

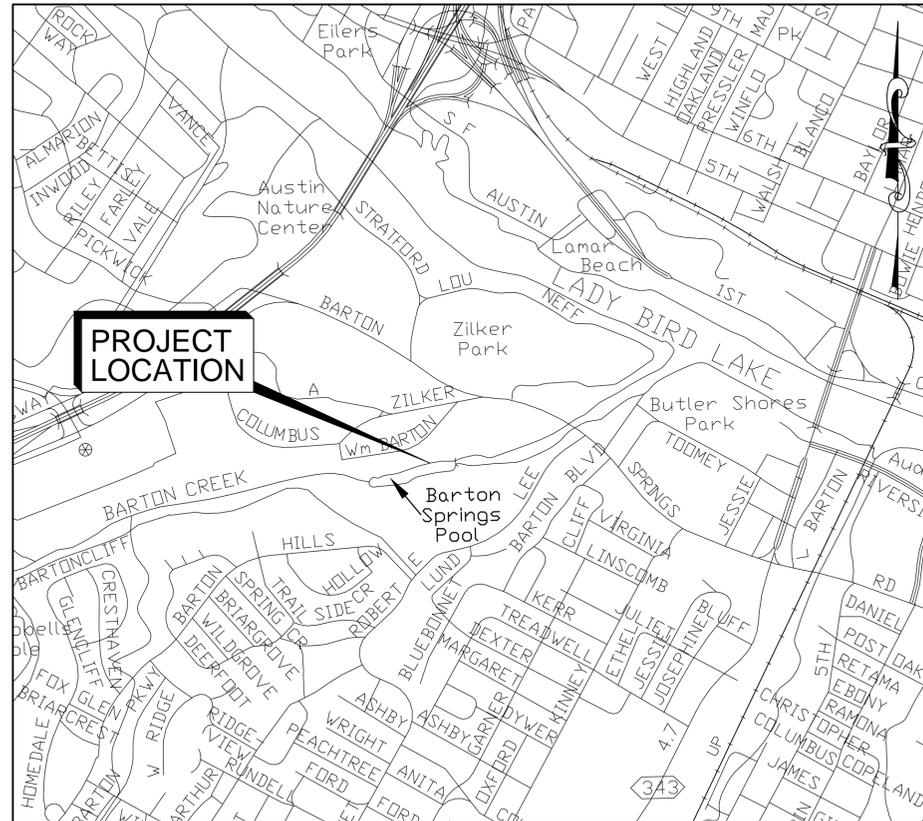


Austin City Council:

- Steve Adler - Mayor
- Kathie Tovo - Mayor Pro Tem
- Ora Houston
- Delia Garza
- Sabino Renteria
- Gregorio Casar
- Ann Kitchen
- Don Zimmerman
- Leslie Pool
- Ellen Troxclair
- Sheri Gallo

Austin City Manager:

Marc A. Ott



VICINITY MAP

1"=2000'
COA GRID: H22
MAPSCO #: 584Y

NOTES:

1. THIS PROJECT IS LOCATED IN THE BARTON CREEK WATERSHED (CLASSIFIED AS BARTON SPRINGS ZONE).
2. THIS PROJECT IS LOCATED IN THE BARTON SPRINGS ZONE.
3. THIS PROJECT IS PARTIALLY LOCATED OVER THE EDWARDS AQUIFER RECHARGE ZONE
4. THIS PROJECT IS LOCATED ENTIRELY WITHIN THE 100-YEAR FLOODPLAIN PER FEMA MAP NO. 48453C0445H, DATED 9/26/08.
5. THIS PROJECT IS SUBJECT TO THE VOID AND WATER FLOW MITIGATION RULE (ECM 1.12.0) AND COA STANDARD SPECIFICATION ITEM 658S. ALL TRENCHING GREATER THAN 5 FT DEEP MUST BE INSPECTED BY A GEOLOGIST (TEXAS P.G. OR A GEOLOGISTS REPRESENTATIVE).
6. THE PROJECT SITE IS ZONED PUBLIC-P AND PUBLIC-HISTORIC P-H. PRINCIPAL STREET TYPE IS URBAN.
7. AN AMENDMENT TO THE SAVE OUR SPRINGS ORDINANCE WILL BE REQUIRED TO ALLOW CONSTRUCTION OF THIS PROJECT WITHIN THE BARTON SPRINGS ZONE.
8. CALL ONE CALL CENTER (1-800-344-8377) FOR UTILITY LOCATIONS PRIOR TO ANY WORK IN CITY EASEMENTS OR STREETS RIGHT-OF-WAY.
9. NOTIFY THE PUBLIC WORKS DEPARTMENT, IN WRITING, TWENTY FOUR (24) HOURS PRIOR TO STARTING CONSTRUCTION OR CLEARING OPERATIONS.
10. RELEASE OF THE APPLICATION DOES NOT CONSTITUTE A VERIFICATION OF ALL DATA, INFORMATION AND CALCULATIONS SUPPLIED BY THE APPLICANT. THE ENGINEER OF RECORD IS SOLELY RESPONSIBLE FOR THE COMPLETENESS, ACCURACY, AND ADEQUACY OF HIS/HER SUBMITTAL, WHETHER OR NOT THE APPLICATION IS REVIEWED FOR CODE COMPLIANCE BY THE CITY ENGINEERS.
11. LEGAL DESCRIPTION: ABS 45 BARTON W ACR 5.22, ABS 8 SUR 20 DECKER I ACR 69.49
12. ZILKER PARK IS LOCATED IN A NATIONAL REGISTERED HISTORIC DISTRICT AND WITHIN THE BARTON SPRINGS ARCHEOLOGICAL HISTORICAL DISTRICT.

Construction Drawings for

ELIZA SPRING OUTLET DAYLIGHTING

BARTON SPRINGS POOL AREA

Eliza Spring is home to the largest known population of the Barton Springs Salamander. In the 1920s, flow from the spring was enclosed in a pipe, made of concrete and metal. This concrete and metal environment does not make for ideal salamander habitat. This project aims to reconstruct that lost salamander habitat by recreating an overland stream. This would return the spring run to a more natural state and enhance the salamander habitat, improving the potential for long term recovery of the species. Because Barton Springs is habitat for two endangered species, the City of Austin needs a U.S. Fish and Wildlife permit to keep the pool open. This project is a mitigation measure for the City's federal U.S. Fish and Wildlife Service permit that allows Barton Springs Pool to remain open to the public.

C.I.P. No. 6660.046

**SITE ADDRESS: 2201 Barton Springs Rd
Austin, TX 78746**

**HDR Project No. Austin, Texas
00000000220162 DECEMBER 2015**



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HDR Engineering, Inc.
Firm Registration No. 754
4401 West Gate Blvd., Ste 400
Austin, Tx 78745
Ph: (512)912-5100
Fax: (512)912-5158

OWNER:
City of Austin

MANAGING DEPARTMENT CONTACT:
Jules Parrish, Project Manager
Public Works Department
505 Barton Springs Road
9th Floor
Austin, TX 78704
(512) 974-9385 Fax: (512) 974-7222

SPONSORING DEPARTMENT CONTACT:
Donelle Robinson, Project Sponsor
WPD
505 Barton Springs Road
11th Floor
Austin, TX 78704
(512) 974-1242 Fax: (512) 974-2846

ENGINEER OF RECORD:
Scott M. Muchard P.E., C.F.M.
HDR Engineering, Inc.
4401 West Gate Blvd., Ste. 400
Austin, Texas 78745
Phone: (512) 912-5100
Fax: (512) 912-5158

Sponsoring Department:

Watershed Protection Department _____ Date

Managing Department:

Public Works Department _____ Date

Submitted By:

HDR Engineering _____ Date

Reviewed By:

For Director, Planning and Development Review Department _____ Date

SP-####-####

Site Plan/ Development Permit Number _____ Date

SUBMITTAL DATE: 12/11/2015

GENERAL CONSTRUCTION NOTES

- 1. ALL IMPROVEMENTS SHALL BE MADE IN ACCORDANCE WITH THE RELEASED SITE PLAN. ANY ADDITIONAL IMPROVEMENTS WILL REQUIRE A SITE PLAN AMENDMENT AND APPROVAL FROM THE DEVELOPMENT SERVICES DEPARTMENT.
2. ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE CITY OF AUSTIN MUST RELY ON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.
3. CONTRACTOR SHALL CALL THE ONE CALL CENTER (1-800-344-8377) FOR UTILITY LOCATIONS PRIOR TO ANY WORK IN CITY EASEMENTS OR STREET R.O.W.
4. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION OF THE CITY'S ONE STOP SHOP (OSS) AT 974-6360 OR 974-7034 AT LEAST 24 HOURS PRIOR TO THE INSTALLATION OF ANY DRAINAGE FACILITY WITHIN A DRAINAGE EASEMENT OR STREET R.O.W. THE METHOD OF PLACEMENT AND COMPACTION OF BACKFILL IN THE CITY'S R.O.W. MUST BE APPROVED PRIOR TO THE START OF BACKFILL OPERATIONS.
5. ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION. (OSHA STANDARDS MAY BE PURCHASED FROM THE GOVERNMENT PRINTING OFFICE; INFORMATION AND RELATED REFERENCE MATERIALS MAY BE PURCHASED FROM OSHA, 611 EAST 6TH STREET, AUSTIN TEXAS.)
6. CONTRACTOR MAY NOT BLOCK, DIRECT, IMPEDE, OR REROUTE PEDESTRIAN OR VEHICULAR TRAFFIC, NOR PLACE A BARRICADE OR OTHER TRAFFIC CONTROL DEVICE IN A RIGHT OF WAY WITHOUT FIRST OBTAINING A TEMPORARY USE OF RIGHT OF WAY PERMIT FROM THE DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION.
7. ALL SITE WORK MUST ALSO COMPLY WITH ENVIRONMENTAL REQUIREMENTS.
8. UPON COMPLETION OF THE PROPOSED SITE IMPROVEMENTS AND PRIOR TO THE FOLLOWING, THE ENGINEER SHALL CERTIFY IN WRITING THAT THE PROPOSED DRAINAGE, FILTRATION AND DETENTION FACILITIES WERE CONSTRUCTED IN CONFORMANCE WITH THE APPROVED PLANS:
•RELEASE OF THE CERTIFICATE OF OCCUPANCY BY THE PLANNING AND DEVELOPMENT REVIEW DEPARTMENT (INSIDE THE CITY LIMITS); OR
•INSTALLATION OF AN ELECTRIC OR WATER METER (IN THE FIVE-MILE ETJ).

SPECIAL CONSTRUCTION NOTES

- 1. BLASTING WITHIN THE PROJECT AREA WILL NOT BE ALLOWED WITHOUT A SEPARATE BLASTING PERMIT.
2. BURNING WILL NOT BE ALLOWED ONSITE.
3. THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN BARRICADES, WARNING SIGNS, FLASHERS AND OTHER DEVICES OF THE TYPE AND SIZE AS INDICATED IN THE LATEST EDITION OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, OR AS DIRECTED BY THE ENGINEER.
4. THE CONTRACTOR SHALL MAINTAIN AT LEAST ONE DUST-FREE LANE FOR TRAFFIC WITH FLAGMEN DURING CONSTRUCTION ACTIVITIES AND TWO LANES AT ALL OTHER TIMES. ACCESS TO CONTIGUOUS PRIVATE PROPERTIES SHALL BE MAINTAINED AT ALL TIMES.
5. ALL STRUCTURAL CONCRETE SHALL BE CLASS "A" (5 SACK, 25-8-36100 PSI @ 28 DAYS) AND ALL REINFORCING STEEL SHALL BE GRADE SIXTY, UNLESS OTHERWISE NOTED.
6. THE CONTRACTOR SHALL NOT DISPOSE OF SURPLUS EXCAVATED MATERIAL FROM THE SITE WITHOUT NOTIFYING THE ENVIRONMENTAL INSPECTOR, AT 974-2278, 48 HOURS PRIOR TO THE REMOVAL. THIS NOTIFICATION SHALL INCLUDE THE DISPOSAL LOCATION AND A COPY OF THE PERMIT ISSUED TO RECEIVE THE MATERIAL, IF APPLICABLE.
7. UTILITIES SHOWN REFLECT THE BEST INFORMATION AVAILABLE AT THE TIME THE PROJECT WAS SURVEYED. NO WARRANTY IS IMPLIED AS TO THE ACTUAL LOCATION. FOR EXACT LOCATIONS CALL 472-2822, 48 HOURS PRIOR TO BEGINNING EXCAVATION.
8. SIGNS IN THE WAY OF CONSTRUCTION SHALL BE REMOVED AND RELOCATED AS SOON AS POSSIBLE. ALL TRAFFIC CONTROL SIGNS, INCLUDING STOP AND STREET-NAME SIGNS, SHALL NOT BE REMOVED OR RELOCATED WITHOUT THE APPROVAL OF THE PROJECT INSPECTOR AND THE TRANSPORTATION ENGINEERING DIVISION OF THE DEPARTMENT OF TRANSPORTATION. THIS WORK SHALL BE SUBSIDIARY TO OTHER BID ITEMS.
9. ANY UTILITY METERS IN THE WAY OF THE CONSTRUCTION WILL BE RELOCATED OUTSIDE OF THE PROPOSED CONSTRUCTION AREA BY THE UTILITY OWNER UNLESS SUCH WORK AFFECTING THOSE METERS IS INCLUDED IN THE CONTRACT.
10. ANY AREAS TO RECEIVE TRANSITION PAVEMENT SHALL BE CONSTRUCTED WITH THE SAME TYPICAL SECTION AS THE ADJACENT NEW CONSTRUCTION.
11. ANY EXISTING SIDEWALKS, CURBS OR DRIVEWAYS DISTURBED BY THE CONSTRUCTION SHALL BE REMOVED AND RESTORED WITH SURFACE MATERIALS EQUAL TO OR BETTER THAN THE ORIGINAL.
12. THE REMOVAL OF EXISTING DRIVEWAY PIPE CULVERTS, RIPRAP AND HEADWALLS IN THE WAY OF CONSTRUCTION WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE SUBSIDIARY TO OTHER BID ITEMS.
13. IN AREAS WHERE EXISTING CURBS AND GUTTERS ARE TO REMAIN, THE OLD PAVING AND BASE MUST BE REMOVED AND THE NEW BASE AND PAVING PLACED AND COMPACTED SO AS NOT TO DISTURB EXISTING CURBS AND GUTTERS.
14. USE OF HYDRATED LIME SHALL BE RESTRICTED AND SHALL BE APPROVED BY OWNER. OWNER MAY DENY APPROVAL FOR USE OF HYDRATED LIME AT OWNER'S DISCRETION.
15. ALL STORM SEWER PIPE SHALL BE RCP, CLASS V, WITH BEDDING THAT CONFORMS TO COA STANDARD SPECIFICATION 510-PIPE AND ITS SPECIAL PROVISION, UNLESS OTHERWISE NOTED. ALL BEDDING MATERIAL SHALL BE APPROVED BY OWNER PRIOR TO PLACEMENT. JOINTS SHALL BE WATER TIGHT.
16. THE CONTRACTOR SHALL ERECT AND MAINTAIN FILTER FABRIC FENCE, MULCH SOCKS, AND SPILL CONTAINMENT BOOMS AT LOCATIONS SHOWN ON THE PLANS AND ANY OTHER LOCATIONS

- DESIGNATED BY THE ENGINEER OR OWNER. PAYMENT WILL BE MADE UNDER THE APPROPRIATE ITEMS LISTED ON THE BID FORM 300U.
17. COMPLIANCE WITH FEDERAL AND STATE ENDANGERED SPECIES PERMITS IS REQUIRED. OVERSIGHT BY CITY OF AUSTIN SALAMANDER BIOLOGIST IN ADDITION TO CITY OF AUSTIN ENVIRONMENTAL INSPECTOR IS REQUIRED THROUGHOUT THE ENTIRE CONSTRUCTION PHASE.
18. THE ENTIRE FLOOR OF THE ELIZA SPRING AMPHITHEATER IS ENDANGERED SPECIES HABITAT AND CANNOT BE IMPACTED BY CONSTRUCTION. EQUIPMENT AND CREW CANNOT ENTER THE AMPHITHEATER FLOOR EXCEPT TO INSTALL COFFERDAM. MATERIAL, DEBRIS, OR SILT CANNOT BE ALLOWED TO DROP INTO AMPHITHEATER FLOOR.
19. ELIZA SPRING AMPHITHEATER IS A HISTORICAL STRUCTURE. ONLY THE PARTS NOTED TO BE REMOVED CAN BE AFFECTED. DEMOLITION AND CONSTRUCTION MUST LEAVE THE REST OF THE HISTORICAL STRUCTURE UNDAMAGED.
20. DAMAGED STRUCTURES MUST BE REPAIRED BY THE CONTRACTOR AT CONTRACTOR'S EXPENSE.
21. SPECIFIED MATERIALS, MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES SHALL NOT BE SUBSTITUTED WITHOUT APPROVAL BY OWNER.
22. COMPLIANCE WITH WPAP EXCEPTION IS REQUIRED.
23. COORDINATION WITH USFWS AND TPWD ARE REQUIRED. CITY OF AUSTIN WILL ARRANGE COORDINATION WITH THESE ENTITIES, AND CONTRACTOR SHALL COMPLY.
24. CONTRACTOR SHALL TAKE EXTREME CARE NOT TO DAMAGE EXISTING BURIED ELIZA SPRING OUTLET PIPE UNTIL WATER FLOW IS DIVERTED. MEASURES TO BE TAKEN TO PROTECT PIPE SHALL INCLUDE BUT NOT BE LIMITED TO PLACEMENT OF STEEL PLATING OVER PIPE ALIGNMENT. CONTRACTOR SHALL INSTALL AND OBTAIN OWNER APPROVAL OF PIPE PROTECTION MEASURES PRIOR TO ALLOWING VEHICLES OR EQUIPMENT TO CROSS PIPE ALIGNMENT OR CONDUCTING ANY OTHER ACTIVITIES THAT MAY CAUSE DAMAGE TO PIPE. NO SEPARATE PAY.
25. MAXIMUM ALLOWABLE UNIFORM LIVE LOAD ON THE BYPASS TUNNEL ROOF IS 100 PSF.
26. MAXIMUM ALLOWABLE EQUIPMENT LOAD ON THE BYPASS TUNNEL ROOF IS 2,000 LBS. EQUIPMENT DATASHEETS MUST BE SUBMITTED FOR ENGINEER/OWNER APPROVAL BEFORE EQUIPMENT WILL BE ALLOWED ON THE BYPASS TUNNEL ROOF. DATASHEETS WILL BE USED TO DETERMINE THE APPLIED LOADING ON THE BYPASS TUNNEL ROOF.
27. FOR THE PROTECTION OF NATURAL AREAS, NO EXCEPTIONS WILL BE TAKEN TO THE LOCATIONS OF FENCES AT THE LIMITS OF CONSTRUCTION AS SHOWN ON PLANS. CONTRACTOR NOT TO EXCEED THE LIMITS OF CONSTRUCTION.
28. CONTRACTOR TO NOTIFY CITY OF AUSTIN SALAMANDER BIOLOGISTS PRIOR TO WORK NEAR OR WITHIN SALAMANDER HABITAT AREA, INCLUDING ANY WORK WITHIN THE ELIZA SPRING AMPHITHEATER. CONTRACTOR SHALL COORDINATE TIMING OF WORK WITHIN THE ELIZA SPRING AMPHITHEATER WITH CITY OF AUSTIN SALAMANDER BIOLOGISTS.
29. CITY OF AUSTIN SALAMANDER BIOLOGIST MUST BE PHYSICALLY PRESENT AT ALL TIMES WHEN THE CONTRACTOR IS WORKING WITHIN THE ELIZA SPRING AMPHITHEATER.
30. CITY OF AUSTIN SALAMANDER BIOLOGIST MUST HAVE CONTINUAL ACCESS TO ALL PARTS OF THE CONSTRUCTION SITE.
31. CITY OF AUSTIN SALAMANDER BIOLOGIST HAVE IMMEDIATE STOP WORK AUTHORITY FOR ANY ACTIVITY THAT IN THEIR SOLE JUDGEMENT POSES POTENTIAL HARM TO PROTECTED SALAMANDER HABITAT.
32. NO STRUCTURAL WORK IS ALLOWED TO INTRUDE INTO THE FLOOR OF THE AMPHITHEATER WITHIN SALAMANDER HABITAT.
33. HAZARDOUS MATERIALS ARE NOT PERMITTED WITHIN 25 FEET OF ENDANGERED SPECIES HABITAT, THE CONSTRUCTED SPRING OUTLET CHANNEL, BARTON SPRINGS POOL, OR BARTON CREEK.
34. PROJECT CONSTRUCTION WORKING HOURS ARE FROM 7 AM TO 7 PM WEEKDAYS AND 8 AM TO 7 PM WEEKENDS.
35. CONTRACTOR SHALL SECURE CONSTRUCTION SITE FROM PUBLIC ACCESS AT ALL TIMES AND PREVENT PUBLIC ENTRY TO BARTON SPRINGS POOL THROUGH CONSTRUCTION SITE AT ALL TIMES.
36. CONTRACTOR SHALL COORDINATE TIMING OF EXCAVATION AND DEMOLITION ACTIVITIES WITH PROJECT CULTURAL RESOURCES CONSULTANT AND ALLOW CONSULTANT TO CONDUCT CULTURAL RESOURCES MONITORING ACTIVITIES.
37. CONTRACTOR SHALL COVER ALL OPEN TRENCHES WITH STEEL PLATING AT THE END OF EACH WORK DAY.
38. THE CONTRACTOR IS LIMITED TO THE TYPES OF FUEL PRODUCTS FOR EQUIPMENT THAT IS USED FOR THE CONSTRUCTION ONLY. THE FOLLOWING FUEL PRODUCTS CAN BE USED DURING CONSTRUCTION:
•PROPANE OR COMPRESSED NATURAL GAS
•BIODIESEL (B100) MEETING ASTM D6751-08. NOTE: BIODIESEL BLENDS WITH PETROLEUM DIESEL WILL NOT BE ALLOWED WITHOUT WRITTEN CONSENT.
•STRAIGHT VEGETABLE OIL (SVO) OR PURE PLANT OIL(PP0).
39. THE CONTRACTOR IS LIMITED TO VEGETABLE BASED HYDRAULIC FLUIDS FOR EQUIPMENT THAT WILL BE USED WITHIN LOC. WITHOUT THE WRITTEN CONSENT BY THE OWNER, HYDRAULIC FLUIDS MUST MEET THE FOLLOWING SPECIFICATIONS:
•BIODEGRADABILITY: 80% DEGRADABLE WITHIN 21 DAY PER CEC L-32-A-94

IN INSTANCES WHERE A SUITABLE BIODEGRADABLE PRODUCT IS NOT AVAILABLE, CONTRACTOR SHALL PROVIDE DOCUMENTATION OF SUCH TO OWNER IF REQUESTED.

DEVELOPER INFORMATION

OWNER: DONELLE ROBINSON, CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT
ADDRESS: 505 BARTON SPRINGS ROAD, AUSTIN, TX 78701
PHONE #: 512-974-1242
OWNER'S REPRESENTATIVE RESPONSIBLE FOR PLAN ALTERATIONS: SCOTT M. MUCHARD, P.E., HDR ENGINEERING, INC.
PHONE#: 512-912-5100
CONTRACTOR IS RESPONSIBLE FOR EROSION/SEDIMENTATION CONTROL MAINTENANCE.
CONTRACTOR IS RESPONSIBLE FOR TREE/NATURAL AREA PROTECTION MAINTENANCE.

AMERICANS WITH DISABILITIES ACT

THE CITY OF AUSTIN HAS REVIEWED THIS PLAN FOR COMPLIANCE WITH CITY DEVELOPMENT REGULATIONS ONLY. THE APPLICANT, PROPERTY OWNER, AND OCCUPANT OF THE PREMISES ARE RESPONSIBLE FOR DETERMINING WHETHER THE PLAN COMPLIES WITH ALL OTHER LAWS, REGULATIONS, AND RESTRICTIONS WHICH MAY BE APPLICABLE TO THE PROPERTY AND ITS USE.

