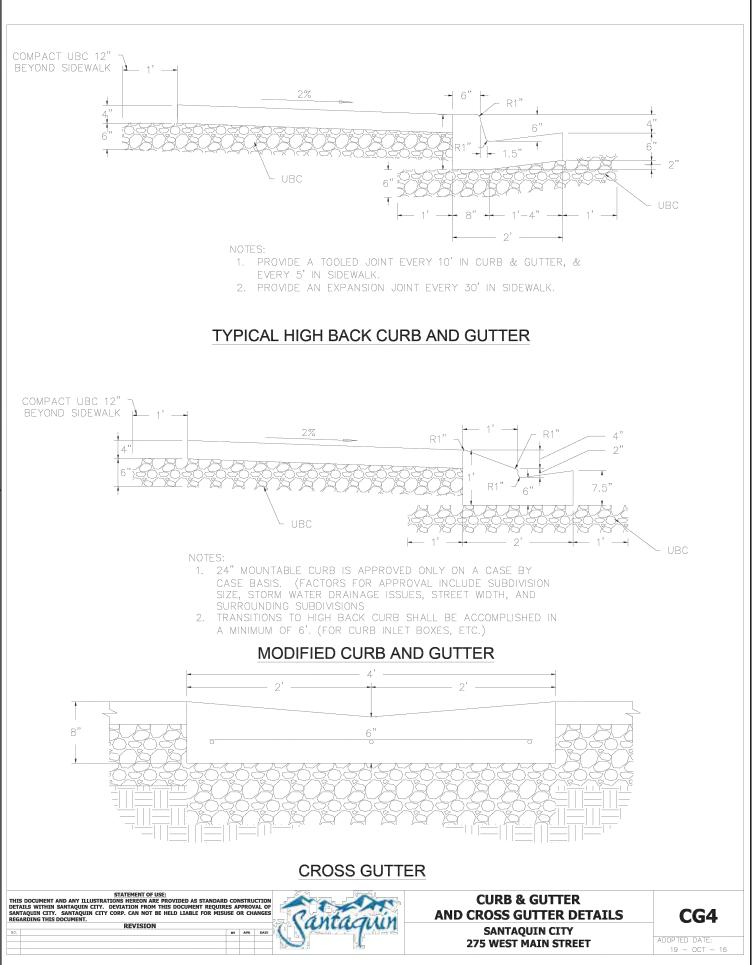
THE DEVELOPER AND THE GENERAL CONTRACTOR UNDERSTAND THAT IT IS HIS/HER RESPONSIBILITY TO ENSURE THAT ALL IMPROVEMENTS INSTALLED WITHIN THIS DEVELOPMENT ARE CONSTRUCTED IN FULL COMPLIANCE WITH ALL STATE AND SANTAQUIN CITY CODES, ORDINANCES AND STANDARDS. THESE PLANS ARE NOT ALL INCLUSIVE OF ALL MINIMUM CODES, ORDINANCES AND STANDARDS. THIS FACT DOES NOT RELIEVE THE DEVELOPER OR GENERAL CONTRACTOR FROM FULL COMPLIANCE WITH ALL MINIMUM STATE AND SANTAQUIN CITY CODES, ORDINANCES AND STANDARDS.

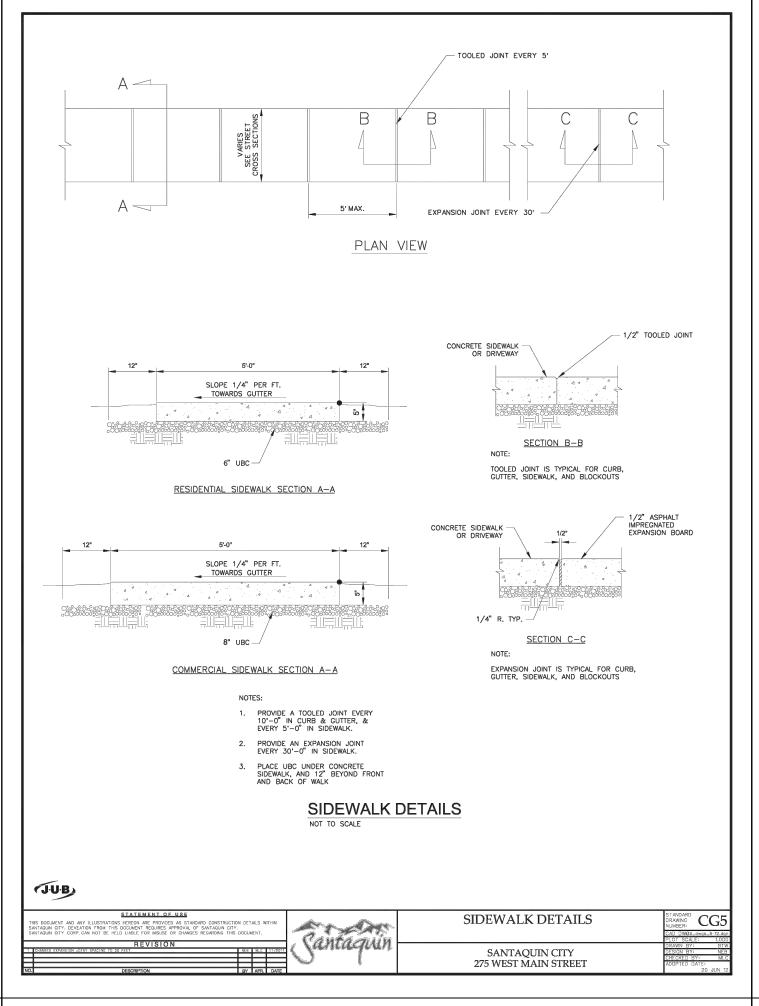
ALL RECOMMENDATIONS MADE IN A PERTINENT GEOTECHNICAL REPORT/STUDY SHALL BE FOLLOWED EXPLICITLY DURING CONSTRUCTION OF BUILDINGS AND SITE IMPROVEMENTS.

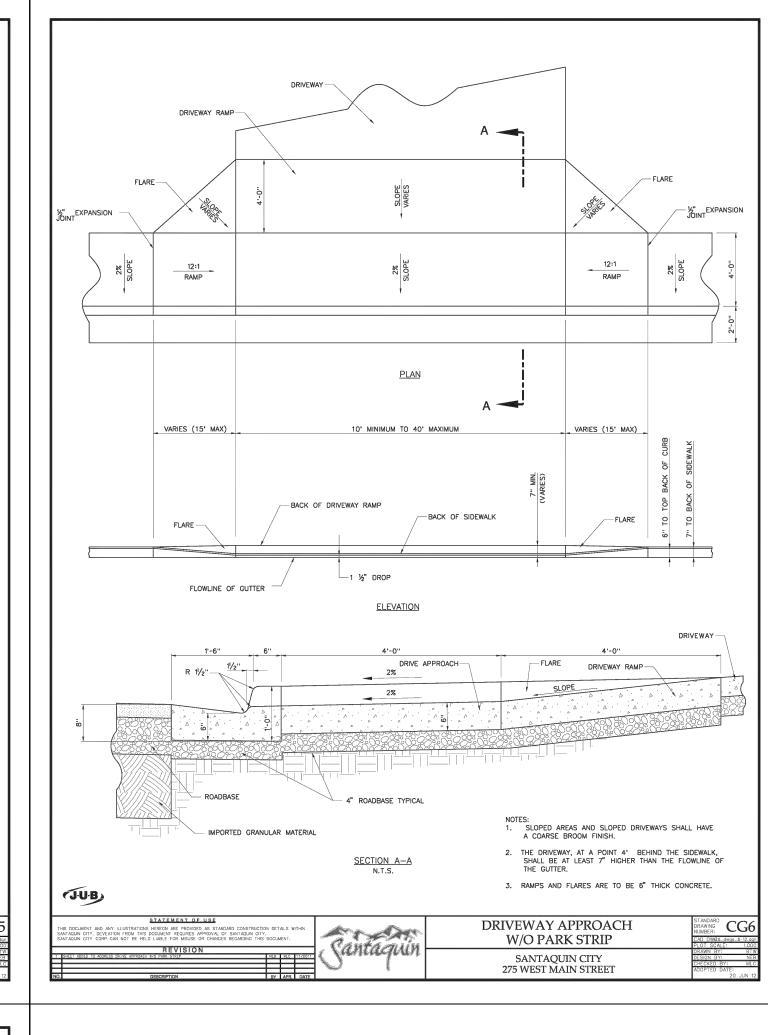
THE CURRENT SANTAQUIN CITY STANDARD SPECIFICATIONS AND DRAWINGS SHALL BE STRICTLY ADHERED TO.