SURVEY

- 1. THE INFORMATION PROVIDED ON THE BASE DRAWING BASED ON SURVEY MAPS PROVIDED BY LANDMARK SURVEYING AND SAM INC. SURVEY DATA GENERALLY COLLECTED BETWEEN 2009 AND 2011.
2. PROJECT SURVEY CONTROL WAS ESTABLISHED FROM LCRA, CITY OF AUSTIN CONTROL IN THIS AREA, AND TXDOT CORS STATIONS.
3. ALL PROJECT GRID COORDINATES BASED ON THE TEXAS STATE PLAN COORDINATE SYSTEM, CENTRAL ZONE, NAD83(1993). VERTICAL DATUM: NAVD88.
4. ONLY VISIBLE SURFACE FEATURES, VISIBLE UTILITIES AND VISIBLE EVIDENCE OF UNDERGROUND UTILITIES WERE SURVEYED AND SHOWN HEREIN.

LEGEND

- BENCHMARK
CONTROL POINT
GPS MONUMENT
MANHOLE
WASTE WATER MANHOLE
WATER MANHOLE
ELECTRIC MANHOLE
TELEPHONE PEDESTAL
ELECTRIC JUNCTION BOX
POWER POLE
GUY ANCHOR
6" WOOD POST (UNLESS OTHERWISE NOTED)
WATER SPRINKLER
FIRE HYDRANT
WATER VALVE
VARIOUS TRAFFIC AND UTILITY SIGNS
WATER FAUCET
WATER METER
DROP INLET
VARIOUS LAMPS
CLEANOUT
TREE WITH APPROXIMATE DRIPLINE PER COA GUIDELINES (1"DBH=1' RADIUS)
CONC. CONCRETE
TD TRASH DISPOSAL
BORING LOCATION
CHAINLINK FENCE
WROUGHT IRON FENCE
OVERHEAD ELECTRIC

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Table with columns: ISSUE, DATE, DESCRIPTION

Table with columns: PROJECT MANAGER, DESIGNED BY, DRAWN BY, CHECKED BY, DATE, PROJECT NUMBER



ELIZA SPRING OUTLET DAYLIGHTING

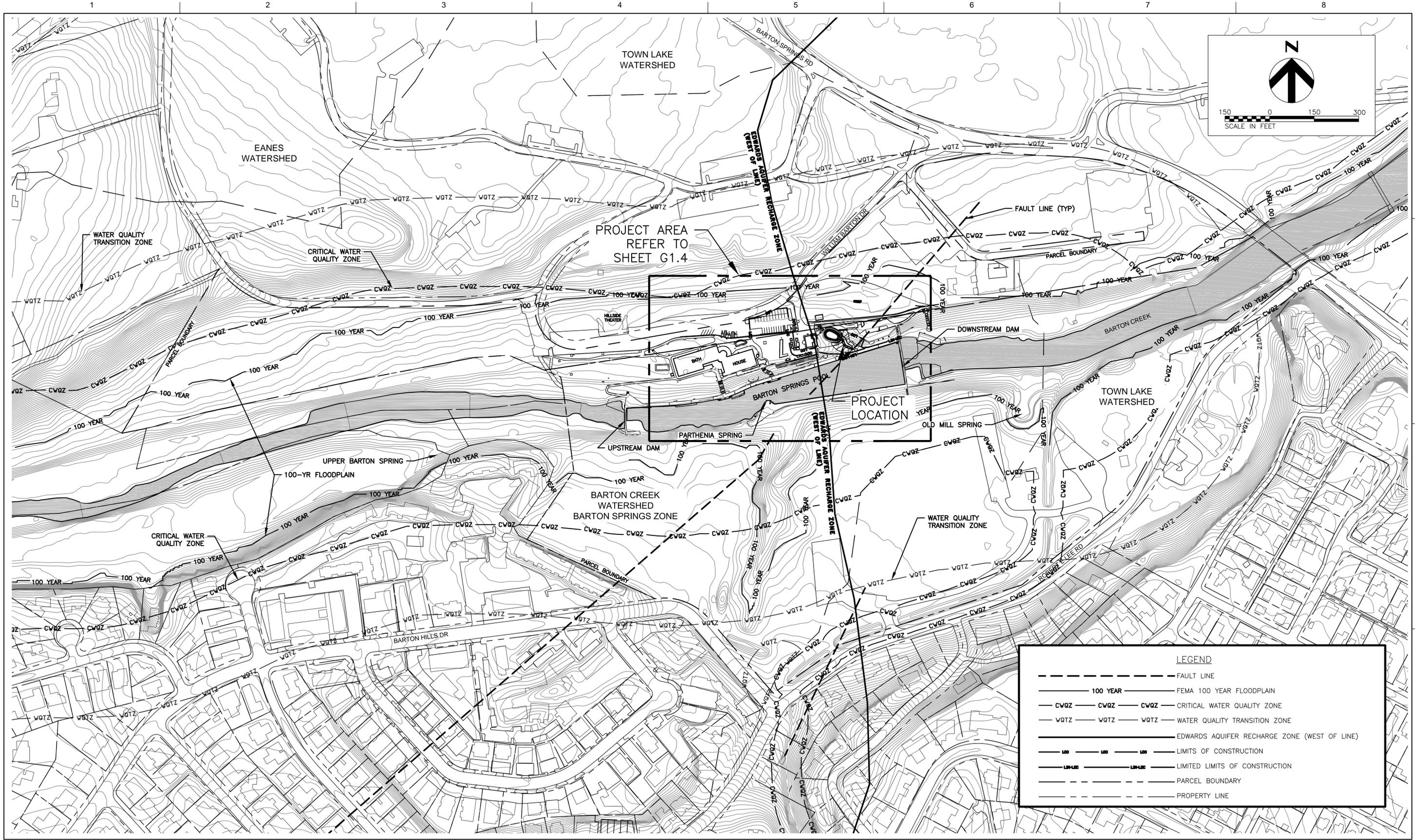
Austin, Texas

GENERAL NOTES AND LEGEND



FILENAME | G1.2.DWG
SCALE | NONE

SHEET | G1.2



c:\pwworking\harrad\04729282\G1.3.dwg



ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	S. MUCHARD
DESIGNED BY	S. MUCHARD
DRAWN BY	C. AMARAL
CHECKED BY	C. PARKER
DATE	DECEMBER 2015
PROJECT NUMBER	220162



ELIZA SPRING OUTLET DAYLIGHTING

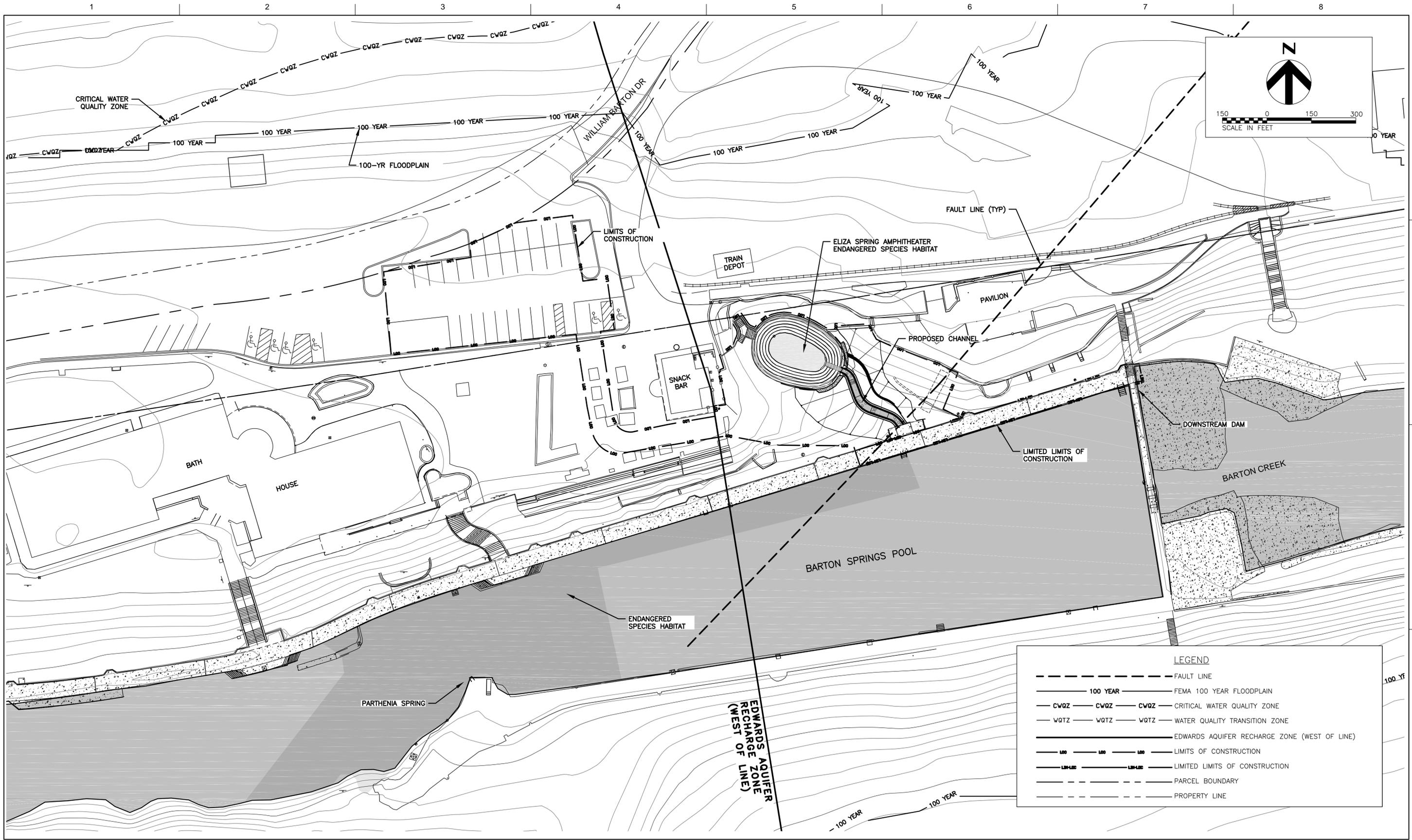
Austin, Texas

OVERALL SITE PLAN



FILENAME | G1.3.DWG
SCALE | 1" = 150'

SHEET
G1.3



LEGEND	
	FAULT LINE
	FEMA 100 YEAR FLOODPLAIN
	CWQZ CRITICAL WATER QUALITY ZONE
	WQTZ WATER QUALITY TRANSITION ZONE
	EDWARDS AQUIFER RECHARGE ZONE (WEST OF LINE)
	LIMITS OF CONSTRUCTION
	LIMITED LIMITS OF CONSTRUCTION
	PARCEL BOUNDARY
	PROPERTY LINE

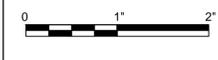


ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	S. MUCHARD
DESIGNED BY	S. MUCHARD
DRAWN BY	C. AMARAL
CHECKED BY	C. PARKER
DATE	DECEMBER 2015
PROJECT NUMBER	220162



**ELIZA SPRING
OUTLET DAYLIGHTING**
Austin, Texas



FILENAME | G1.4.DWG
SCALE | 1" = 30'

SHEET
G1.4

c:\pwworking\hadr\04739282\G1.4.dwg

RIGHT OF WAY MANAGEMENT STANDARD NOTES

1. FOR RIGHT OF WAY VIOLATIONS INCLUDING BUT NOT LIMITED TO WORKING WITHOUT A PERMIT OR AN EXPIRED PERMIT WITHIN THE CITY OF AUSTIN ROW AN INVESTIGATION FEE WILL BE ASSESSED FOR EACH OFFENSE UNTIL THE VIOLATION IS CORRECTED. FOLLOWING IS THE INVESTIGATION FEE SCHEDULE FOR VIOLATIONS OF PUBLIC SAFETY:
 - a. NO OR EXPIRED PERMIT = EQUAL TO THE COST OF THE PERMIT
 - b. VIOLATION OF PERMIT CONDITIONS, RESTRICTION LIMITS, TIMES AND LOCATIONS ON ROW PERMIT = \$250
 - c. IMPROPER ADVANCE WARNING SIGN = \$250
 - d. IMPROPER USE OF DEVICE = \$250
 - e. FAILURE TO CORRECT DEFICIENCY = \$500
 - f. RESTRICTING TRAFFIC DURING PEAK HOURS = EQUAL TO THE COST OF THE PERMIT
 - g. MULTIPLE VIOLATIONS = UP TO A 4 DAY SUSPENSION OF WORK
2. CONTRACTORS AND THEIR SUBCONTRACTORS MUST BE LICENSED BY THE CITY OF AUSTIN FOR CONDUCTING WORK WITHIN THE RIGHT OF WAY.
3. CONTRACTOR MUST OBTAIN RIGHT OF WAY EXCAVATION PERMITS FROM RIGHT OF WAY MANAGEMENT DIVISION, FOR EACH STREET PRIOR TO COMMENCEMENT OF WORK. PLEASE CALL (512) 974-1150 FOR ADDITIONAL INFORMATION REGARDING PERMITTING PROCESS AND THE MOST CURRENT RIGHT OF WAY PERMITTING FEE SCHEDULE.
4. FOR WORK AT SIGNALIZED INTERSECTIONS CONTRACTOR MUST DIAL 311 OR (512) 974-2000 TO INITIATE A CITIZENS SERVICE REQUEST (CSR) FOR THE TRAFFIC SIGNALS GROUP; TO COORDINATE AND GAIN APPROVAL A MINIMUM OF 1 WEEK PRIOR TO CHANGE OF PROJECT LOCATION OR PHASE.
5. CONTRACTOR SHALL HAVE AN APPROVED RIGHT OF WAY PERMIT ON SITE AT ALL TIMES WHEN WORKING IN THE ROW.
6. CONTRACTOR MUST DIAL 311 OR (512) 974-2000 TO INITIATE A CITIZENS SERVICE REQUEST (CSR) FOR RIGHT OF WAY MANAGEMENT A MINIMUM OF 1 WEEK PRIOR TO START OF WORK.
7. CONTRACTOR MUST PROVIDE TRAINING CERTIFICATION OF COMPETENT PERSON THAT WILL BE RESPONSIBLE FOR THE TRAFFIC CONTROL PLACEMENT, TO RIGHT OF WAY INSPECTOR, PRIOR TO START OF WORK.
8. STORAGE OF EQUIPMENT AND/OR MATERIAL WITHIN THE ROW.
 - a. STORAGE OF EQUIPMENT IN THE ROW IS PERMISSIBLE ONLY WITHIN THE CURRENT LIMITS OF LONG-TERM OR INTERMEDIATE-TERM CLOSURES AND SHALL BE LIMITED TO THE EQUIPMENT REQUIRED FOR THE CURRENT WORK ACTIVITY. THIS EQUIPMENT SHALL BE PROTECTED BEHIND BARRICADES.
 - b. STORAGE OF MATERIAL IN THE ROW IS PERMISSIBLE ONLY WITHIN THE CURRENT LIMITS OF LONG-TERM OR INTERMEDIATE-TERM CLOSURES AND SHALL BE LIMITED TO NO MORE THAN THE MATERIAL REQUIRED FOR THREE DAYS OF PRODUCTION. THIS MATERIAL SHALL BE PROTECTED BEHIND WATER-FILLED BARRIER.
 - c. EQUIPMENT OR MATERIAL STORED IN THE ROW SHALL NOT CREATE A VISUAL BARRIER TO TRAFFIC.
9. NO MORE THAN ONE WORK ZONE LOCATION MAY BE SET AT ONE TIME.

10. PEAK HOURS FOR ARTERIAL AND COLLECTOR STREETS ARE 6AM TO 9AM AND 4PM TO 6 PM, MONDAY THROUGH FRIDAY. NO DISRUPTION OR REDUCTION OF ACTIVE ROADWAY OR PEDESTRIAN ROUTE CAPACITY SHALL OCCUR DURING THESE TIMES, UNLESS ALLOWED BY TRAFFIC CONTROL PLAN.
11. EXCAVATIONS SHALL BE BACKFILLED OR PLATED WHEN REQUIRED TO OPEN IMPACTED TRAFFIC LANES. FOR EXCAVATIONS EXCEEDING A TRANSVERSE WIDTH OF 6 FEET, THE CONTRACTOR SHALL PROVIDE AN ENGINEERED PLATING PLAN TO THE OWNER'S REPRESENTATIVE FOR REVIEW BY RIGHT OF WAY MANAGEMENT DIVISION.
12. EXISTING SIDEWALKS AND BEATEN PATHS SHALL BE MAINTAINED AS ADA COMPLIANT THROUGHOUT THE PROJECT DURATION WITH THE EXCEPTION OF FINAL FLATWORK AND UTILITY TIE-INS. ANY WORK OVERHEAD WITHIN 25 FEET OF EXISTING PEDESTRIAN PATHWAYS WILL REQUIRE PEDESTRIAN COVERED WALKWAYS. SIDEWALK CLOSURES FOR MAJOR SIDEWALK IMPROVEMENTS HAVE A 14-DAY MAXIMUM PERIOD AND SHALL BE COMPLETED IN PHASES AS TO NOT CLOSE MORE THAN ONE BLOCK AT A TIME.
13. "ROAD WORK AHEAD" AND "CONSTRUCTION ENTRANCE AHEAD" SIGNS MUST BE PLACED AT ALL APPROACHES TO STABILIZED CONSTRUCTION ENTRANCE. SEE THE CITY OF AUSTIN STANDARD DETAILS FOR SIGN SPACING.
14. DRIVEWAYS SHALL NOT BE CLOSED FOR MORE THAN 3 CONSECUTIVE CALENDAR DAYS.
15. ADA COMPLIANCE SHALL BE MAINTAINED THROUGH STABILIZED CONSTRUCTION ENTRANCE.
16. BARRIER SHALL BE PLACED WITHIN GUIDELINES SET FORTH BY THE TMUTCD CRASH TESTING REQUIREMENTS (NCHRP REPORT 350) FOR THAT PARTICULAR BARRIER USED. ANY MODIFICATIONS TO THAT TESTING APPLICATION SHALL BE APPROVED BY THE ENGINEER OF RECORD.
17. FOR OVERNIGHT PROTECTION OF WORK ZONES WITHIN THE ROW, REFER TO CITY OF AUSTIN STANDARD 804S-4 SERIES DETAILS.
18. ALL TEMPORARY PAVING SHALL CONFORM TO CITY OF AUSTIN STANDARD DETAIL 1100S-4.
19. INITIAL AND PHASE CHANGE TRAFFIC CONTROL CHANGES SHALL BE INSTALLED ON THE WEEKENDS.
20. THE NAME AND TELEPHONE NUMBER OF THE CONTRACTOR OR SUPPLIER SHALL BE SHOWN ON THE NON-REFLECTIVE SURFACE OF ALL CHANNELIZING DEVICES IN ACCORDANCE WITH THE CITY OF AUSTIN STANDARD 800 SERIES DETAILS.

STREET BARRICADING SUMMARY TABLE

PROTECTION	STREET NAME	FROM STREET	TO STREET	FUNCTIONAL CLASSIFICATION	WORK HOURS	TRAFFIC CONTROL DETAILS
NOT PROTECTED	WILLIAM BARTON DR.	BARTON SPRINGS POOL ENTRANCE	200 LF EAST	LOCAL STREET	FULL TIME CLOSURE	SHEET G1.6



ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	S. MUCHARD
DESIGNED BY	L. POLLACK
DRAWN BY	C. AMARAL
CHECKED BY	C. PARKER
DATE	DECEMBER 2015
PROJECT NUMBER	220162



**ELIZA SPRING
OUTLET DAYLIGHTING**

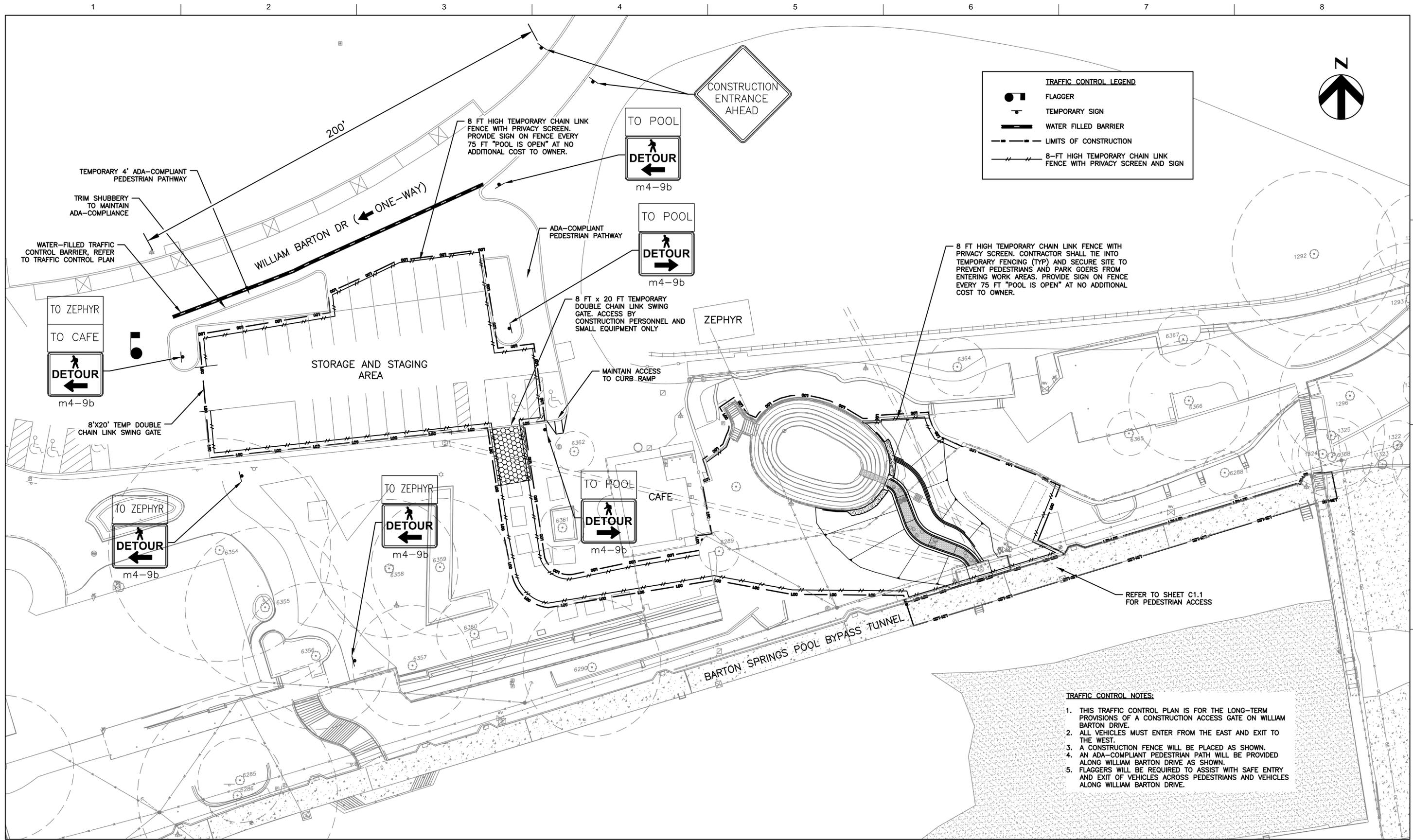
Austin, Texas

**TRAFFIC CONTROL
GENERAL NOTES**



FILENAME | G1.5.DWG
SCALE | NONE

SHEET
G1.5



TRAFFIC CONTROL LEGEND

- FLAGGER
- TEMPORARY SIGN
- WATER FILLED BARRIER
- LIMITS OF CONSTRUCTION
- 8-FT HIGH TEMPORARY CHAIN LINK FENCE WITH PRIVACY SCREEN AND SIGN

- TRAFFIC CONTROL NOTES:**
1. THIS TRAFFIC CONTROL PLAN IS FOR THE LONG-TERM PROVISIONS OF A CONSTRUCTION ACCESS GATE ON WILLIAM BARTON DRIVE.
 2. ALL VEHICLES MUST ENTER FROM THE EAST AND EXIT TO THE WEST.
 3. A CONSTRUCTION FENCE WILL BE PLACED AS SHOWN.
 4. AN ADA-COMPLIANT PEDESTRIAN PATH WILL BE PROVIDED ALONG WILLIAM BARTON DRIVE AS SHOWN.
 5. FLAGGERS WILL BE REQUIRED TO ASSIST WITH SAFE ENTRY AND EXIT OF VEHICLES ACROSS PEDESTRIANS AND VEHICLES ALONG WILLIAM BARTON DRIVE.

c:\pwworking\harr04739282\G1.6.dwg



ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	S. MUCHARD
DESIGNED BY	L. POLLACK
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CHECKED BY	C. PARKER
DATE	DECEMBER 2015
PROJECT NUMBER	220162



**ELIZA SPRING
OUTLET DAYLIGHTING**

Austin, Texas

**TRAFFIC CONTROL
PLAN**



FILENAME | G1.6.DWG
SCALE | 1"=20'

SHEET
G1.6

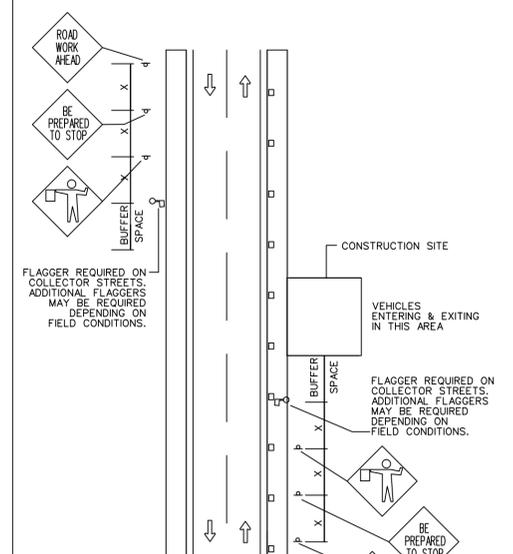
- FOR DAYTIME WORK, THE FLAGGER SHALL WEAR AN APPROVED BRIGHTLY COLORED VEST. FOR NIGHTTIME WORK, THE VEST SHALL BE RETROREFLECTIVE. THE RETROREFLECTIVE MATERIAL SHALL BE ORANGE, YELLOW, WHITE, SILVER, STRONG YELLOW-GREEN OR A FLOURESCENT VERSION OF THESE COLORS AND SHALL BE VISIBLE AT A MINIMUM DISTANCE OF 305 m (1,000').
- FOR LOW-VOLUME APPLICATIONS, A SINGLE FLAGGER MAY BE ADEQUATE. WHERE ONE FLAGGER CAN BE USED, SUCH AS FOR SHORT WORK AREAS ON STRAIGHT ROADWAYS, THE FLAGGER MUST BE VISIBLE TO APPROACHING TRAFFIC FROM BOTH DIRECTIONS.
- FLAGGERS SHALL USE ONLY STOP/SLOW PADDLE TO DIRECT TRAFFIC UNLESS WORKING IN A SIGNALIZED INTERSECTION WHERE DRIVERS MAY BE CONFUSED BY THE SIGN PADDLE. HAND SIGNAL MAY BE USED IN THESE SITUATIONS.
- FLAGGERS SHALL ENSURE THAT ALL REQUIRED SIGNING IS IN PLACE PRIOR TO BEGINNING FLAGGING OPERATIONS.
- FLAGGERS SHALL NOT PERFORM WORK THAT IS NOT RELATED TO FLAGGING WHILE ON DUTY.
- FLAGGERS MAY CARRY AIR HORNS OR WHISTLES TO WARN WORKERS OF AN EMERGENCY CONDITION.
- FLAGGERS SHALL BE REQUIRED TO USE TWO-WAY RADIOS WHEN OUT OF CLEAR VIEW OF EACH OTHER.
- FLOODLIGHTS SHOULD BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT AS NEEDED.

TAPER LENGTHS

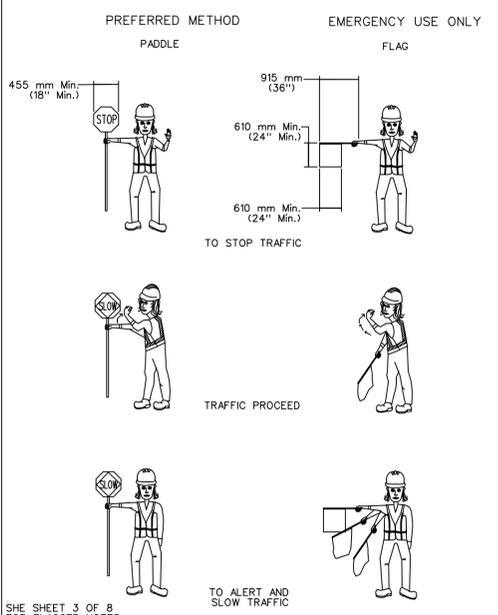
SPEED (kmph)	SPEED* (mph)	LENGTH (meters)	LENGTH (feet)
30	20	11	35
40	25	17	55
50	30	26	85
55	35	36	120
65	40	51	170
70	45	66	220
80	50	84	280
90	55	101	335
95	60	125	415
105	65	146	485

*POSTED SPEED

DEPARTMENT OF PUBLIC WORKS	FLAGGER SETUP FOR 2 LANE ROADWAY	STANDARD NO.
RECORD COPY SIGNED BY BILL GARDNER	03/13/06 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
		804S-2 3 OF 8



DEPARTMENT OF PUBLIC WORKS	FLAGGER SETUP FOR VEHICLES ENTERING AND EXITING WORK SITE	STANDARD NO.
RECORD COPY SIGNED BY BILL GARDNER	03/13/06 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
		804S-2 4 OF 8



DEPARTMENT OF PUBLIC WORKS	USE OF HAND SIGNALING DEVICES	STANDARD NO.
RECORD COPY SIGNED BY BILL GARDNER	03/13/06 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
		804S-2 7 OF 8

Typical Transition Lengths and Suggested Maximum Spacing of Devices

Speed KMPH	Posted Speed MPH	Formula	Minimum Desirable Taper Lengths (L) Meters (Feet)	Suggested Max. Device Spacing Meters (Feet)	Suggested Sign Spacing Meters (Feet)
50	30	L=WS ² /60	3.0(10) 45 (150)	3.3(11) 50 (165)	3.6(12) 55 (180)
55	35		65 (205)	70 (225)	75 (245)
65	40	L=WS	80 (265)	90 (295)	100 (320)
70	45		135 (450)	165 (540)	180 (600)
80	50	L=WS	150 (500)	165 (550)	180 (600)
90	55		200 (660)	220 (720)	240 (780)
95	60	L=WS	215 (700)	235 (770)	255 (840)
105	65		235 (770)	255 (840)	275 (900)
115	70		255 (840)	275 (900)	295 (960)

LEGEND

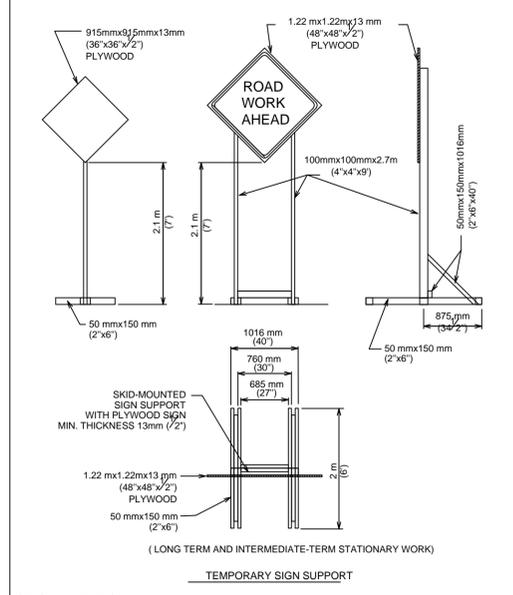
- Channelizing devices
- Trailer mounted flashing arrow board
- Flagger

TRAFFIC DETOUR NOTES:

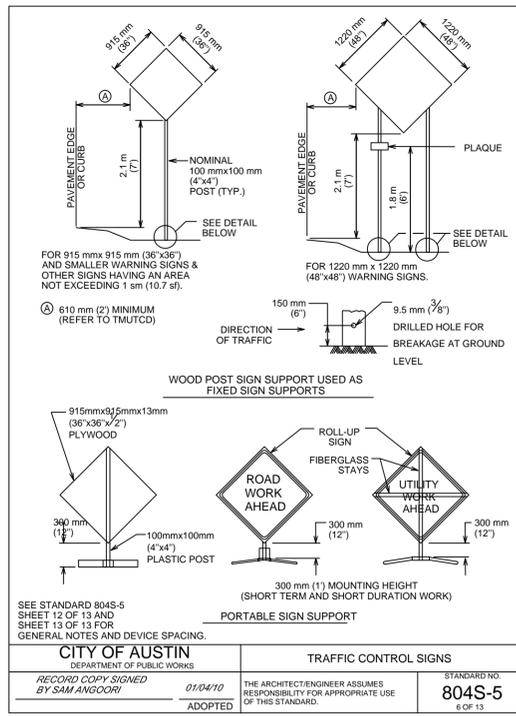
- "STREET CLOSED" AND "STREET CLOSED TO THRU TRAFFIC" MAY BE USED IN PLACE OF "ROAD CLOSED" AND "ROAD CLOSED TO THRU TRAFFIC".
- THE USE OF A STREET SIGN NAME MOUNTED WITH THE M4-9 DETOUR SIGN IS REQUIRED. THE STREET NAME PLATE SHOULD BE PLACED ABOVE THE DETOUR SIGN. THE PLATE MAY HAVE EITHER A WHITE-ON-GREEN OR A BLACK-ON-ORANGE LEGEND.
- ADDITIONAL "DO NOT ENTER SIGNS" MAY BE DESIRABLE AT INTERSECTIONS WITH INTERVENING STREETS.
- A M4-9 DETOUR SIGN WITH AN ADVANCE TURN ARROW MAY BE USED IN ADVANCE OF A TURN. ON MULTI-LANE STREETS, SUCH SIGNS SHOULD BE USED.
- M4-9 DETOUR SIGNS MAY BE LOCATED ON THE FAR SIDE OF INTERSECTIONS.

** TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES

DEPARTMENT OF PUBLIC WORKS	TYPICAL LENGTHS & SPACING OF DEVICES LEGEND AND GENERAL NOTES	STANDARD NO.
RECORD COPY SIGNED BY BILL GARDNER	03/13/06 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
		804S-2 8 OF 8



DEPARTMENT OF PUBLIC WORKS	TRAFFIC CONTROL SIGNS	STANDARD NO.
RECORD COPY SIGNED BY SAM ANGOORI	01/04/10 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
		804S-5 5 OF 13



DEPARTMENT OF PUBLIC WORKS	TRAFFIC CONTROL SIGNS	STANDARD NO.
RECORD COPY SIGNED BY SAM ANGOORI	01/04/10 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
		804S-5 6 OF 13

TABLE VI-3 TYPICAL CONSTRUCTION WARNING SIGN SIZE AND SPACING

Roadway Class	Posted Speed	Sign Spacing	Long-term Stationary Or Intermediate-term Stationary Approaching Warning Signs		Short-term Stationary Or Short Duration Approaching Warning Signs		Other Warning Signs	
			Standard	Minimum*	Standard	Minimum*	Standard	Minimum*
Convsn.	KPH (MPH)	meter (feet)	mm (inches)	mm (inches)	mm (inches)	mm (inches)	mm (inches)	mm (inches)
40	25	1200x1200 (48x48)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)
50	30	1200x1200 (48x48)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)
60	35	1200x1200 (48x48)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)
70	40	1200x1200 (48x48)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)
80	45	1200x1200 (48x48)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)
90	50	1200x1200 (48x48)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)
100	55	1200x1200 (48x48)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)
110	60	1200x1200 (48x48)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)
120	65	1200x1200 (48x48)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)
130	70	1200x1200 (48x48)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)
140	75	1200x1200 (48x48)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)
150	80	1200x1200 (48x48)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)
160	85	1200x1200 (48x48)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)
170	90	1200x1200 (48x48)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)

DEPARTMENT OF PUBLIC WORKS	TRAFFIC CONTROL SIGNS	STANDARD NO.
RECORD COPY SIGNED BY SAM ANGOORI	01/04/10 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
		804S-5 7 OF 13

- ALL TRAFFIC CONTROL DEVICES, SIGNS, BARRICADES AND WARNING SIGNS SHALL BE FURNISHED, PLACED, CONSTRUCTED AND MAINTAINED IN THE APPROPRIATE TYPES AND SIZES AND FLAGGER OPERATIONS EXECUTED IN ACCORDANCE WITH THE CURRENT EDITION OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD). THE CITY OF AUSTIN STANDARD SPECIFICATIONS SERIES 800 AND THE CITY OF AUSTIN TRANSPORTATION CRITERIA MANUAL, OR AS DIRECTED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE. IF A CONFLICT ARISES THEN THE CITY OF AUSTIN TRANSPORTATION CRITERIA MANUAL SHALL CONTROL UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE.
- THE CONTRACTOR SHALL NOTIFY THE TRANSPORTATION DIVISION OF THE DEPARTMENT OF PUBLIC WORKS AT 974-7024 NO LATER THAN THE MONDAY OF THE WEEK DURING WHICH THE CONTRACTOR INTENDS TO SET UP BARRICADES TO START CONSTRUCTION.
- PROPOSED CONSTRUCTION TRAFFIC MOVEMENTS MAY REQUIRE EXISTING SIGNAL HEADS TO BE RELOCATED. THE CITY OF AUSTIN WILL REVIEW SIGNAL HEAD LOCATIONS DURING CONSTRUCTION AND PERFORM THE REQUIRED ADJUSTMENTS. THE CONTRACTOR SHALL CONTACT THE TRANSPORTATION DIVISION OF THE DEPARTMENT OF PUBLIC WORKS AT 974-7024, THREE (3) DAYS PRIOR TO PLACEMENT ANY TRAFFIC CONTROLS WHICH MAY REQUIRE SIGNAL HEAD ADJUSTMENTS/RELOCATION.
- THE CONTRACTOR SHALL PROVIDE ONE (1) FULL-TIME OFF-DUTY, UNIFORMED AUSTIN POLICE DEPARTMENT CERTIFIED PEACE OFFICER AND ONE (1) VEHICLE OF THE TYPE APPROVED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE FOR TEMPORARY LANE CLOSURES WHEN UNDERSEALING, MILLING, PAVING AND WHEN WORKING IN INTERSECTIONS AS PART OF THE TRAFFIC CONTROL OPERATIONS. THE PEACE OFFICER SHALL BE ABLE TO SHOW PROOF OF CERTIFICATION BY THE TEXAS COMMISSION ON LAW ENFORCEMENT OFFICER STANDARDS.
- THE CONTRACTOR SHALL NOTIFY ALL OTHER GOVERNMENTAL AGENCIES WHOSE RIGHTS-OF-WAY ARE AFFECTED BY HIS WORK ACTIVITIES. THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL TRAFFIC CONTROL DEVICES THAT THEY MAY NEED.
- THE CONTRACTOR SHALL MAINTAIN ONE (1) DUST-FREE LANE OF TRAFFIC IN EACH DIRECTION AT ALL TIMES, UNLESS OTHERWISE NOTED IN THE DRAWINGS OR APPROVED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE.
- THERE SHALL BE A MINIMUM OF THREE (3) METERS (10 FEET) CLEAR WIDTH FOR EACH LANE OF TRAFFIC IN CHANNELIZED AREAS, UNLESS OTHERWISE NOTED ON THE DRAWINGS OR APPROVED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE.
- THE CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS AT ALL TIMES. IF ACCESS CANNOT BE MAINTAINED, THE CONTRACTOR WITH THE APPROVAL OF THE ENGINEER OR DESIGNATED REPRESENTATIVE SHALL PROVIDE AT LEAST 24 HOUR WRITTEN NOTICE OF LIMITED ACCESS TO AFFECTED PROPERTY OWNERS. THE CONTRACTOR SHALL PROVIDE BUSINESS ACCESS SIGNS AS NEEDED TO INFORM DRIVERS OF THE LOCATIONS OF ALL DRIVEWAYS.
- TEMPORARY LANE CLOSURES IN THE CENTRAL BUSINESS DISTRICT (CBD) OR ON ARTERIAL STREETS SHALL NOT BE PERMITTED DURING THE HOURS OF 7 AM TO 9 AM AND 4 PM TO 6 PM MONDAY THROUGH FRIDAY UNLESS PRIOR APPROVAL HAS BEEN OBTAINED FROM THE TRANSPORTATION DIVISION.
- TRAFFIC CONTROL SHOWN ON STANDARD DETAILS IS TYPICAL. ADDITIONAL SIGNING AND/OR BARRICADES, AS WELL AS TEMPORARY PAVEMENT MARKINGS AND OBLITERATION/RESTORATION OF EXISTING PAVEMENT MARKINGS, MAY BE REQUIRED DEPENDING ON FIELD CONDITIONS. FIELD ADJUSTMENTS TO TRAFFIC CONTROL SIGNS WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED SUBSIDIARY TO ITEM NO. 803S "BARRICADES, SIGNS AND TRAFFIC HANDLING".
- THE CONTRACTOR SHALL DESIGNATE A COMPETENT PERSON FOR TRAFFIC CONTROL. THE COMPETENT PERSON SHALL MAKE INSPECTIONS OF THE TRAFFIC CONTROL DEVICES AT LEAST TWO (2) TIMES A DAY (ONCE AT THE BEGINNING OF THE DAY AND ONCE AT THE END OF THE DAY), INCLUDING NON-WORKING DAYS, ENSURING THAT ALL DEVICES ARE IN THEIR PROPER PLACE AND ARE IN WORKING ORDER.
- ALL DEVICES LIST BE MADE USING MATERIALS LISTED ON THE TxDOT APPROVED PRODUCTS LIST.

DEPARTMENT OF PUBLIC WORKS	GENERAL TRAFFIC CONTROL NOTES	STANDARD NO.
RECORD COPY SIGNED BY SAM ANGOORI	01/04/10 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
		804S-5 12 OF 13

- ALL PERSONS WORKING WITHIN THE RIGHT-OF-WAY SHALL WEAR A BRIGHTLY COLORED SAFETY VEST. FOR NIGHTTIME WORK THE VEST SHALL BE RETROREFLECTIVE.
 - WHEN AN INTERSECTION IS CLOSED FOR CONSTRUCTION, THE CONTRACTOR SHALL PROCEED WITH CONSTRUCTION IN SUCH A MANNER THAT THE CLOSURE TIME IS MINIMIZED.
 - THE CONTRACTOR SHALL NOTIFY THE CAPITAL METRO DISPATCHER AT 385-4295 ONE (1) WEEK PRIOR TO LANE CLOSURES ADJACENT TO BUS STOPS.
- DURATION OF WORK**
- WORK DURATION IS A MAJOR FACTOR IN DETERMINING THE NUMBER AND TYPES OF DEVICES USED IN TEMPORARY TRAFFIC ZONES. THE FIVE (5) CATEGORIES OF WORK DURATION AND THEIR TIME AT A LOCATION ARE AS FOLLOWS:
- LONG-TERM STATIONARY-WORK THAT OCCUPIES A LOCATION FOR MORE THAN 3 DAYS.
 - INTERMEDIATE-TERM STATIONARY-WORK THAT OCCUPIES A LOCATION FROM CONSTRUCTION AND PERFORM THE REQUIRED ADJUSTMENTS.
 - SHORT-TERM STATIONARY-DAYTIME WORK THAT OCCUPIES A LOCATION FROM 1 TO 12 HOURS.
 - SHORT-DURATION WORK THAT OCCUPIES A LOCATION UP TO 1 HOUR.
 - MOBILE-WORK THAT MOVES INTERMITTENTLY OR CONTINUOUSLY.

Typical Transition Lengths and Suggested Maximum Spacing of Devices

Posted Speed KPH (MPH)	Formula	Minimum Desirable Taper Lengths (L) Meters (Feet)	Suggested Max. Device Spacing Meters (Feet)	Suggested Sign Spacing Meters (Feet)
50 (30)	L=WS ² /60	45 (150)	50 (165)	55 (180)
55 (35)		65 (205)	70 (225)	75 (245)
65 (40)	L=WS	80 (265)	90 (295)	100 (320)
70 (45)		135 (450)	165 (540)	180 (600)
80 (50)	L=WS	150 (500)	165 (550)	180 (600)
90 (55)		200 (660)	220 (720)	240 (780)
100 (60)	L=WS	215 (700)	235 (770)	255 (840)
105 (65)		235 (770)	255 (840)	275 (900)
115 (70)		255 (840)	275 (900)	295 (960)

DEPARTMENT OF PUBLIC WORKS	GENERAL TRAFFIC CONTROL NOTES	STANDARD NO.
RECORD COPY SIGNED BY SAM ANGOORI	01/04/10 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
		804S-5 13 OF 13



PROJECT MANAGER	S. MUCHARD	
DESIGNED BY	L. POLLACK	
DRAWN BY	C. AMARAL	
CHECKED BY	C. PARKER	
DATE	DECEMBER 2015	
ISSUE	DATE	DESCRIPTION
PROJECT NUMBER	220162	



ELIZA SPRING OUTLET DAYLIGHTING

Austin, Texas

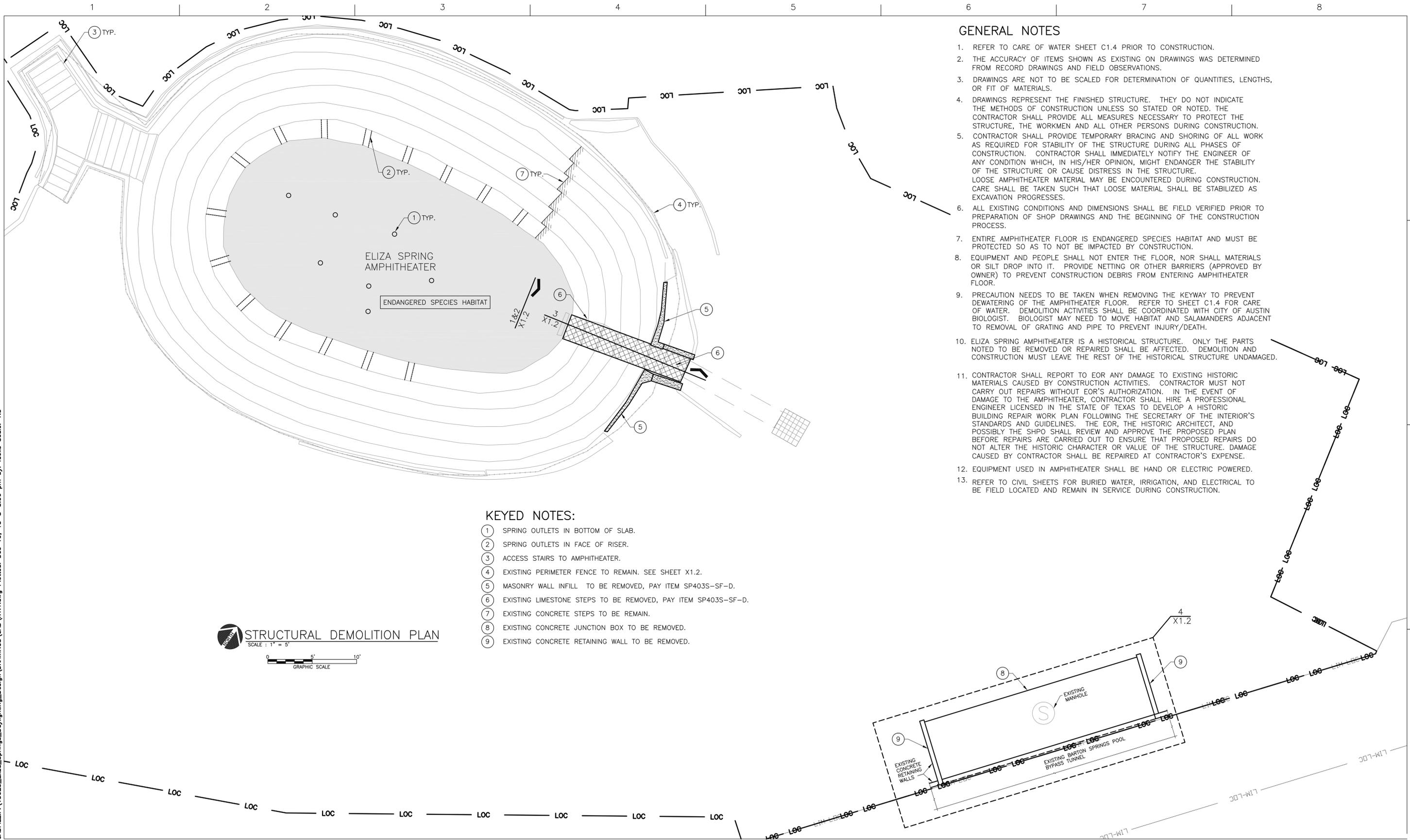
TRAFFIC CONTROL STANDARD DETAILS



FILENAME | G1.7.DWG
SCALE | NONE

SHEET | G1.7

CADFILE:\13025_Eliza_Springs_Daylighting_Design\DRAWINGS\CAD\X1.1.dwg Plotted: Dec 10, 15 @ 8:06 pm by: fsolis Scale: 1:5