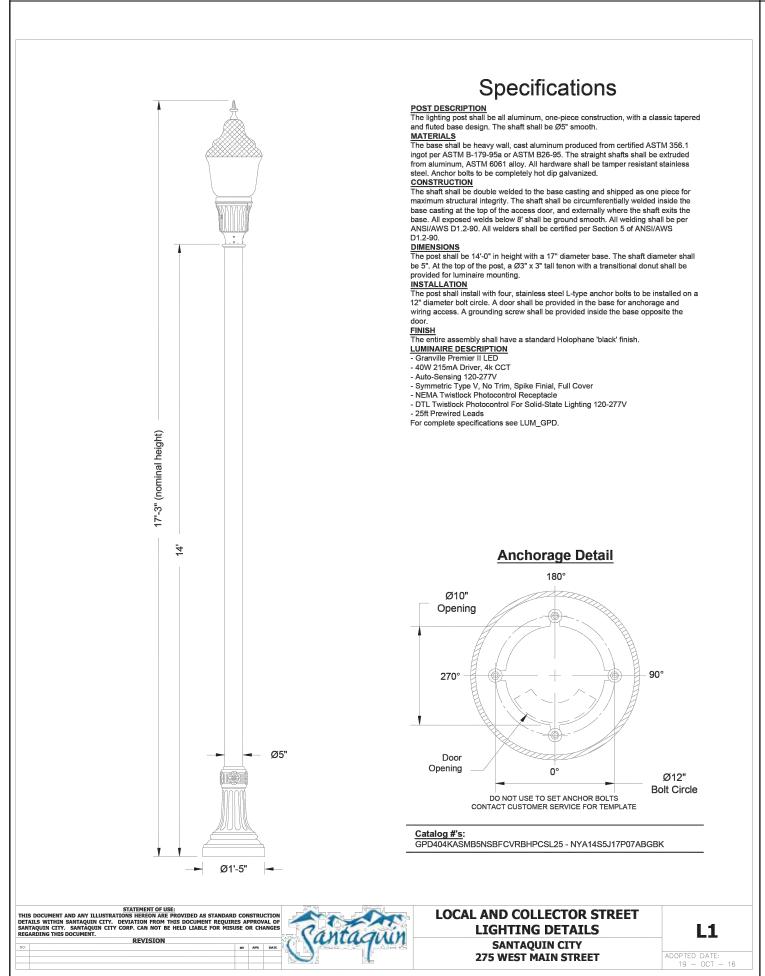


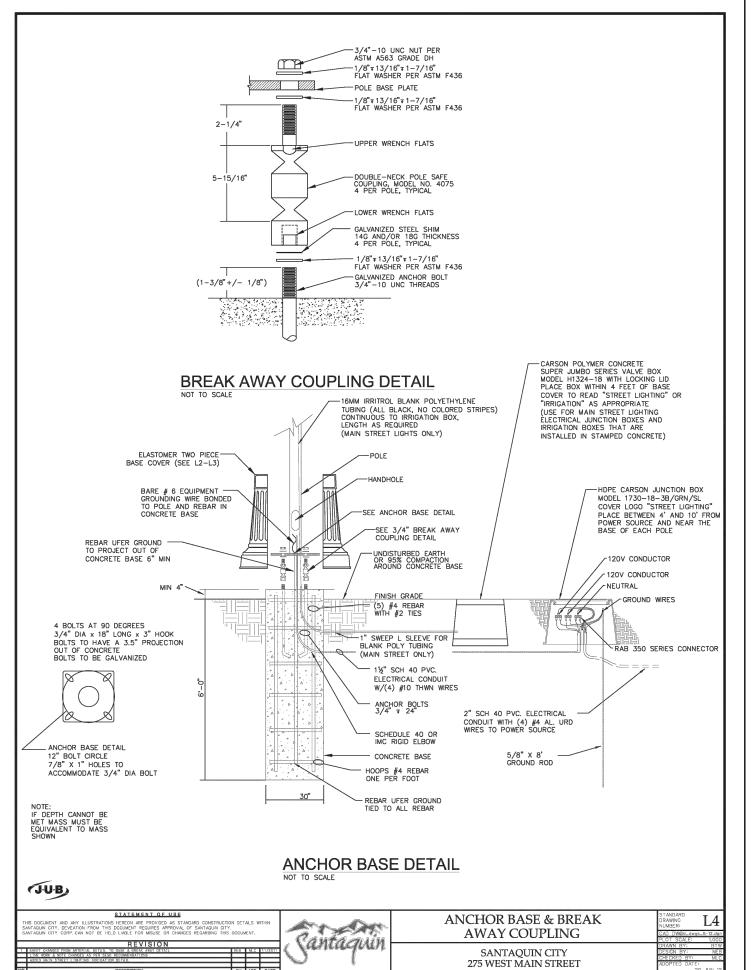
FALLOUT CURB

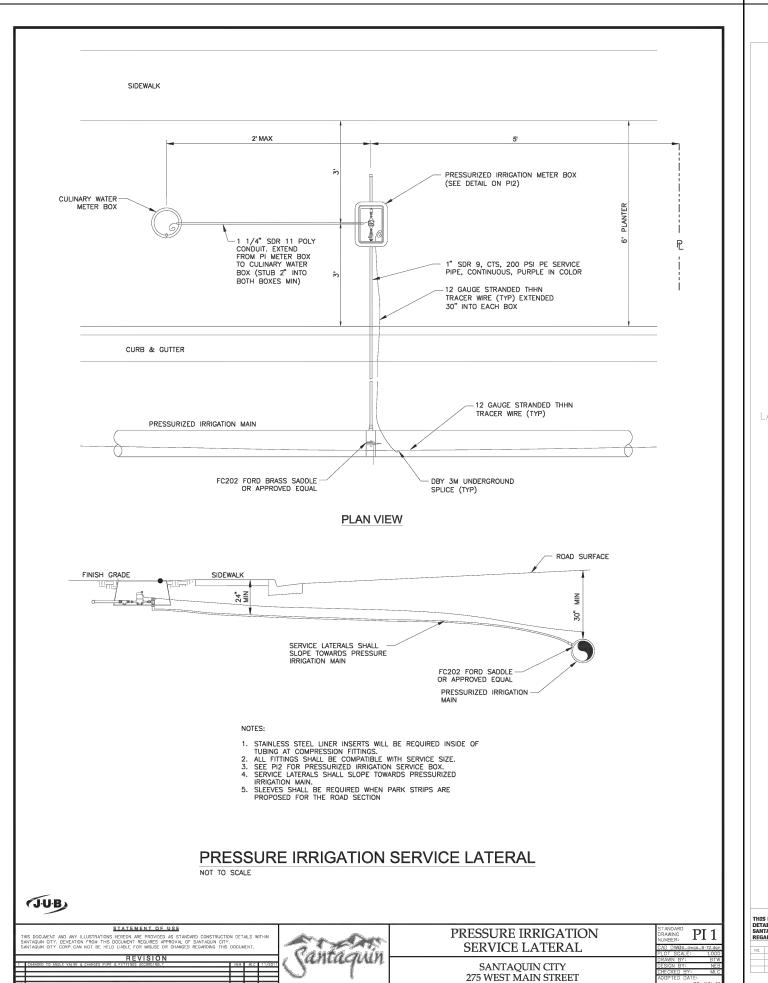


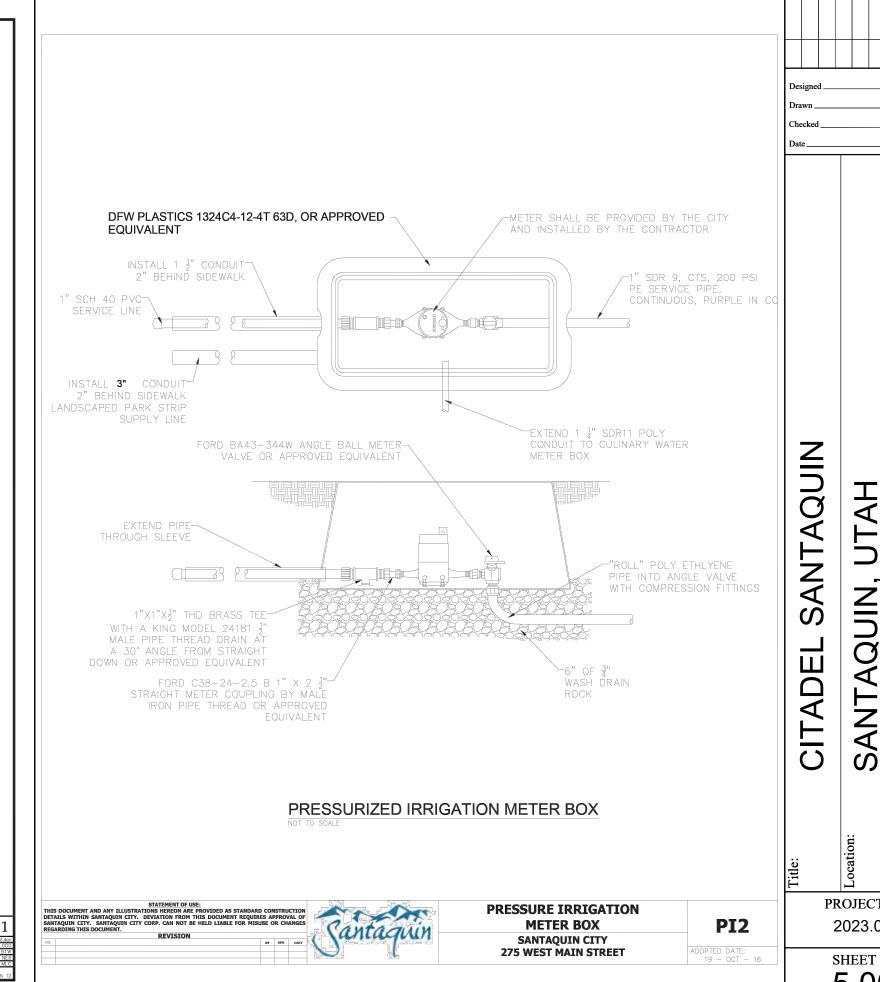


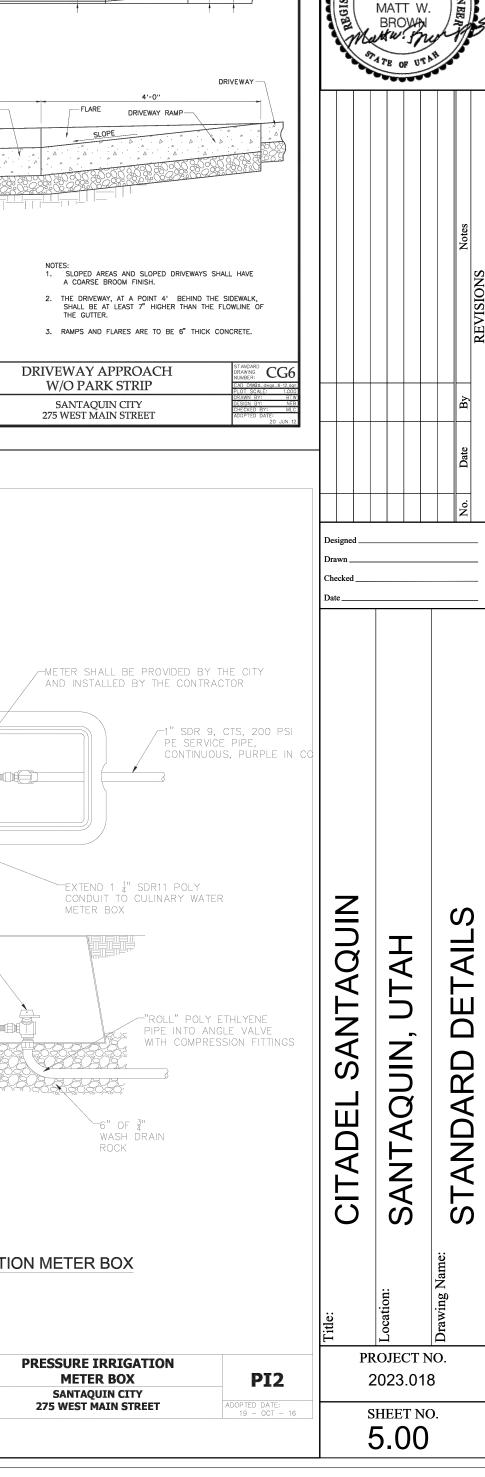


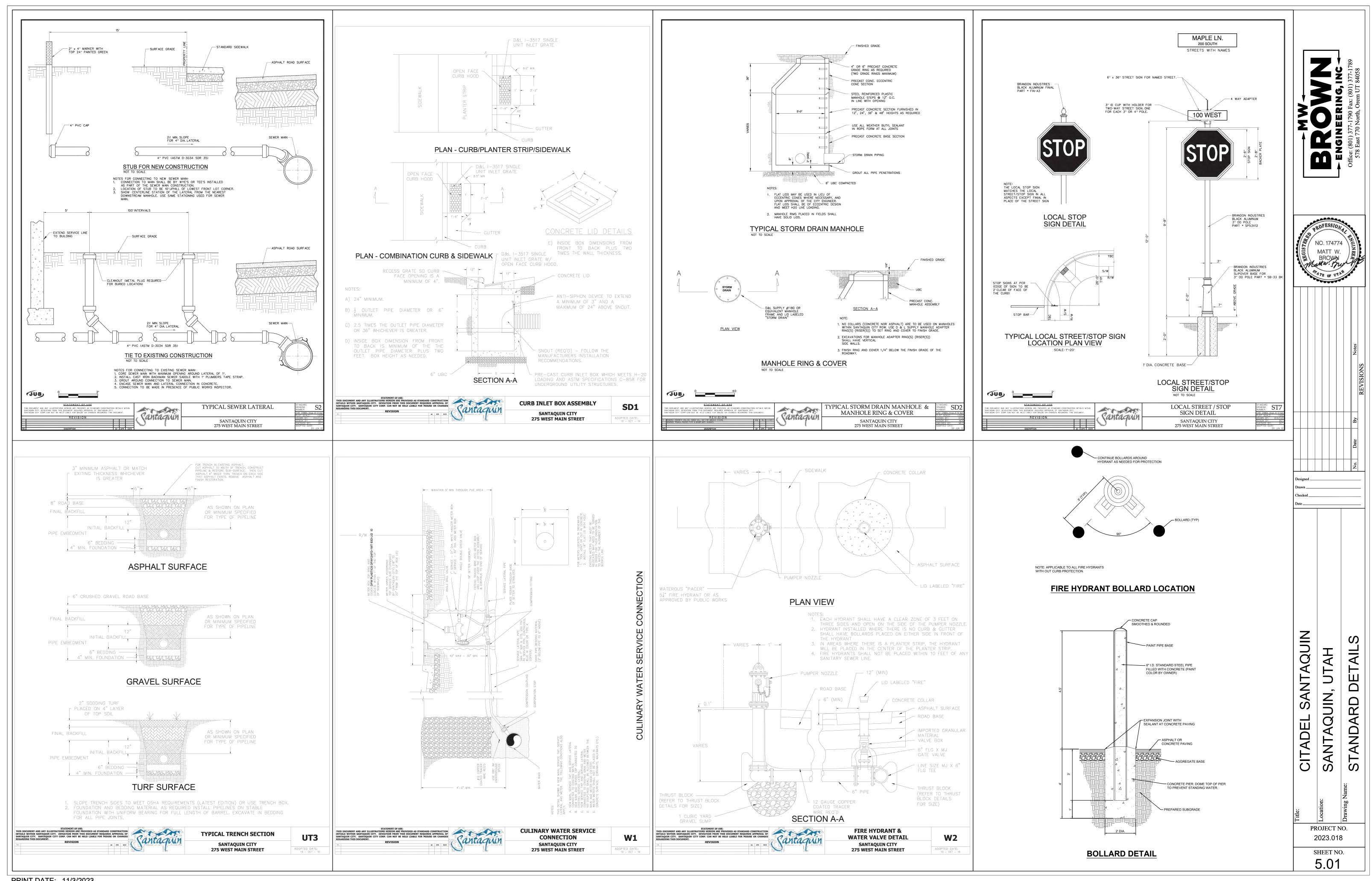












Precast box

1. GENERAL

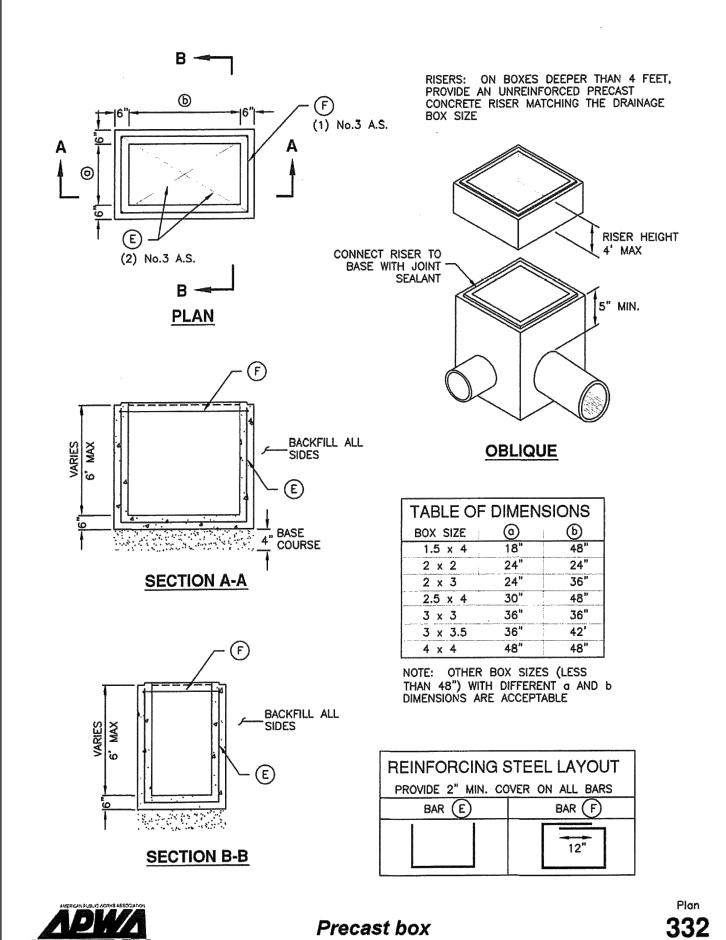
- A. The drawing shows typical pipe connections. Refer to construction drawings for connection locations or refer to field location of existing piping when engineering pipe connection to the box.
- B. This drawing is acceptable where the water table elevation is less than 3 feet above the floor of the box. If elevation of water table is higher, engineering calculations and drawings must be submitted to and approved by the ENGINEER.
- C. Submit bar design detail for ENGINEER's review.

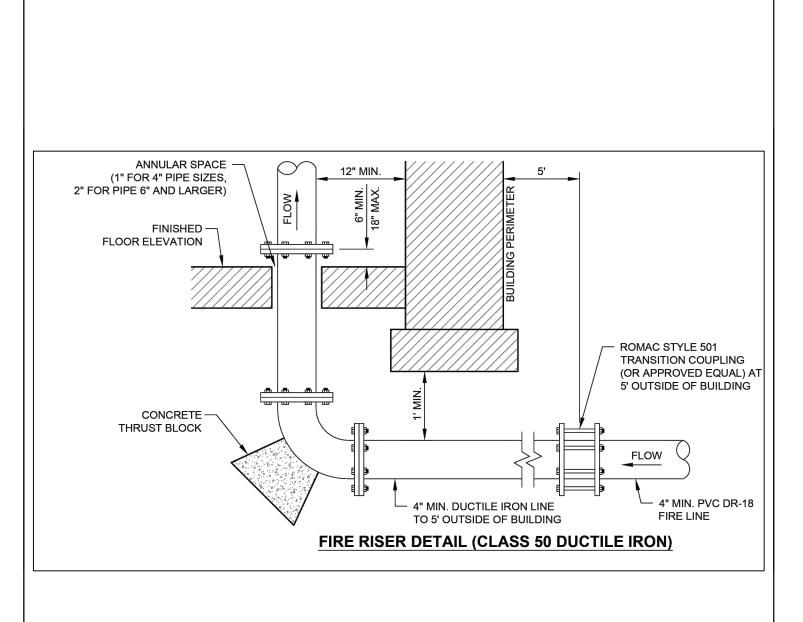
2. PRODUCTS

- A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
- B. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.
- C. Precast Concrete: Class 4000 precast, APWA Section 03 40 00.
- D. Reinforcement: Deformed, 60 ksi yield grade steel, ASTM A615. Coated steel is not required for small drainage structures shown on this drawing.
- E. Frame and Cover (or Grate): Use the appropriate unit indicated in the Contract Documents.
- F. Joint Sealant: Rubber-based, compressible.

3. EXECUTION

- A. Concrete Placement: Provide 2-inches of concrete cover over reinforcing steel.
- B. Lifting Points: Provide at least 2 lifting points per section that avoid interference with the reinforcing steel and that are designed according to PCI (Prestressed Concrete Institute) design handbook. Lift only from the engineered lifting points.
- C. Depth: Drainage boxes and riser combinations that exceed 8-feet from finished grade to the bottom of the box requires ENGINEER's approval. Submit design calculations and shop drawings.
- D. Core Holes:
- Provide core holes that are at least 4" larger than attaching outer pipe diameter. Cut core holes at the manufacturing plant unless ENGINEER permits field core holes.
- 2) Center core holes to leave 2" of concrete measured horizontally from inside wall of the box to core hole. Locate core hole vertically so bottom of core hole will be at or above floor elevation with at least 5-inches of concrete directly above the core hole to the top of the box.
- 3) Deviations from core hole tolerances require shop drawings. Shop drawings will identify lifting point number and location.
- E. Precast Top: Design precast top for AASHTO HL-93 live loads and submit rebar detail and stamped design drawings to ENGINEER. Show connection detail for frame and grate or cover.





PAVEMENT SECTIONS

3" ASPHALT
10" ROAD BASE
PARKING AREAS

3.5" ASPHALT

12" ROAD BASE

DRIVE AREAS

NOTE: PAVEMENT THICKNESSES REFERENCED FROM GEOTECHNICAL ENGINEERING STUDY SECTION 11.0 PREPARED BY CMT TECHNICAL SERVICES.

NO. 174774 MATT W. BROWN BROWN BROWN MATT W. BROWN BROWN BROWN BROWN MATT W. BROWN B

332

Combination catch basin and cleanout box

1. GENERAL

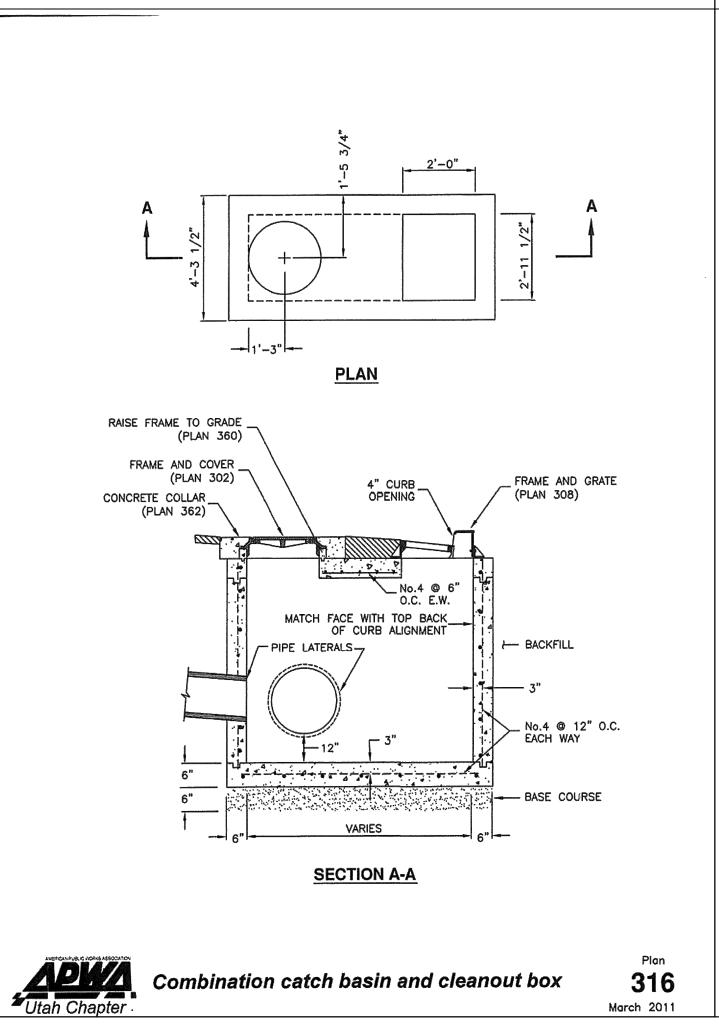
A. The drawing shows typical pipe connections. Refer to construction drawings for connection locations or refer to field location of existing piping when engineering pipe connection to the box.

2. PRODUCTS

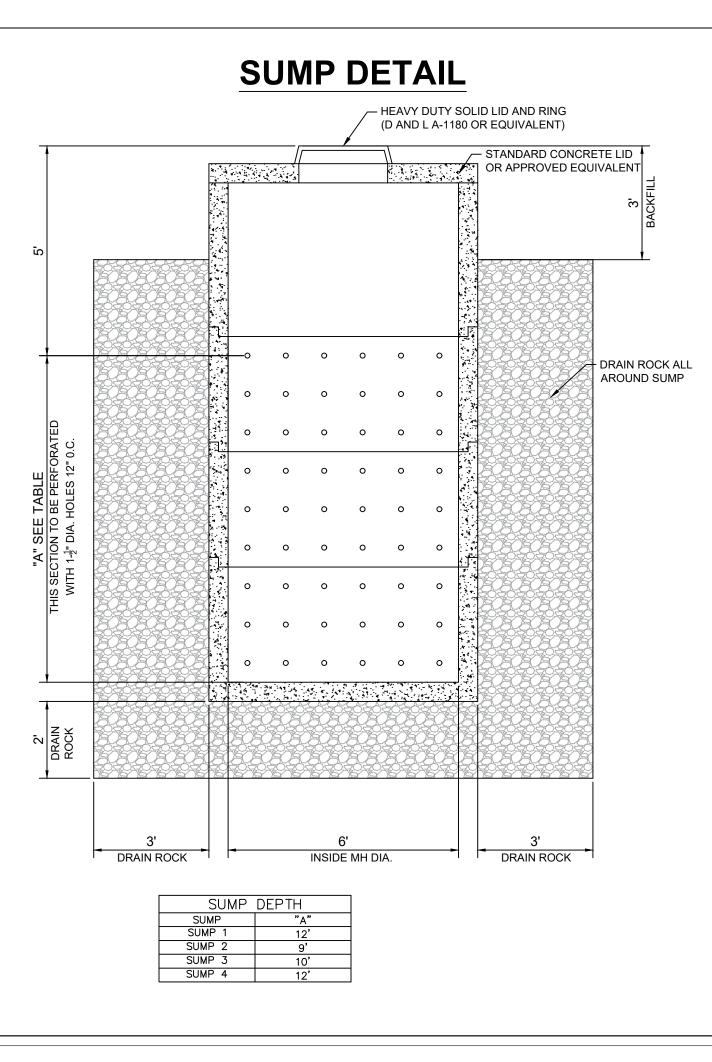
- A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
- B. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.C. Concrete: Class 4000, APWA Section 03 30 04.
- D. Reinforcement: Deformed, 60 ksi yield grade steel, ASTM A615.
- E. Ladder Rungs: Plastic, or plastic coated steel typically 8-inches wide.

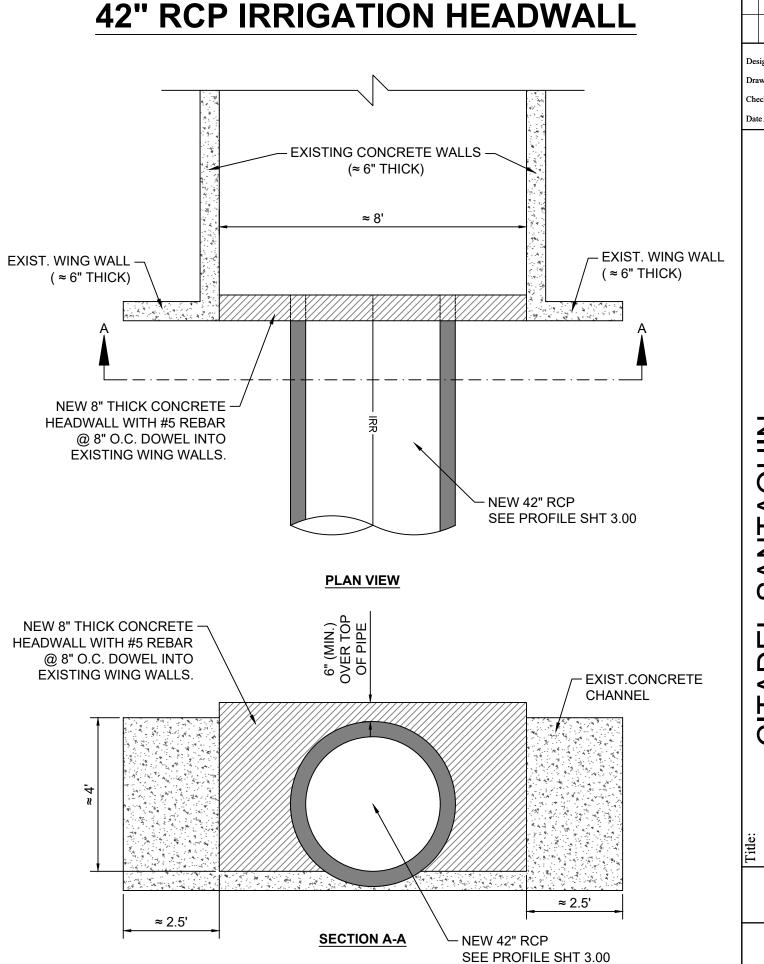
3. EXECUTION

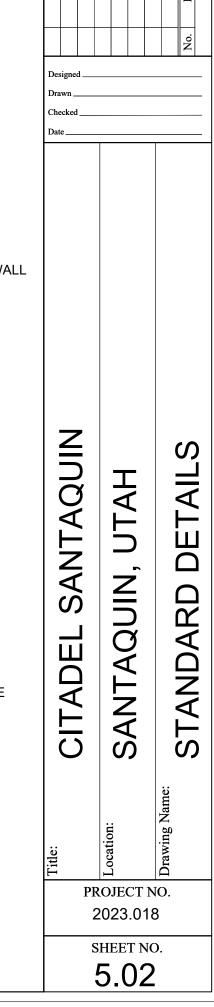
- A. Base Course Placement: APWA Section 32 11 23. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
- B. Curb Face Opening: Make opening at least 4-inches high. Provide at least a 2-inch drop between the "begin warp" line in the gutter flow-line and the top of the grate at the curb face opening.
- C. Ladder Rungs: Provide rungs in boxes over 6 feet deep. When measured from the floor of the box, place bottom rung the greater distance of 4 feet from the floor of the box or 1 foot above the top of the pipe. Place top rung within 3 feet of bottom of box ceiling.
- D. Concrete Placement: APWA Section 03 30 10. Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent.
- E. Backfill: Provide backfill against all sides of the box. Pea gravel and recycled RAP aggregate is NOT ALLOWED. Water jetting is NOT allowed. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23 26.