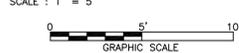
GENERAL NOTES

1. REFER TO CARE OF WATER SHEET C1.4 PRIOR TO CONSTRUCTION.
2. THE ACCURACY OF ITEMS SHOWN AS EXISTING ON DRAWINGS WAS DETERMINED FROM RECORD DRAWINGS AND FIELD OBSERVATIONS.
3. DRAWINGS ARE NOT TO BE SCALED FOR DETERMINATION OF QUANTITIES, LENGTHS, OR FIT OF MATERIALS.
4. DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHODS OF CONSTRUCTION UNLESS SO STATED OR NOTED. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE, THE WORKMEN AND ALL OTHER PERSONS DURING CONSTRUCTION.
5. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING AND SHORING OF ALL WORK AS REQUIRED FOR STABILITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY CONDITION WHICH, IN HIS/HER OPINION, MIGHT ENDANGER THE STABILITY OF THE STRUCTURE OR CAUSE DISTRESS IN THE STRUCTURE. LOOSE AMPHITHEATER MATERIAL MAY BE ENCOUNTERED DURING CONSTRUCTION. CARE SHALL BE TAKEN SUCH THAT LOOSE MATERIAL SHALL BE STABILIZED AS EXCAVATION PROGRESSES.
6. ALL EXISTING CONDITIONS AND DIMENSIONS SHALL BE FIELD VERIFIED PRIOR TO PREPARATION OF SHOP DRAWINGS AND THE BEGINNING OF THE CONSTRUCTION PROCESS.
7. ENTIRE AMPHITHEATER FLOOR IS ENDANGERED SPECIES HABITAT AND MUST BE PROTECTED SO AS TO NOT BE IMPACTED BY CONSTRUCTION.
8. EQUIPMENT AND PEOPLE SHALL NOT ENTER THE FLOOR, NOR SHALL MATERIALS OR SILT DROP INTO IT. PROVIDE NETTING OR OTHER BARRIERS (APPROVED BY OWNER) TO PREVENT CONSTRUCTION DEBRIS FROM ENTERING AMPHITHEATER FLOOR.
9. PRECAUTION NEEDS TO BE TAKEN WHEN REMOVING THE KEYWAY TO PREVENT DEWATERING OF THE AMPHITHEATER FLOOR. REFER TO SHEET C1.4 FOR CARE OF WATER. DEMOLITION ACTIVITIES SHALL BE COORDINATED WITH CITY OF AUSTIN BIOLOGIST. BIOLOGIST MAY NEED TO MOVE HABITAT AND SALAMANDERS ADJACENT TO REMOVAL OF GRATING AND PIPE TO PREVENT INJURY/DEATH.
10. ELIZA SPRING AMPHITHEATER IS A HISTORICAL STRUCTURE. ONLY THE PARTS NOTED TO BE REMOVED OR REPAIRED SHALL BE AFFECTED. DEMOLITION AND CONSTRUCTION MUST LEAVE THE REST OF THE HISTORICAL STRUCTURE UNDAUNAGED.
11. CONTRACTOR SHALL REPORT TO EOR ANY DAMAGE TO EXISTING HISTORIC MATERIALS CAUSED BY CONSTRUCTION ACTIVITIES. CONTRACTOR MUST NOT CARRY OUT REPAIRS WITHOUT EOR'S AUTHORIZATION. IN THE EVENT OF DAMAGE TO THE AMPHITHEATER, CONTRACTOR SHALL HIRE A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF TEXAS TO DEVELOP A HISTORIC BUILDING REPAIR WORK PLAN FOLLOWING THE SECRETARY OF THE INTERIOR'S STANDARDS AND GUIDELINES. THE EOR, THE HISTORIC ARCHITECT, AND POSSIBLY THE SHPO SHALL REVIEW AND APPROVE THE PROPOSED PLAN BEFORE REPAIRS ARE CARRIED OUT TO ENSURE THAT PROPOSED REPAIRS DO NOT ALTER THE HISTORIC CHARACTER OR VALUE OF THE STRUCTURE. DAMAGE CAUSED BY CONTRACTOR SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
12. EQUIPMENT USED IN AMPHITHEATER SHALL BE HAND OR ELECTRIC POWERED.
13. REFER TO CIVIL SHEETS FOR BURIED WATER, IRRIGATION, AND ELECTRICAL TO BE FIELD LOCATED AND REMAIN IN SERVICE DURING CONSTRUCTION.

KEYED NOTES:

- ① SPRING OUTLETS IN BOTTOM OF SLAB.
- ② SPRING OUTLETS IN FACE OF RISER.
- ③ ACCESS STAIRS TO AMPHITHEATER.
- ④ EXISTING PERIMETER FENCE TO REMAIN. SEE SHEET X1.2.
- ⑤ MASONRY WALL INFILL TO BE REMOVED, PAY ITEM SP403S-SF-D.
- ⑥ EXISTING LIMESTONE STEPS TO BE REMOVED, PAY ITEM SP403S-SF-D.
- ⑦ EXISTING CONCRETE STEPS TO BE REMAIN.
- ⑧ EXISTING CONCRETE JUNCTION BOX TO BE REMOVED.
- ⑨ EXISTING CONCRETE RETAINING WALL TO BE REMOVED.

STRUCTURAL DEMOLITION PLAN



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 Consulting Engineers
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 Austin, Texas 78741
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 Structural • Civil • Mechanical • Electrical
 TBPE FIRM F-3



Texas P.E. Firm
 Registration No. F-754

ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	RJG
DESIGNED BY	BMB
DRAWN BY	FS
CHECKED BY	
DATE	12-10-15
PROJECT NUMBER	220162



**ELIZA SPRING
 OUTLET DAYLIGHTING**

Austin, Texas

**STRUCTURAL
 DEMOLITION PLAN**

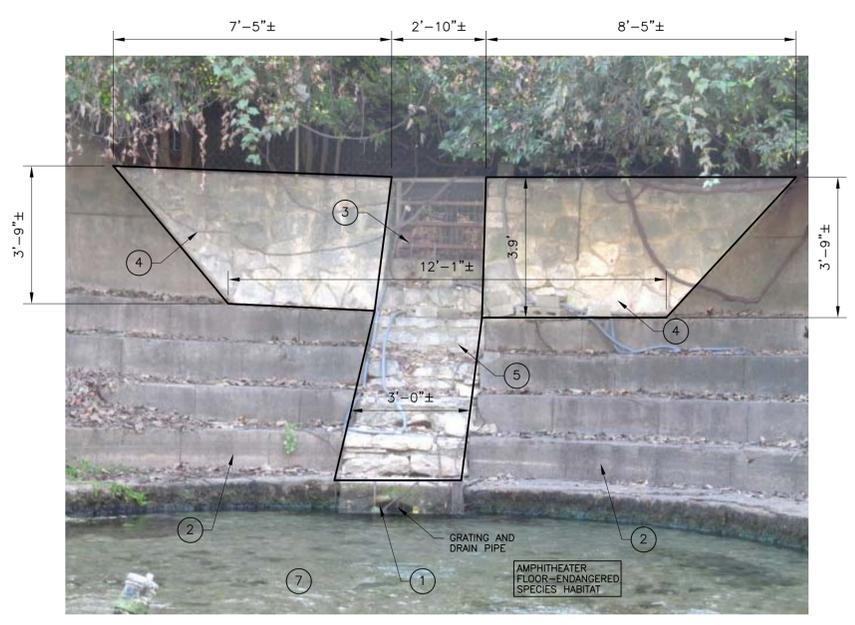


FILENAME
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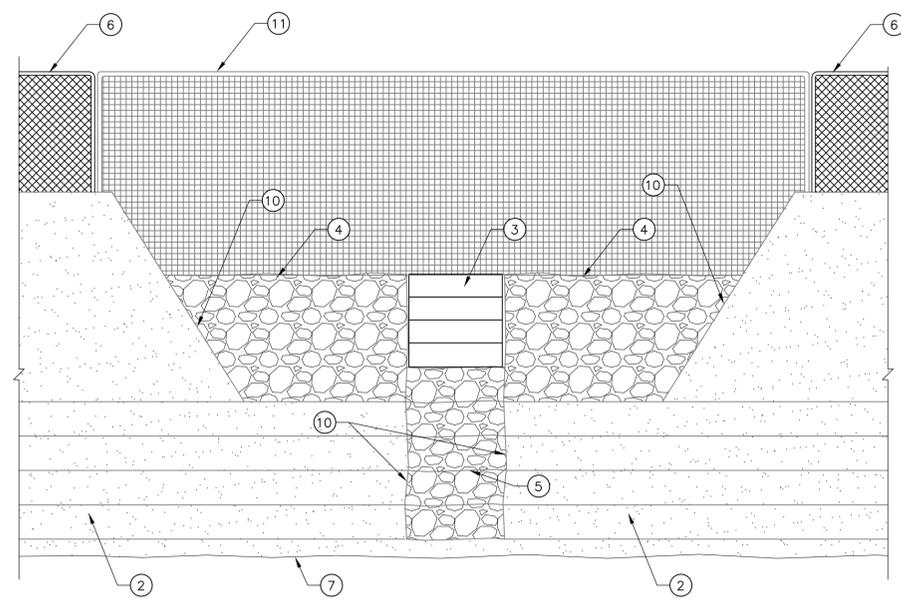
SHEET
X1.1

GENERAL NOTES

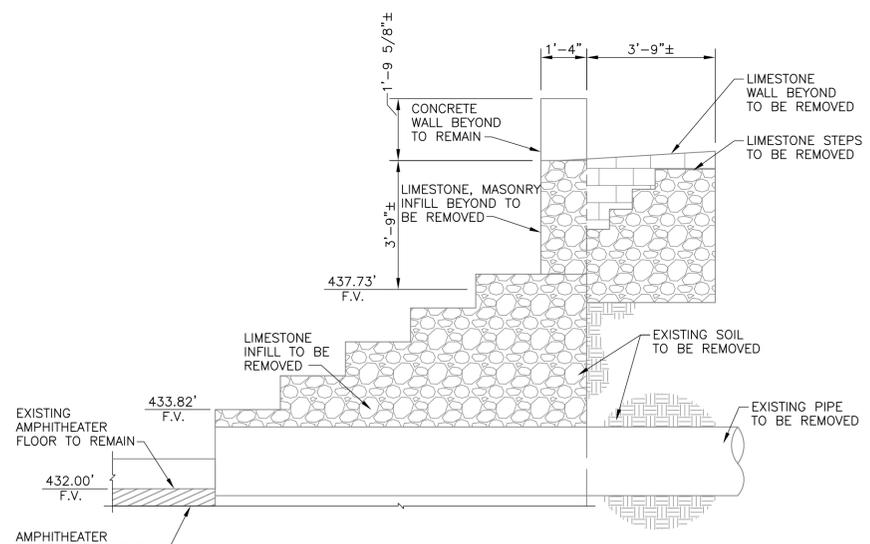
1. SEE GENERAL NOTES ON SHEET X1.1



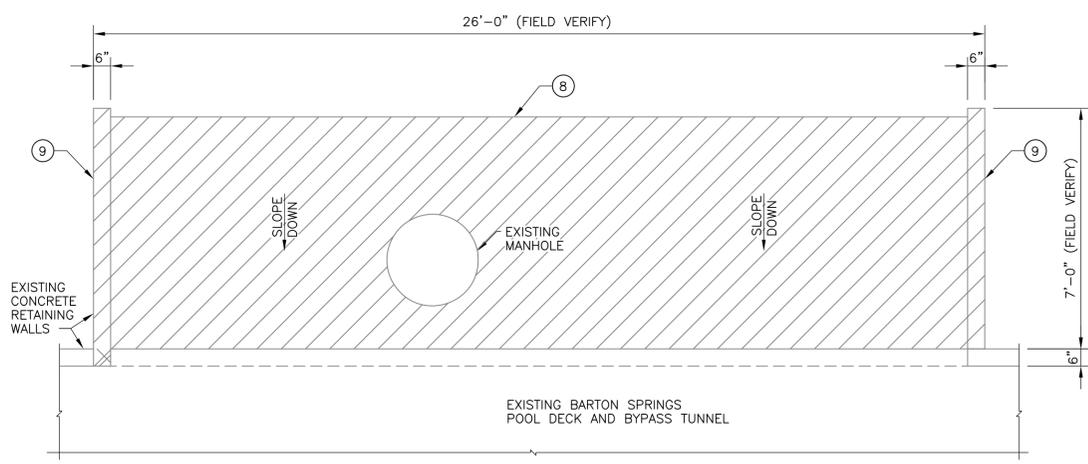
1 ELEVATION – MASONRY INFILL TO BE REMOVED
NO SCALE



2 ELEVATION – MASONRY INFILL TO BE REMOVED
NO SCALE



3 SECTION – MASONRY INFILL TO BE REMOVED
SCALE: NTS



4 JUNCTION BOX DEMOLITION PLAN
SCALE: 3/8" = 1'-0"

KEYED NOTES:

- 1 EXISTING GRATING AND OUTLET PIPE TO BE REMOVED.
- 2 EXISTING CONCRETE AMPHITHEATER SEATING STEPS TO REMAIN.
- 3 EXISTING STEEL GATE TO BE REMOVED.
- 4 EXISTING LIMESTONE MASONRY INFILL TO BE REMOVED.
- 5 EXISTING LIMESTONE MASONRY STEPS TO BE REMOVED.
- 6 EXISTING PERIMETER FENCE TO REMAIN. SEE SHEET L1.1 FOR LIMITS.
- 7 EXISTING AMPHITHEATER FLOOR TO REMAIN.
- 8 EXISTING CONCRETE JUNCTION BOX TO BE REMOVED.
- 9 EXISTING CONCRETE RETAINING WALL TO BE REMOVED.
- 10 EXCAVATION BY HAND POWERED TOOLS RECOMMENDED.
- 11 EXISTING FENCE TO BE REMOVED TO LIMITS OF PROPOSED FENCE. SEE SHEET L1.1 FOR LIMITS OF PROPOSED FENCE, PAY ITEM1015-C.

LEGEND:

- PERIMETER FENCE
- LIMESTONE MASONRY
- CONCRETE
- SOIL

CADFILE:\13025_Eliza_Springs_Daylighting_Design\DRAWINGS\CAD\X1.2.dwg Plotted: Dec 10, 15 @ 8:07 pm by: fsoils Scale: 1:32

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TBE FIRM F-3



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PROJECT MANAGER	RJG
DESIGNED BY	BMB
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DATE	12-10-15
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**ELIZA SPRING
OUTLET DAYLIGHTING**

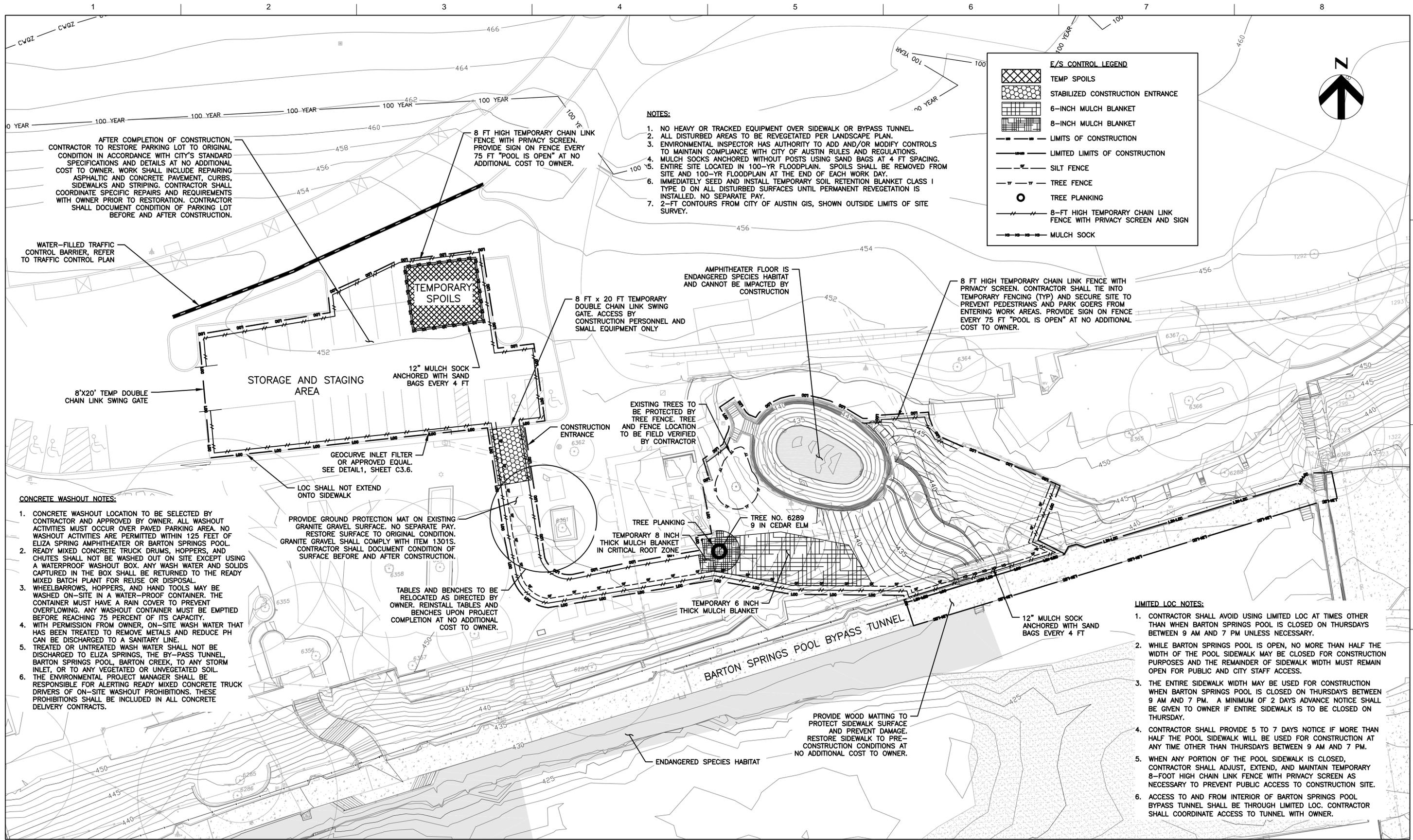
Austin, Texas

**STRUCTURAL DEMOLITION
ELEVATIONS AND ENLARGED
PLANS**



FILENAME
SCALE AS NOTED

SHEET
X1.2



E/S CONTROL LEGEND

- TEMP SPOILS
- STABILIZED CONSTRUCTION ENTRANCE
- 6-INCH MULCH BLANKET
- 8-INCH MULCH BLANKET
- LIMITS OF CONSTRUCTION
- LIMITED LIMITS OF CONSTRUCTION
- SILT FENCE
- TREE FENCE
- TREE PLANKING
- 8-FT HIGH TEMPORARY CHAIN LINK FENCE WITH PRIVACY SCREEN AND SIGN
- MULCH SOCK

- NOTES:**
- NO HEAVY OR TRACKED EQUIPMENT OVER SIDEWALK OR BYPASS TUNNEL.
 - ALL DISTURBED AREAS TO BE REVEGETATED PER LANDSCAPE PLAN.
 - ENVIRONMENTAL INSPECTOR HAS AUTHORITY TO ADD AND/OR MODIFY CONTROLS TO MAINTAIN COMPLIANCE WITH CITY OF AUSTIN RULES AND REGULATIONS.
 - MULCH SOCKS ANCHORED WITHOUT POSTS USING SAND BAGS AT 4 FT SPACING.
 - ENTIRE SITE LOCATED IN 100-YR FLOODPLAIN. SPOILS SHALL BE REMOVED FROM SITE AND 100-YR FLOODPLAIN AT THE END OF EACH WORK DAY.
 - IMMEDIATELY SEED AND INSTALL TEMPORARY SOIL RETENTION BLANKET CLASS I TYPE D ON ALL DISTURBED SURFACES UNTIL PERMANENT REVEGETATION IS INSTALLED. NO SEPARATE PAY.
 - 2-FT CONTOURS FROM CITY OF AUSTIN GIS, SHOWN OUTSIDE LIMITS OF SITE SURVEY.

AFTER COMPLETION OF CONSTRUCTION, CONTRACTOR TO RESTORE PARKING LOT TO ORIGINAL CONDITION IN ACCORDANCE WITH CITY'S STANDARD SPECIFICATIONS AND DETAILS AT NO ADDITIONAL COST TO OWNER. WORK SHALL INCLUDE REPAIRING ASPHALTIC AND CONCRETE PAVEMENT, CURBS, SIDEWALKS AND STRIPING. CONTRACTOR SHALL COORDINATE SPECIFIC REPAIRS AND REQUIREMENTS WITH OWNER PRIOR TO RESTORATION. CONTRACTOR SHALL DOCUMENT CONDITION OF PARKING LOT BEFORE AND AFTER CONSTRUCTION.

8 FT HIGH TEMPORARY CHAIN LINK FENCE WITH PRIVACY SCREEN. PROVIDE SIGN ON FENCE EVERY 75 FT "POOL IS OPEN" AT NO ADDITIONAL COST TO OWNER.

8 FT HIGH TEMPORARY CHAIN LINK FENCE WITH PRIVACY SCREEN. CONTRACTOR SHALL TIE INTO TEMPORARY FENCING (TYP) AND SECURE SITE TO PREVENT PEDESTRIANS AND PARK GOERS FROM ENTERING WORK AREAS. PROVIDE SIGN ON FENCE EVERY 75 FT "POOL IS OPEN" AT NO ADDITIONAL COST TO OWNER.

WATER-FILLED TRAFFIC CONTROL BARRIER, REFER TO TRAFFIC CONTROL PLAN

8 FT x 20 FT TEMPORARY DOUBLE CHAIN LINK SWING GATE. ACCESS BY CONSTRUCTION PERSONNEL AND SMALL EQUIPMENT ONLY

AMPHITHEATER FLOOR IS ENDANGERED SPECIES HABITAT AND CANNOT BE IMPACTED BY CONSTRUCTION

STORAGE AND STAGING AREA

12" MULCH SOCK ANCHORED WITH SAND BAGS EVERY 4 FT

8'x20' TEMP DOUBLE CHAIN LINK SWING GATE

GEOCURVE INLET FILTER OR APPROVED EQUAL. SEE DETAIL1, SHEET C3.6.

CONSTRUCTION ENTRANCE

EXISTING TREES TO BE PROTECTED BY TREE FENCE. TREE AND FENCE LOCATION TO BE FIELD VERIFIED BY CONTRACTOR

TREE PLANKING

TREE NO. 6289 9 IN CEDAR ELM

TEMPORARY 8 INCH THICK MULCH BLANKET IN CRITICAL ROOT ZONE

TEMPORARY 6 INCH THICK MULCH BLANKET

BARTON SPRINGS POOL BYPASS TUNNEL

12" MULCH SOCK ANCHORED WITH SAND BAGS EVERY 4 FT

PROVIDE WOOD MATTING TO PROTECT SIDEWALK SURFACE AND PREVENT DAMAGE. RESTORE SIDEWALK TO PRE-CONSTRUCTION CONDITIONS AT NO ADDITIONAL COST TO OWNER.