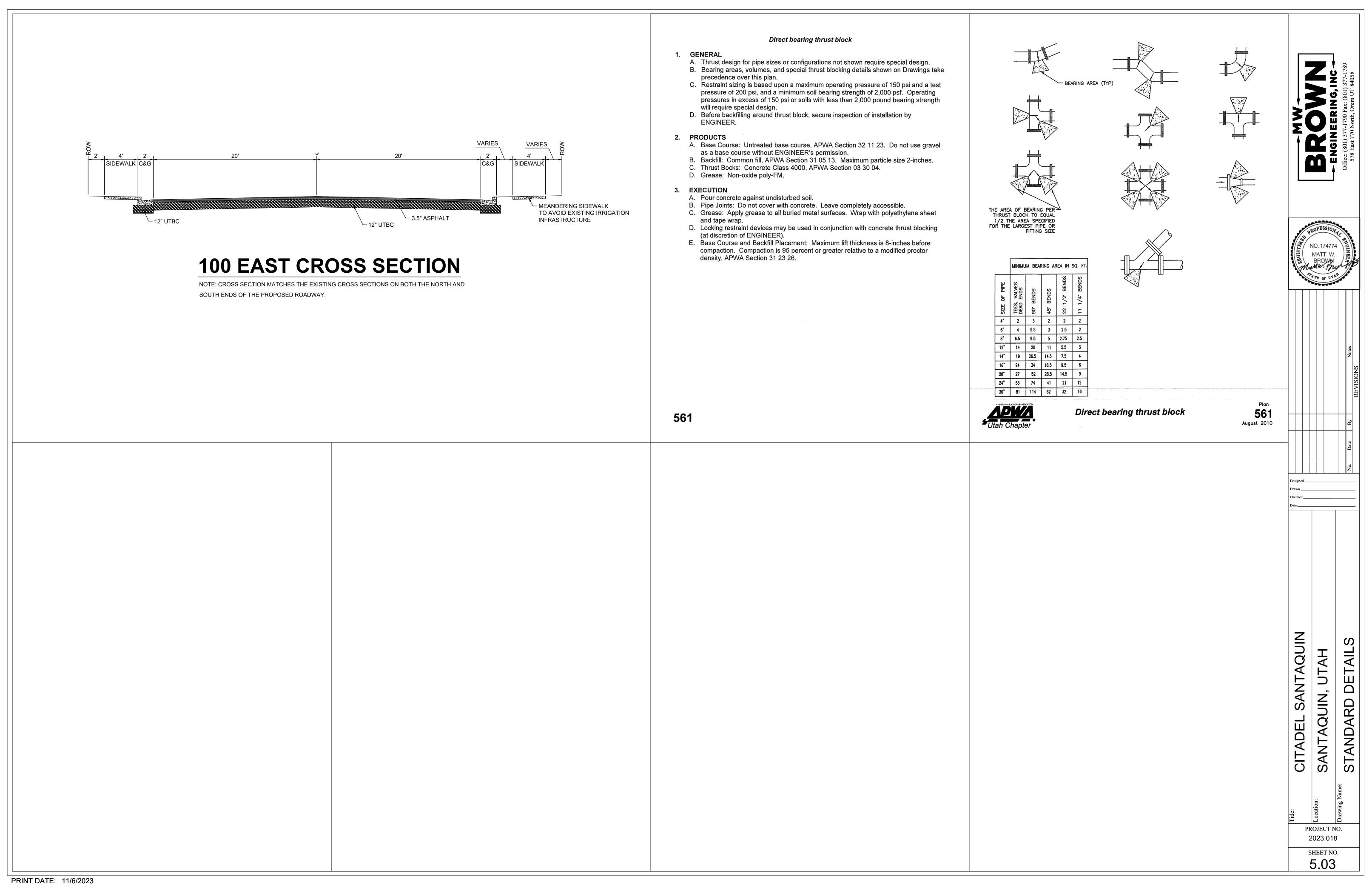
June 2010







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CULTEC RECHARGER 902HD® SPECIFICATIONS CULTEC RECHARGER® 902HD CHAMBERS ARE DESIGNED FOR UNDERGROUND STORMWATER MANAGEMENT. THE CHAMBERS MAY BE USED FOR RETENTION, RECHARGING, DETENTION OR CONTROLLING THE FLOW OF ON-SITE STORMWATER RUNOFF. 1. THE CHAMBERS SHALL BE MANUFACTURED IN THE U.S.A. OR CANADA BY CULTEC, INC. OF BROOKFIELD, CT (CULTEC.COM, 203-775-4416). 2. THE CHAMBERS SHALL BE DESIGNED AND TESTED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". THE LOAD CONFIGURATION SHALL INCLUDE: A. INSTANTANEOUS AASHTO DESIGN TRUCK LIVE LOAD AT MINIMUM COVER B. MAXIMUM PERMANENT (50-YEAR) COVER LOAD C. 1-WEEK PARKED AASHTO DESIGN TRUCK LOAD 3. THE CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F3430-20 "STANDARD SPECIFICATION FOR CELLULAR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". 4. THE INSTALLED CHAMBER SYSTEM SHALL PROVIDE RESISTANCE TO THE LOADS AND LOAD FACTORS AS DEFINED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12, WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS. THE STRUCTURAL DESIGN OF THE CHAMBERS SHALL INCLUDE THE FOLLOWING: A. THE CREEP MODULUS SHALL BE 50-YEAR AS SPECIFIED IN ASTM F3430 B. THE MINIMUM SAFETY FACTOR FOR LIVE LOADS SHALL BE 1.75 C. THE MINIMUM SAFETY FACTOR FOR DEAD LOADS SHALL BE 1.95 5. THE CHAMBER SHALL BE STRUCTURAL FOAM INJECTION MOLDED OF BLUE VIRGIN HIGH MOLECULAR WEIGHT IMPACT-MODIFIED POLYPROPYLENE. 6. THE CHAMBER SHALL BE ARCHED IN SHAPE. 7. THE CHAMBER SHALL BE OPEN-BOTTOMED. 8. THE CHAMBER SHALL BE JOINED USING AN INTERLOCKING OVERLAPPING RIB METHOD. CONNECTIONS MUST BE FULLY SHOULDERED OVERLAPPING RIBS, HAVING NO SEPARATE 9. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC RECHARGER® 902HD SHALL BE 48 INCHES (1219 MM) TALL, 78 INCHES (1981 MM) WIDE AND 4.25 FEET (1.30 M) LONG. THE INSTALLED LENGTH OF A JOINED RECHARGER 902HD SHALL BE 3.67 FEET (1.12 M). 10. MULTIPLE CHAMBERS MAY BE CONNECTED TO FORM DIFFERENT LENGTH ROWS. EACH ROW SHALL BEGIN AND END WITH A SEPARATELY FORMED CULTEC RECHARGER® 902HD END CAP. MAXIMUM INLET OPENING ON THE END CAP IS 30 INCHES (750 MM) HDPE OR 36 INCHES (900 MM) PVC. 11. THE CHAMBER SHALL HAVE TWO SIDE PORTALS TO ACCEPT CULTEC HVLV™ FC-48 FEED CONNECTORS TO CREATE AN INTERNAL MANIFOLD. MAXIMUM ALLOWABLE PIPE SIZE IN THE SIDE PORTAL IS 10 INCHES (250 MM) HDPE AND 12 INCHES (300 MM) PVC. 12. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV™ FC-48 FEED CONNECTOR SHALL BE 12 INCHES (305 MM) TALL, 16 INCHES (406 MM) WIDE AND 49 INCHES (1245 13. THE NOMINAL STORAGE VOLUME OF THE RECHARGER 902HD CHAMBER SHALL BE 17.31 FT³/ FT (1.61 M³ / M) - WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF A JOINED RECHARGER 902HD SHALL BE 63.47 FT³ / UNIT (1.80 M³ / UNIT) - WITHOUT STONE. 14. THE NOMINAL STORAGE VOLUME OF THE HVLV™ FC-48 FEED CONNECTOR SHALL BE 0.913 FT³ / FT (0.085 M³ / M) - WITHOUT STONE. 15. THE RECHARGER 902HD CHAMBER SHALL HAVE 5 CORRUGATIONS. 16. THE CHAMBER SHALL BE CAPABLE OF ACCEPTING A 6 INCH (150 MM) INSPECTION PORT OPENING AT THE TOP CENTER OF EACH CHAMBER, CENTERED ON THE CORRUGATION 17. THE CHAMBER SHALL BE MANUFACTURED IN A FACILITY EMPLOYING CULTEC'S QUALITY CONTROL AND ASSURANCE PROCEDURES 18. MAXIMUM ALLOWABLE COVER OVER THE TOP OF THE CHAMBER SHALL BE 8.3 FEET (2.53 END CAP PARAMETERS 1. THE CULTEC RECHARGER 902HD END CAP (REFERRED TO AS 'END CAP') SHALL BE MANUFACTURED IN THE U.S.A. BY CULTEC, INC. OF BROOKFIELD, CT (CULTEC.COM, 203-775-4416). 2. THE END CAP SHALL BE TWIN-SHEET THERMOFORMED OF VIRGIN HIGH MOLECULAR WEIGHT POLYETHYLENE. 3. THE END CAP SHALL BE JOINED AT THE BEGINNING AND END OF EACH ROW OF CHAMBERS USING AN INTERLOCKING OVERLAPPING RIB METHOD. CONNECTIONS MUST BE FULLY SHOULDERED OVERLAPPING RIBS, HAVING NO SEPARATE COUPLINGS. 4. THE NOMINAL DIMENSIONS OF THE END CAP SHALL BE 48.5 INCHES (1231 MM) TALL, 78 INCHES (1982 MM) WIDE AND 9.7 INCHES (246 MM) LONG, WHEN JOINED WITH A RECHARGER 902HD CHAMBER, THE INSTALLED LENGTH OF THE END CAP SHALL BE 6.2 INCHES (157 MM). 5. THE NOMINAL STORAGE VOLUME OF THE END CAP SHALL BE 5.34 $\mathrm{FT}^3/\mathrm{FT}$ (0.50 $\mathrm{M}^3/\mathrm{M})$ -WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF AN INTERLOCKED END CAP SHALL BE 2.76 FT³ / UNIT (0.08 M³ / UNIT) - WITHOUT STONE. 6.MAXIMUM INLET OPENING ON THE END CAP IS 30 INCHES (750 MM) HDPE OR 36 INCHES (900 MM) PVC. 7. THE END CAP SHALL PROVIDE RESISTANCE TO THE LOADS AND LOAD FACTORS AS DEFINED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12. 902HD 1.0

CULTEC HVLV FC-48 FEED CONNECTOR PRODUCT SPECIFICATIONS

CULTEC HVLV FC-48 FEED CONNECTORS ARE DESIGNED TO CREATE AN INTERNAL MANIFOLD FOR CULTEC RECHARGER MODEL 902HD STORMWATER CHAMBERS.

FEED CONNECTOR PARAMETERS 1. THE FEED CONNECTOR SHALL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT.

- (203-775-4416 OR 1-800-428-5832)
- 2. THE FEED CONNECTOR SHALL BE VACUUM THERMOFORMED OF BLACK HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMWHDPE).
- 3. THE FEED CONNECTOR SHALL BE ARCHED IN SHAPE.
 - 4. THE FEED CONNECTOR SHALL BE OPEN-BOTTOMED.
 - 5. THE NOMINAL DIMENSIONS OF THE CULTEC HVLV FC-48 FEED CONNECTOR SHALL BE 12 INCHES (305 mm) TALL, 16 INCHES (406 mm) WIDE AND 49 INCHES (1245 mm) LONG.
 - 6. THE NOMINAL STORAGE VOLUME OF THE HVLV FC-48 FEED CONNECTOR SHALL BE 0.913 FT3 / FT (0.085 m^3 / m) - WITHOUT STONE.
 - 7. THE HVLV FC-48 FEED CONNECTOR SHALL HAVE 4 CORRUGATIONS 8. THE HVLV FC-48 FEED CONNECTOR MUST BE FORMED AS A WHOLE UNIT HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT
 - SHALL FIT INTO THE SIDE PORTALS OF THE CULTEC RECHARGER STORMWATER CHAMBER AND ACT AS CROSS FEED CONNECTIONS CREATING AN INTERNAL MANIFOLD 9. THE FEED CONNECTOR SHALL BE DESIGNED TO WITHSTAND AASHTO HS-25 DEFINED LOADS
 - WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS. 10. THE FEED CONNECTOR SHALL BE MANUFACTURED IN AN ISO 9001:2008 CERTIFIED FACILITY.

CULTEC NO. 410™ NON-WOVEN GEOTEXTILE

CULTEC NO. 410™ NON-WOVEN GEOTEXTILE MAY BE USED WITH CULTEC CONTACTOR® AND RECHARGER® STORMWATER INSTALLATIONS TO PROVIDE A BARRIER THAT PREVENTS SOIL

GEOTEXTILE PARAMETERS 1. THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416

- 2. THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE 3. THE GEOTEXTILE SHALL HAVE A TYPICAL WEIGHT OF 4.5 OZ/SY (142 G/M).
- 4. THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH VALUE OF 120 LBS (533 N) PER ASTM D4632 TESTING METHOD.
- 5. THE GEOTEXTILE SHALL HAVE AN ELONGATION @ BREAK VALUE OF 50% PER ASTM D4632
- TESTING METHOD. 6. THE GEOTEXTILE SHALL HAVE A MULLEN BURST VALUE OF 225 PSI (1551 KPA) PER ASTM
- D3786 TESTING METHOD. 7. THE GEOTEXTILE SHALL HAVE A PUNCTURE STRENGTH VALUE OF 65 LBS (289 N) PER ASTM
- D4833 TESTING METHOD.
- 8. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE VALUE OF 340 LBS (1513 N) PER ASTM D6241 TESTING METHOD.
- 9. THE GEOTEXTILE SHALL HAVE A TRAPEZOID TEAR VALUE OF 50 LBS (222 N) PER ASTM
- 10. THE GEOTEXTILE SHALL HAVE A AOS VALUE OF 70 U.S. SIEVE (0.212 MM) PER ASTM D4751 TESTING METHOD
- 11. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY VALUE OF 1.7 SEC-1 PER ASTM D4491
- TESTING METHOD 12. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATE VALUE OF 135 GAL/MIN/SF (5500
- 13. THE GEOTEXTILE SHALL HAVE A UV STABILITY @ 500 HOURS VALUE OF 70% PER ASTM D4355 TESTING METHOD.

CULTEC NO. 4800™ WOVEN GEOTEXTILE

L/MIN/SM) PER ASTM D4491 TESTING METHOD.

CULTEC NO. 4800 WOVEN GEOTEXTILE IS DESIGNED AS A UNDERLAYMENT TO PREVENT SCOURING CAUSED BY WATER MOVEMENT WITHIN THE CULTEC CHAMBERS AND FEED CONNECTORS UTILIZING THE CULTEC MANIFOLD FEATURE. IT MAY ALSO BE USED AS A COMPONENT OF THE CULTEC SEPARATOR ROW TO ACT AS A BARRIER TO PREVENT SOIL/CONTAMINANT INTRUSION INTO THE STONE WHILE ALLOWING FOR MAINTENANCE.

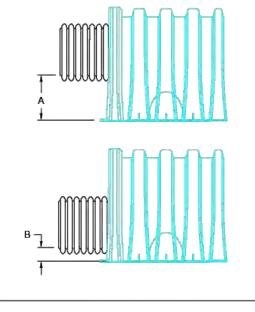
GEOTEXTILE PARAMETERS

- THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT.
- (203-775-4416 OR 1-800-428-5832) THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE
- THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH OF 550 X 550 LBS (2,448 X 2,448 N) PER ASTM D4632 TESTING METHOD.
- THE GEOTEXTILE SHALL HAVE A ELONGATION @ BREAK RESISTANCE OF 20 X 20% PER ASTM D4632 TESTING METHOD. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE OF 5,070 X
- 5.070 LBS/FT (74 X 74 KN/M) PER ASTM D4595 TESTING METHOD
- 6. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 2% STRAIN OF 960 X 1,096 LBS/FT
- (14 X 16 KN/M) PER ASTM D4595 TESTING METHOD.
- OF 2,740 X 2, 740 LBS/FT (40 X 40 KN/M) PER ASTM D4595 TESTING METHOD. 8. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 10% STRAIN OF 4,800 X 4,800 LBS/FT (70 X 70 KN/M) PER ASTM D4595 TESTING
- 9. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE RESISTANCE OF 1,700 LBS (7,560
- N) PER ASTM D6241 TESTING METHOD. 10. THE GEOTEXTILE SHALL HAVE A TRAPEZOIDAL TEAR RESISTANCE OF 180 X 180
- LBS (801 X 801 N) PER ASTM D4533 TESTING METHOD. 11. THE GEOTEXTILE SHALL HAVE AN APPARENT OPENING SIZE OF 40 US STD. SIEVE
- (0.425 MM) PER ASTM D4751 TESTING METHOD. 12. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY RATING OF 0.15 SEC-1 PER ASTM
- D4491 TESTING METHOD. 13. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATING OF 11.5 GPM/FT2 (470
- LPM/M2) PER ASTM D4491 TESTING METHOD.
- 14. THE GEOTEXTILE SHALL HAVE A UV RESISTANCE OF 80% @ 500 HRS. PER ASTM D4355 TESTING METHOD.

GENERAL NOTES



*THE TYPICAL INVERT TABLE ABOVE IS BASED ON THE INSIDE DIAMETER OF STANDARD CORRUGATED PLASTIC PIPE. THE HEAVY DUTY END CAP HAS PRE-MARKED TRIM LINES FOR PIPE DIAMETERS 12" (300mm), 15" (375mm), 18" (450mm) AND 24" (600mm). PIPES OF ANY SIZE AND MATERIAL UP TO 24" MAY BE PLACED AT CUSTOM LOCATIONS AND CUSTOM INVERTS. THE CROWN OF THE PIPE MUST REMAIN A MINIMUM OF 4" (100mm) FROM THE EDGE OF THE HEAVY DUTY END CAP



FIELD PLACED CLASS "C" CONCRETE (OPTION 2) FLUSH WITH PAVEMENT PAVEMENT OR FINISHED GRADE 8.0" [203mm] MIN. 16.0" [406 mm] 6.0" [152 mm] **CULTEC HVLV FC-48 CULTEC INSPECTION PORT - ZOOM DETAIL**

9.0" [229 mm] MIN.

DLECTION CHAMBERS." THE LOAD CONFIGURATION SHALL INCLUDE: INSTANTANEOUS AASHTO DESIGN TRUCK LIVE LOAD AT MINIMUM COVER

3.a. THE CREEP MODULUS SHALL BE 50-YEAR AS SPECIFIED IN ASTM F3430

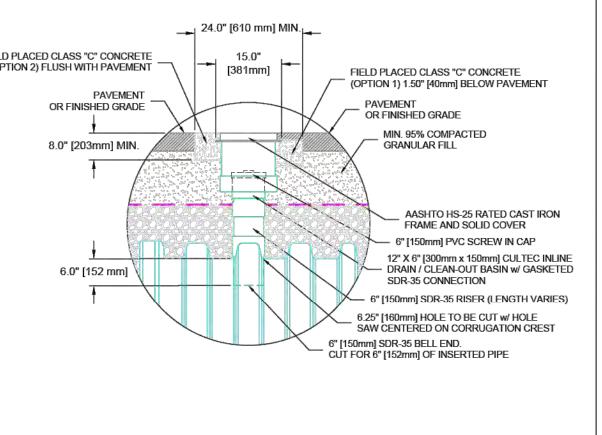
THE MINIMUM SAFETY FACTOR FOR LIVE LOADS SHALL BE 1.75.

THE MINIMUM SAFETY FACTOR FOR DEAD LOADS SHALL BE 1.95

MAXIMUM PERMANENT (50-YEAR) COVER LOAD

1-WEEK PARKED AASHTO DESIGN TRUCK LOAD

49.0" [1243 mm] ——



PAVEMENT OR FINISHED GRADE

MINIMUM 95% COMPACTED FILL

WHERE SPECIFIED

PAVEMENT SUB-BASE (WHEN APPLICABLE)

CULTEC NO. 410 NON-WOVEN GEOTEXTILE

CULTEC HVLV FC-48 FEED CONNECTOR

1-2 INCH [25-50mm] WASHED CRUSHED

12.0 INCH [305mm] MIN. WIDTH OF 1-2 INCH

[25-50mm] WASHED CRUSHED STONE BORDER

12.0" [305 mm] MIN. FOR PAVED

18.0" [457mm] MIN. FOR UNPAVED

12.0" [305 mm] MIN

48.0" [1219 mm]

9.0" [229 mm] MIN

12.0 INCH [305mm] MIN. DEPTH OF

STONE ABOVE CHAMBERS

CULTEC RECHARGER 902HD

SURROUNDING ALL CHAMBERS

9.0 INCH [229mm] MIN. DEPTH OF

STONE BENEATH CHAMBERS

CULTEC NO. 410 NON-WOVEN GEOTEXTILE

AROUND STONE. TOP AND SIDES MANDATOR

BOTTOM PER ENGINEER'S DESIGN PREFERENCE

1-2 INCH [25-50mm] WASHED CRUSHED

HEAVY-DUTY CHAMBER

AROUND STONE. TOP AND SIDES MANDATORY

BOTTOM PER ENGINEER'S DESIGN PREFERENCE

6" [150mm] DIA. INSPECTION PORT TRIM LOCATION

78.0" [1981 mm]

44 0" [1118 mm]

INSTALLED LENGTH

----- 51.0" [1294 mm] ------

BEGINNING OF RUN -

MODEL 902HD END CAP

48.0" [1219 mm]

MAXIMUM PIPE SIZE:

12" [300mm] PVC

78.0" [1981 mm]

— 51.0" [1294 mm] ——

(ACCOMMODATES CULTEC HVLV FC-48 FEED CONNECTOR OR STORM PIPE)

CULTEC RECHARGER 902HD CHAMBER

INSTALLED LENGTH ADJUSTMENT = 0.58' [.176m]

STORAGE = 17.31 CF/FT [1.608 m³/m]

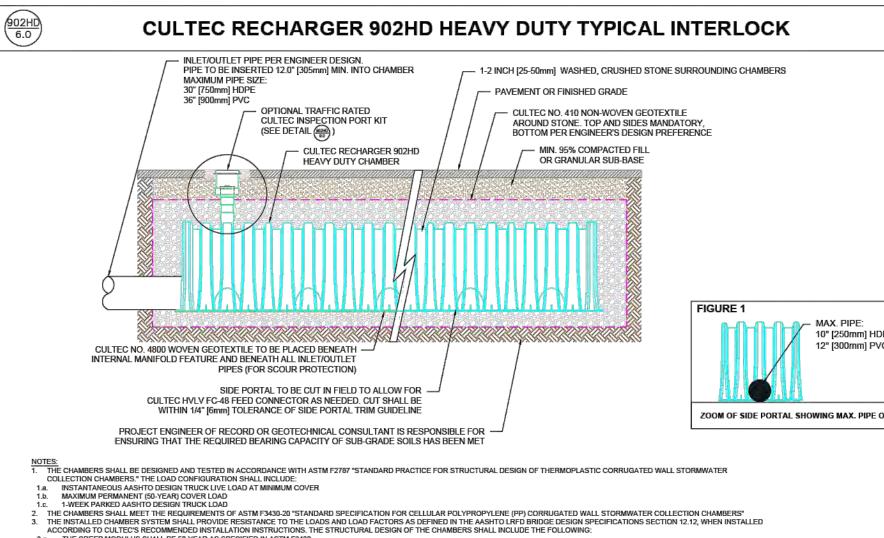
MODEL 902HD

SIDE PORTAL FOR OPTIONAL INTERNAL MANIFOLD

CULTEC RECHARGER 902HD HEAVY DUTY THREE VIEW

HIDDEN END

MODEL 902HD

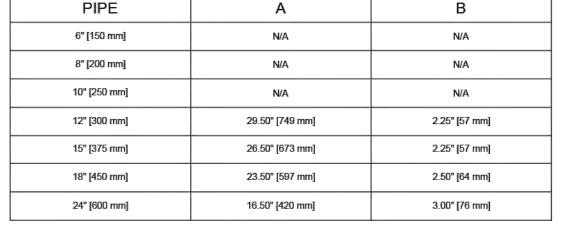


THE CREEP MODULUS SHALL BE 50-YEAR AS SPECIFIED IN ASTM F3430 THE MINIMUM SAFETY FACTOR FOR LIVE LOADS SHALL BE 1.75 THE MINIMUM SAFETY FACTOR FOR DEAD LOADS SHALL BE 1.95

CULTEC STORMWATER CHAMBER

CULTEC INTERNAL MANIFOLD - OPTIONAL INSPECTION PORT DETAIL

)	OLILO GI OKINIV	ATER OTAMBER	•
PROJECT NO:	-	DATE:	03/2020
DESIGNED BY:	TECH	CHECKED BY:	TECH
SCALE:	N.T.S.	SHEET NO:	1 OF 2





CULTEC, Inc. Subsurface Stormwater Management Systems

P.O. Box 280 878 Federal Road Brookfield, CT 06804 www.cultec.com

PH: (203) 775-4416 PH: (800) 4-CULTEC FX: (203) 775-1462 tech@cultec.com

THIS DRAWING WAS PREPARED TO SUPPORT THE PROJECT ENGINEER OF RECORD FOR THE PROPOSED SYSTEM. IT IS THE ULTIMATE RESPONSIBILITY OF THE PROJECT ENGINEER OF RECORD TO ENSURE THAT THE CULTEC SYSTEM'S DESIGN IS IN FULL COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. IT IS THE PROJECT ENGINEER OF RECORD'S RESPONSIBILITY TO ENSURE THAT THE CULTEC PRODUCTS ARE DESIGNED IN ACCORDANCE WITH CULTEC'S MINIMUM REQUIREMENTS. CULTEC DOES NOT APPROVE PLANS, SIZING, OR SYSTEM DESIGNS.

FEED CONNECTOR THREE VIEW

12.0' [3.66m] MIN.

CULTEC NO. 4800 WOVEN GEOTEXTILE

PLACED BENEATH INLET PIPES

7.5' [2.29m] MIN.

CULTEC NO. 4800 WOVEN GEOTEXTILE PLACED BENEATH FEED CONNECTORS

MIN. 95% COMPACTED FILL

CULTEC RECHARGER 902HD -

12.0" [305 mm] MIN. -

HEAVY DUTY CHAMBER

OR GRANULAR SUB-BASE

8.3' [2.53m] MAX.

COVER DEPTI

PIPE PER ENGINEER DESIGN

CULTEC RECHARGER 902HD HEAVY DUTY PLAN VIEW

1-2 INCH [25-50mm] WASHED, CRUSHED STONE

WHERE SPECIFIED

PROJECT ENGINEER OF RECORD OR GEOTECHNICAL CONSULTANT IS RESPONSIBLE FOR

CULTEC NO. 4800 WOVEN GEOTEXTILE TO BE PLACED BENEATH INTERNAL MANIFOLD -

FEATURE AND BENEATH ALL INLET/OUTLET PIPES (FOR SCOUR PROTECTION)

CULTEC RECHARGER 902HD HEAVY DUTY CROSS SECTION

ENSURING THAT THE REQUIRED BEARING CAPACITY OF SUB-GRADE SOILS HAS BEEN MET

INCIDENT CHAMBERS SHALL BE DESIGNED AND TESTED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER

RDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS. THE STRUCTURAL DESIGN OF THE CHAMBERS SHALL INCLUDE THE FOLLOWING:

HE CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F3430-20 "STANDARD SPECIFICATION FOR CELLULAR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBER

THE INSTALLED CHAMBER SYSTEM SHALL PROVIDE RESISTANCE TO THE LOADS AND LOAD FACTORS AS DEFINED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12. WHEN INSTALLED

CULTEC HVLV FC-48 FEED CONNECTOR

87.0" [2211 mm] MIN.