ENDANGERED SPECIES HABITAT

CONCRETE WASHOUT NOTES:

- CONCRETE WASHOUT LOCATION TO BE SELECTED BY CONTRACTOR AND APPROVED BY OWNER. ALL WASHOUT ACTIVITIES MUST OCCUR OVER PAVED PARKING AREA. NO WASHOUT ACTIVITIES ARE PERMITTED WITHIN 125 FEET OF ELIZA SPRING AMPHITHEATER OR BARTON SPRINGS POOL. READY MIXED CONCRETE TRUCK DRUMS, HOPPERS, AND CHUTES SHALL NOT BE WASHED OUT ON SITE EXCEPT USING A WATERPROOF WASHOUT BOX. ANY WASH WATER AND SOLIDS CAPTURED IN THE BOX SHALL BE RETURNED TO THE READY MIXED BATCH PLANT FOR REUSE OR DISPOSAL.
- WHEELBARROWS, HOPPERS, AND HAND TOOLS MAY BE WASHED ON-SITE IN A WATER-PROOF CONTAINER. THE CONTAINER MUST HAVE A RAIN COVER TO PREVENT OVERFLOWING. ANY WASHOUT CONTAINER MUST BE EMPTIED BEFORE REACHING 75 PERCENT OF ITS CAPACITY.
- WITH PERMISSION FROM OWNER, ON-SITE WASH WATER THAT HAS BEEN TREATED TO REMOVE METALS AND REDUCE PH CAN BE DISCHARGED TO A SANITARY LINE.
- TREATED OR UNTREATED WASH WATER SHALL NOT BE DISCHARGED TO ELIZA SPRINGS, THE BY-PASS TUNNEL, BARTON SPRINGS POOL, BARTON CREEK, TO ANY STORM INLET, OR TO ANY VEGETATED OR UNVEGETATED SOIL.
- THE ENVIRONMENTAL PROJECT MANAGER SHALL BE RESPONSIBLE FOR ALERTING READY MIXED CONCRETE TRUCK DRIVERS OF ON-SITE WASHOUT PROHIBITIONS. THESE PROHIBITIONS SHALL BE INCLUDED IN ALL CONCRETE DELIVERY CONTRACTS.

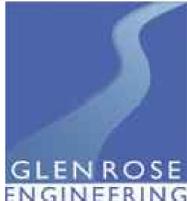
PROVIDE GROUND PROTECTION MAT ON EXISTING GRANITE GRAVEL SURFACE. NO SEPARATE PAY. RESTORE SURFACE TO ORIGINAL CONDITION. GRANITE GRAVEL SHALL COMPLY WITH ITEM 1301S. CONTRACTOR SHALL DOCUMENT CONDITION OF SURFACE BEFORE AND AFTER CONSTRUCTION.

TABLES AND BENCHES TO BE RELOCATED AS DIRECTED BY OWNER. REINSTALL TABLES AND BENCHES UPON PROJECT COMPLETION AT NO ADDITIONAL COST TO OWNER.

LIMITED LOC NOTES:

- CONTRACTOR SHALL AVOID USING LIMITED LOC AT TIMES OTHER THAN WHEN BARTON SPRINGS POOL IS CLOSED ON THURSDAYS BETWEEN 9 AM AND 7 PM UNLESS NECESSARY.
- WHILE BARTON SPRINGS POOL IS OPEN, NO MORE THAN HALF THE WIDTH OF THE POOL SIDEWALK MAY BE CLOSED FOR CONSTRUCTION PURPOSES AND THE REMAINDER OF SIDEWALK WIDTH MUST REMAIN OPEN FOR PUBLIC AND CITY STAFF ACCESS.
- THE ENTIRE SIDEWALK WIDTH MAY BE USED FOR CONSTRUCTION WHEN BARTON SPRINGS POOL IS CLOSED ON THURSDAYS BETWEEN 9 AM AND 7 PM. A MINIMUM OF 2 DAYS ADVANCE NOTICE SHALL BE GIVEN TO OWNER IF ENTIRE SIDEWALK IS TO BE CLOSED ON THURSDAY.
- CONTRACTOR SHALL PROVIDE 5 TO 7 DAYS NOTICE IF MORE THAN HALF THE POOL SIDEWALK WILL BE USED FOR CONSTRUCTION AT ANY TIME OTHER THAN THURSDAYS BETWEEN 9 AM AND 7 PM.
- WHEN ANY PORTION OF THE POOL SIDEWALK IS CLOSED, CONTRACTOR SHALL ADJUST, EXTEND, AND MAINTAIN TEMPORARY 8-FOOT HIGH CHAIN LINK FENCE WITH PRIVACY SCREEN AS NECESSARY TO PREVENT PUBLIC ACCESS TO CONSTRUCTION SITE.
- ACCESS TO AND FROM INTERIOR OF BARTON SPRINGS POOL BYPASS TUNNEL SHALL BE THROUGH LIMITED LOC. CONTRACTOR SHALL COORDINATE ACCESS TO TUNNEL WITH OWNER.

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ISSUE	DATE	DESCRIPTION

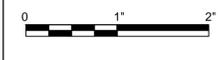
PROJECT MANAGER	S. MUCHARD
DESIGNED BY	L. ROSS
DRAWN BY	C. AMARAL
CHECKED BY	C. PARKER
DATE	DECEMBER 2015
PROJECT NUMBER	220162



**ELIZA SPRING
OUTLET DAYLIGHTING**

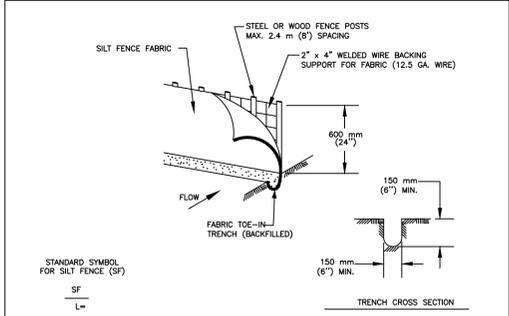
Austin, Texas

**EROSION/SEDIMENTATION
CONTROL AND
TREE PROTECTION PLAN**



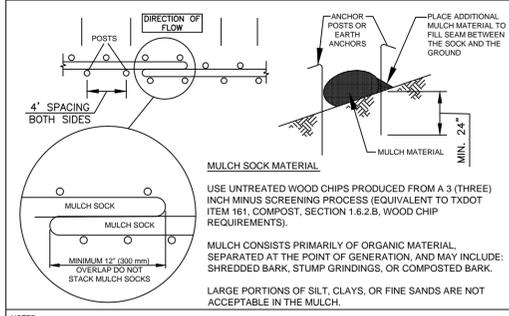
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SCALE 1"=20'

SHEET
C1.1



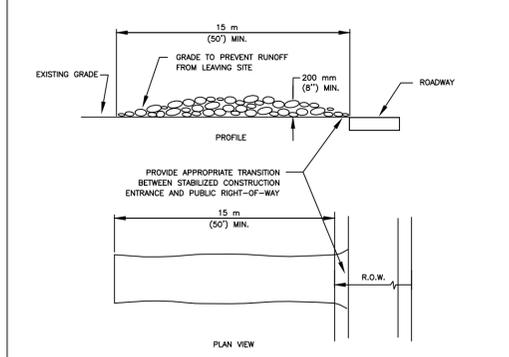
- STEEL OR WOOD POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 300 mm (12 INCHES). IF WOOD POSTS CANNOT ACHIEVE 300 mm (12 INCHES) DEPTH, USE STEEL POSTS.
- THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPACE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW.
- THE TRENCH MUST BE A MINIMUM OF 150 mm (6 INCHES) DEEP AND 150 mm (6 INCHES) WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
- SILT FENCE FABRIC SHOULD BE SECURELY FASTENED TO EACH STEEL OR WOOD SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL OR WOOD FENCE POST.
- INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
- ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 150 mm (6 INCHES). THE SILT SHALL BE DISPOSED OF ON AN APPROVED SITE AND IN SUCH A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTATION.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT		SILT FENCE	
RECORD COPY SIGNED BY MORGAN BYARS	08/01/2011 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 6425-1



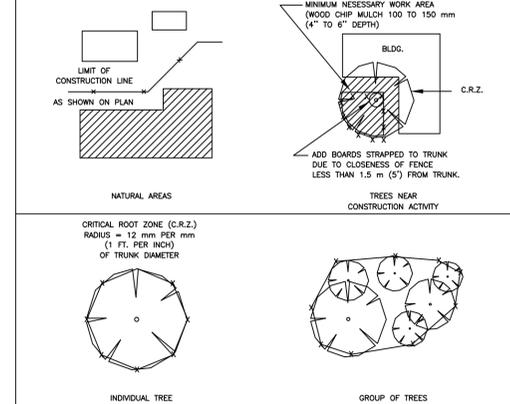
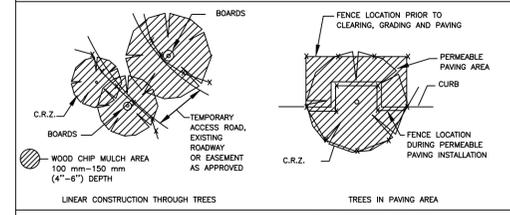
- NOTES:**
- STEEL OR WOOD POSTS WHICH SUPPORT THE MULCH SOCK SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 600mm (24 inches). IF WOOD POSTS CANNOT ACHIEVE 600mm (24 inches) DEPTH, USE STEEL POSTS. EARTH ANCHORS ARE ALSO ACCEPTABLE.
 - THE TOE OF THE MULCH SOCK SHALL BE PLACED SO THAT THE MULCH SOCK IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. IN ORDER TO PREVENT WATER FROM FLOWING BETWEEN THE JOINTS OF ADJACENT ENDS OF MULCH SOCKS, LAP THE ENDS OF ADJACENT MULCH SOCKS A MINIMUM OF 300mm (12 inches).
 - MULCH MATERIAL MUST BE FREE OF REFUSE, PHYSICAL CONTAMINANTS, AND MATERIAL TOXIC TO PLANT GROWTH; IT IS NOT ACCEPTABLE FOR THE MULCH MATERIAL TO CONTAIN GROUND CONSTRUCTION DEBRIS, BRASS/STEEL, OR MANURE.
 - SOCK MATERIAL WILL BE 100% BIODEGRADABLE, PHOTODEGRADABLE, OR RECYCLABLE SUCH AS BURLAP, TWINE, UV PHOTODEGRADABLE PLASTIC, POLYESTER, OR ANY OTHER ACCEPTABLE MATERIAL.
 - MULCH SOCKS SHOULD BE USED AT THE BASE OF SLOPES NO STEEPER THAN 2:1 AND SHOULD NOT EXCEED THE MAXIMUM SPACING CRITERIA PROVIDED IN CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL TABLE 1.4.5.F.1 FOR A GIVEN SLOPE CATEGORY.
 - ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 150mm (6 inches). THE SILT SHALL BE DISPOSED OF ON AN APPROVED SITE AND IN SUCH A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTATION.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT		MULCH SOCK	
RECORD COPY SIGNED BY MORGAN BYARS	08/24/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 6485-1

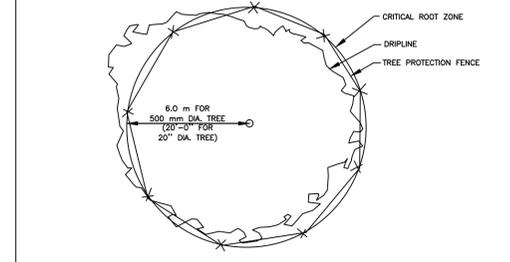
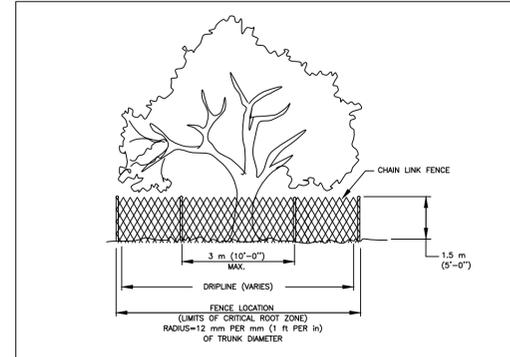


- NOTES:**
- STONE SIZE: 75-125 mm (3-5") OPEN GRADED ROCK.
 - LENGTH: AS EFFECTIVE BUT NOT LESS THAN 15 m (50').
 - THICKNESS: NOT LESS THAN 200 mm (8").
 - WIDTH: NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS/EGRESS.
 - WASHING: WHEN NECESSARY, VEHICLE WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE AND DRAINS INTO AN APPROVED TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
 - MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AS WELL AS REPAIR AND CLEAN OUT OF ANY MEASURE DEVICES USED TO TRAP SEDIMENT. ALL SEDIMENTS THAT IS SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.
 - DRAINAGE: ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT		STABILIZED CONSTRUCTION ENTRANCE	
RECORD COPY SIGNED BY J. PATRICK MURPHY	5/23/00 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 6415-1

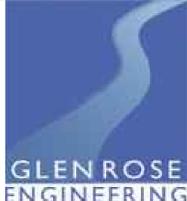


CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT		TREE PROTECTION FENCE LOCATIONS	
RECORD COPY SIGNED BY J. PATRICK MURPHY	11/15/99 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 6105-1



CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT		TREE PROTECTION FENCE TYPE A - CHAIN LINK	
RECORD COPY SIGNED BY J. PATRICK MURPHY	11/15/99 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 6105-2

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PROJECT MANAGER	S. MUCHARD	
DESIGNED BY	L. ROSS	
DRAWN BY	C. AMARAL	
CHECKED BY	C. PARKER	
DATE	DECEMBER 2015	
PROJECT NUMBER	220162	
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	S. MUCHARD
DESIGNED BY	L. ROSS
DRAWN BY	C. AMARAL
CHECKED BY	C. PARKER
DATE	DECEMBER 2015
PROJECT NUMBER	220162



**ELIZA SPRING
OUTLET DAYLIGHTING**
Austin, Texas

**EROSION/SEDIMENTATION CONTROL
STANDARD DETAILS**

0 1' 2'

FILENAME | C1.3.DWG
SCALE | NONE
SHEET | C1.3

GENERAL:

1. ALL CARE OF WATER ACTIVITIES AND ELEMENTS SHALL BE PAID UNDER PAY ITEM SS130300.
2. CONTRACTOR SHALL COMPLY WITH CITY OF AUSTIN'S 10A1B PERMIT AND U.S. FISH AND WILDLIFE PERMIT WHEN CARRYING OUT THE CONSTRUCTION WORK, UNLESS OTHERWISE APPROVED BY OWNER.
3. CONTRACTOR WILL STOP WORK IF DETRIMENTAL IMPACTS OR THE POTENTIAL FOR DETRIMENTAL IMPACTS TO PROTECTED SPECIES OR THEIR HABITAT ARE DISCOVERED BY CONTRACTOR, OWNER, INSPECTOR, ENGINEER, OR PARD REPRESENTATIVE DESIGNATED BY OWNER.
4. HAZARDOUS MATERIALS ARE NOT PERMITTED WITHIN 25 FEET OF ENDANGERED SPECIES HABITAT, THE CONSTRUCTED SPRING OUTLET CHANNEL, BARTON SPRINGS POOL, OR BARTON CREEK.
5. ALL PUMPS SHALL BE ELECTRIC UNLESS REQUIRED FLOW RATES AND WATER LEVELS CANNOT BE MAINTAINED THROUGH USE OF ELECTRIC PUMPS AND OWNER APPROVES USE OF ALTERNATIVE PUMPS.
6. PUMPS SHALL NOT BE PLACED WITHIN THE AMPHITHEATER OR WITHIN ENDANGERED SPECIES HABITAT.
7. EQUIPMENT USED WITHIN THE AMPHITHEATER SHALL BE HAND OR ELECTRIC POWERED.
8. CONTRACTOR SHALL ESTABLISH TEMPORARY ELECTRICAL SERVICE AT SITE THROUGH AUSTIN ENERGY AT CONTRACTOR'S EXPENSE. ONSITE POWER GENERATION SHALL NOT BE ALLOWED DUE TO THE POTENTIAL FOR ONGOING FUME GENERATION.
9. CONTRACTOR SHALL NOT DISCHARGE WATER TO THE AMPHITHEATER OR BARTON SPRINGS POOL.
10. COFFERDAMS AND ASSOCIATED DEWATERING PUMPS SHALL PROVIDE DRY, SUITABLE WORKING CONDITIONS.
11. CONTRACTOR MAY DEWATER AREA ENCLOSED BY COFFERDAMS WITHIN BYPASS TUNNEL BY PUMPING TO WET SIDE OF COFFERDAM PROVIDED WATER FROM CONSTRUCTION SITE HAS NOT ENTERED AREA ENCLOSED BY COFFERDAM.
12. CONTRACTOR SHALL ALLOW SUSPENDED PARTICLES TO SETTLE OUT OF WATER COLUMN BEFORE DISASSEMBLING OR RESUMING DISASSEMBLY OF ANY COFFERDAM OR DEWATERING SYSTEM.
13. THE EXPECTED RANGE OF ELIZA SPRING FLOW RATES IS APPROXIMATELY 1 TO 14 CFS. THE OCCURRENCE OF SPRING FLOW RATES OUTSIDE THIS RANGE SHALL NOT BE CAUSE FOR ADDITIONAL PAYMENT.
14. CITY OF AUSTIN BIOLOGIST WILL ESTABLISH MINIMUM AND MAXIMUM ALLOWABLE WATER LEVELS IN ELIZA SPRING AMPHITHEATER.
15. CONTRACTOR SHALL PROVIDE MEANS TO MONITOR AMPHITHEATER WATER LEVELS REMOTELY. MONITORING SYSTEM SHALL SEND ALARMS TO CONTRACTOR AND CITY OF AUSTIN BIOLOGIST IF WATER LEVELS DROP BELOW OR EXCEED ALLOWABLE RANGE. CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING AMPHITHEATER WATER LEVELS AT ALL TIMES DURING CONSTRUCTION, REGARDLESS OF WHETHER CONSTRUCTION ACTIVITIES ARE OCCURRING AT THE SITE, AND NOTIFY CITY OF AUSTIN BIOLOGIST IMMEDIATELY IF WATER LEVELS DROP BELOW OR EXCEED ALLOWABLE RANGE.
16. CONTRACTOR SHALL BE READY AT ALL TIMES DURING CONSTRUCTION, REGARDLESS OF WHETHER CONSTRUCTION ACTIVITIES ARE OCCURRING AT THE SITE, TO IMPLEMENT IMMEDIATE ACTIONS TO RESTORE WATER LEVELS IN AMPHITHEATER SHOULD SUDDEN AND/OR UNANTICIPATED EVENTS CAUSE AMPHITHEATER WATER LEVELS TO DROP BELOW MINIMUM ALLOWABLE LEVEL. CONTRACTOR SHALL DEVELOP PLAN FOR EMERGENCY WATER LEVEL RESTORATION AND SUBMIT PLAN TO OWNER FOR APPROVAL.
17. ALL WATER DISCHARGED FROM EXCAVATED AREAS SHALL MEET DISCHARGE STANDARDS LISTED IN SS130300.

TEMPORARY GRAVITY-FED SPRING FLOW DIVERSION:

1. TEMPORARY GRAVITY-FED SPRING FLOW DIVERSION SHALL BE CAPABLE OF CONVEYING ELIZA SPRING FLOW WHILE MAINTAINING AMPHITHEATER WATER LEVELS WITHIN THE ALLOWABLE RANGE ESTABLISHED BY CITY OF AUSTIN BIOLOGIST.
2. CONTRACTOR SHALL PROVIDE, AT NO ADDITIONAL COST TO OWNER, MEANS OF RESTRICTING DIVERSION FLOW RATE IF NECESSARY TO ACHIEVE MINIMUM ALLOWABLE AMPHITHEATER WATER LEVEL. MEANS OF RESTRICTING FLOW RATE SHALL BE APPROVED BY OWNER.
3. CONTRACTOR SHALL PROVIDE, AT NO ADDITIONAL COST TO OWNER, SUPPLEMENTAL PUMPING FOR AMPHITHEATER TO PREVENT AMPHITHEATER WATER LEVELS FROM EXCEEDING MAXIMUM ALLOWABLE WATER LEVEL IF GRAVITY DIVERSION FAILS TO MAINTAIN MAXIMUM ALLOWABLE LEVELS. LOCATION OF INTAKE FOR SUPPLEMENTAL PUMPING SHALL BE APPROVED BY OWNER.
4. TEMPORARY GRAVITY-FED SPRING FLOW DIVERSION PIPE TO STORM DRAIN LINE B JUNCTION BOX SHALL BE PROTECTED TO PREVENT DAMAGE TO PIPE FROM VEHICLE AND EQUIPMENT TRAFFIC BY PROVIDING ADEQUATE COVER OR PLATING.
5. IF TEMPORARY GRAVITY-FED SPRING FLOW DIVERSION INCREASES SUSPENDED SOLIDS OR DECREASES DISSOLVED OXYGEN FROM LEVELS PRESENT IN AMPHITHEATER POOL, TREATMENT OF DIVERTED WATER SHALL BE NECESSARY PRIOR TO DISCHARGE.
6. IF USING TEMPORARY GRAVITY-FED SPRING FLOW DIVERSION PIPE OF DIAMETER GREATER THAN 24 INCHES, INCREASE SIZE OF JUNCTION BOX B1 AS NECESSARY AT NO ADDITIONAL COST TO OWNER.
7. UPON REMOVAL OF TEMPORARY GRAVITY-FED SPRING FLOW DIVERSION, CUT DIVERSION PIPE AT JUNCTION BOX B1 AND FILL PIPE END IN JUNCTION BOX WITH CLSM STANDARD SPEC 402S.

AMPHITHEATER KEYWAY DEWATERING:

1. CITY OF AUSTIN BIOLOGIST MUST BE PRESENT DURING AMPHITHEATER KEYWAY DEWATERING TO IDENTIFY AND RELOCATE STRANDED SALAMANDERS, AND MUST RECEIVE NOTICE 48 HOURS IN ADVANCE OF INITIATION OF DEWATERING ACTIVITIES.
2. AT ANY TIME, FOR THE DURATION OF CONSTRUCTION, DEWATERING OF THE KEYWAY IS SUBJECT TO APPROVAL BY THE OWNER. THIS APPROVAL IS AT THE OWNER'S SOLE DISCRETION. IF DEWATERING ACTIVITY IS APPROVED BY THE OWNER, DEWATERING MAY OCCUR FOR NO MORE THAN SIX (6) CONSECUTIVE CALENDAR DAYS WITHOUT ADDITIONAL APPROVAL BY THE OWNER. APPROVAL OF MORE THAN SIX (6) CONSECUTIVE CALENDAR DAYS IS AT THE OWNER'S SOLE DISCRETION. OWNER MAY CONSIDER DEWATERING OF THE KEYWAY FOR A PERIOD OF TIME EXCEEDING SIX (6) CONSECUTIVE CALENDAR DAYS ON A CASE BY CASE BASIS. AT ANY TIME DEWATERING OF THE KEYWAY IS REQUIRED FOR COMPLETION OF CONSTRUCTION ACTIVITIES, CONTRACTOR MUST SUBMIT A DETAILED SCHEDULE AND SEQUENCE OF ACTIVITIES TO BE COMPLETED DURING THE PERIOD OF DEWATERING. CONTRACTOR MUST DETERMINE THE MOST EFFECTIVE MEANS AND METHODS TO MINIMIZE THE NUMBER OF TIMES AND DAYS THE KEYWAY WILL BE DEWATERED FOR THE DURATION OF THE PROJECT. THIS PREREQUISITE IS IN ADDITION TO ALL OTHER REQUIREMENTS FOR KEYWAY DEWATERING.
3. CONTRACTOR SHALL MINIMIZE EXTENT OF DEWATERED AREA AND SHALL NOT ALLOW DEWATERED PORTION OF AMPHITHEATER TO EXTEND MORE THAN 3 FT FROM THE ENTRANCE TO THE EXISTING OUTFALL PIPE.
4. AMPHITHEATER KEYWAY DEWATERING PUMP SHALL OPERATE IN CONJUNCTION WITH A WATER LEVEL SENSOR INSIDE THE ELIZA SPRING AMPHITHEATER. THE PUMP SHALL ACTIVATE WHEN THE WATER LEVEL IN THE AMPHITHEATER EXCEEDS THE MAXIMUM ALLOWABLE LEVEL ESTABLISHED BY CITY OF AUSTIN BIOLOGIST AND WILL STOP WHEN THE WATER LEVEL IN THE AMPHITHEATER REACHES THE MINIMUM ALLOWABLE LEVEL ESTABLISHED BY CITY OF AUSTIN BIOLOGIST.
5. CONTRACTOR SHALL ADJUST PUMP CAPACITY, INCLUDING PROVIDING ADDITIONAL CAPACITY, AS REQUIRED TO MAINTAIN AMPHITHEATER WATER LEVELS WITHIN ALLOWABLE RANGE AT NO ADDITIONAL COST TO OWNER.