CENTÈR TO CÉNTER

MAXIMUM PIPE SIZE:

36" [900mm] PVC

PIPE TO BE INSERTED 12.0 INCHES [305mm] MIN. INTO CHAMBER

DETAIL SHEET TRAFFIC APPLICATION

RECHARGER 902HD

PRINT DATE: 11/3/2023

CULTEC

MAXIMUM PIPE SIZE IN END CAP:

48.5" [1232mm]

30" [750 mm] HDPE

36" [900 mm] PVC

- 6.2" [157mm] INSTALLED

INSTALLED LENGTH ADJUSTMENT = 0.29' [.08m]

HIDDEN END

MODEL 902HD END CAP

CULTEC RECHARGER 902HD

HEAVY DUTY END CAP THREE VIEW

CULTEC RECHARGER 902HD END CAP

STORAGE = $5.34 \text{ CF/FT } [0.50 \text{m}^3/\text{m}]$

END OF RUN

MODEL 902HD

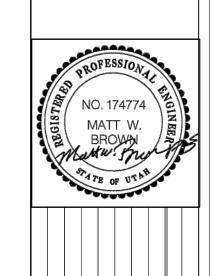
MODEL 902HD

- TRIM CUT-OUT TO UTILIZE

INTERNAL MANIFOLD FEATURE

HVLV FC-48

FEED CONNECTOR



ANTAQUIN TAH

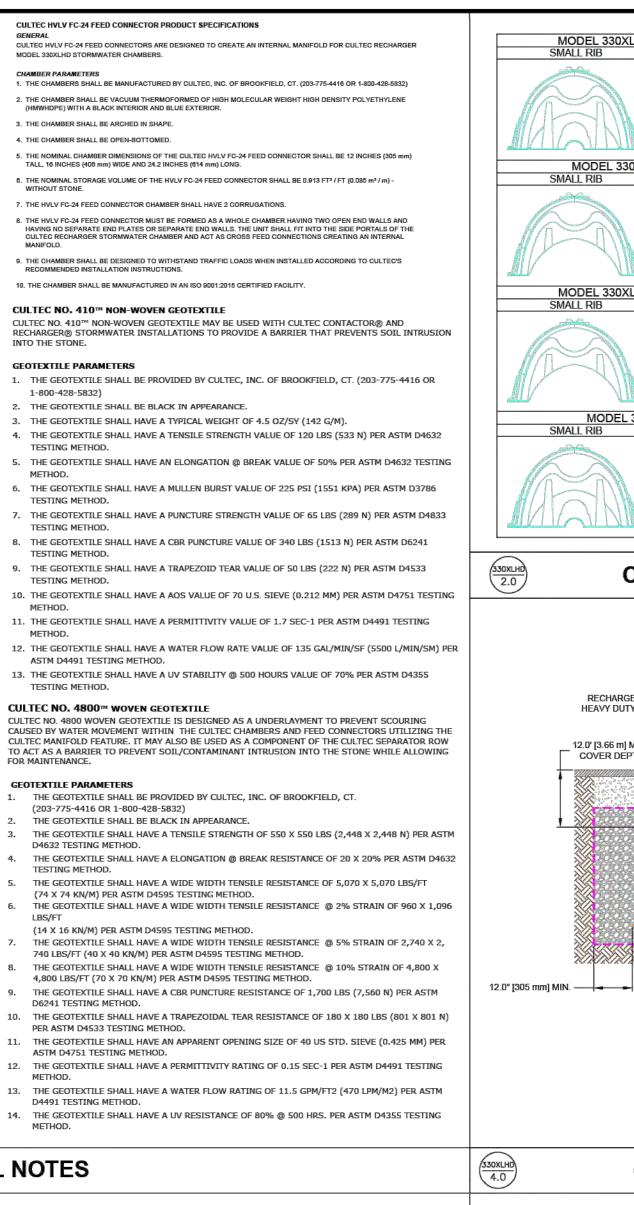
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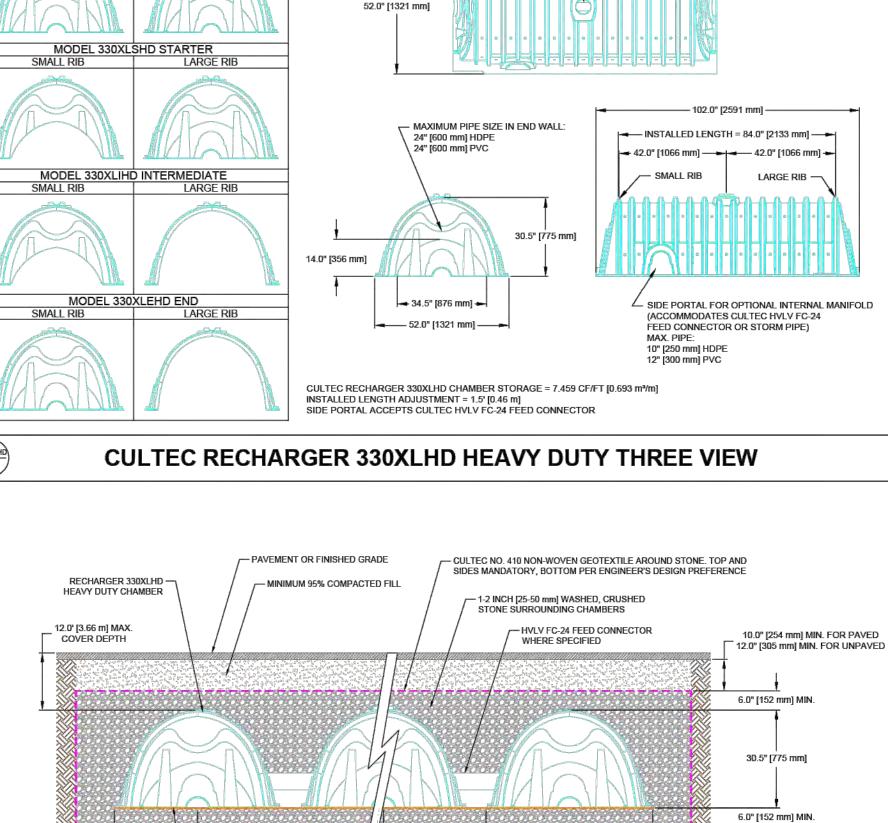
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PROJECT NO. 2023.018

SHEET NO. 5.04

CULTEC RECHARGER® 330XLHD PRODUCT SPECIFICATION CULTEC RECHARGER 330XLHD CHAMBERS ARE DESIGNED FOR UNDERGROUND STORMWATER MANAGEMENT. THE CHAMBERS MAY BE USED FOR RETENTION, RECHARGING, DETENTION OR CONTROLLING THE FLOW OF ON-SITE STORMWATER CHAMBER PARAMETERS 1. THE CHAMBERS SHALL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT, USA. (203-775-4416 OR 1-800-428-5832) 2. THE CHAMBER SHALL BE VACUUM THERMOFORMED OF HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMWHDPE) WITH A BLACK INTERIOR AND BLUE EXTERIOR. 3. THE CHAMBER SHALL BE ARCHED IN SHAPE. 4. THE CHAMBER SHALL BE OPEN-BOTTOMED. 5. THE CHAMBER SHALL BE JOINED USING AN INTERLOCKING OVERLAPPING RIB METHOD. CONNECTIONS MUST BE FULLY SHOULDERED OVERLAPPING RIBS, HAVING NO SEPARATE COUPLINGS OR SEPARATE END WALLS 6. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC RECHARGER 330XLHD SHALL BE 30.5 INCHES (775 mm) TALL, 52 INCHES (1321 mm) WIDE AND 8.5 FEET (2.59 m) LONG. THE INSTALLED LENGTH OF A JOINED RECHARGER 330XLHD SHALL BE 7 FEET (2.13 m). MAXIMUM INLET OPENING ON THE CHAMBER ENDWALL IS 24 INCHES (600 mm) HDPE 8. THE CHAMBER SHALL HAVE TWO SIDE PORTALS TO ACCEPT CULTEC HVLV® FC-24 FEED CONNECTORS TO CREATE AN INTERNAL MANIFOLD. THE NOMINAL DIMENSIONS OF EACH SIDE PORTAL SHALL BE 10.5 INCHES (267 mm) HIGH BY 11.5 INCHES (292 mm) WIDE. MAXIMUM ALLOWABLE OUTER DIAMETER (O.D.) PIPE SIZE IN THE SIDE PORTAL IS 9. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV FC-24 FEED CONNECTOR SHALL BE 12 INCHES (305 mm) TALL, 16 INCHES (406 mm) WIDE AND 24.2 INCHES (614 10. THE NOMINAL STORAGE VOLUME OF THE RECHARGER 330XLHD CHAMBER SHALL BE 7.459 FT* / FT (0.693 m* / m) - WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF A JOINED RECHARGER 330XLHD SHALL BE 52.213 FT3 / UNIT (1.478 m3 / UNIT) - WITHOUT 11. THE NOMINAL STORAGE VOLUME OF THE HVLV FC-24 FEED CONNECTOR SHALL BE 0.913 FT3 / FT (0.085 m3 / m) - WITHOUT STONE. 12. THE RECHARGER 330XLHD CHAMBER SHALL HAVE FIFTY-SIX DISCHARGE HOLES BORED INTO THE SIDEWALLS OF THE UNIT'S CORE TO PROMOTE LATERAL CONVEYANCE OF WATER. 13. THE RECHARGER 330XLHD CHAMBER SHALL HAVE 16 CORRUGATIONS. 14. THE ENDWALL OF THE CHAMBER, WHEN PRESENT, SHALL BE AN INTEGRAL PART OF THE CONTINUOUSLY FORMED UNIT. SEPARATE END PLATES CANNOT BE USED WITH 15. THE RECHARGER 330XLRHD STAND ALONE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO FULLY FORMED INTEGRAL ENDWALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. 16 THE RECHARGER 330XI SHD STARTER UNIT MUST BE FORMED AS A WHOLE CHAMBER. HAVING ONE FULLY FORMED INTEGRAL ENDWALL AND ONE PARTIALLY FORMED INTEGRAL ENDWALL WITH A LOWER TRANSFER OPENING OF 14 INCHES (356 mm) HIGH X 34.5 INCHES (876 mm) WIDE. 17. THE RECHARGER 330XLIHD INTERMEDIATE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY OPEN ENDWALL AND ONE PARTIALLY FORMED INTEGRAL ENDWALL WITH A LOWER TRANSFER OPENING OF 14 INCHES (356 mm) HIGH 18. THE RECHARGER 330XLEHD END UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTEGRAL ENDWALL AND ONE FULLY OPEN END WALL AND HAVING NO SEPARATE END PLATES OR END WALLS. 19. THE HYLV FC-24 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT SHALL FIT INTO THE SIDE PORTALS OF THE RECHARGER 330XLHD AND ACT AS CROSS FEED CONNECTIONS. 20. CHAMBERS MUST HAVE HORIZONTAL STIFFENING FLEX REDUCTION STEPS BETWEEN 21 THE CHAMBER SHALL HAVE A 6 INCH (152 mm) DIAMETER RAISED INTEGRAL CAP AT THE TOP OF THE ARCH IN THE CENTER OF EACH UNIT TO BE USED AS AN OPTIONAL INSPECTION PORT OR CLEAN-OUT. 22.THE UNITS MAY BE TRIMMED TO CUSTOM LENGTHS BY CUTTING BACK TO ANY CORRUGATION. 23.THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2015 CERTIFIED FACILITY. 24 THE CHAMBER SHALL BE DESIGNED AND MANUFACTURED TO MEET THE MATERIAL AND STRUCTURAL REQUIREMENTS OF IAPMO PS 63-2019, INCLUDING RESISTANCE TO AASHTO H-10 AND H-20 HIGHWAY LIVE LOADS, WHEN INSTALLED IN ACCORDANCE WITH CULTEC'S INSTALLATION INSTRUCTIONS. 25.THE CHAMBER SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH THE SPECIFICATIONS OF NSAI IRISH AGREEMENT BOARD CERTIFICATE FOR CULTEC ATTENUATION AND INFILTRATION. 26.MAXIMUM ALLOWED COVER OVER TOP OF UNIT SHALL BE 12 FEET (3.66 m) 27.THE CHAMBER SHALL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CUI TEC'S RECOMMENDED INSTALL ATION INSTRUCTIONS





58.0" [1473 mm] MIN.

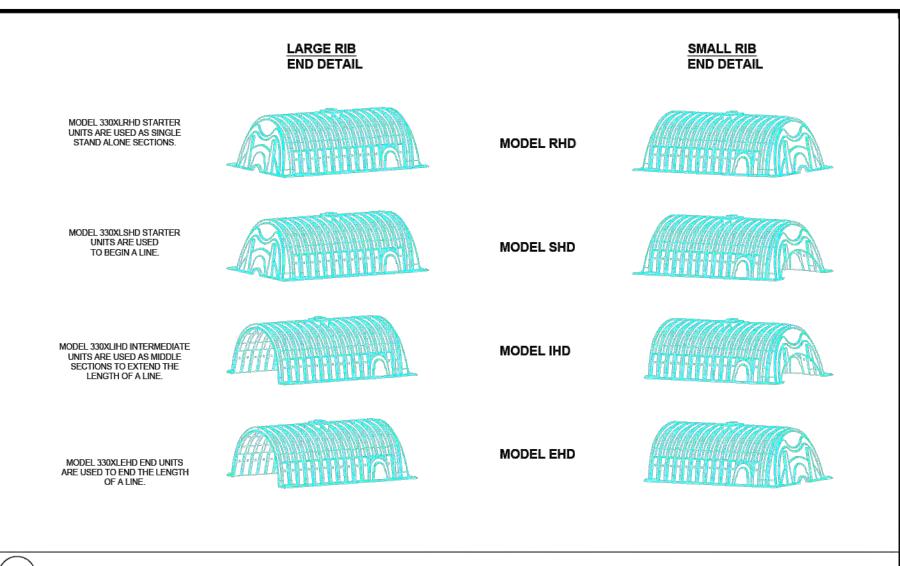
REQUIRED BEARING CAPACITY OF SUB-GRADE SOILS HAS BEEN MET

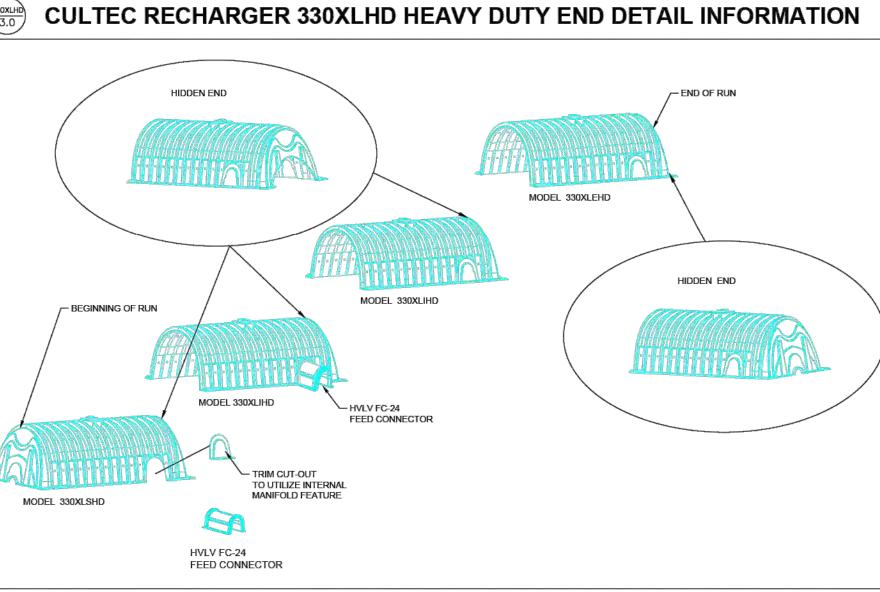
- CULTEC NO. 4800 WOVEN GEOTEXTILE TO BE PLACED BENEATH INTERNAL MANIFOLD

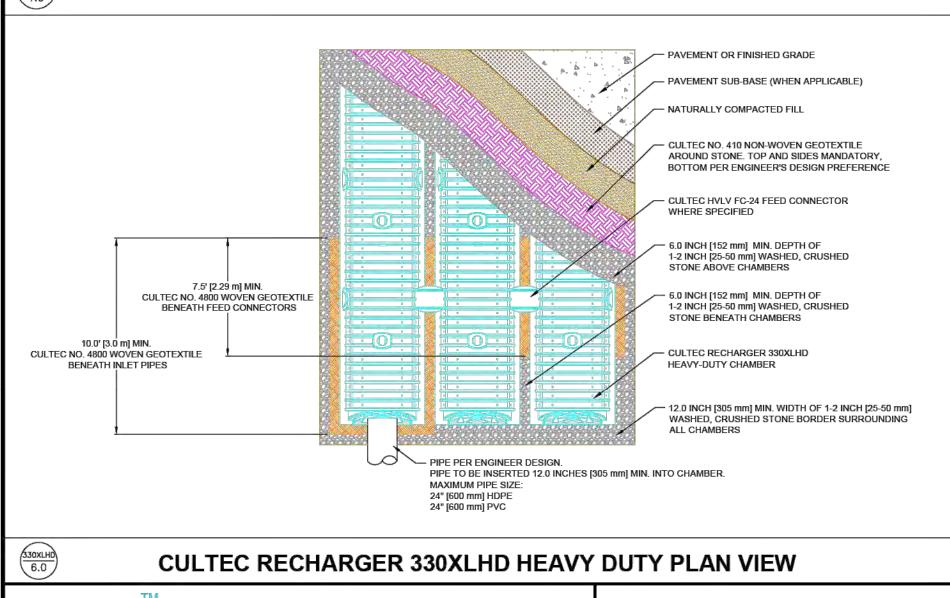
PROJECT ENGINEER OF RECORD OR GEOTECHNICAL CONSULTANT IS RESPONSIBLE FOR ENSURING THAT THE

FEATURE AND BENEATH ALL INLET/OUTLET PIPES (FOR SCOUR PROTECTION

6.0" [152 mm] DIA. INSPECTION PORT







GENERAL NOTES

CULTEC HVLV FC-24 FEED CONNECTOR PRODUCT SPECIFICATIONS

(HMWHDPE) WITH A BLACK INTERIOR AND BLUE EXTERIOR

TALL, 16 INCHES (408 mm) WIDE AND 24.2 INCHES (614 mm) LONG.

2. THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE

7 THE HVLV EC-24 FEED CONNECTOR CHAMBER SHALL HAVE 2 CORRUGATIONS

10. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2015 CERTIFIED FACILITY.

MODEL 330XLHD STORMWATER CHAMBERS

3. THE CHAMBER SHALL BE ARCHED IN SHAPE.

4. THE CHAMBER SHALL BE OPEN-BOTTOMED.

INTO THE STONE.

1-800-428-5832)

TESTING METHOD.

TESTING METHOD.

TESTING METHOD.

TESTING METHOD.

TESTING METHOD.

GEOTEXTILE PARAMETERS

TESTING METHOD.

D4632 TESTING METHOD.

D6241 TESTING METHOD.

METHOD.

PER ASTM D4533 TESTING METHOD.

ASTM D4751 TESTING METHOD

ASTM D4491 TESTING METHOD.

CULTEC NO. 4800™ WOVEN GEOTEXTILE

(203-775-4416 OR 1-800-428-5832)

THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE.

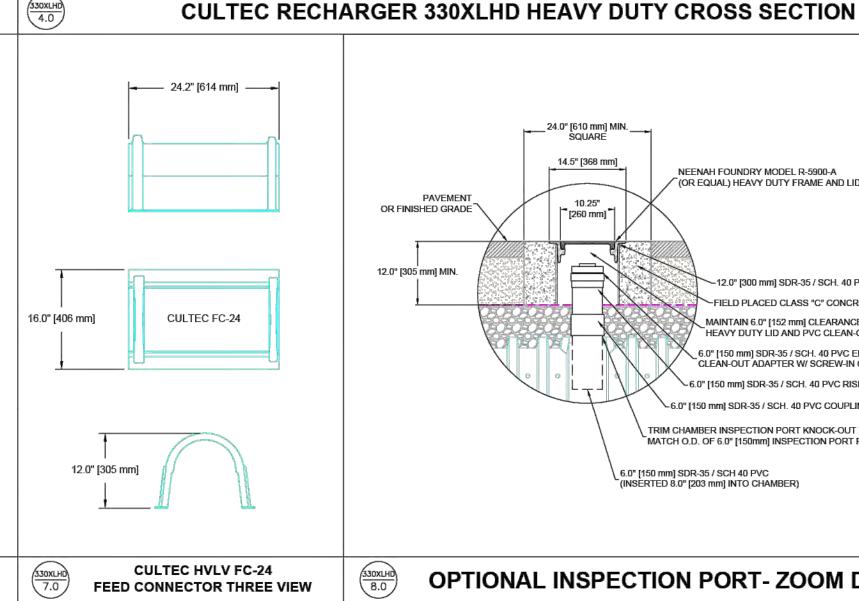
(74 X 74 KN/M) PER ASTM D4595 TESTING METHOD.

(14 X 16 KN/M) PER ASTM D4595 TESTING METHOD.

740 LBS/FT (40 X 40 KN/M) PER ASTM D4595 TESTING METHOD.

4,800 LBS/FT (70 X 70 KN/M) PER ASTM D4595 TESTING METHOD.

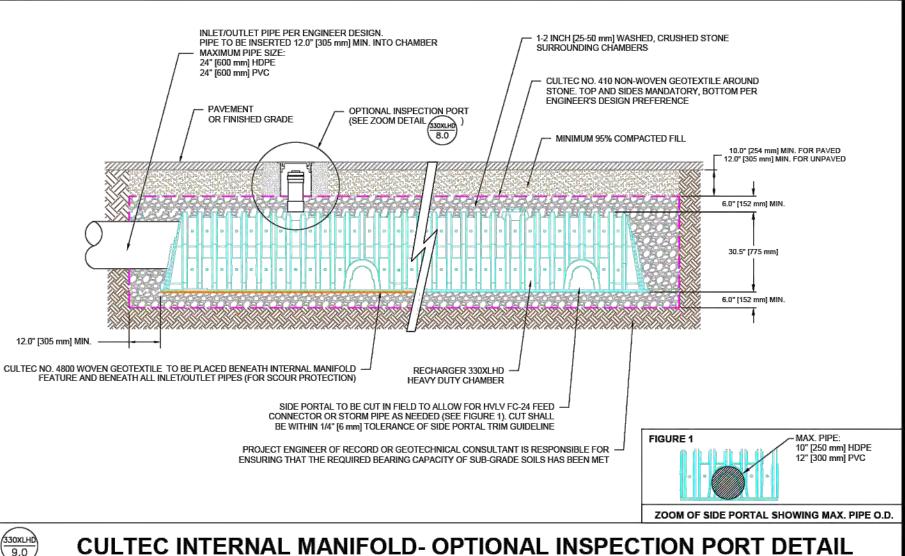
METHOD.



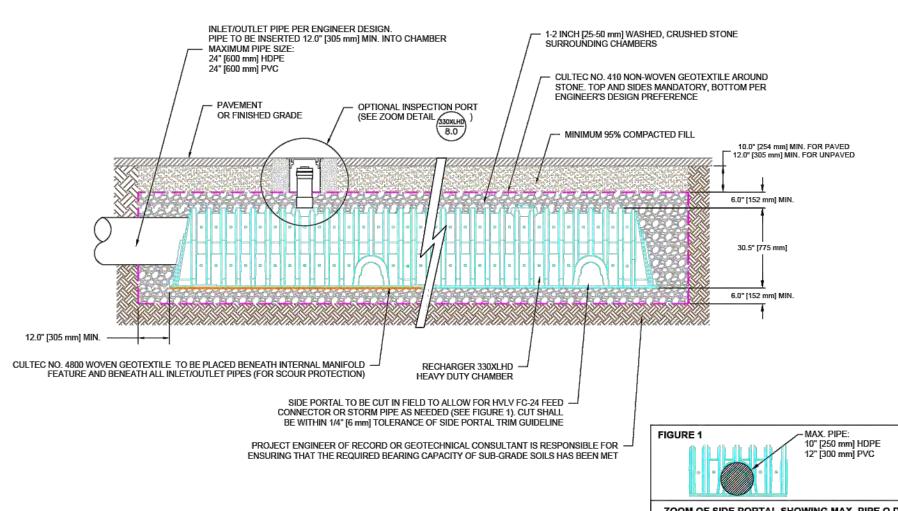
_ 24.0" [610 mm] MIN. _ 14.5" [368 mm] NEENAH FOUNDRY MODEL R-5900-A PAVEMENT OR FINISHED GRADE -12.0" [300 mm] SDR-35 / SCH. 40 PVC COLLAR FIELD PLACED CLASS "C" CONCRETE MAINTAIN 6.0" [152 mm] CLEARANCE BETWEEN HEAVY DUTY LID AND PVC CLEAN-OUT CAP 6.0" [150 mm] SDR-35 / SCH, 40 PVC ENDCAP CLEAN-OUT ADAPTER W/ SCREW-IN CAP ~6.0" [150 mm] SDR-35 / SCH. 40 PVC RISER ^6.0" [150 mm] SDR-35 / SCH. 40 PVC COUPLING TRIM CHAMBER INSPECTION PORT KNOCK-OUT TO MATCH O.D. OF 6.0" [150mm] INSPECTION PORT PIPE 6.0" [150 mm] SDR-35 / SCH 40 PVC NSERTED 8.0" [203 mm] INTO CHAMBER)

OPTIONAL INSPECTION PORT- ZOOM DETAIL

-- 52.0" [1321 mm] ------



CULTEC RECHARGER 330XLHD HEAVY DUTY TYPICAL INTERLOCK



CULTEC, Inc.

Subsurface Stormwater Management Systems P.O. Box 280 878 Federal Road Brookfield, CT 06804 www.cultec.com

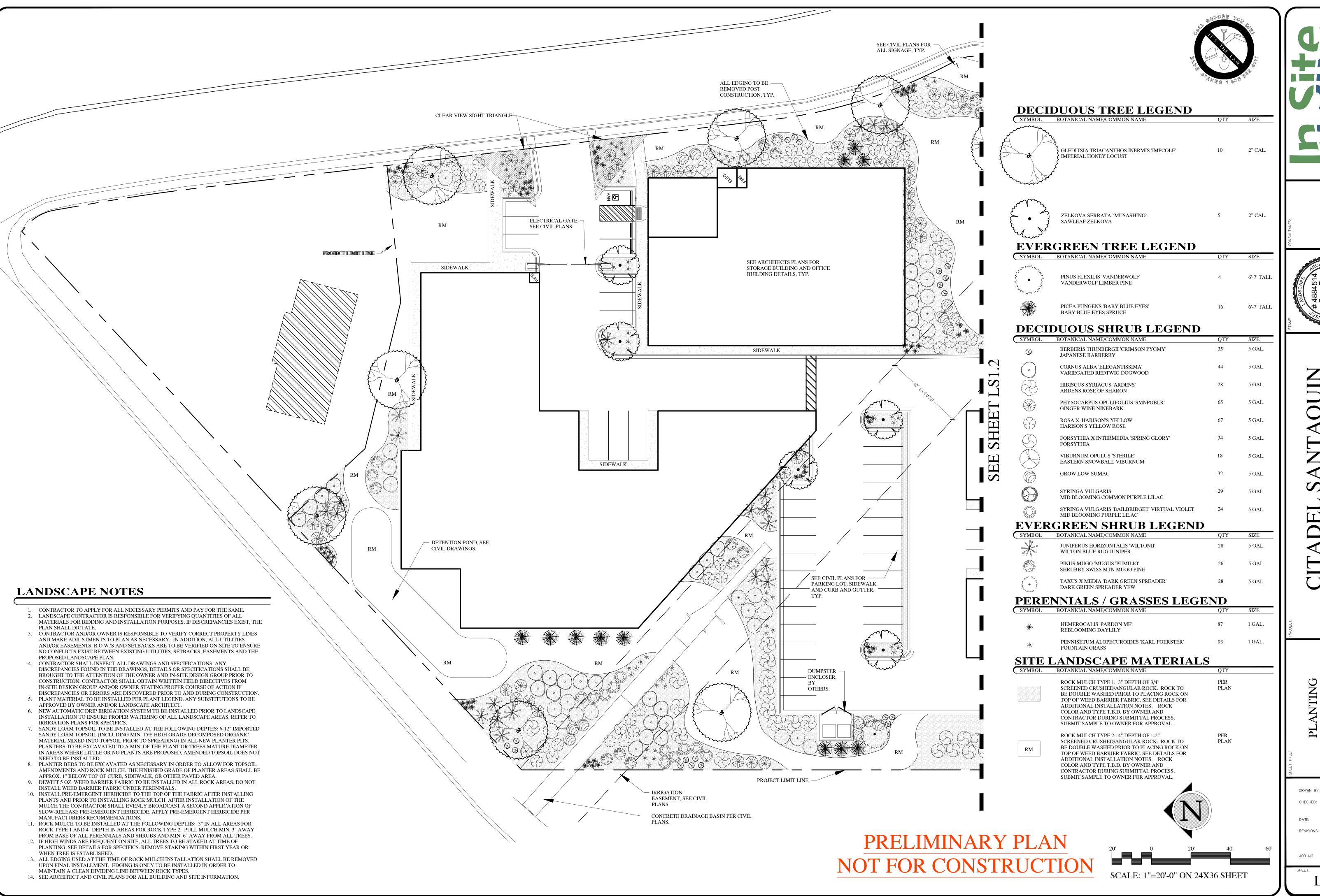
PH: (203) 775-4416 PH: (800) 4-CULTEC FX: (203) 775-1462 tech@cultec.com

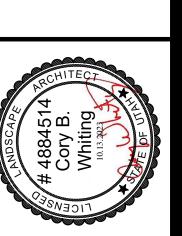
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RECHARGER 330XLHD **DETAIL SHEET** TRAFFIC APPLICATION

CULTEC STORMWATER CHAMBER PROJECT NO: DATE: 2019 DESIGNED BY: CULTEC, INC CHECKED BY: TECH SCALE: N.T.S. SHEET NO: 1 OF 1

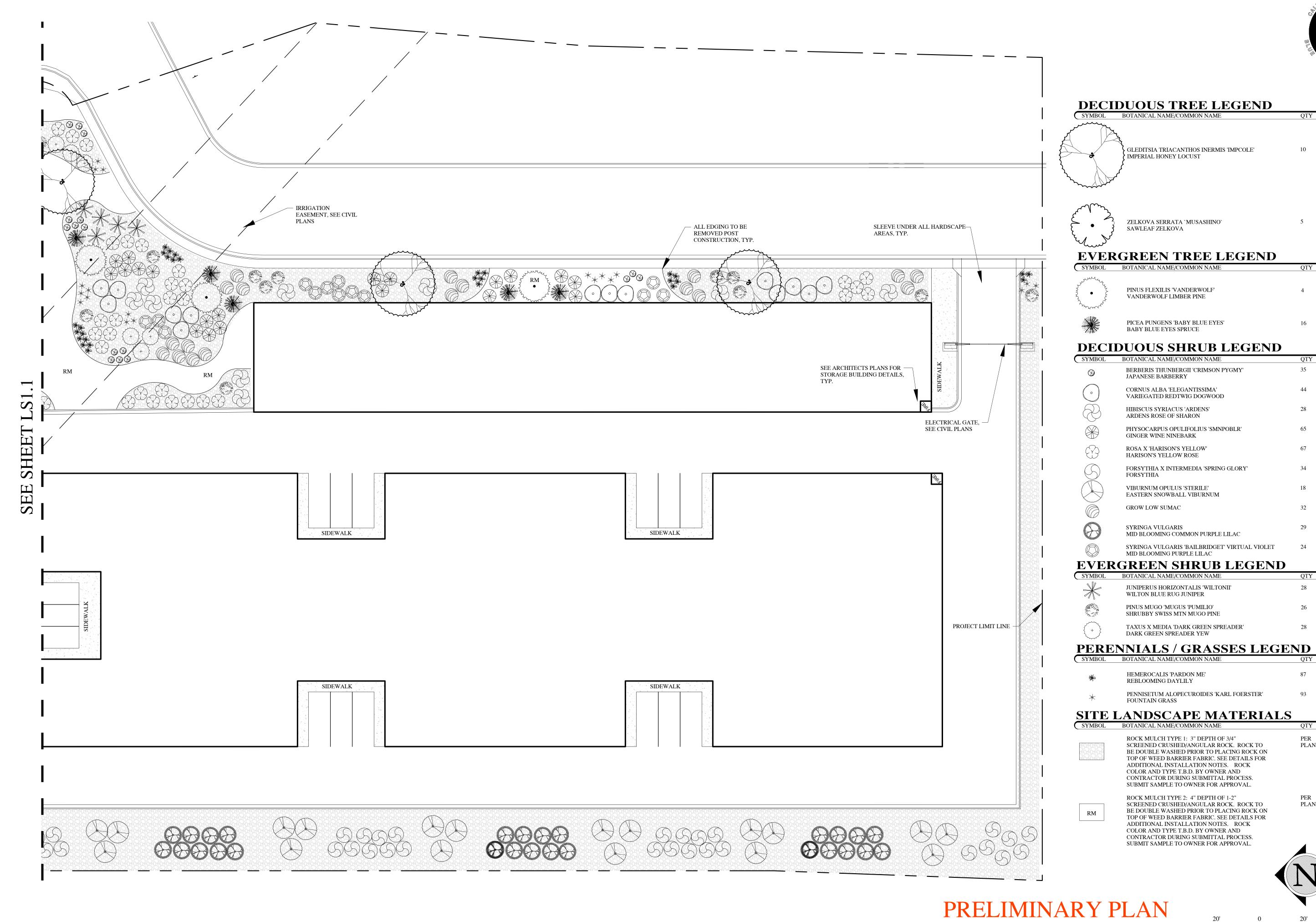
TAH ANTAQUIN, TANDA CITADE S PROJECT NO. 2023.018 SHEET NO.



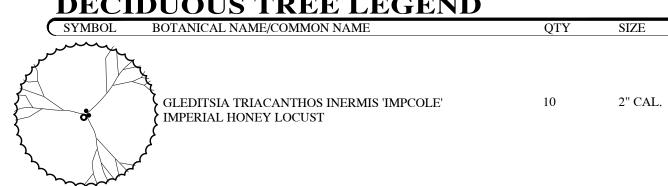


JOB NO. 23-119

LS1.1







مرسك			
	ZELKOVA SERRATA `MUSASHINO` SAWLEAF ZELKOVA	5	2" CAL.

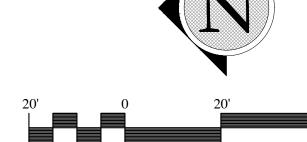
manura ***	PINUS FLEXILIS 'VANDERWOLF' VANDERWOLF LIMBER PINE	4	6'-7' TALL
	PICEA PUNGENS 'BABY BLUE EYES' BABY BLUE EYES SPRUCE	16	6'-7' TALL

SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZ
\otimes	BERBERIS THUNBERGII 'CRIMSON PYGMY' JAPANESE BARBERRY	35	5 G
\circ	CORNUS ALBA 'ELEGANTISSIMA' VARIEGATED REDTWIG DOGWOOD	44	5 G.
	HIBISCUS SYRIACUS 'ARDENS' ARDENS ROSE OF SHARON	28	5 G.
	PHYSOCARPUS OPULIFOLIUS 'SMNPOBLR' GINGER WINE NINEBARK	65	5 G.
	ROSA X 'HARISON'S YELLOW' HARISON'S YELLOW ROSE	67	5 G.
	FORSYTHIA X INTERMEDIA 'SPRING GLORY' FORSYTHIA	34	5 G.
	VIBURNUM OPULUS 'STERILE' EASTERN SNOWBALL VIBURNUM	18	5 G.
	GROW LOW SUMAC	32	5 G.
and the second s	SYRINGA VULGARIS MID BLOOMING COMMON PURPLE LILAC	29	5 G
	SYRINGA VULGARIS 'BAILBRIDGET' VIRTUAL VIOLET MID BLOOMING PURPLE LILAC	24	5 G.
EVER	GREEN SHRUB LEGEND		

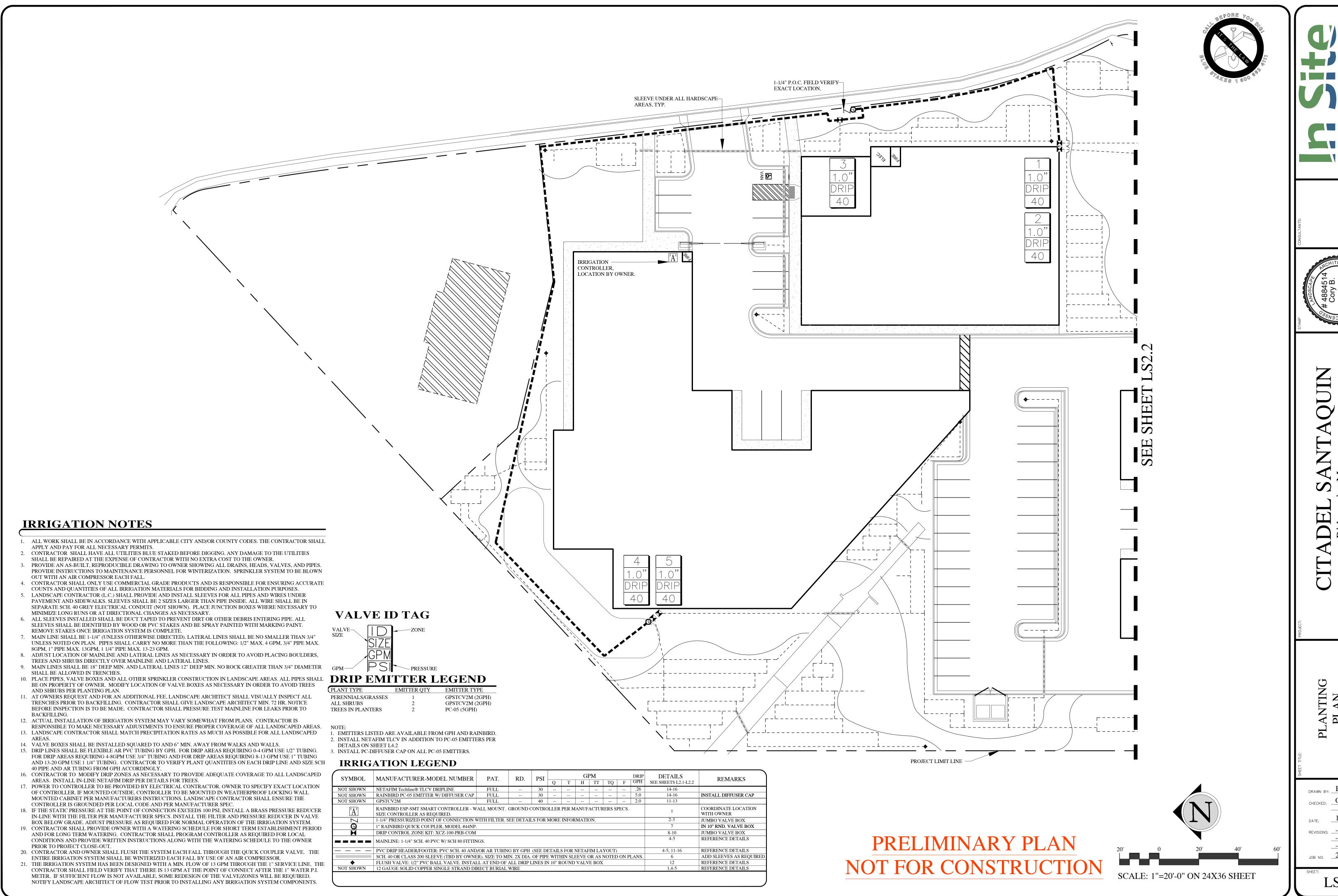
SYMBOL	BOTANICAL NAME/COMMON NAME	QTY	SIZE
	JUNIPERUS HORIZONTALIS 'WILTONII' WILTON BLUE RUG JUNIPER	28	5 GAI
	PINUS MUGO 'MUGUS 'PUMILIO' SHRUBBY SWISS MTN MUGO PINE	26	5 GAL
+	TAXUS X MEDIA 'DARK GREEN SPREADER' DARK GREEN SPREADER YEW	28	5 GAL
		CCENID	

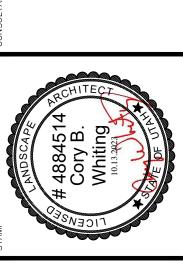
<u> </u>	,		
***	HEMEROCALIS 'PARDON ME' REBLOOMING DAYLILY	87	1 GAL.
*	PENNISETUM ALOPECUROIDES 'KARL FOERSTER' FOUNTAIN GRASS	93	1 GAL.

DL	BOTANICAL NAME/COMMON NAME	QTY	
OL.	BOTANICAL NAME/COMMON NAME ROCK MULCH TYPE 1: 3" DEPTH OF 3/4" SCREENED CRUSHED/ANGULAR ROCK. ROCK TO BE DOUBLE WASHED PRIOR TO PLACING ROCK ON TOP OF WEED BARRIER FABRIC. SEE DETAILS FOR ADDITIONAL INSTALLATION NOTES. ROCK COLOR AND TYPE T.B.D. BY OWNER AND CONTRACTOR DURING SUBMITTAL PROCESS.	QTY PER PLAN	

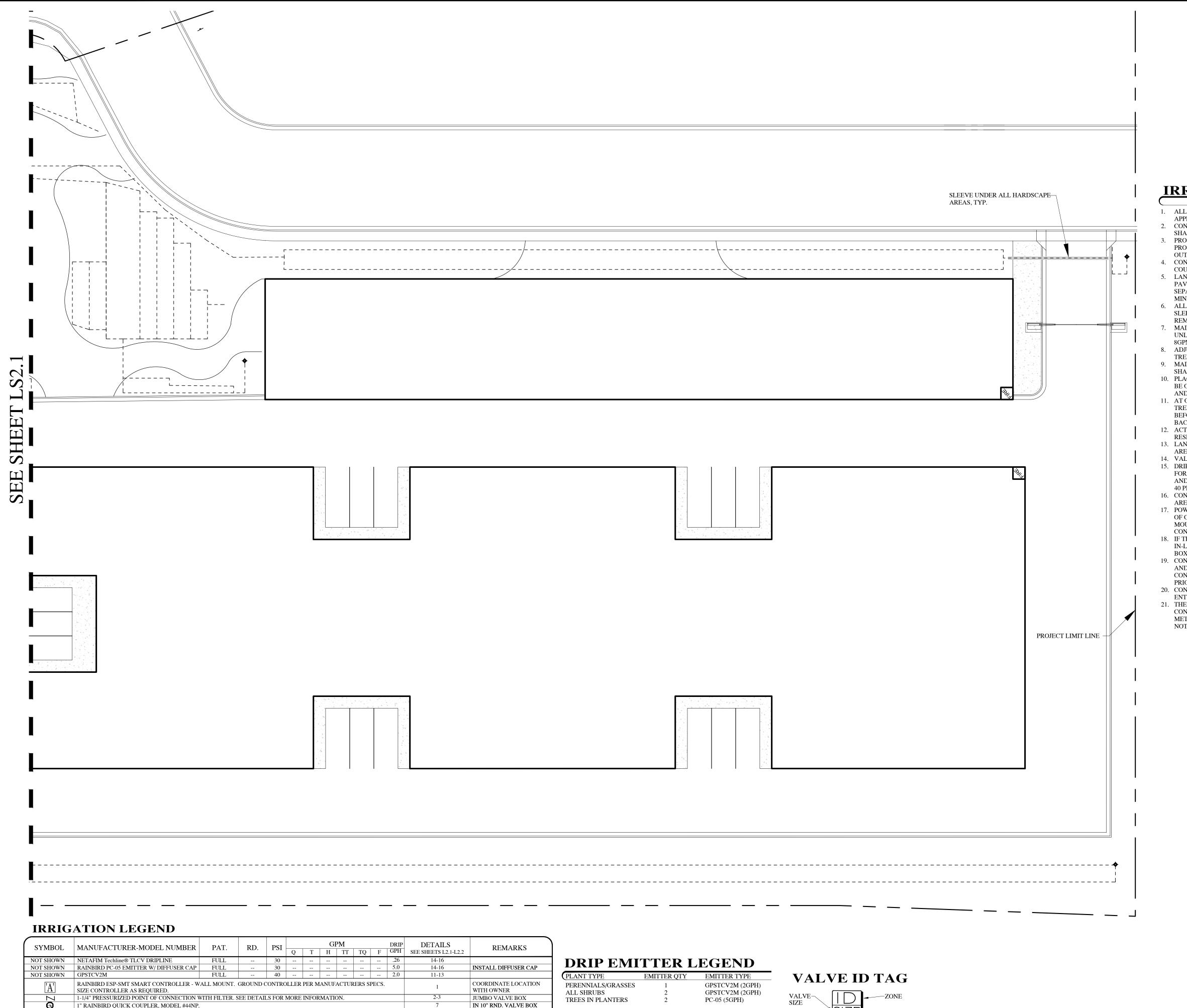


NOT FOR CONSTRUCTION SCALE: 1"=20'-0" ON 24X36 SHEET LS1.2





LS2.1



JUMBO VALVE BOX

REFERENCE DETAILS

REFERENCE DETAILS

REFERENCE DETAILS

REFERENCE DETAILS

ADD SLEEVES AS REQUIRED

4-5, 11-16

1. EMITTERS LISTED ARE AVAILABLE FROM GPH AND RAINBIRD.

2. INSTALL NETAFIM TLCV IN ADDITION TO PC-05 EMITTERS PER

3. INSTALL PC-DIFFUSER CAP ON ALL PC-05 EMITTERS.

DETAILS ON SHEET L4.2

DRIP CONTROL ZONE KIT: XCZ-100-PRB-COM

NOT SHOWN 12 GAUGE SOLID COPPER SINGLE STRAND DIRECT BURIAL WIRE

PVC DRIP HEADER/FOOTER: PVC SCH. 40 AND/OR AR TUBING BY GPH (SEE DETAILS FOR NETAFIM LAYOUT

FLUSH VALVE: 1/2" PVC BALL VALVE. INSTALL AT END OF ALL DRIP LINES IN 10" ROUND VALVE BOX

SCH. 40 OR CLASS 200 SLEEVE (TBD BY OWNER). SIZE TO MIN. 2X DIA. OF PIPE WITHIN SLEEVE OR AS NOTED ON PLANS.