KEYWAY DEWATERING PUMP INTAKE. LOCATION TO BE APPROVED BY OWNER. INTAKE TO INCLUDE SALAMANDER EXCLUSION SCREENING AND BE LOCATED OUTSIDE ENDANGERED SPECIES HABITAT. PUMP INTAKE SHALL BE SET NO LOWER THAN 10 INCHES ABOVE AMPHITHEATER FLOOR TO ENSURE MINIMUM WATER DEPTH IS MAINTAINED.

COFFERDAM NO. 2. COFFERDAM FOR USE IN KEYWAY DEWATERING. COFFERDAM TO INCLUDE SALAMANDER EXCLUSION SCREENING.

KEYWAY DEWATERING PUMP LOCATION OUTSIDE AMPHITHEATER TO BE PROPOSED BY CONTRACTOR AND APPROVED BY OWNER

KEYWAY DEWATERING PUMP DISCHARGE TO STORM DRAIN LINE A (TO BE USED DURING CHANNEL CONSTRUCTION.)

ELIZA SPRING AMPHITHEATER

ENDANGERED SPECIES HABITAT

SALAMANDER ACCESS EXCLUSION SCREENING AT KEYWAY ENTRANCE

PROPOSED STORM DRAIN LINE A

KEYWAY DEWATERING PUMP DISCHARGE TO EXISTING MANHOLE OR PROPOSED JUNCTION BOX (TO BE USED DURING CONSTRUCTION OF SPRING FLOW GRAVITY DIVERSION TO STORM DRAIN LINE B.)

TEMPORARY GRAVITY-FED SPRING FLOW DIVERSION JUNCTION BOX

TEMPORARY GRAVITY-FED SPRING FLOW DIVERSION PIPE TO STORM DRAIN LINE B JUNCTION BOX MINIMUM PIPE DIA. 24IN.

PROPOSED STORM DRAIN LINE B

TUNNEL OPENING AND/OR STORM DRAIN LINE B AND CHANNEL FLOW CONTROL GATE OPENINGS IN JUNCTION BOX TO BE TEMPORARILY BLOCKED UNTIL CONSTRUCTION OF STORM DRAIN LINE B AND INSTALLATION OF FLOW CONTROL GATE ARE COMPLETE AND OWNER HAS APPROVED REMOVING BLOCKAGES.

TUNNEL OPENING AT STORM DRAIN LINE A OUTFALL TO BE TEMPORARILY BLOCKED UNTIL CONSTRUCTION OF STORM DRAIN LINE A IS COMPLETE AND OWNER HAS APPROVED REMOVING BLOCKAGE.

6. IF AMPHITHEATER KEYWAY DEWATERING INCREASES SUSPENDED SOLIDS OR DECREASES DISSOLVED OXYGEN FROM AMBIENT LEVELS, TREATMENT OF DIVERTED WATER SHALL BE NECESSARY PRIOR TO DISCHARGE.
7. REFER TO SPECIFICATION SS130300 FOR PUMP INTAKE REQUIREMENTS.

EXCAVATION DEWATERING:

1. CONTRACTOR SHALL PROVIDE AN EXCAVATION DEWATERING SYSTEM THAT MEETS THE PERFORMANCE REQUIREMENTS AND DESIGN CRITERIA OF SPECIFICATION SS130300. THE SYSTEM SHALL INCLUDE WATER FILTRATION AND/OR TREATMENT TO MEET PERFORMANCE REQUIREMENTS. CONTRACTOR SHALL DESIGN EXCAVATION DEWATERING SYSTEM AND SUBMIT PLAN TO OWNER FOR APPROVAL. DEWATERING SYSTEM POINT OF DISCHARGE FOR FILTERED AND/OR TREATED WATER SHALL BE APPROVED BY OWNER AND LOCATED WITHIN THE LIMITS OF CONSTRUCTION. POTENTIALLY ACCEPTABLE POINTS OF DISCHARGE INCLUDE MANHOLES IN STORM DRAIN LINE A, STORM DRAIN LINE B OR JUNCTION BOX WHEN THESE PROJECT COMPONENTS ARE COMPLETE.
2. CONTRACTOR SHALL NOT ALLOW UNTREATED WATER FROM EXCAVATED AREAS TO ENTER THE AMPHITHEATER, BARTON SPRINGS POOL, BYPASS TUNNEL, OR BARTON CREEK.
3. CONTRACTOR SHALL NOT ALLOW EXCAVATION DEWATERING TO CAUSE AMPHITHEATER LEVEL TO DROP BELOW MINIMUM LEVEL ESTABLISHED BY CITY OF AUSTIN BIOLOGIST.

COFFERDAM NO. 1 AND PUMP IN BYPASS TUNNEL AT TUNNEL OPENING ADJACENT TO JUNCTION BOX

COFFERDAM NO. 3 AND PUMP IN BYPASS TUNNEL AT STORM DRAIN LINE A OPENING

EXISTING BARTON SPRINGS POOL BYPASS TUNNEL

BARTON SPRINGS POOL

ENDANGERED SPECIES HABITAT

REFER TO SHEET C2.1 FOR GENERAL PROJECT LAYOUT



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ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	S. MUCHARD
DESIGNED BY	S. MUCHARD
DRAWN BY	J. FELAN
CHECKED BY	C. PARKER
DATE	DECEMBER 2015
PROJECT NUMBER	220162



ELIZA SPRING OUTLET DAYLIGHTING

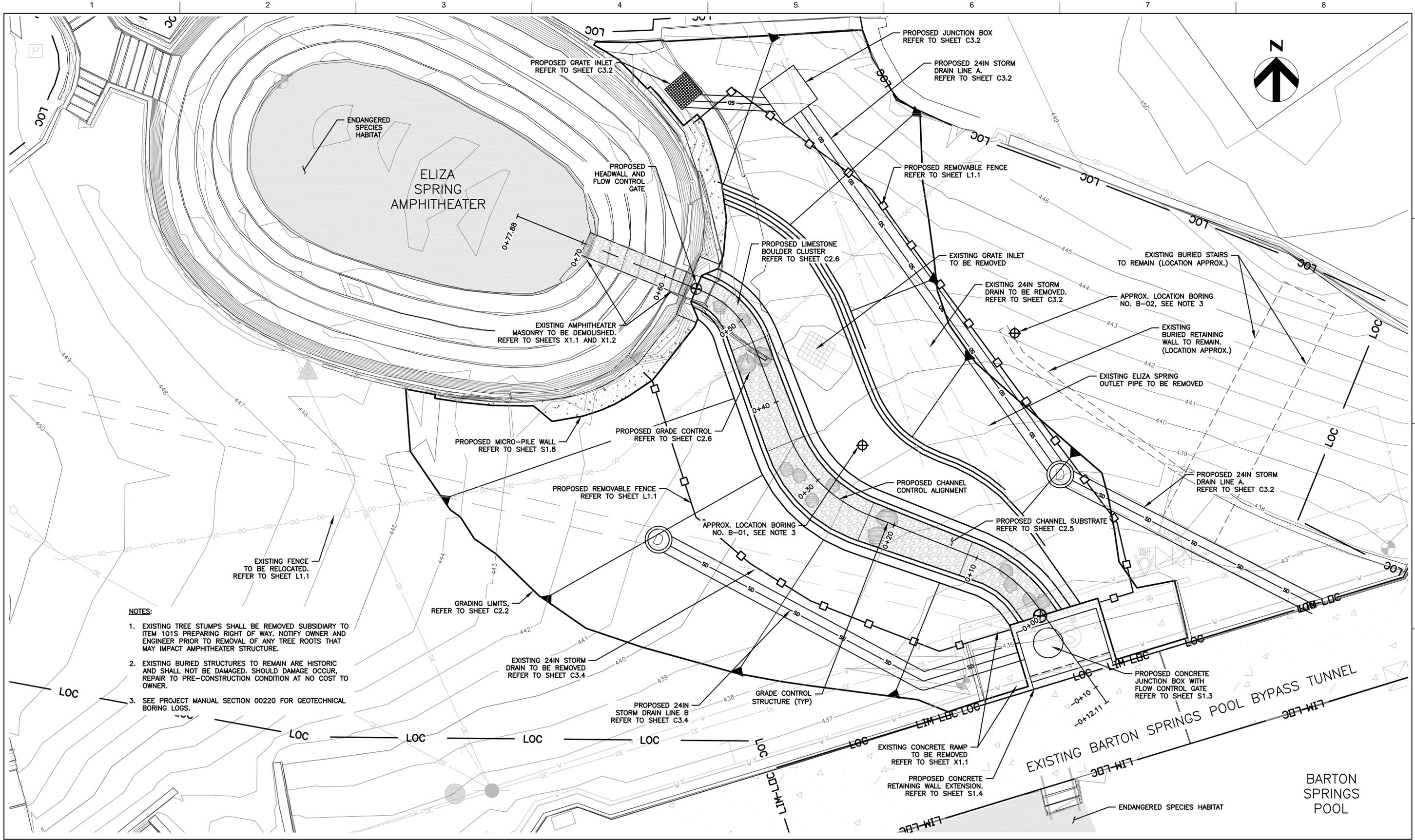
Austin, Texas

CARE OF WATER PLAN AND NOTES



FILENAME | C1.4.DWG
SCALE | 1"=5'

SHEET
C1.4



NOTES:

- EXISTING TREE STUMPS SHALL BE REMOVED SUBSIDIARY TO ITEM 101S PREPARING RIGHT OF WAY. NOTIFY OWNER AND ENGINEER PRIOR TO REMOVAL OF ANY TREE ROOTS THAT MAY IMPACT AMPHITHEATER STRUCTURE.
- EXISTING BURIED STRUCTURES TO REMAIN ARE HISTORIC AND SHALL NOT BE DAMAGED. SHOULD DAMAGE OCCUR, REPAIR TO PRE-CONSTRUCTION CONDITION AT NO COST TO OWNER.
- SEE PROJECT MANUAL SECTION 00220 FOR GEOTECHNICAL BORING LOGS.



ISSUE	DATE	DESCRIPTION

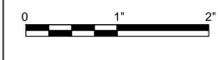
PROJECT MANAGER	S. MUCHARD
DESIGNED BY	S. MUCHARD
DRAWN BY	C. AMARAL
CHECKED BY	C. PARKER
DATE	DECEMBER 2015
PROJECT NUMBER	220162



**ELIZA SPRING
OUTLET DAYLIGHTING**

Austin, Texas

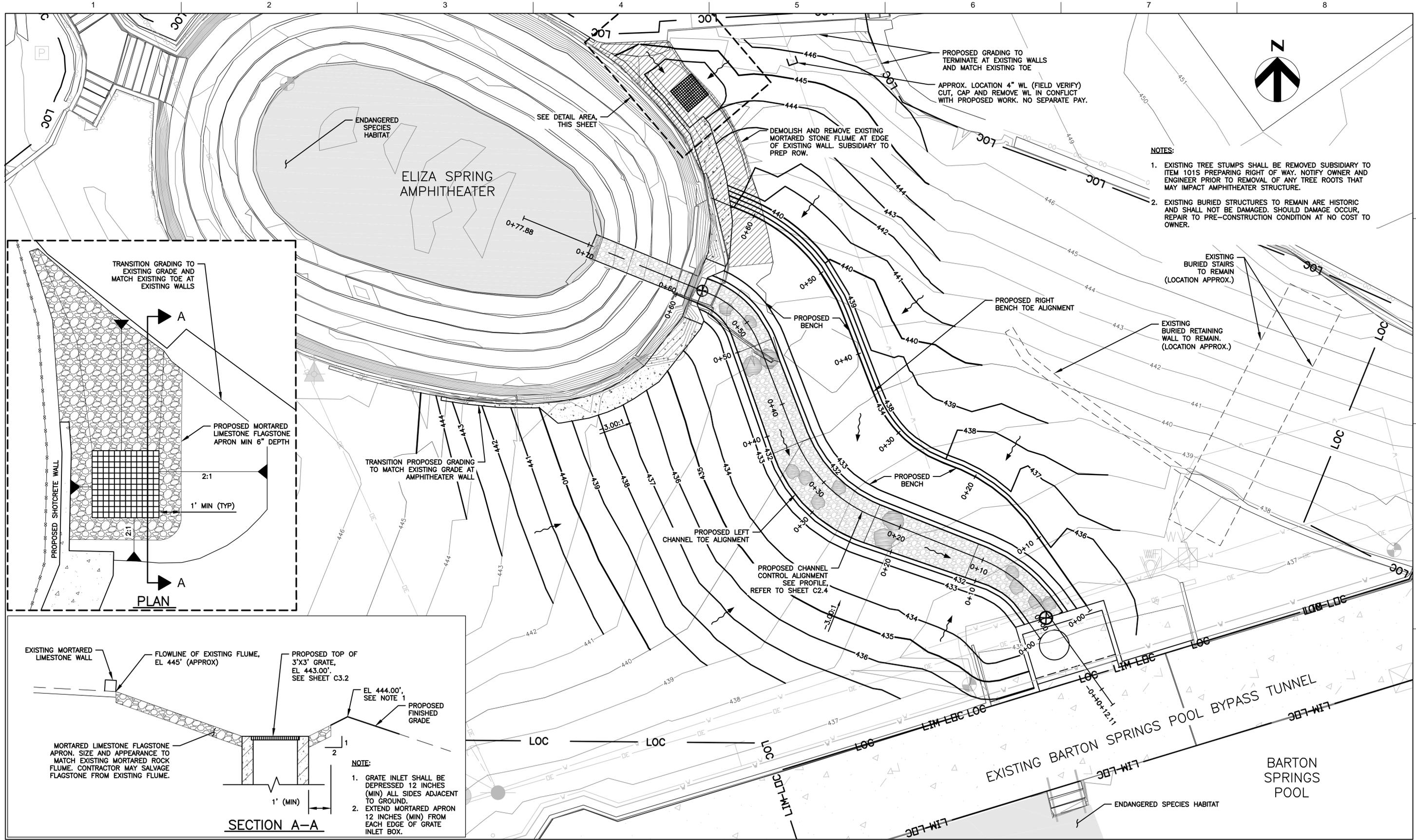
**GENERAL PROJECT
LAYOUT**



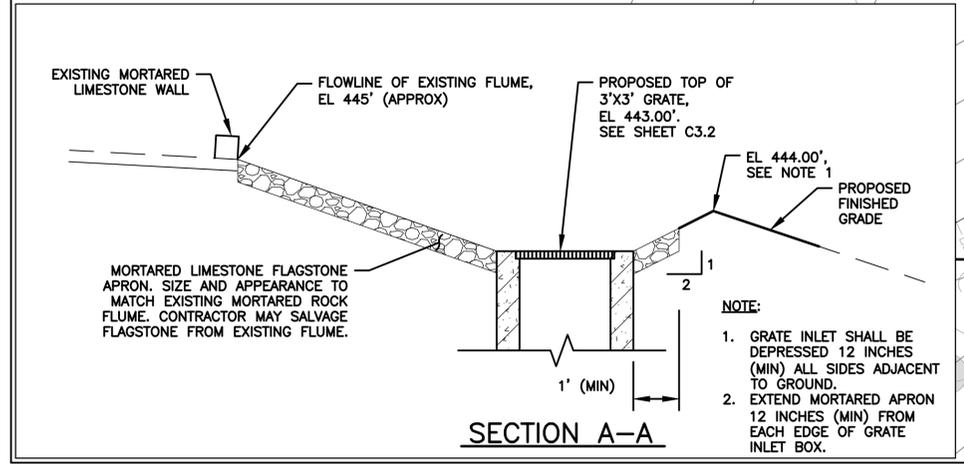
FILENAME | C2.1.DWG
SCALE | 1"=5'

SHEET
C2.1

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- NOTES:**
1. EXISTING TREE STUMPS SHALL BE REMOVED SUBSIDIARY TO ITEM 101S PREPARING RIGHT OF WAY. NOTIFY OWNER AND ENGINEER PRIOR TO REMOVAL OF ANY TREE ROOTS THAT MAY IMPACT AMPHITHEATER STRUCTURE.
 2. EXISTING BURIED STRUCTURES TO REMAIN ARE HISTORIC AND SHALL NOT BE DAMAGED. SHOULD DAMAGE OCCUR, REPAIR TO PRE-CONSTRUCTION CONDITION AT NO COST TO OWNER.



PROJECT MANAGER	S. MUCHARD
DESIGNED BY	E. STEWART
DRAWN BY	C. AMARAL
CHECKED BY	C. PARKER
DATE	DECEMBER 2015
PROJECT NUMBER	220162



**ELIZA SPRING
OUTLET DAYLIGHTING**

Austin, Texas

**PROJECT GRADING
PLAN**



FILENAME | C2.2.DWG
SCALE | 1"=5'

SHEET
C2.2

c:\pwworking\harr\04739282\C2.2.dwg



ISSUE	DATE	DESCRIPTION

Alignment: CHANNEL CONTROL ALIGNMENT

Tangent Data
 Description PT Station Northing Easting
 Start: 0+12.114 10069118.28 3105802.584
 End: 0+01.169 10069129.05 3105794.818
 Tangent Data
 Parameter Value Parameter Value
 Length: 13.283 Course: "N 35' 46' 32.6872" W"

Curve Point Data
 Description Station Northing Easting
 PC: 0+01.169 10069129.05 3105794.818
 RP: 10069119.7 3105781.837
 PT: 0+10.262 10069134.57 3105787.743
 Circular Curve Data
 Parameter Value Parameter Value
 Delta: "32' 33' 47.7371" Type: LEFT
 Radius: 16
 Length: 9.093 Tangent: 4.673
 Mid-Ord: 0.642 External: 0.668
 Chord: 8.971 Course: "N 52' 03' 26.5558" W"

Tangent Data
 Description PT Station Northing Easting
 Start: 0+10.262 10069134.57 3105787.743
 End: 0+23.034 10069139.28 3105775.873
 Tangent Data
 Parameter Value Parameter Value
 Length: 12.772 Course: "N 68' 20' 20.4244" W"

Curve Point Data
 Description Station Northing Easting
 PC: 0+23.034 10069139.28 3105775.873
 RP: 10069154.16 3105781.779
 PT: 0+36.200 10069148.37 3105766.861
 Circular Curve Data
 Parameter Value Parameter Value
 Delta: "47' 08' 48.5387" Type: RIGHT
 Radius: 16
 Length: 13.166 Tangent: 6.981
 Mid-Ord: 1.335 External: 1.457
 Chord: 12.798 Course: "N 44' 45' 56.1550" W"

Tangent Data
 Description PT Station Northing Easting
 Start: 0+36.200 10069148.37 3105766.861
 End: 0+47.218 10069158.64 3105762.878
 Tangent Data
 Parameter Value Parameter Value
 Length: 11.018 Course: "N 21' 11' 31.8856" W"

Curve Point Data
 Description Station Northing Easting
 PC: 0+47.218 10069158.64 3105762.878
 RP: 10069155.03 3105753.554
 PT: 0+55.375 10069164.3 3105757.312
 Circular Curve Data
 Parameter Value Parameter Value
 Delta: "46' 44' 06.9443" Type: LEFT
 Radius: 10
 Length: 8.157 Tangent: 4.321
 Mid-Ord: 0.82 External: 0.893
 Chord: 7.933 Course: "N 44' 33' 35.3578" W"

Tangent Data
 Description PT Station Northing Easting
 Start: 0+55.375 10069164.3 3105757.312
 End: 0+77.884 10069172.75 3105736.453
 Tangent Data
 Parameter Value Parameter Value
 Length: 22.509 Course: "N 67' 55' 38.8300" W"

Alignment: LEFT CHANNEL TOE

Tangent Data
 Description PT Station Northing Easting
 Start: 0+00.000 10069125.69 3105794.427
 End: 0+03.929 10069128.87 3105792.13
 Tangent Data
 Parameter Value Parameter Value
 Length: 3.929 Course: "N 35' 46' 32.6876" W"

Curve Point Data
 Description Station Northing Easting
 PC: 0+03.929 10069128.87 3105792.13
 RP: 10069124.2 3105785.64
 PT: 0+08.863 10069131.77 3105788.229
 Circular Curve Data
 Parameter Value Parameter Value
 Delta: "35' 20' 21.4623" Type: LEFT
 Radius: 8
 Length: 4.934 Tangent: 2.548
 Mid-Ord: 0.377 External: 0.396
 Chord: 4.856 Course: "N 53' 26' 43.4188" W"

Tangent Data
 Description PT Station Northing Easting
 Start: 0+08.863 10069131.77 3105788.229
 End: 0+23.485 10069136.5 3105774.394
 Tangent Data
 Parameter Value Parameter Value
 Length: 14.622 Course: "N 71' 06' 54.1499" W"

Curve Point Data
 Description Station Northing Easting
 PC: 0+23.485 10069136.5 3105774.394
 RP: 10069151.64 3105779.573
 PT: 0+37.948 10069146.34 3105764.474
 Circular Curve Data
 Parameter Value Parameter Value
 Delta: "51' 47' 24.6483" Type: RIGHT
 Radius: 16
 Length: 14.463 Tangent: 7.767
 Mid-Ord: 1.606 External: 1.786
 Chord: 13.975 Course: "N 45' 13' 11.8258" W"

Tangent Data
 Description PT Station Northing Easting
 Start: 0+37.948 10069146.34 3105764.474
 End: 0+52.000 10069159.6 3105759.824
 Tangent Data
 Parameter Value Parameter Value
 Length: 14.052 Course: "N 19' 19' 29.5016" W"

Curve Point Data
 Description Station Northing Easting
 PC: 0+52.000 10069159.6 3105759.824
 RP: 10069157.44 3105754.23
 PT: 0+56.853 10069162.98 3105756.523
 Circular Curve Data
 Parameter Value Parameter Value
 Delta: "46' 20' 17.9496" Type: LEFT
 Radius: 6
 Length: 4.853 Tangent: 2.568
 Mid-Ord: 0.484 External: 0.526
 Chord: 4.721 Course: "N 44' 21' 40.8604" W"

Tangent Data
 Description PT Station Northing Easting
 Start: 0+56.853 10069162.98 3105756.523
 End: 0+60.425 10069164.35 3105753.222
 Tangent Data
 Parameter Value Parameter Value
 Length: 3.572 Course: "N 67' 31' 49.8353" W"

Alignment: RIGHT BENCH TOE

Tangent Data
 Description PT Station Northing Easting
 Start: 0+00.000 10069128.77 3105800.043
 End: 0+12.297 10069138.82 3105792.95
 Tangent Data
 Parameter Value Parameter Value
 Length: 12.297 Course: "N 35' 13' 32.1246" W"

Curve Point Data
 Description Station Northing Easting
 PC: 0+12.297 10069138.82 3105792.95
 RP: 10069127.06 3105777.826
 PT: 0+21.676 10069144.55 3105785.644
 Circular Curve Data
 Parameter Value Parameter Value
 Delta: "28' 03' 20.5767" Type: LEFT
 Radius: 19.155
 Length: 9.379 Tangent: 4.786
 Mid-Ord: 0.571 External: 0.589
 Chord: 9.286 Course: "N 51' 53' 01.3826" W"

Tangent Data
 Description PT Station Northing Easting
 Start: 0+21.676 10069144.55 3105785.644
 End: 0+25.666 10069146.08 3105781.958
 Tangent Data
 Parameter Value Parameter Value
 Length: 3.99 Course: "N 67' 29' 42.0702" W"