MAINLINE: 1-1/4" SCH, 40 PVC W/ SCH 80 FITTINGS.

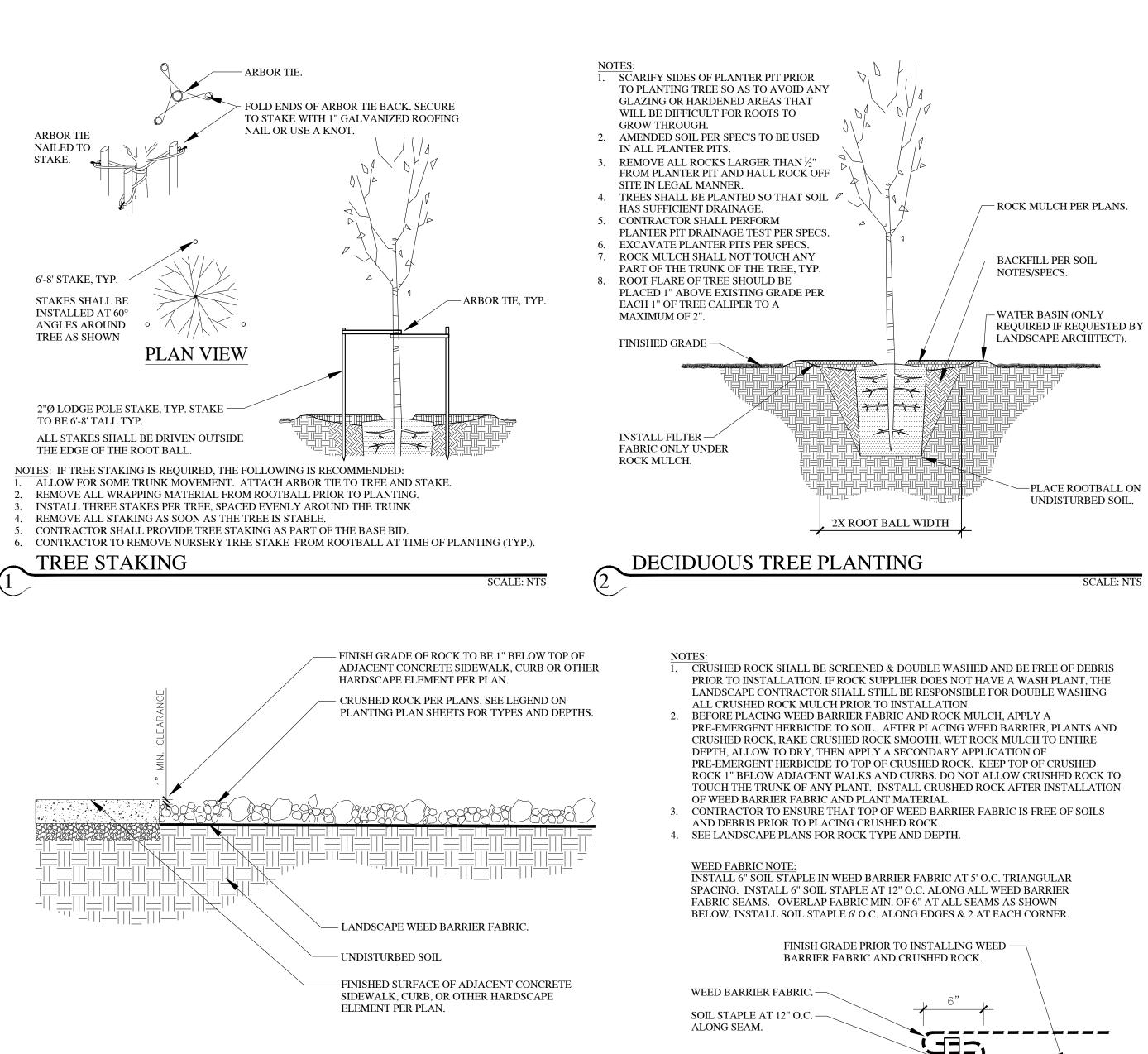


IRRIGATION NOTES

- 1. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE CITY AND/OR COUNTY CODES. THE CONTRACTOR SHALL APPLY AND PAY FOR ALL NECESSARY PERMITS.
- CONTRACTOR SHALL HAVE ALL UTILITIES BLUE STAKED BEFORE DIGGING. ANY DAMAGE TO THE UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF CONTRACTOR WITH NO EXTRA COST TO THE OWNER.
- PROVIDE AN AS-BUILT, REPRODUCIBLE DRAWING TO OWNER SHOWING ALL DRAINS, HEADS, VALVES, AND PIPES. PROVIDE INSTRUCTIONS TO MAINTENANCE PERSONNEL FOR WINTERIZATION. SPRINKLER SYSTEM TO BE BLOWN OUT WITH AN AIR COMPRESSOR EACH FALL.
- 4. CONTRACTOR SHALL ONLY USE COMMERCIAL GRADE PRODUCTS AND IS RESPONSIBLE FOR ENSURING ACCURATE COUNTS AND QUANTITIES OF ALL IRRIGATION MATERIALS FOR BIDDING AND INSTALLATION PURPOSES. 5. LANDSCAPE CONTRACTOR (L.C.) SHALL PROVIDE AND INSTALL SLEEVES FOR ALL PIPES AND WIRES UNDER
- PAVEMENT AND SIDEWALKS. SLEEVES SHALL BE 2 SIZES LARGER THAN PIPE INSIDE. ALL WIRE SHALL BE IN SEPARATE SCH. 40 GREY ELECTRICAL CONDUIT (NOT SHOWN). PLACE JUNCTION BOXES WHERE NECESSARY TO MINIMIZE LONG RUNS OR AT DIRECTIONAL CHANGES AS NECESSARY.
- ALL SLEEVES INSTALLED SHALL BE DUCT TAPED TO PREVENT DIRT OR OTHER DEBRIS ENTERING PIPE. ALL SLEEVES SHALL BE IDENTIFIED BY WOOD OR PVC STAKES AND BE SPRAY PAINTED WITH MARKING PAINT.
- REMOVE STAKES ONCE IRRIGATION SYSTEM IS COMPLETE. MAIN LINE SHALL BE 1-1/4" (UNLESS OTHERWISE DIRECTED), LATERAL LINES SHALL BE NO SMALLER THAN 3/4" UNLESS NOTED ON PLAN. PIPES SHALL CARRY NO MORE THAN THE FOLLOWING: 1/2" MAX. 4 GPM, 3/4" PIPE MAX.
- 8GPM, 1" PIPE MAX. 13GPM, 1 1/4" PIPE MAX. 13-23 GPM. ADJUST LOCATION OF MAINLINE AND LATERAL LINES AS NECESSARY IN ORDER TO AVOID PLACING BOULDERS, TREES AND SHRUBS DIRECTLY OVER MAINLINE AND LATERAL LINES.
- 9. MAIN LINES SHALL BE 18" DEEP MIN, AND LATERAL LINES 12" DEEP MIN, NO ROCK GREATER THAN 3/4" DIAMETER SHALL BE ALLOWED IN TRENCHES. 10. PLACE PIPES, VALVE BOXES AND ALL OTHER SPRINKLER CONSTRUCTION IN LANDSCAPE AREAS. ALL PIPES SHALL
- BE ON PROPERTY OF OWNER. MODIFY LOCATION OF VALVE BOXES AS NECESSARY IN ORDER TO AVOID TREES AND SHRUBS PER PLANTING PLAN. 11. AT OWNERS REQUEST AND FOR AN ADDITIONAL FEE, LANDSCAPE ARCHITECT SHALL VISUALLY INSPECT ALL
- TRENCHES PRIOR TO BACKFILLING. CONTRACTOR SHALL GIVE LANDSCAPE ARCHITECT MIN. 72 HR. NOTICE BEFORE INSPECTION IS TO BE MADE. CONTRACTOR SHALL PRESSURE TEST MAINLINE FOR LEAKS PRIOR TO BACKFILLING.
- 12. ACTUAL INSTALLATION OF IRRIGATION SYSTEM MAY VARY SOMEWHAT FROM PLANS. CONTRACTOR IS RESPONSIBLE TO MAKE NECESSARY ADJUSTMENTS TO ENSURE PROPER COVERAGE OF ALL LANDSCAPED AREAS.
- 13. LANDSCAPE CONTRACTOR SHALL MATCH PRECIPITATION RATES AS MUCH AS POSSIBLE FOR ALL LANDSCAPED
- 14. VALVE BOXES SHALL BE INSTALLED SQUARED TO AND 6" MIN. AWAY FROM WALKS AND WALLS. 15. DRIP LINES SHALL BE FLEXIBLE AR PVC TUBING BY GPH. FOR DRIP AREAS REQUIRING 0-4 GPM USE 1/2" TUBING.
- FOR DRIP AREAS REQUIRING 4-8GPM USE 3/4" TUBING AND FOR DRIP AREAS REQUIRING 8-13 GPM USE 1" TUBING AND 13-20 GPM USE 1 1/4" TUBING. CONTRACTOR TO VERIFY PLANT QUANTITIES ON EACH DRIP LINE AND SIZE SCH 40 PIPE AND AR TUBING FROM GPH ACCORDINGLY.
- 16. CONTRACTOR TO MODIFY DRIP ZONES AS NECESSARY TO PROVIDE ADEQUATE COVERAGE TO ALL LANDSCAPED AREAS. INSTALL IN-LINE NETAFIM DRIP PER DETAILS FOR TREES.
- 17. POWER TO CONTROLLER TO BE PROVIDED BY ELECTRICAL CONTRACTOR. OWNER TO SPECIFY EXACT LOCATION OF CONTROLLER, IF MOUNTED OUTSIDE, CONTROLLER TO BE MOUNTED IN WEATHERPROOF LOCKING WALL MOUNTED CABINET PER MANUFACTURERS INSTRUCTIONS, LANDSCAPE CONTRACTOR SHALL ENSURE THE CONTROLLER IS GROUNDED PER LOCAL CODE AND PER MANUFACTURER SPEC.
- 18. IF THE STATIC PRESSURE AT THE POINT OF CONNECTION EXCEEDS 100 PSI, INSTALL A BRASS PRESSURE REDUCER IN-LINE WITH THE FILTER PER MANUFACTURER SPECS. INSTALL THE FILTER AND PRESSURE REDUCER IN VALVE
- BOX BELOW GRADE. ADJUST PRESSURE AS REQUIRED FOR NORMAL OPERATION OF THE IRRIGATION SYSTEM. 19. CONTRACTOR SHALL PROVIDE OWNER WITH A WATERING SCHEDULE FOR SHORT TERM ESTABLISHMENT PERIOD AND FOR LONG TERM WATERING. CONTRACTOR SHALL PROGRAM CONTROLLER AS REQUIRED FOR LOCAL CONDITIONS AND PROVIDE WRITTEN INSTRUCTIONS ALONG WITH THE WATERING SCHEDULE TO THE OWNER
- PRIOR TO PROJECT CLOSE-OUT. 20. CONTRACTOR AND OWNER SHALL FLUSH THE SYSTEM EACH FALL THROUGH THE QUICK COUPLER VALVE. THE ENTIRE IRRIGATION SYSTEM SHALL BE WINTERIZED EACH FALL BY USE OF AN AIR COMPRESSOR.
- THE IRRIGATION SYSTEM HAS BEEN DESIGNED WITH A MIN. FLOW OF 13 GPM THROUGH THE 1" SERVICE LINE. THE CONTRACTOR SHALL FIELD VERIFY THAT THERE IS 13 GPM AT THE POINT OF CONNECT AFTER THE 1" WATER P.I. METER. IF SUFFICIENT FLOW IS NOT AVAILABLE, SOME REDESIGN OF THE VALVE/ZONES WILL BE REQUIRED. NOTIFY LANDSCAPE ARCHITECT OF FLOW TEST PRIOR TO INSTALLING ANY IRRIGATION SYSTEM COMPONENTS.

SCALE: 1"=20'-0" ON 24X36 SHEET

PRELIMINARY PLAN NOT FOR CONSTRUCTION



CRUSHED ROCK AND WEED BARRIER FABRIC

OR HARDENED AREAS THAT WILL BE DIFFICULT FOR ROOTS TO GROW THROUGH. IMPORTED & AMENDED TOPSOIL PER SPEC'S TO BE USED IN ALL PLANTER PITS. REMOVE ALL COMPACTED, CLAY OR ROCKY SOILS FROM PIT AND HAUL OFF SITE IN A 4. CONTRACTOR SHALL PERFORM PLANTER PIT DRAINAGE TEST PER SPECS. 5. EXCAVATE PLANTER PITS PER SPECS. SHRUB & ORNAMENTAL GRASS PLANTING SCALE: NTS NOTE: SCARIFY SIDES OF PLANTER PIT PRIOR TO PLANTING TREE SO AS TO AVOID ANY GLAZING OR HARDENED AREAS THAT WILL BE DIFFICULT FOR ROOTS TO GROW THROUGH. NOTE: AMMENED SOIL SHALL CONTAIN 3 PARTS GOOD TOPSOIL EXCAVATED FROM PIT AND 1 PART − 3" DEPTH OF ROCK MULCH "SOIL PEP" SOIL CONDITIONER. – WATER BASIN FINISHED GRADE BACKFILL WITH AMENDED SOIL SOIL NOTE: ROOT FLARE OF TREE SHOULD BE PLACED 1" - PLACE ROOTBALL ON ABOVE EXISTING GRADE PER UNDISTURBED SOIL EACH 1" OF TREE CALIPER. 2x ROOT BALL WIDTH NOTE: ROCK MULCH SHALL NOT TOUCH ANY PART OF THE TRUNK OF THE TREE, TYP.

EVERGREEN PLANTING DETAIL

1. SCARIFY SIDES OF PLANTER PIT PRIOR TO PLANTING SHRUB SO AS TO AVOID ANY GLAZING

WATER BASIN. USE —

WHEN NECESSARY

PER LANDSCAPE

FINISHED GRADE.-

ARCHITECTS

REQUEST.

– PLACE TOP OF ROOTBALL

ROCK MULCH PER PLANS.

THE SHRUB.

AND SPECS.

MULCH SHOULD NOT TOUCH

ANY PART OF THE TRUNK OF

- BACKFILL PER SOIL NOTES

PLACE ROOTBALL ON UNDISTURBED SOIL.

FLUSH WITH FINISHED GRADE.

ROCK MULCH PER PLAN. MULCH SHOULD NOT TOUCH ANY PART OF THE PERENNIAL. PLANT SPACING 6-12" DEPTH OF AMENDED PER PLAN SOIL PER SPECS. SCARIFY SIDES OF PLANTER PIT PRIOR TO PLANTING PERENNIALS SO AS TO AVOID ANY GLAZING OR HARDENED AREAS THAT WILL BE DIFFICULT FOR ROOTS TO GROW THROUGH. REMOVE ALL COMPACTED, CLAY OR ROCKY SOILS FROM PIT AND HAUL

OFF SITE IN LEGAL MANNER. 3. CONTRACTOR SHALL PERFORM PLANTER PIT DRAINAGE TEST PER SPECS. 4. EXCAVATE PLANTER PITS PER SPECS.

PERENNIAL PLANTING

STAKES SHALL BE INSTALLED AT 60° ANGLES AROUND TREE AS SHOWN 2' STAKE, TYP. -PLAN VIEW ARBOR TAPE, TYP. 2"Ø X 2' LONG LODGE POLE STAKE, TYP. ALL STAKES SHALL BE DRIVEN OUTSIDE THE EDGE OF THE ROOT BALL

NOTE: IF TREE STAKING IS REQUIRED, THE FOLLOWING IS RECOMMENDED:

WIRE OR CABLE SIZE TO BE 14 GAUGE

ALLOW FOR SOME TRUNK MOVEMENT. ATTACH WIRE TO TREE WITH ARBOR TAPE. INSTALL THREE STAKES PER TREE, SPACED EVENLY AROUND THE TRUNK

REMOVE ALL STAKING AS SOON AS THE TREE IS STABLE

CONTRACTOR SHALL PROVIDE BID ALTERNATE FOR TREE STAKING.

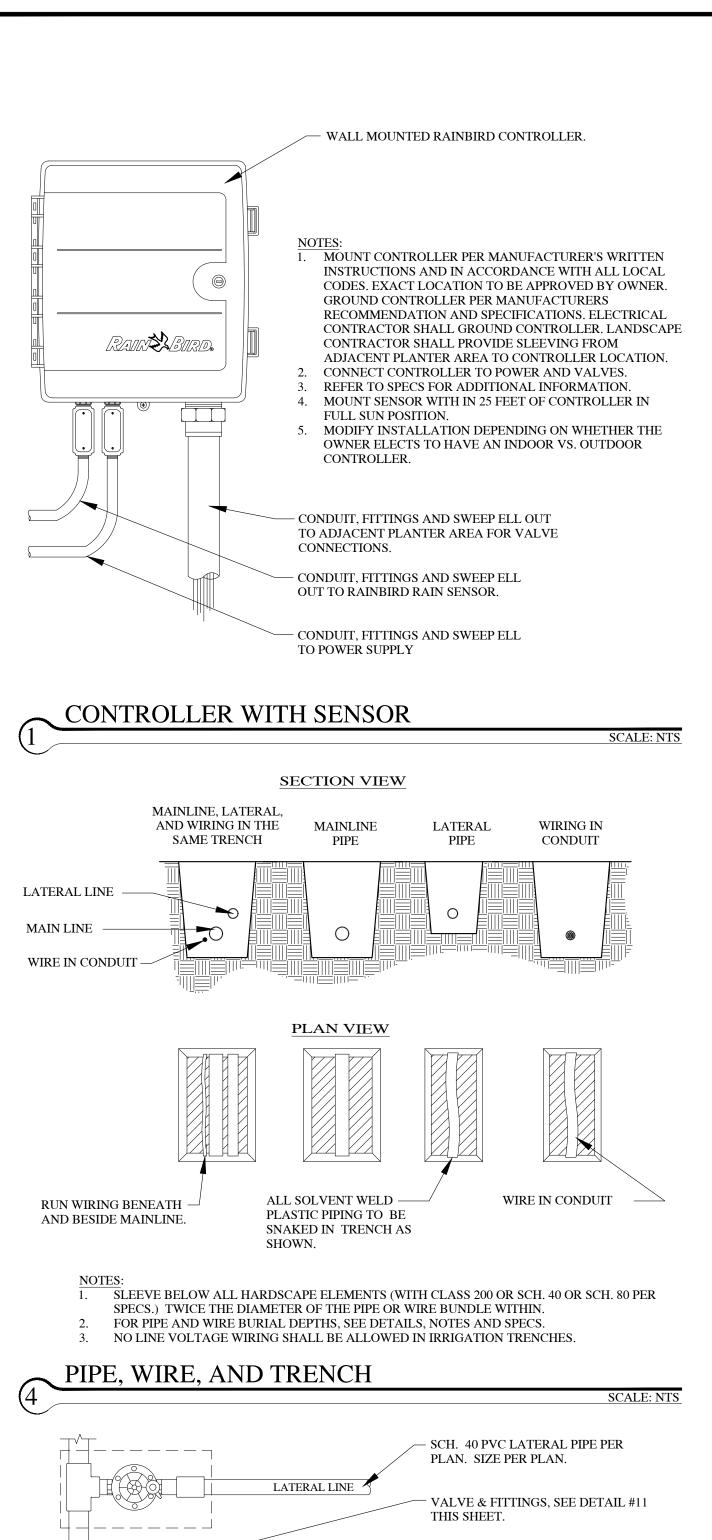
EVERGREEN TREE STAKING DETAIL

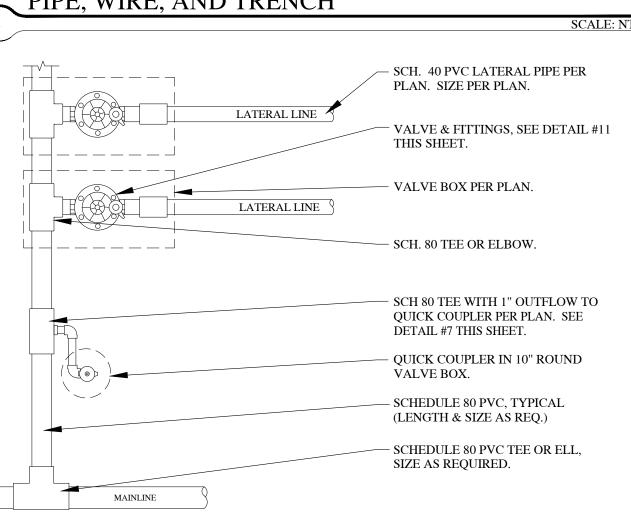
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CHECKED: 10.13.2023 REVISIONS: ____