Curve Point Data
 Description Station Northing Easting
 PC: 0+25.666 10069146.08 3105781.958
 RP: 10069158.02 3105788.393
 PT: 0+34.039 10069152.01 3105776.235
 Circular Curve Data
 Parameter Value Parameter Value
 Delta: "35' 22' 18.1015" Type: RIGHT
 Radius: 13.562
 Length: 8.373 Tangent: 4.325
 Mid-Ord: 0.641 External: 0.673
 Chord: 8.24 Course: "N 43' 59' 21.2032" W"

Tangent Data
 Description PT Station Northing Easting
 Start: 0+34.039 10069152.01 3105776.235
 End: 0+45.057 10069162.26 3105772.201
 Tangent Data
 Parameter Value Parameter Value
 Length: 11.018 Course: "N 21' 28' 21.4358" W"

Curve Point Data
 Description Station Northing Easting
 PC: 0+45.057 10069162.26 3105772.201
 RP: 10069155.03 3105753.554
 PT: 0+60.393 10069173.17 3105761.967
 Circular Curve Data
 Parameter Value Parameter Value
 Delta: "43' 55' 57.2141" Type: LEFT
 Radius: 20
 Length: 15.335 Tangent: 8.067
 Mid-Ord: 1.452 External: 1.566
 Chord: 14.962 Course: "N 43' 09' 30.4927" W"

Tangent Data
 Description PT Station Northing Easting
 Start: 0+60.393 10069173.17 3105761.967
 End: 0+65.179 10069174.99 3105757.54
 Tangent Data
 Parameter Value Parameter Value
 Length: 4.786 Course: "N 67' 38' 27.8414" W"

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ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	S. MUCHARD
DESIGNED BY	E. STEWART
DRAWN BY	C. AMARAL
CHECKED BY	C. PARKER
DATE	DECEMBER 2015
PROJECT NUMBER	220162

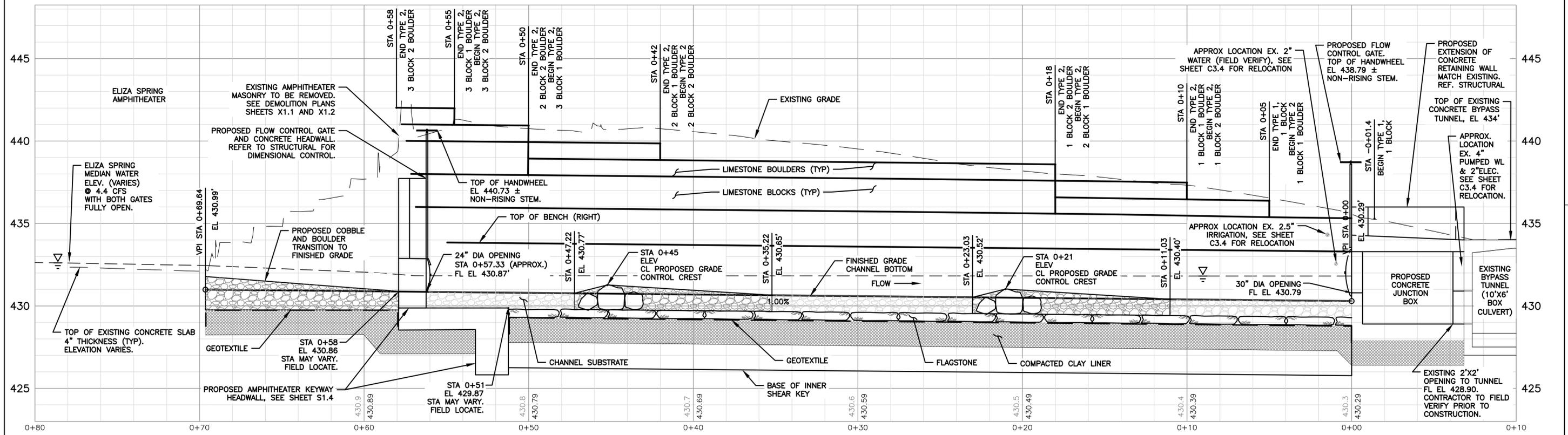
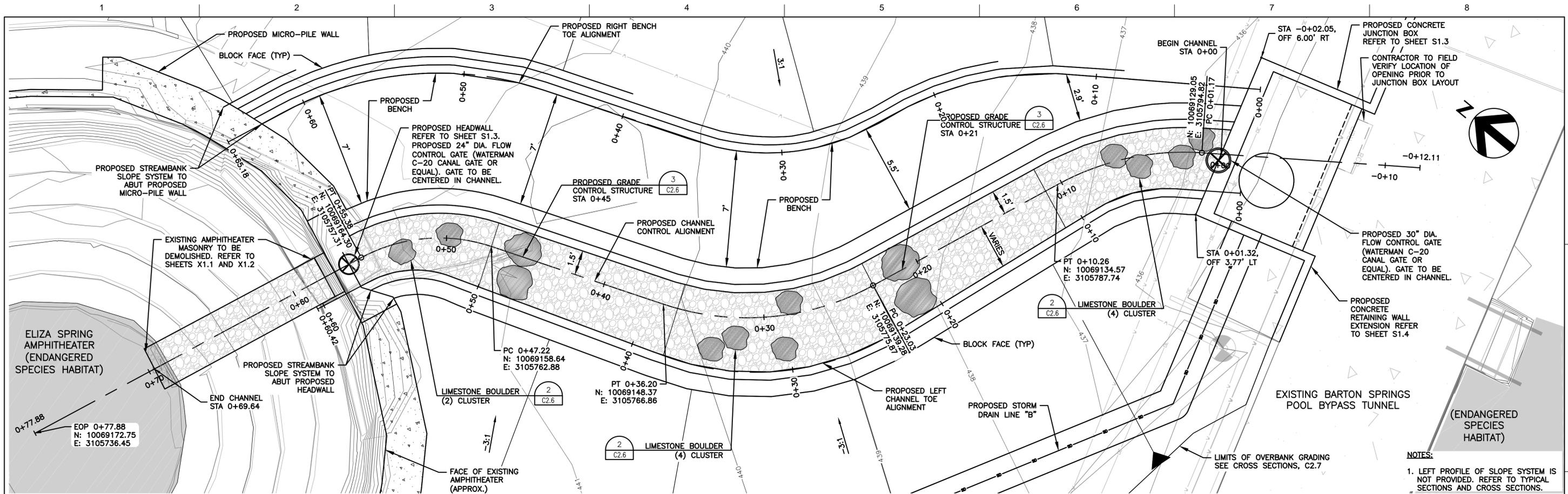


**ELIZA SPRING
 OUTLET DAYLIGHTING**
 Austin, Texas

HORIZONTAL ALIGNMENT DATA

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 SCALE | NONE



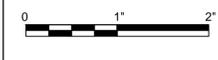
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	S. MUCHARD
DESIGNED BY	E. STEWART
DRAWN BY	C. AMARAL
CHECKED BY	C. PARKER
DATE	DECEMBER 2015
PROJECT NUMBER	220162



**ELIZA SPRING
OUTLET DAYLIGHTING**
Austin, Texas

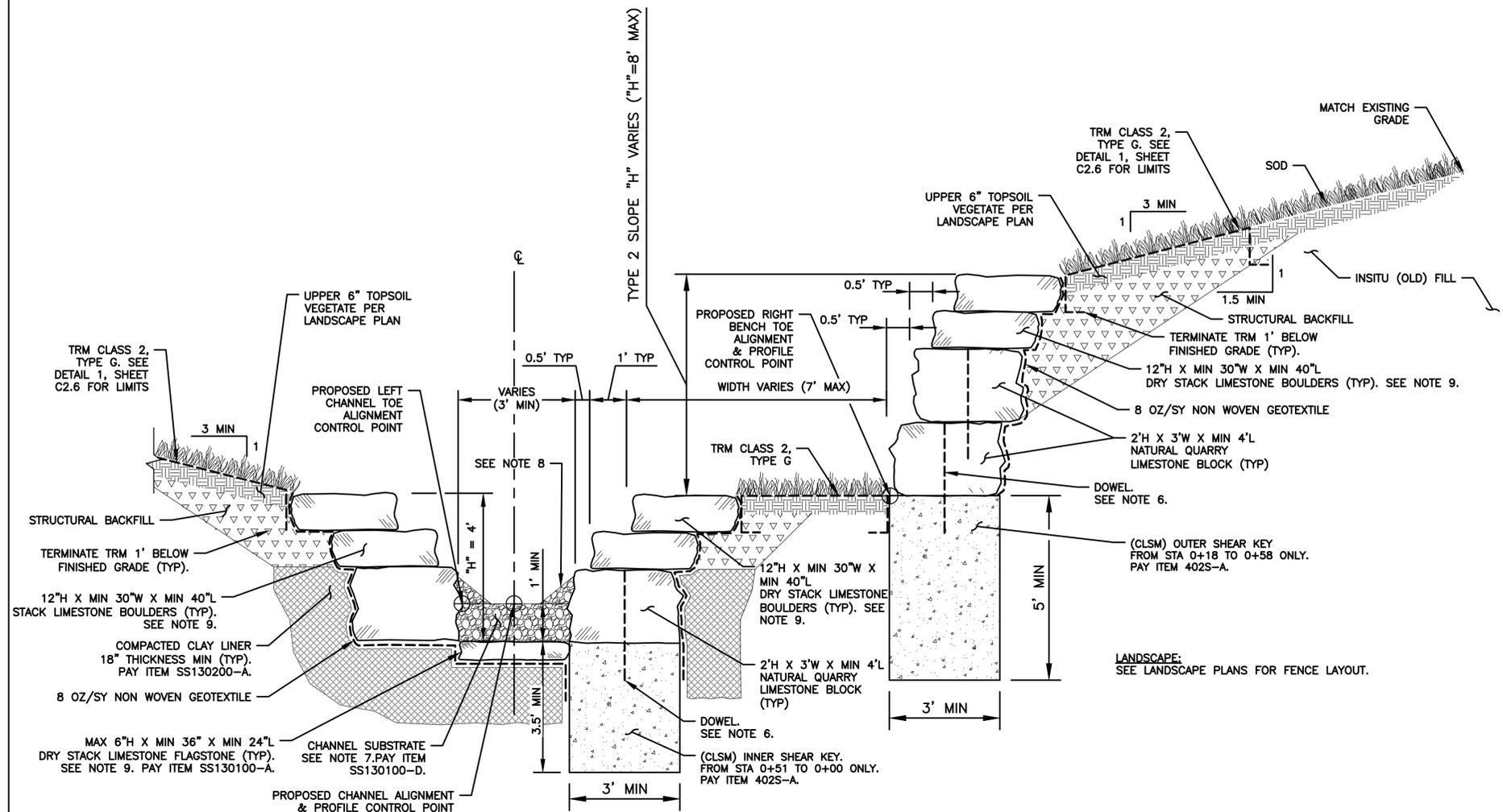
**OUTLET CHANNEL
PLAN & RIGHT PROFILE**



FILENAME | C2.4.DWG
SCALE | 1"=3'

SHEET
C2.4

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TYPICAL SECTION W/ TYPE 2 SLOPE SYSTEM
 (1, 2, OR 3 BLOCKS WITH DRY STACK BOULDERS,
 TYPE 2 SLOPE "H" = 8' MAX)

2
 STA 0+05 TO 0+58

DESIGN CRITERIA SUMMARY								
Foundation Material	Sliding Factor of Safety		Overturning Factor of Safety		Bearing Capacity Factor of Safety		Slope Stability Factor of Safety	
	Computed	Criteria	Computed	Criteria	Computed	Criteria	Computed	Criteria
Clay-Sand	3.14	1.5	2.06	2.0	3.18	3.0	1.86	1.3

RETAINING WALL GEOTECHNICAL DESIGN PARAMETERS			
Material	Friction Angle (degrees)	Cohesion (psf)	Moist Unit Weight (pcf)
Clay-Sand	28	100	110
Structural (MSE) Backfill	32	250	122
Limestone Block	0	4000	140
LS Block Interface	24	NA	NA

DESIGN BASIS NOTE:
 1. WALLS WERE DESIGNED IN ACCORDANCE WITH THE CITY OF AUSTIN TRANSPORTATION CRITERIA MANUAL CHECKLIST SECTION 11.3.5.C.

SUBSURFACE CONDITIONS:

- A LIMITED GEOTECHNICAL INVESTIGATION WAS CONDUCTED FOR THIS PROJECT, AS DESCRIBED IN A LETTER REPORT PREPARED BY HOLT ENGINEERING, INC, DATED MARCH 10, 2015. THE INVESTIGATION INCLUDED TWO BORINGS, EACH TO A DEPTH OF 22 FEET. THE ENCOUNTERED CONDITIONS INCLUDED A LAYER OF UNCLASSIFIED/UNDOCUMENTED FILL UNDERLAIN BY ALLUVIUM SOIL AND LIMESTONE BEDROCK. THE FILL MATERIAL EXTENDED TO A DEPTH OF 6 TO 7 FEET AT THE TWO BORING LOCATIONS. IT CAN GENERALLY BE DESCRIBED AS A LOOSE TO FIRM SILTY SANDY CLAY WITH GRAVEL. THE UNDERLYING ALLUVIUM WAS DESCRIBED AS MEDIUM DENSE CLAYEY GRAVEL TO CLAYEY SAND. THE LIMESTONE WAS ENCOUNTERED AT DEPTHS RANGING FROM 18 TO 20 FEET BELOW THE SURFACE, WHICH APPROXIMATELY CORRELATES TO ELEVATION 422 +/- FEET. REFER TO THE REFERENCED LETTER REPORT FOR FURTHER DETAILS OF THE ENCOUNTERED SUBSURFACE CONDITIONS.

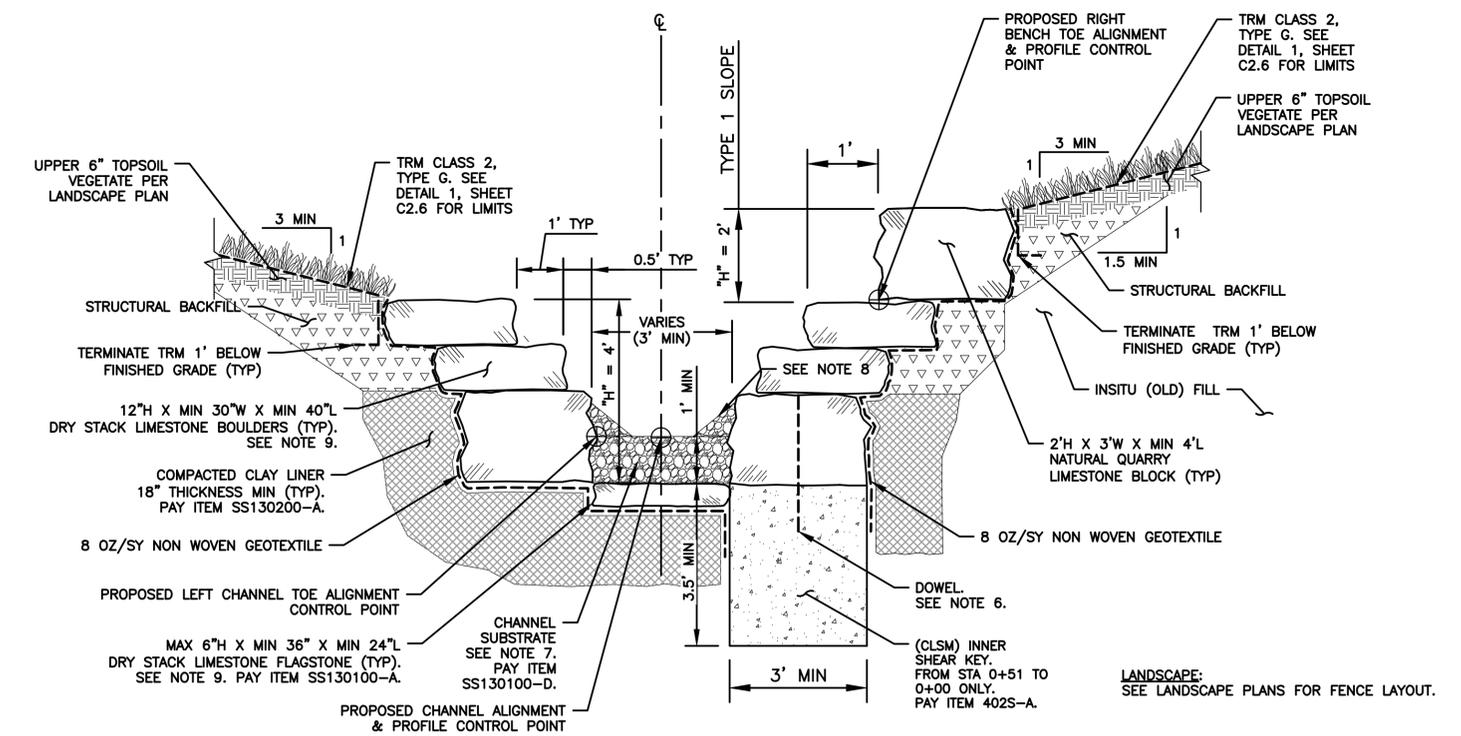
- GROUNDWATER WAS NOTED IN BOTH BORINGS AT A DEPTH RANGING FROM 7.6 TO 8.7 FEET BELOW EXISTING GROUND. BASED ON THIS INFORMATION GROUNDWATER IS ASSUMED TO LIE AT ELEVATION 433 +/- FEET. ELEVATIONS MAY VARY. SEE CARE OF WATER PLANS AND SPECIFICATIONS.
- SOIL DESIGN-RELATED PARAMETERS WERE ESTIMATED BASED ON THE SUBSURFACE CONDITIONS ENCOUNTERED IN THE TWO REFERENCED SOIL BORINGS.

EXCAVATION:

- CONTRACTOR IS RESPONSIBLE FOR TEMPORARY STABILITY RELATIVE TO EXCAVATION GEOMETRY AND EROSION CONTROL OF DISTURBED SOIL DUE TO CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL SUBMIT TO THE OWNER A SEALED EXCAVATION SAFETY SYSTEM DESIGN WHICH SHALL INCLUDE ANY SPECIAL SHORING, SLOPE PROTECTION, OR PHASING AS REQUIRED TO KEEP EXCAVATED AREAS STABLE THROUGHOUT THE CONSTRUCTION PERIOD. CONTRACTOR SHALL MODIFY THE EXCAVATION SAFETY DESIGN IN THE EVENT THE SUBSURFACE CONDITIONS, AS ENCOUNTERED DURING EXCAVATION, ARE MORE CRITICAL THAN DISCLOSED BY THE TWO REFERENCED SOIL BORINGS.
- MAJOR EXCAVATION SHALL PRECEDE MSE AND BANK STABILIZATION AND SHALL BE PERFORMED IN ACCORDANCE WITH COA STANDARD SPECIFICATION ITEMS NO. 120S AND NO. 132S.

CONSTRUCTION NOTES:

- EACH BLOCK-TO-SHEAR KEY AND BLOCK TO BLOCK INTERFACE SHALL BE DOWELED WITH A SINGLE BAR. FOR EACH BLOCK-TO-SHEAR KEY INTERFACE, DRILL 1.5 INCH DIAMETER HOLE CENTERED INTO THE BLOCK AND SHEAR KEY. FOR EACH BLOCK-TO-BLOCK INTERFACE, DRILL 1.5 INCH DIAMETER HOLE CENTERED BETWEEN THE FRONT AND BACK FACES OF THE UPPER BLOCK AND A MINIMUM OF 6 INCHES FROM THE PREVIOUSLY INSTALLED DOWELS IN THE LOWER BLOCK COURSE. NO ROCK HAMMERING WILL BE ALLOWED. INSTALL #8 EPOXY COATED REBAR DOWELS WITH MINIMUM 12 INCHES OF EMBEDMENT INTO UPPER AND LOWER BLOCK/CONCRETE LAYER. DOWELS SHALL BE ANCHORED WITH CONCRETE NON-SHRINK GROUT WHICH SHALL EXTEND THE FULL DEPTH OF THE HOLE AND COMPLETELY FILL ALL VOIDS. AFTER GROUT INSTALLATION NO PART OF THE DOWEL SHOULD BE VISIBLE OR EXPOSED.
- CHANNEL SUBSTRATE MATERIAL WILL BE PROVIDED AND STOCKPILED BY THE CITY FOR USE ON THE PROJECT. MATERIAL WILL CONSIST OF LIMESTONE COARSE GRAVELS AND COBBLES. CONTRACTOR SHALL PROVIDE CITY A MINIMUM OF TWO BUSINESS DAYS NOTICE TO PREPARE MATERIAL.
- CONTRACTOR SHALL PILE UP SUBSTRATE AT THE EDGE OF THE PROPOSED CHANNEL AS DIRECTED BY THE CITY'S BIOLOGIST TO PROVIDE VARIABLE DEPTHS ALONG BOTTOM WIDTH OF THE CHANNEL FOR FULL LENGTH OF CHANNEL. NO SEPARATE PAY.
- LIMESTONE BOULDER AND FLAGSTONE WIDTH AND LENGTH DIMENSIONS SHALL VARY TO PROVIDE A NATURAL AESTHETIC. SEE SS130000 FOR MATERIAL AND DIMENSIONAL REQUIREMENTS.



TYPICAL SECTION W/ TYPE 1 SLOPE SYSTEM
 (1 BLOCK, TYPE 1 SLOPE = 2')

1
 STA 0+00 TO 0+05

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ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	S. MUCHARD
DESIGNED BY	R. BOEHM
DRAWN BY	C. AMARAL
CHECKED BY	C. PARKER
DATE	DECEMBER 2015
PROJECT NUMBER	220162



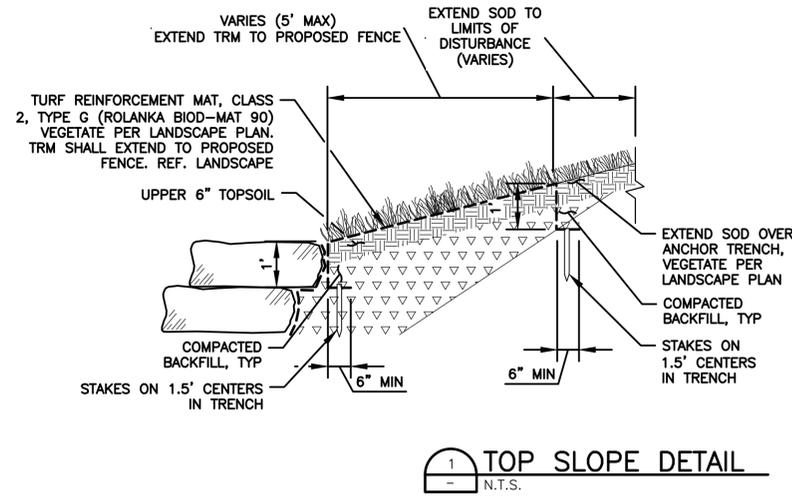
**ELIZA SPRING
 OUTLET DAYLIGHTING**
 Austin, Texas



**TYPICAL CHANNEL SECTIONS
 W/ SLOPE SYSTEM
 DETAILS**

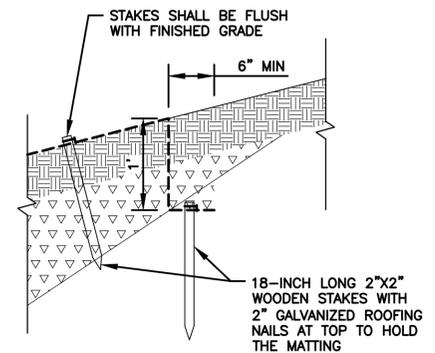
FILENAME | C2.5.DWG
 SCALE | 1"=2'

SHEET
C2.5

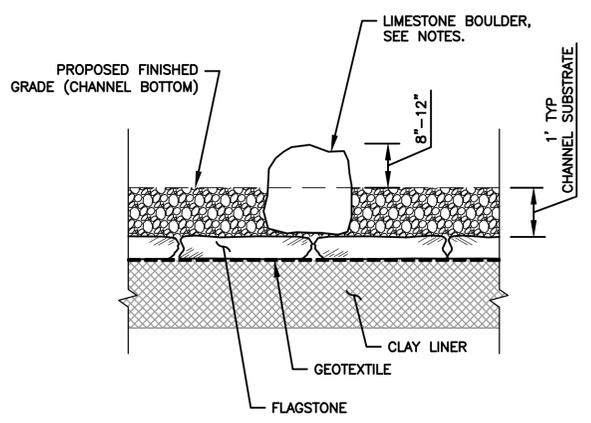


1 TOP SLOPE DETAIL
N.T.S.

- NOTES:**
1. ANCHOR TRM WITH 18-INCH, 2"x2" WOODEN STAKES, 2.5 STAKES PER SQUARE YARD. FOR CLARITY, NOT ALL STAKES ARE ILLUSTRATED. SEE DETAIL 4, THIS SHEET.
 2. ROLL SHALL BE INSTALLED PARALLEL TO CHANNEL. EDGES SHALL BE OVERLAPPED BY 4-INCHES. ROLL ENDS SHALL BE OVERLAPPED BY 6-INCHES. EDGES SHALL BE SECURED WITH STAKES, 1.5' ON CENTERS.
 3. TRM SHALL BE SHINGLED IN THE DIRECTION OF THE DOWN SLOPE AND FLOW.
 4. CONTRACTOR SHALL CONTACT OWNER/ENGINEER 3 DAYS PRIOR TO INSTALLATION OF TRM TO ALLOW FOR INSPECTION OF INSTALLATION BY CITY STAFF.
 5. SCARIFY STRUCTURAL BACKFILL BY HAND RAKING TO A DEPTH NO DEEPER THAN 1-INCH PRIOR TO PLACEMENT OF APPROVED TOPSOIL.