JOB NO. 23-119

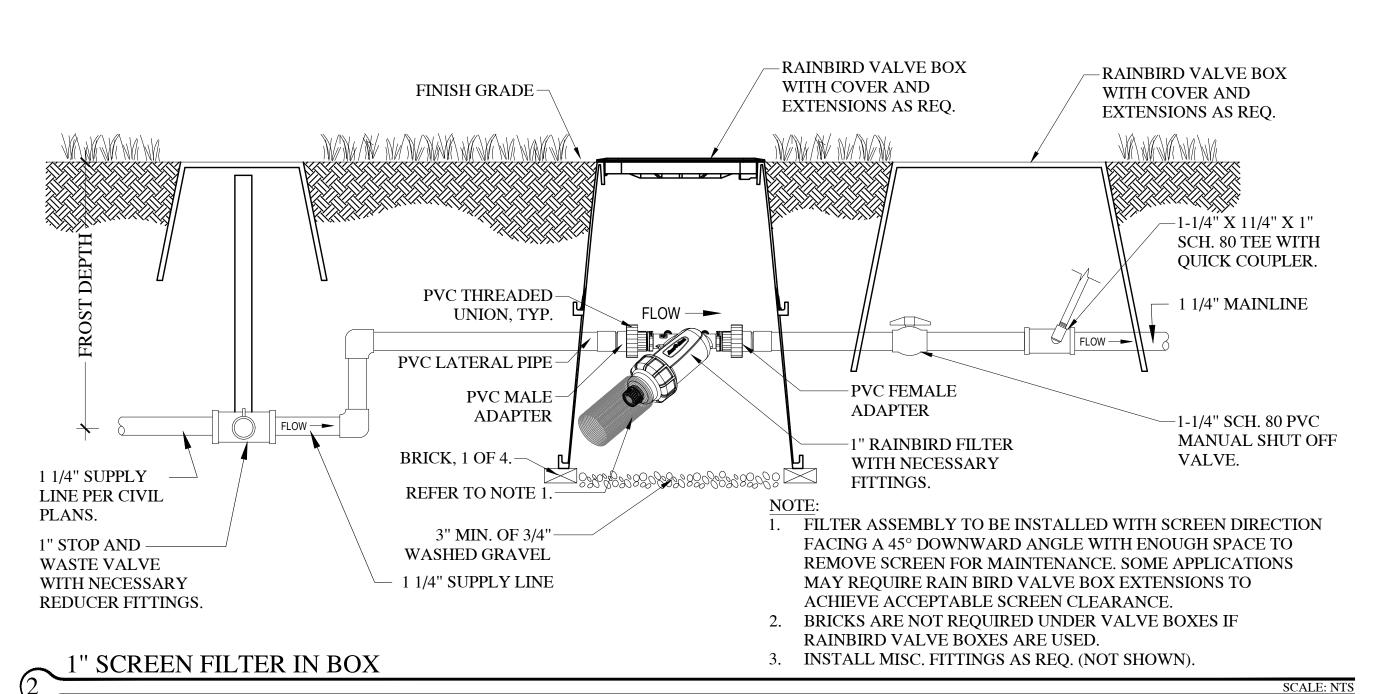
LS3.1





ALL VALVE MANIFOLD PIPING AND FITTINGS TO BE SCH. 80 FITTINGS, MODIFY MANIFOLD AS NECESSARY DEPENDING ON HOW MANY VALVES ARE IN A CLUSTER. MODIFY AS REQUIRED DEPENDING ON WHETHER THE VALVES ARE PARALLEL OR PERPENDICULAR TO MAINLINE.

VALVE MANIFOLD



ROCK MULCH IN PLANTER AREA, SEE LANDSCAPE PLAN AND DETAILS FOR DEPTHS FINISH GRADE WEED BARRIER FABRIC UNDER TOPSOIL, SEE LANDSCAPE PLAN — ROCK MULCH PER PLANS. AND DETAILS AND SPECS FOR CLASS 200 SLEEVES OR GREEN ABS PIPE SIDE BY SIDE 18" MIN. ¬PVC CAP (TYPICAL) PAINT ENDS PINK AND COMPACTED BACKFILL LABEL AS 'IRR. SLEEVE' 24" MIN. TO FINISH GRADE LATERAL PVC LINE — PAVING 2" DEPTH OF SAND OR ROCK FREE SOIL ON TOP, BOTTOM AND SIDES OF MAINLINE CONTROL WIRE, INSTALL BESIDE & BELOW TOP OF MAINLINE. INSTALL 24" MIN. IN CONDUIT. 30" MAX. PVC CAP(TYP.) PVC MAINLINE. WHERE THERE IS MORE THAN ONE SLEEVE, EXTEND THE SMALLER SLEEVE TO INSTALL CONTROL WIRE BUNDLE IN CONDUIT.

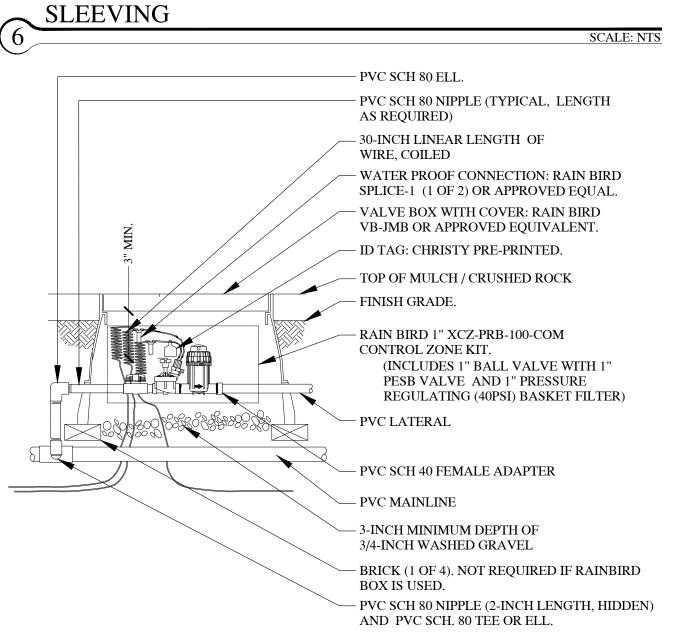
24-INCHES MINIMUM ABOVE FINISH GRADE. MAINLINE DEPTH SHALL BE 24" DEEP EXCEPT UNDER ASPHALT & CONCRETE 2. ALL SLEEVES INSTALLED SHALL BE DUCT TAPED TO PREVENT DIRT OR OTHER DEBRIS PAVING AND AT P.O.C. SHALL BE MIN OF 24" & MAX OF 30". INSTALL ADDITIONAL ENTERING PIPE. ALL SLEEVES SHALL BE IDENTIFIED BY WOOD OR PVC STAKES AND FITTINGS & RESTRAINTS AS REQUIRED. BE SPRAY PAINTED WITH MARKING PAINT. REMOVE STAKES ONCE IRRIGATION 3. MAINLINE AND LATERAL LINES SHALL BE KEPT MIN. 12" FROM ALL SIDEWALKS AND CURBS.

12" MAXIMUM FROM -SCH. 80 PVC "ACTION" CONCRETE WALK OR UNION MOWSTRIP SCH. 40 PVC COUPLER 30" COILED WIRE SCH. 80 ST ELL-SCH. 80 PVC "ACTION" - SCH. 40 PVC LATERAL UNION LINE 12" DEEP MINIMUM -3" DEPTH OF $\frac{3}{4}$ " MINUS RECTANGULAR-WASHED GRAVEL VALVE BOX LIMIT 2 VALVES PER VALVE BOX MAIN SUPPLY LINE 18 DEEP MINIMUM

TRENCH SECTION

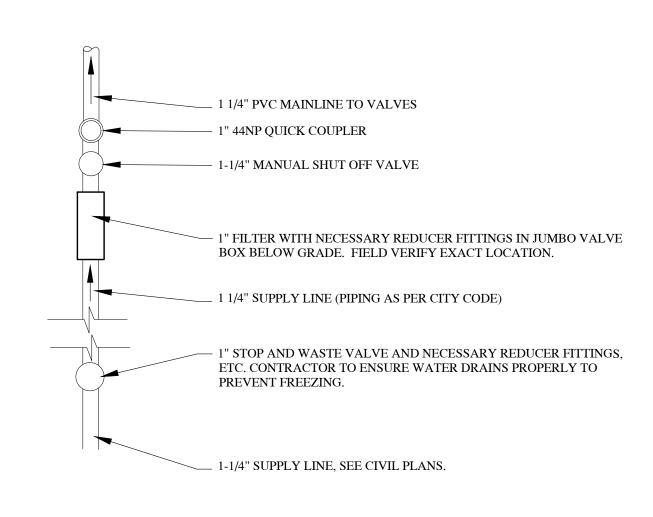
ADD PRE-PRINTED CHRISTY I.D. TAGS TO ALL NEW CONTROL VALVES AND CONTROL ZONE KITS. COORDINATE AND LABEL ALL CONTROL WIRE AT CONTROLLER WITH EACH VALVE IN THE FIELD, TYP.

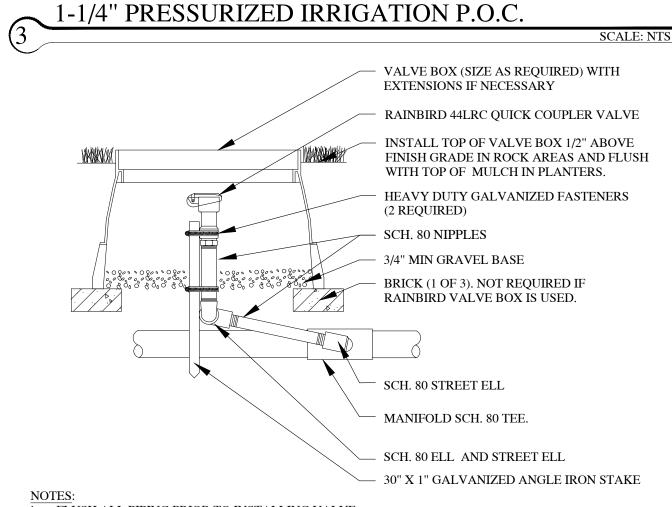
VALVE ASSEMBLY



1" DRIP CONTROL ZONE KIT

SCALE: NTS





FLUSH ALL PIPING PRIOR TO INSTALLING VALVE.

WRAP ALL THREADS WITH TEFLON TAPE. 1.1/2 TO 2 WRAPS MAXIMUM. COMPACT SOILS AROUND VALVE BOX TO 80% OF ORIGINAL DRY DENSITY. INSTALL GEOFABRIC UNDER VALVE BOXES AND TAPE TO PIPE NIPPLES AND VALVE BOX. 5. BOX COLOR - GREEN IN TURF AND TAN IN PLANTER AREAS.

QUICK COUPLER FITTINGS AND NIPPLES AT P.O.C. QUICK COUPLER(S) TO BE GALVANIZED.

IRRIGATION SYSTEM TO BE BLOWN OUT WITH AIR COMPRESSOR THROUGH THE RPZ AND QUICK COUPLERS BEFORE FREEZING TEMPERATURES OCCUR, TYP. 7. SCH 80 PVC TEE OR ELL'S CAN BE USED ON ALL QUICK COUPLERS EXCEPT AT POINT OF CONNECTION (IF QUICK COUPLER(S) ARE INSTALLED AT THE POINT OF CONNECTION). ALL

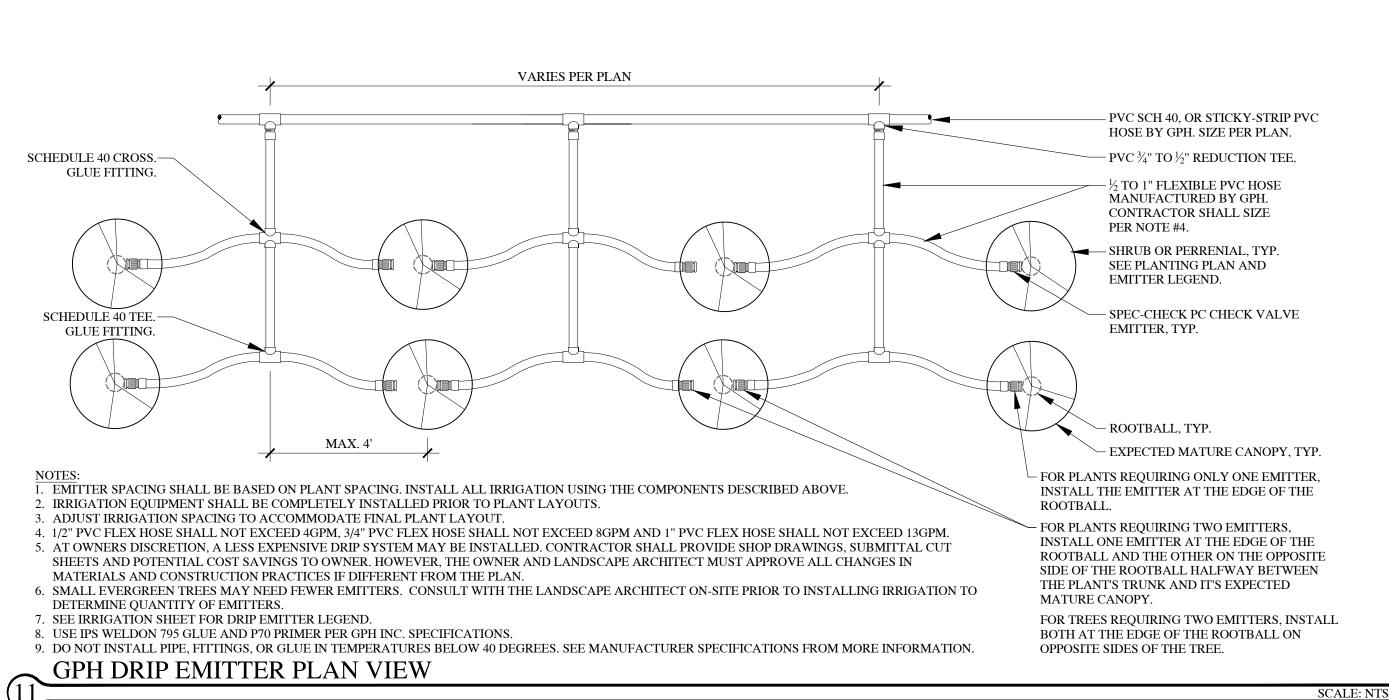
QUICK COUPLER VALVE



CHECKED: REVISIONS: ___

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LS4.1



TWO PC-05 DRIP EMITTER AT SURFACE, ATTACH DIRECTLY TO NETAFIM DRIPLINE. TRUNK OF TREE. MATURE CANOPY OF DECIDUOUS OR EVERGREEN TREE. NETAFIM TLCV26-1801 DRIP LINE TUBING WITH FITTINGS. START 12" OUT FROM TRUNK OF TREE THEN SPIRAL OUT FROM TRUNK TO TREES CANOPY ESTIMATED MATURE DIAMETER. MAKE SPIRAL OVAL SHAPES IN NARROW PLANTERS. — SCH. 40 PVC LATERAL LINE PER PLAN.

LAYOUT SHOWN IS TYPICAL. ON SITE MODIFICATIONS WILL BE REQUIRED DUE TO VARYING SIZE OF PLANTER ISLANDS. CONSULT WITH LANDSCAPE ARCHITECT ON-SITE PRIOR TO INSTALLATION TO

DETERMINE HOW MUCH DRIP NEEDS TO BE INSTALLED AND WHAT CONFIGURATION IS APPROPRIATE. 2. INSTALL NETAFIM DRIP TUBING UNDER WEED BARRIER FABRIC. USE THIS DETAIL FOR ALL TREES PLANTED IN CRUSHED ROCK AREAS. CONTRACTOR SHALL BE CAREFUL NOT TO DAMAGE OR PINCH TUBING WHEN PLACING CRUSHED ROCK.

TREE DRIP WITHOUT PLANTS UNDER FULL CANOPY

- 3. THIS DETAIL IS FOR DESIGN INTENT ONLY AND IS NOT TO SCALE. CONTRACTOR MUST INSTALL DRIP LINE PER THIS DETAIL OUT TO THE DRIPLINE OF THE TREES MATURE SIZE.
- 4. FOR LINEAR PLANTERS WITH TREES, INSTALL NETAFIM IN STRAIGHT LINES RATHER THAN A
- CIRCULAR PATTERN AROUND THE TREE. 5. INSTALL A FLUSH VALVE (NOT SHOWN) AT THE END OF ALL DRIP LINES, PER PLAN.

- TWO PC-05 DRIP EMITTER AT

NETAFIM DRIPLINE.

OR EVERGREEN TREE.

MATERIAL (IF ANY), TYP.

- TRUNK OF TREE.

SURFACE, ATTACH DIRECTLY TO

- MATURE CANOPY OF DECIDUOUS

SIDEWALK OR OTHER HARDSCAPE

NETAFIM TLCV26-1801 DRIP LINE

OUT FROM TRUNK OF TREE THEN

CANOPY ESTIMATED MATURE DIAMETER. ADJUST NETAFIM IN

AND AROUND SHRUBS.

PER PLAN.

SCH. 40 PVC LATERAL LINE

TUBING WITH FITTINGS. START 12"

SPIRAL OUT FROM TRUNK TO TREES

LAYOUT SHOWN IS TYPICAL. ON SITE MODIFICATIONS WILL BE REQUIRED DUE TO VARYING SIZE OF

PLANTER ISLANDS. CONSULT WITH LANDSCAPE ARCHITECT ON-SITE PRIOR TO INSTALLATION TO

2. INSTALL NETAFIM DRIP TUBING UNDER WEED BARRIER FABRIC. USE THIS DETAIL FOR ALL TREES

4. FOR LINEAR PLANTERS WITH TREES, INSTALL NETAFIM IN STRAIGHT LINES RATHER THAN A

LINE PER THIS DETAIL OUT TO THE DRIPLINE OF THE TREES MATURE SIZE.

DETERMINE HOW MUCH DRIP NEEDS TO BE INSTALLED AND WHAT CONFIGURATION IS APPROPRIATE.

PLANTED IN CRUSHED ROCK AREAS. CONTRACTOR SHALL BE CAREFUL NOT TO DAMAGE OR PINCH

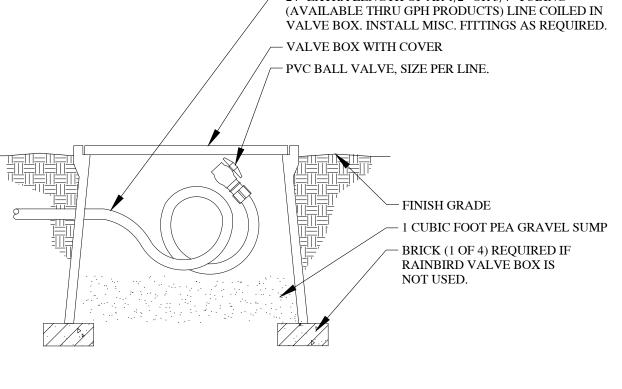
THIS DETAIL IS FOR DESIGN INTENT ONLY AND IS NOT TO SCALE. CONTRACTOR MUST INSTALL DRIP

– 24" EXTRA LENGTH OF AR 1/2" OR 3/4" TUBING (AVAILABLE THRU GPH PRODUCTS) LINE COILED IN VALVE BOX, INSTALL MISC, FITTINGS AS REQUIRED. — VALVE BOX WITH COVER – PVC BALL VALVE, SIZE PER LINE. – 1 CUBIC FOOT PEA GRAVEL SUMP BRICK (1 OF 4) REQUIRED IF RAINBIRD VALVE BOX IS NOT USED.

DRIP LINE FLUSH CAP

TUBING WHEN PLACING CRUSHED ROCK.

CIRCULAR PATTERN AROUND THE TREE.



SCALE: NTS

- TWO GPH INC. GPSTCV4M DRIP

- MATURE CANOPY OF DECIDUOUS

- SIDEWALK OR OTHER HARDSCAPE

EMITTER AT SURFACE.

OR EVERGREEN TREE.

MATERIAL(IF ANY), TYP.

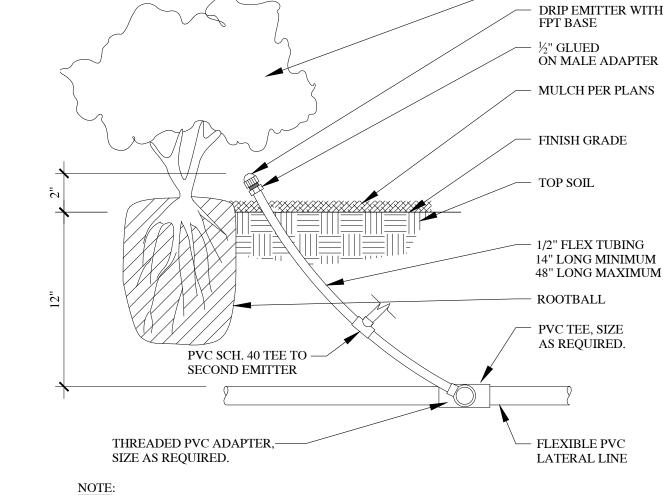
– SCH. 40 PVC OR FLEXIBLE PVC

LATERAL LINE PER PLAN.

SEE DETAIL:15 | 4.2

- TRUNK OF TREE.

- SHRUBS.



PLANT OR TREE

1. FOR LAYOUT OF MULTIPLE SHRUBS, CONTRACTOR SHALL USE TEE'S AS NECESSARY.

DRIP EMITTER SCALE: NTS



CHECKED: 10.13.2023

JOB NO. 23-119

LS4.2

REVISIONS: ____



1. LAYOUT SHOWN IS TYPICAL. ON SITE MODIFICATIONS WILL BE REOUIRED DUE TO VARYING SIZE OF

2. INSTALL NETAFIM DRIP TUBING UNDER WEED BARRIER FABRIC. USE THIS DETAIL FOR ALL TREES

4. FOR LINEAR PLANTERS WITH TREES, INSTALL NETAFIM IN STRAIGHT LINES RATHER THAN A

LINE PER THIS DETAIL OUT TO THE DRIPLINE OF THE TREES MATURE SIZE.

5. INSTALL A FLUSH VALVE (NOT SHOWN) AT THE END OF ALL DRIP LINES, PER PLAN.

TUBING WHEN PLACING CRUSHED ROCK.

CIRCULAR PATTERN AROUND THE TREE.

PLANTER ISLANDS. CONSULT WITH LANDSCAPE ARCHITECT ON-SITE PRIOR TO INSTALLATION TO

DETERMINE HOW MUCH DRIP NEEDS TO BE INSTALLED AND WHAT CONFIGURATION IS APPROPRIATE.

PLANTED IN CRUSHED ROCK AREAS. CONTRACTOR SHALL BE CAREFUL NOT TO DAMAGE OR PINCH

THIS DETAIL IS FOR DESIGN INTENT ONLY AND IS NOT TO SCALE. CONTRACTOR MUST INSTALL DRIP

5. INSTALL A FLUSH VALVE (NOT SHOWN) AT THE END OF ALL DRIP LINES, PER PLAN.

	ELECTRICAL SYMBOLS						
SYMBOL	EXPLANATION	SYMBOL	EXPLANATION	SYMBOL	EXPLANATION		
	BRANCH CIRCUIT CONCEALED IN CEILING OR WALL	F1	FIXTURE TYPE SYMBOL	\$	TAMPER AND FLOW		
	BRANCH CIRCUIT CONCEALED IN GROUND OR FLOOR		LINIER FIXTURE (TYPICAL)	FACP	FIRE ALARM CONTROL PANEL		
A-1,3	BRANCH CIRCUIT HOMERUNS TO PANEL	0	EMERGENCY LIGHTING UNIT	RFAA	REMOTE FIRE ALARM ANNUNCIATOR PANEL		
[135]	ROOM NUMBER		SURFACE OR PENDANT MOUNTED FIXTURE	NAC	FIRE ALARM NAC PANEL		
CH 1	MECHANICAL EQUIPMENT SYMBOL	۵	RECESSED FIXTURE	VOICE	FIRE ALARM VOICE PANEL		
	KEYED NOTE REFERENCE	-0	WALL MOUNTED FIXTURE	D/H	DOOR HOLDER		
(42X)	FEEDER TAG (SEE FEEDER SCHEDULE)	•	WALL PACK	F/S	FIRE/SMOKE DAMPER		
	LIGHTING AND POWER PANELBOARD		STRIP FIXTURE	E	FIRE ALARM PULL STATION		
- Non-Fused - Fused	DISCONNECT SWITCH	∇ ∇	TRACK LIGHTING	図	FIRE ALARM STROBE		
- Non-Fused - Fused	DISCONNECT SWITCH WITH MOTOR STARTER	BUGEYE EGRESS	EMERGENCY LIGHTING UNIT		FIRE ALARM HORN/STROBE		
\boxtimes	MOTOR STARTER	₩	WALL MOUNTED EXIT LIGHT (SINGLE FACE)		FIRE ALARM HORN/STROBE (LF = LOW FREQUENCY)		
VFD	VARIABLE FREQUENCY DRIVE	⊦₫	WALL MOUNTED EXIT LIGHT (DOUBLE FACE)	⊠(1)	FIRE ALARM HORN/STROBE WITH PROTECTIVE COVER		
С	CONDUIT STUB	8	CEILING MOUNTED EXIT LIGHT		FIRE ALARM SPEAKER/STROBE		
J	JUNCTION BOX	₫	CEILING MOUNTED EXIT LIGHT (DOUBLE FACE)		FIRE ALARM SPEAKER/STROBE (LF = LOW FREQUENCY)		
	ELECTRIC VEHICLE CHARGING STATION	⊗)	EXIT LIGHT WITH PROTECTIVE COVER		FIRE ALARM SPEAKER		
← A-3 	Modifier 	\$	SINGLE POLE SWITCH (SUBSCRIPT AS INDICATED BELOW)		FIRE ALARM SPEAKER (LF = LOW FREQUENCY)		
		2 3	TWO POLE SWITCH 3-WAY SWITCH		FIRE ALARM HORN		
WP GFCI	WEATHERPROOF COVER & LISTED WEATHER RESISTANT DEVICE PROTECTED BY FAULT CIRCUIT INTERRUPTER	4 D	4-WAY SWITCH DIMMER SWITCH		FIRE ALARM HORN (LF = LOW FREQUENCY)		
+44	MOUNTING HEIGHT ABOVE FLOOR OR GRADE GIVEN IN INCHES.	, к	KEYED SWITCH	8	FIRE ALARM STROBE CEILING MOUNTED		
REF DW	REFRIGERATOR DISHWASHER	, ' M	TIMER SWITCH MANUAL STARTER WITH THERMAL OVERLOAD	84	FIRE ALARM HORN/STROBE CEILING MOUNTED		
DISP WASH	DISPOSAL WASHING MACHINE	F OC	PADDLE FAN SPEED CONTROL. (CANARM "CN" SERIES) OCCUPANCY SENSOR SWITCH		FIRE ALARM HORN/STROBE CEILING MOUNTED		
EWC	ELECTRIC WATER COOLER HUBBELL USB15AC5W OR EQUAL DUPLEX PLUS USB CHARGER	LV LV/D	LOW VOLTAGE CONTROL SWITCH LOW VOLTAGE CONTROL SWITCH WITH DIMMER	Ø □ LF	(LF = LOW FREQUENCY)		
TR	TAMPER RESISTANT	0C/D 0C/2	OCCUPANCY SENSOR CONTROL SWITCH WITH DIMMER DUAL RELAY OCCUPANCY SENSOR CONTROL SWITCH	O ₁	FIRE ALARM HORN CEILING MOUNTED		
	DUPLEX RECEPTACLE OUTLET	00/2	DUAL RELAT OCCUPANCE SENSOR CONTROL SWITCH		FIRE ALARM HORN CEILING MOUNTED (LF = LOW FREQUENCY)		
	QUAD RECEPTACLE OUTLET	\$ \$	DOUBLE GANG SWITCH	0	SMOKE DETECTOR (SUBSCRIPT AS INDICATED BELOW)		
€	SPLIT WIRED DUPLEX RECEPTACLE OUTLET	\$2,400 \$	LOW VOLTAGE MULTI BUTTON CONTROL SWITCH (LETTER INDICATES CONTROL OF CORRESPONDING FIXTURES)	B C	SMOKE ALARM BATTERY-BACKED SMOKE/CARBON MONOXIDE ALARM COMBO BATTERY-BACKED		
€	220V RECEPTACLE OUTLET	\$°\$	CONTROLLING SWITCH (LETTER INDICATES CONTROL OF CORRESPONDING FIXTURES)	D R	DUCT SMOKE DETECTOR SMOKE DETECTOR WITH ADDRESSABLE RELAY		
⊕ =	ISOLATED GROUND RECEPTACLE	<u>\$</u>	OCCUPANCY SENSOR (CEILING MOUNTED)	s	SMOKE DETECTOR WITH SOUNDER BASE		
	RECEPTACLE FLOOR DEVICE	DT PIR	DUAL TECHNOLOGY OCCUPANCY SENSOR (CEILING MOUNTED) PASSIVE INFRARED OCCUPANCY SENSOR (CEILING MOUNTED)	1	HEAT DETECTOR		
	CEILING MOUNTED DEVICE	(RC)	ROOM CONTROLLER	0	GAS DETECTOR		
©	SPECIAL RECEPTACLE	(LS)	DAYLIGHT SENSOR	CO CO/NO2	CARBON MONOXIDE DETECTOR CARBON MONOXIDE/NITROGEN DIOXIDE SENSOR (GARAGE)		
9	MOTOR OUTLET	®	PHOTOCELL	©	ADA TWO-WAY COMMUNICATIONS SYSTEM		
	EXHAUST FAN	(V)	VOLUME CONTROL	KP	ACCESS CONTROL KEY PAD		
•	THERMOSTAT OUTLET		WALL SPEAKER	CR	ACCESS CONTROL CARD READER		
S	REMOTE SENSOR OUTLET		CEILING SPEAKER	Sps	ACCESS CONTROL DOOR STRIKE		
平	TELEPHONE OUTLET		SURVEILLANCE CAMERA	ML	ACCESS CONTROL MAG LOCK		
▽(#)	COMPUTER DATA OUTLET (#) INDICATES JACK QUANTITIES	DVR	SURVEILLANCE DIGITAL VIDEO RECORDER	DS	ACCESS CONTROL DOOR SENSOR		
\Box	NETWORK AND VOICE OUTLET	NURSE	NURSE CALL ANNUNCIATOR PANEL	0	ACCESS CONTROL REQUEST TO EXIT		
(a)	WIRELESS ACCESS POINT CEILING MOUNTED	-N	NURSE CALL EMERGENCY CALL DEVICE	•	PUSHBUTTON		
TV	TELEVISION OUTLET	M	NURSE CALL EMERGENCY CALL LIGHT	-B	BELL		
NOTE: ALL SYMB	I DLS MAY NOT BE USED.	<u> </u>	1	1	<u> </u>		

20 21 22

18 19

11 12 13

NOTE: ALL SYMBOLS MAY NOT BE USED.

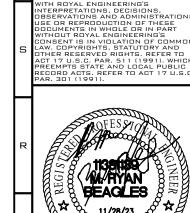
	ABBREVIATIONS INDEX							
#	NUMBER	DC	DIRECT CURRENT	KW	KILOWATT	PT	POTENTIAL TRANSFORMER	
ф	PHASE	DISP	DISPOSAL	LRA	LOCKED ROTOR AMPS	PV	PHOTOVOLTAIC	
1ф	SINGLE PHASE	DRY	DRYER	LTG	LIGHTING	PVC	POLYVINYL CHLORIDE	
2P	TWO-POLE	DW	DISHWASHER	MATV	MASTER ANTENNA TELEVISION	(R)	RELOCATE	
3 φ	THREE PHASE	DWG	DRAWING	MAX	MAXIMUM	RECP	RECEPTACLE	
\$ P	FOUR-POLE	EC	EMPTY CONDUIT	MB	MAIN BUS	REF	REFRIGERATOR	
NC	ALTERNATING CURRENT	EM	EMERGENCY	MCB	MAIN CIRCUIT BREAKER	REQ	REQUIRED	
\FF	ABOVE FINISHED FLOOR	EMG	EMERGENCY GENERATOR	MCC	MOTOR CONTROL CENTER	RLA	RATED LOAD AMPS	
\FG	ABOVE FINISHED GRADE	EMT	ELECTRICAL METALLIC TUBING	MCM	1000 CIRCULAR MILLS	RMS	ROOT MEAN SQUARE	
\FP	ARC FAULT PROTECTOR	EP0	EMERGENCY POWER OFF	MH	MANHOLE	SE	SERVICE ENTRANCE	
\HJ	AUTHORITY HAVING JURISDICTION	EWC	ELECTRIC WATER COOLER	MIC	MICROPHONE	SPD	SURGE PROTECTION DEVICE	
AIC	AMP INTERRUPTING CURRENT (SYMMETRICAL)	EWH	ELECTRIC WATER HEATER	MIN	MINIMUM	SPEC	SPECIFICATION	
\L	ALUMINUM	(E)	EXISTING	MLO	MAIN LUGS ONLY	SPK	SPEAKER	
AM .	AMPS METER	(E) (F)	FUTURE	MNF	MANUFACTURER	SS	SELECTOR SWITCH	
AMP	AMPERE	FA	FIRE ALARM	MTG	MOUNTING	SW	SWITCH	
ANN	ANNUNCIATOR	FACP	FIRE ALARM CONTROL PANEL	MTR	MOTOR	SWBD	SWITCHBOARD	
NTS	AUTOMATIC TRANSFER SWITCH	FC	FOOT CANDLE	MW	MICROWAVE	SWGR	SWITCHGEAR	
\UX	AUXILIARY	FLA	FULL LOAD AMPS	(N) N/A	NEW	ТТВ	TELEPHONE TERMINAL BOARD	
WG	AMERICAN WIRE GAUGE	FT	FOOT	N/A	NOT APPLICABLE	TBC	TELEPHONE TERMINAL CABINET	
BC	BARE COPPER	FRZ	FREEZER	NC	NORMALLY CLOSED	TV	TELEVISION	
3FG	BELOW FINISH GRADE	FS	FUSED SWITCH	NEC	NATIONAL ELECTRICAL CODE	TYP	TYPICAL	
;	CONDUIT	GFAF	DUAL FUNCTION GFCI/AFCI CIRCUIT BREAKER	NEMA	NATIONAL MANUFACTURING ASSOCIATION	UG	UNDERGROUND	
AB	CABINET	GFCI	GROUND FAULT CIRCUIT INTERRUPTER	NFC	NATIONAL FIRE CODE	UNO	UNLESS NOTED OTHERWISE	
ATB	COMMUNITY ANTENNA TELEVISION	GFEP	GROUND-FAULT EQUIPMENT PROTECTION	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION	UPS	UNINTERRUPTIBLE POWER SUPPLY	
CATV	CABLE TELEVISION	GFP	GROUND FAULT PROTECTOR	NFS	NON FUSED SWITCH	V	VOLT (KV-KILOVOLT)	
FCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED	GRC	GALVANIZED RIGID CONDUIT	NIC	NOT IN CONTRACT	VA/R	VOLT-AMPS/REACTIVE	
KT	CIRCUIT	GRD	GROUND	NL	NIGHT LIGHT	VM	VOLT METER	
LG	CEILING	HP	HORSE POWER	NO	NORMALLY OPEN	W	WATTS	
NTR	CONTRACTOR	HZ	HERTZ	NTS	NOT TO SCALE	W/	WITH	
0	CONVENIENCE OUTLET	IG	ISOLATED GROUND	OFCI	OWNER FURNISHED CONTRACTOR INSTALLED	WASH	WASHER	
RT	COMPUTER TERMINAL	IMC	INTERMEDIATE METALLIC CONDUIT	OFOI	OWNER FURNISHED OWNER INSTALLED	WH	WATTHOUR	
T	CURRENT TRANSFORMER	IN	INCH	OS&Y	OUTSIDE SCREW AND YOKE	W/O	WITHOUT	
:U	COPPER	J-BOX	JUNCTION BOX	PB	PUSH BUTTON	WP	WEATHER PROOF	
:/W	CONDUIT WITH	ΚV	KILOVOLT	PF	POWER FACTOR	XFMR	TRANSFORMER	
Ď)	DEMOLISH/DELETE	KVA	KILOVOLT AMPERES	PFR	PHASE FAILURE RELAY	XFMR-SW	TRANSFORMER SWITCH	
DB	DECIBEL	KVAR	KILOVARS	PNL	PANEL	XP	EXPLOSION PROOF	

	DESIGN CONTACTS						
	ELECTRICAL ENGINEER:	RYAN BEAGLES					
	ELECTRICAL TEAM LEAD:	JOE HUTCHINGS					
	ELECTRICAL DESIGNER:	MAXIMILIANO BARONA					

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	SHEET INDEX
SHEET NUMBER	SHEET TITLE
E0.0	ELECTRICAL COVER SHEET
E1.1	SITE PHOTOMETRIC PLAN
E6.1	ELECTRICAL SCHEDULES

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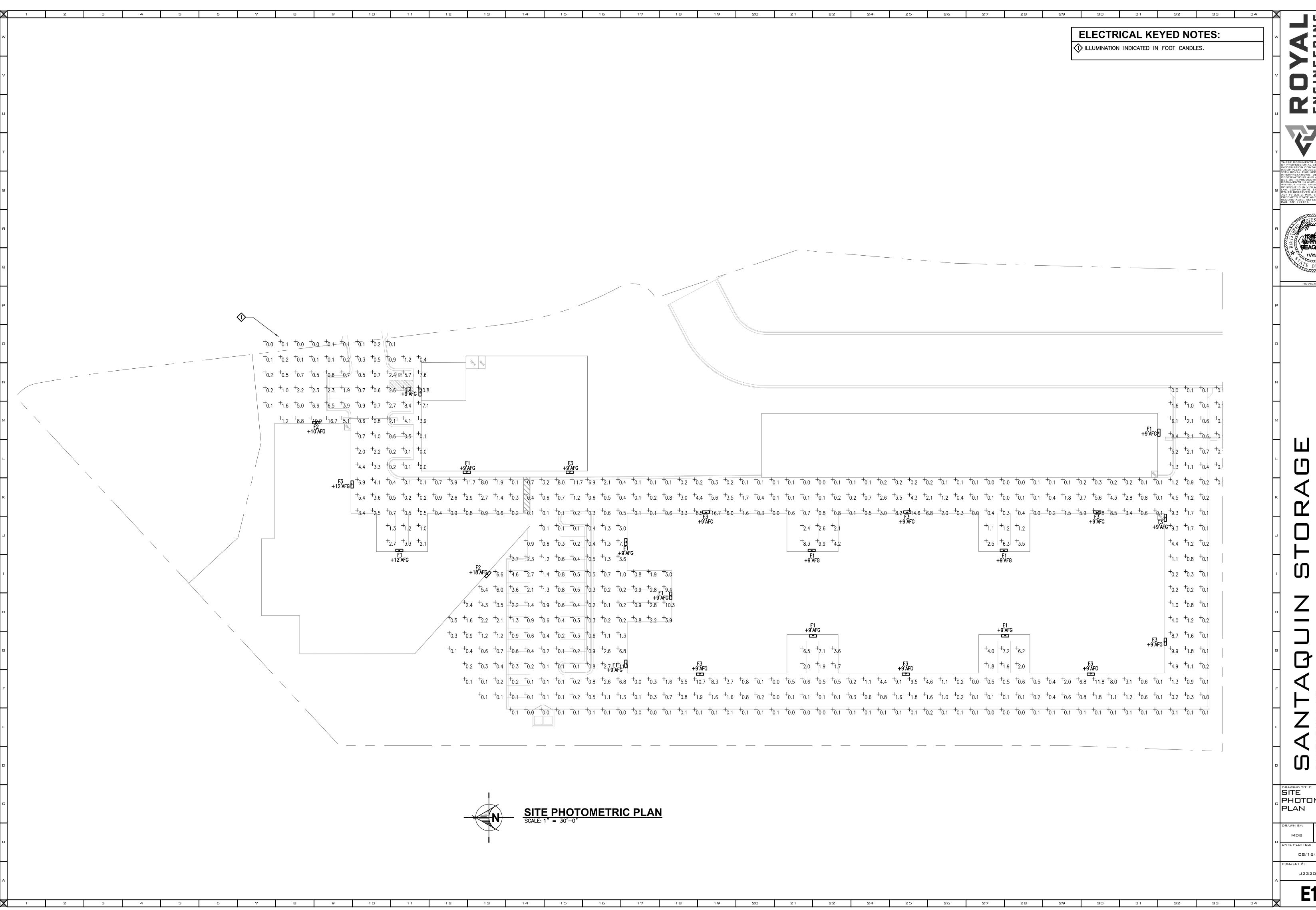
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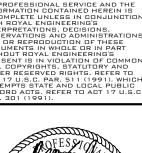
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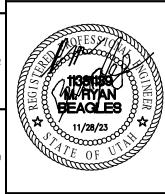
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IXTURE	FIXTURE	FIXTURE CATALOG #	LAMPS		FIXTURE			T	T
NUMBER	MANUFACTURER		TYPE	QTY.	VOLTS	WATTS	MOUNTING	DESCRIPTION	REMARKS
F1	McGRAW-EDISON OR APPROVED EQUAL	GWC-SA1D-740-U-SL4	LED 6725 LUMENS 4000 KELVIN 70 CRI	-	120	67	WALL MOUNT	LED WALL PACK	
F2	McGRAW-EDISON OR APPROVED EQUAL	GWC-SA2D-740-U-SL4	LED 13142 LUMENS 4000 KELVIN 70 CRI	-	120	129	WALL MOUNT	LED WALL PACK	
F3	McGRAW-EDISON OR APPROVED EQUAL	GWC-SA1D-740-U-SL2	LED 6863 LUMENS 4000 KELVIN 70 CRI	-	120	67	WALL MOUNT	LED WALL PACK	

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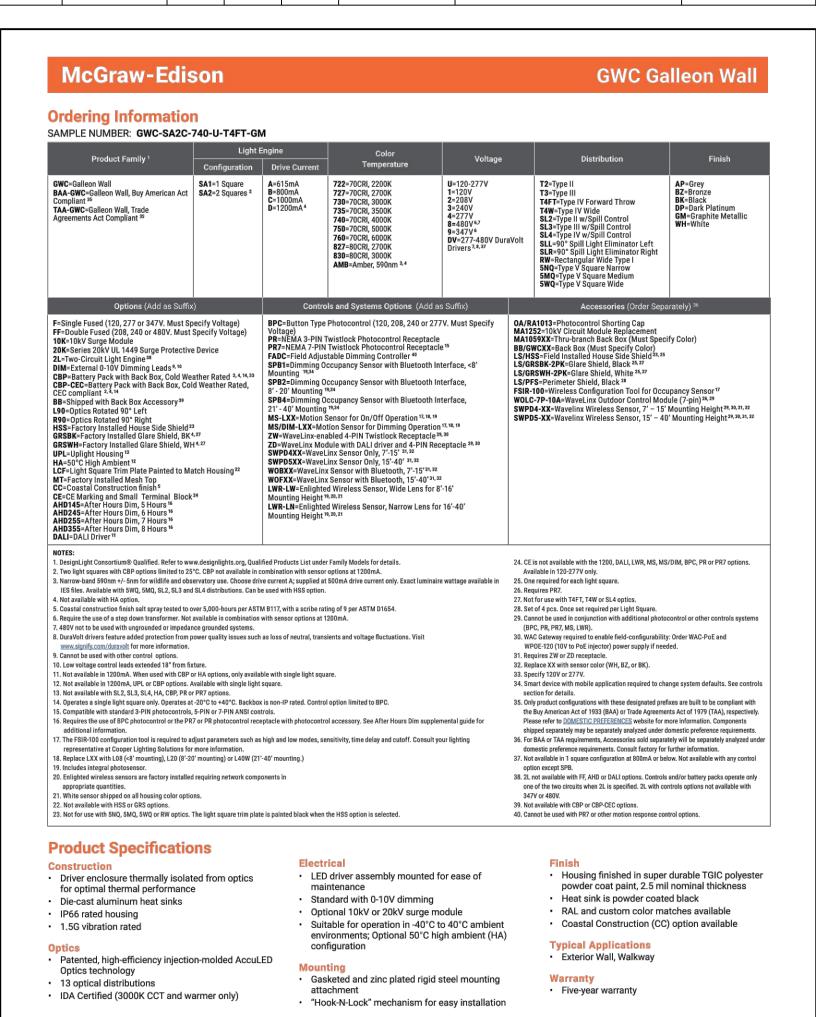
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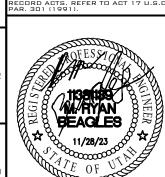
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ELECTRICAL SCHEDULES

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