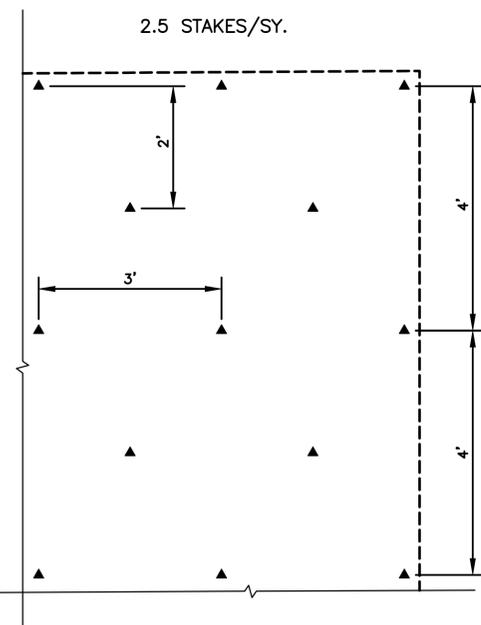


STAKING SECTION
N.T.S.



2 LIMESTONE BOULDER CLUSTER
1"=2'

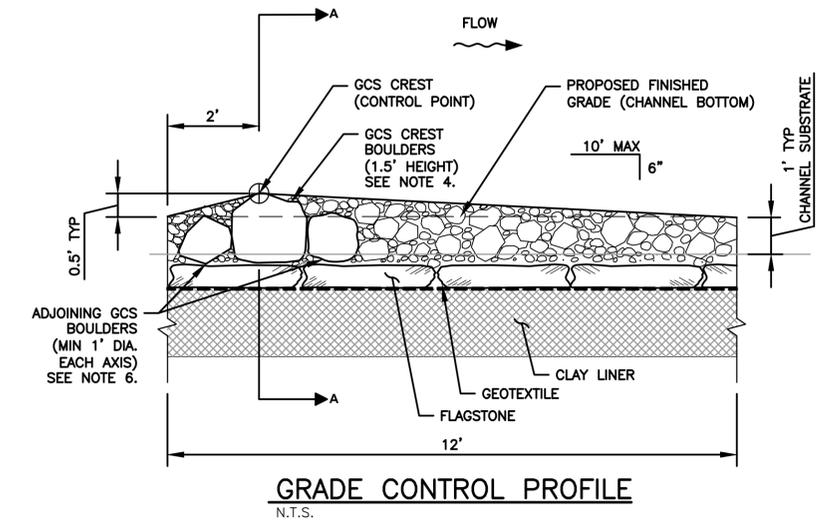
- NOTES:**
1. LIMESTONE BOULDER CLUSTERS SHALL EXTEND DOWN AND REST SOUNDLY ON FLAGSTONE LAYER AT BASE OF CHANNEL SUBSTRATE.
 2. EACH CLUSTER BOULDER SHALL BE HAND SELECTED BY CONTRACTOR AND PRE-APPROVED BY OWNER PRIOR TO INSTALLATION. FINAL LOCATION OF EACH BOULDER SHALL BE COORDINATED WITH THE OWNER IN THE FIELD.
 3. CLUSTER BOULDER DIMENSIONS SHALL VARY. LENGTH AND WIDTH SHALL BE 18 INCHES MIN, BUT HEIGHT SHALL BE 20 TO 24 INCHES TO EXTEND 8 TO 12 INCHES ABOVE PROPOSED FINISHED GRADE OF CHANNEL.



STAKING PLAN
N.T.S.

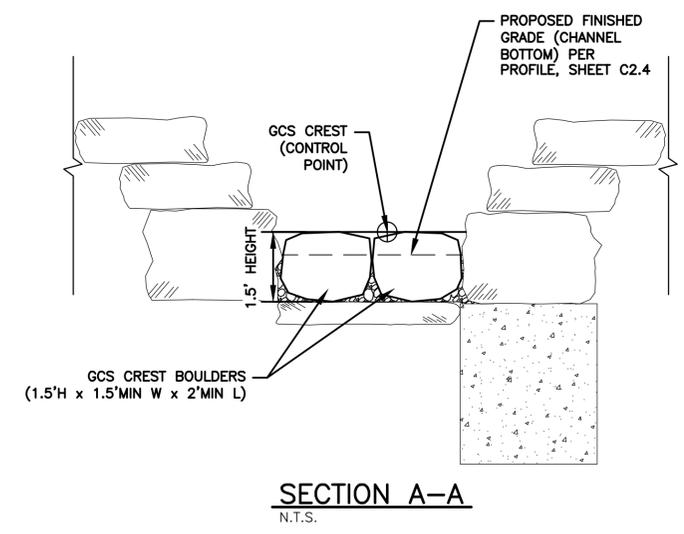


4 STAKING DETAIL
N.T.S.



GRADE CONTROL PROFILE
N.T.S.

- GRADE CONTROL NOTES:**
1. PLAN: BUILD GRADE CONTROL STRUCTURE (GCS) TO EXTEND ACROSS BASE OF CHANNEL WITH LARGEST DIAMETER BOULDERS AT THE CREST LINE AND REDUCE SIZES PROGRESSIVELY UPSTREAM AND DOWNSTREAM. MANUAL PLACEMENT AND SELECTION OF BOULDERS IS REQUIRED.
 2. PROFILE: CONSTRUCT DOWNSTREAM FACE OF GRADE CONTROL AT APPROXIMATELY 20H:1V AND UPSTREAM FACE AT APPROXIMATELY 4H:1V SLOPE.
 3. GCS BOULDERS SHALL BE HAND SELECTED TO COMPLY WITH GEOMETRIC REQUIREMENTS. BOULDERS IN CHANNEL ARE TO BE PRE-APPROVED BY OWNER AND ENGINEER PRIOR CONSTRUCTION. BOULDER PLACEMENT SHALL BE APPROVED BY OWNER AND ENGINEER.
 4. EACH GCS CREST SHALL CONSIST OF TWO HAND SELECTED BOULDERS WHICH TOGETHER EXTEND THE FULL WIDTH OF CHANNEL. THE HEIGHT OF EACH GCS CREST BOULDER SHALL EXTEND 6 INCHES ABOVE PROPOSED FINISHED GRADE OF CHANNEL.
 5. GCS CREST BOULDERS SHALL EXTEND AND REST SOUNDLY ON FLAGSTONE LAYER AT BASE OF CHANNEL SUBSTRATE.
 6. ADDITIONAL BOULDERS (MIN 1' DIA. EACH AXIS) SHALL ABUT THE DOWNSTREAM AND UPSTREAM FACES OF THE GCS BOULDERS.



SECTION A-A
N.T.S.

3 GRADE CONTROL STRUCTURE (GCS) DETAIL
N.T.S.

c:\pwworking\harr0473928\C2.5.dwg



ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	S. MUCHARD
DESIGNED BY	E. STEWART
DRAWN BY	C. AMARAL
CHECKED BY	C. PARKER
DATE	DECEMBER 2015
PROJECT NUMBER	220162

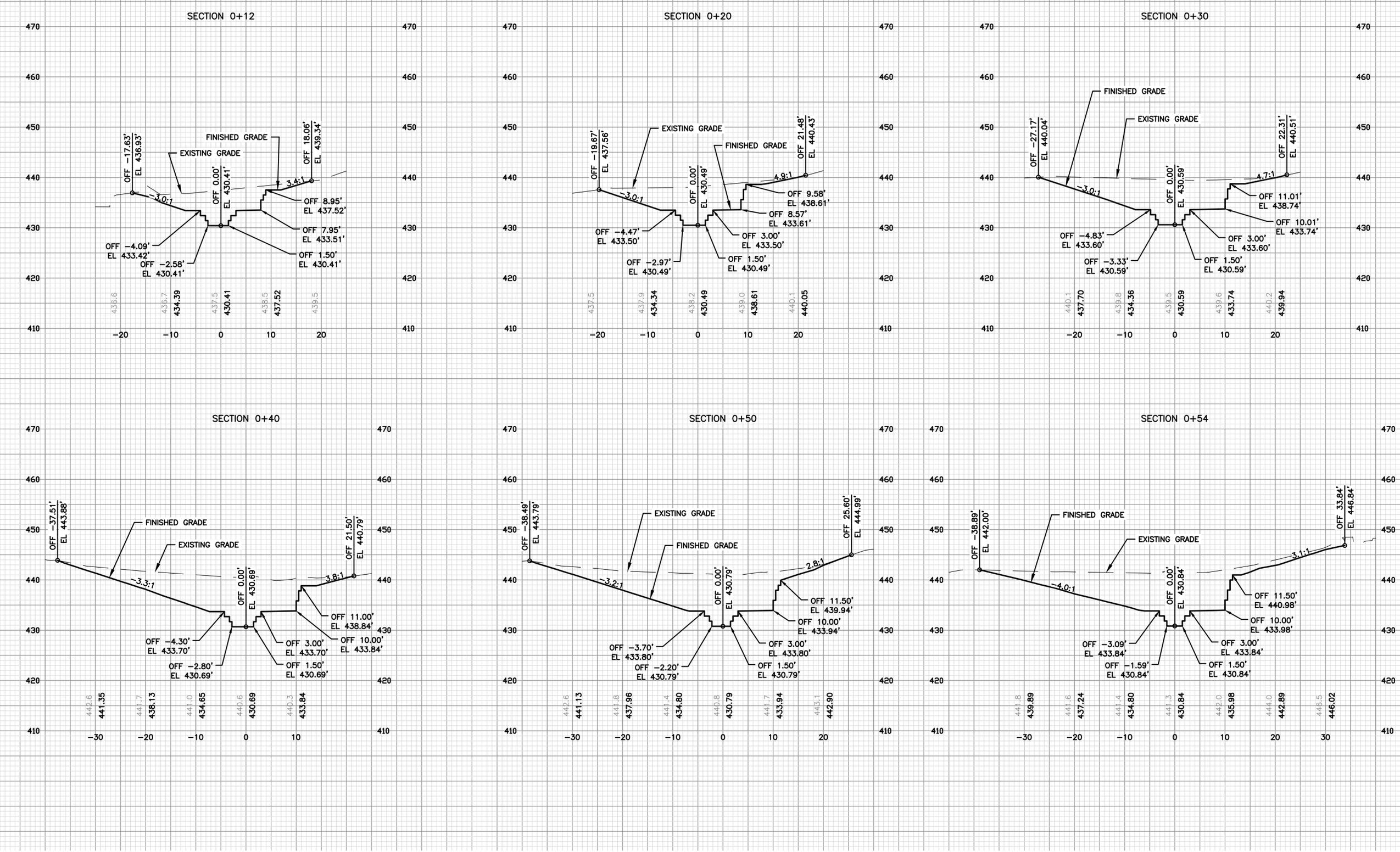


**ELIZA SPRING
OUTLET DAYLIGHTING**
Austin, Texas



FILENAME | C2.5.DWG
SCALE | AS NOTED

SHEET
C2.6



ISSUE	DATE	DESCRIPTION
-	-	-
-	-	-
-	-	-

PROJECT MANAGER	S. MUCHARD
DESIGNED BY	E. STEWART
DRAWN BY	C. AMARAL
CHECKED BY	C. PARKER
DATE	DECEMBER 2015
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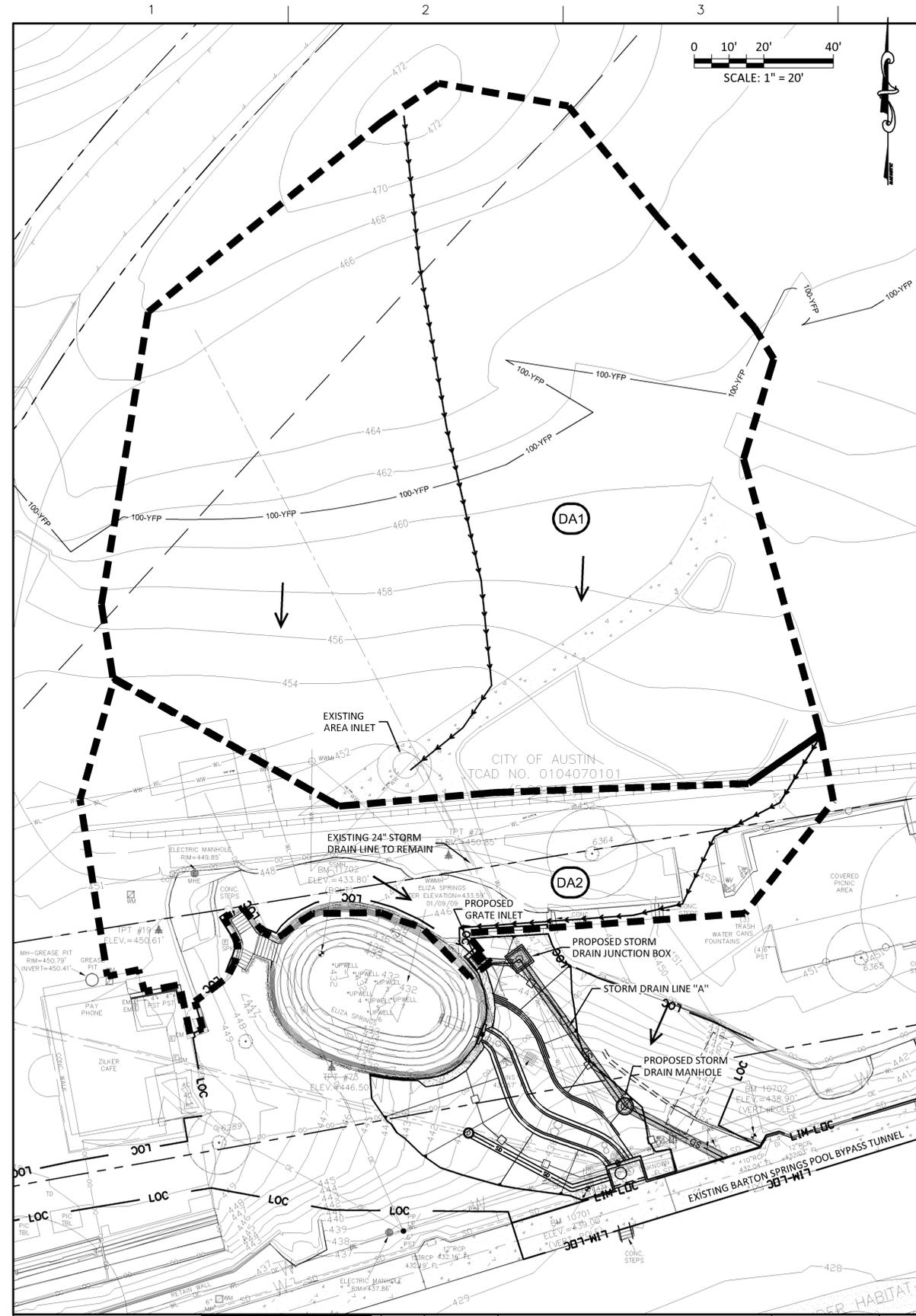
**ELIZA SPRING
OUTLET DAYLIGHTING**
Austin, Texas



CROSS SECTIONS

FILENAME | C2.7.DWG
SCALE | 1" = 10'

SHEET
C2.7



IMPERVIOUS COVER CALCULATIONS

Drainage Area	Area (Sq. Ft.)	Area (Acres)	Impervious Cover		Impervious Cover Composite C Value						Impervious Area (sf)	Percent Impervious	Pervious Classification	Pervious C Value					
			Concrete (%)	Asphalt (%)	2-yr	5-yr	10-yr	25-yr	50-yr	100-yr				2-yr	5-yr	10-yr	25-yr	50-yr	100-yr
DA1	31524.5	0.723703	100.00	0.00	0.75	0.80	0.83	0.88	0.92	0.97	2410.16	8%	FS	0.37	0.40	0.42	0.46	0.49	0.53
DA2	9608.6	0.220583	100.00	0.00	0.75	0.80	0.83	0.88	0.92	0.97	5582.61	58%	FS	0.37	0.40	0.42	0.46	0.49	0.53

Composite C Value						
2-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
0.40	0.43	0.45	0.49	0.52	0.56	
0.59	0.63	0.66	0.71	0.74	0.79	

TIME OF CONCENTRATION CALCULATIONS

Drainage Area	Sheet Flow						Shallow Concentrated Flow 1				Shallow Concentrated Flow 2				Time of Conce		
	Length	N	P2	ΔElev.	Slope	Sub Tc	Length	Paved?	ΔElev.	Slope	Sub Tc	Length	Paved?	ΔElev.		Slope	Sub Tc
DA1	100	0.15	3.44	11	0.11	4.78	65.44	No	8	0.122	0.19	34.03	Yes	2	0.059	0.12	5.09
DA2	42.2	0.015	3.44	3	0.0711	0.45	35.87	Yes	3	0.084	0.10	59.4	No	5	0.084	0.21	0.77

HYDROLOGY CALCULATIONS

Drainage Area	Area (Acres)	T _c (min)	I ₂	I ₅	I ₁₀	I ₂₅	I ₅₀	I ₁₀₀	C ₂	C ₅	C ₁₀	C ₂₅	C ₅₀	C ₁₀₀	Q ₂	Q ₅	Q ₁₀	Q ₂₅	Q ₅₀	Q ₁₀₀
DA1	0.724	5.09	5.73	7.36	8.53	10.07	11.18	12.50	0.40	0.43	0.45	0.49	0.52	0.56	1.7	2.3	2.8	3.6	4.2	5.1
DA2	0.221	5.00	5.76	7.39	8.57	10.11	11.23	12.54	0.59	0.63	0.66	0.70	0.74	0.79	0.8	1.0	1.2	1.6	1.8	2.2

LEGEND

- EXISTING R.O.W./PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING PAVEMENT
- PROPOSED CURB & GUTTER
- EXISTING CREEK/SWALE
- DRAINAGE BOUNDARY LINE
- ENDANGERED SPECIES HABITAT
- DA DRAINAGE BOUNDARY LABEL
- NO INLET NUMBER
- DRAINAGE FLOW DIRECTION
- TIME OF CONCENTRATION LINE
- 493 --- EX. CONTOURS 493 --- PROP. CONTOURS
- EX. STORM DRAIN INLET WITH LATERAL --- PROP. STORM DRAIN INLET WITH LATERAL
- 100-YFP --- 100-YR FLOODPLAIN
- CWOZ --- CRITICAL WATER QUALITY ZONE
- WOTZ --- WATER QUALITY TRANSITION ZONE

CHAN & PARTNERS ENGINEERING, LLC
 4319 JAMES CASEY STREET, #300
 AUSTIN, TEXAS 78745
 512-480-8155 (PH) • 512-480-8811 (FAX)
 E-mail: info@chanpartners.com
 WWW.CHANPARTNERS.COM
 TEXAS REGISTRATION NO. F-13013



ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	S. MUCHARD
DESIGNED BY	
DRAWN BY	
CHECKED BY	
DATE	
PROJECT NUMBER	220162

CHAN & PARTNERS
 CONSULTING CIVIL ENGINEERS

STATE OF TEXAS
 JOHN R. KING
 58429
 LICENSED PROFESSIONAL ENGINEER
 12/3/2015

CITY OF AUSTIN
 FOUNDED 1839

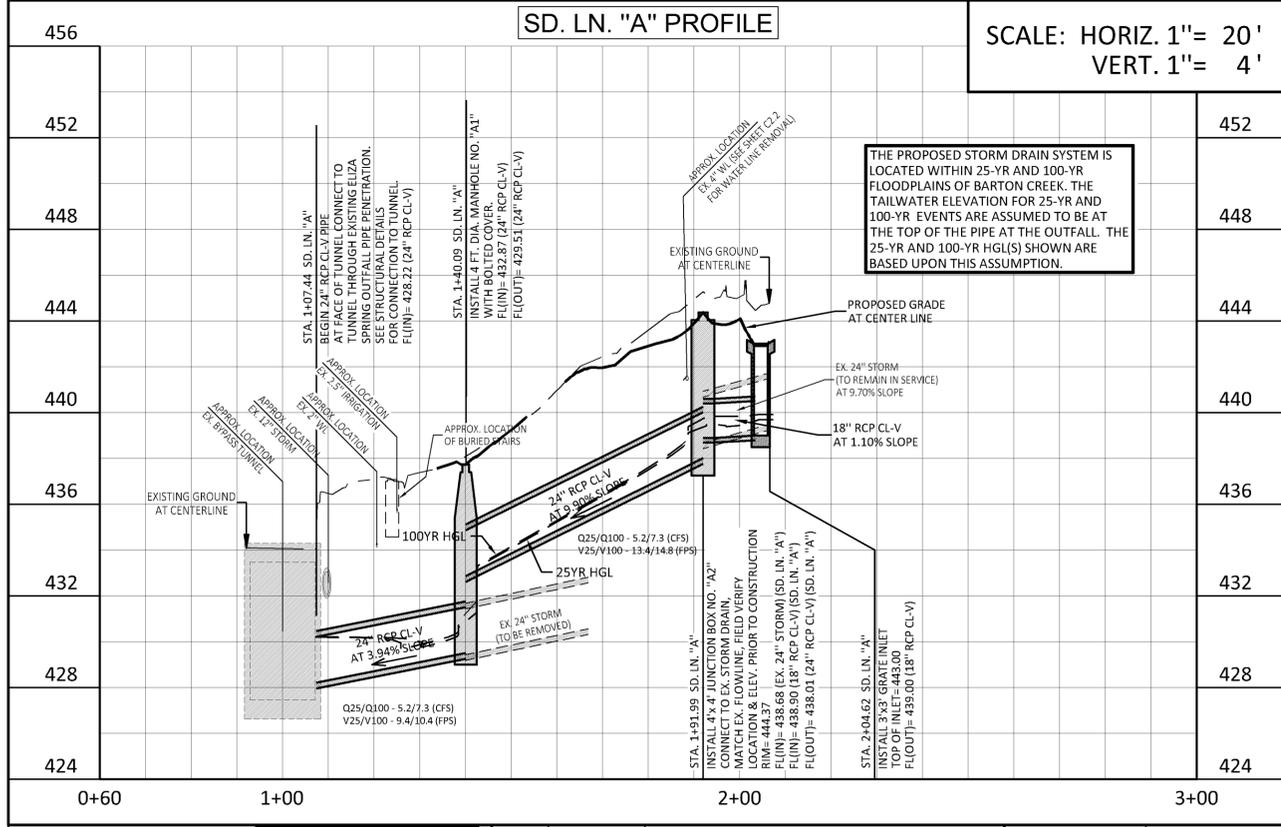
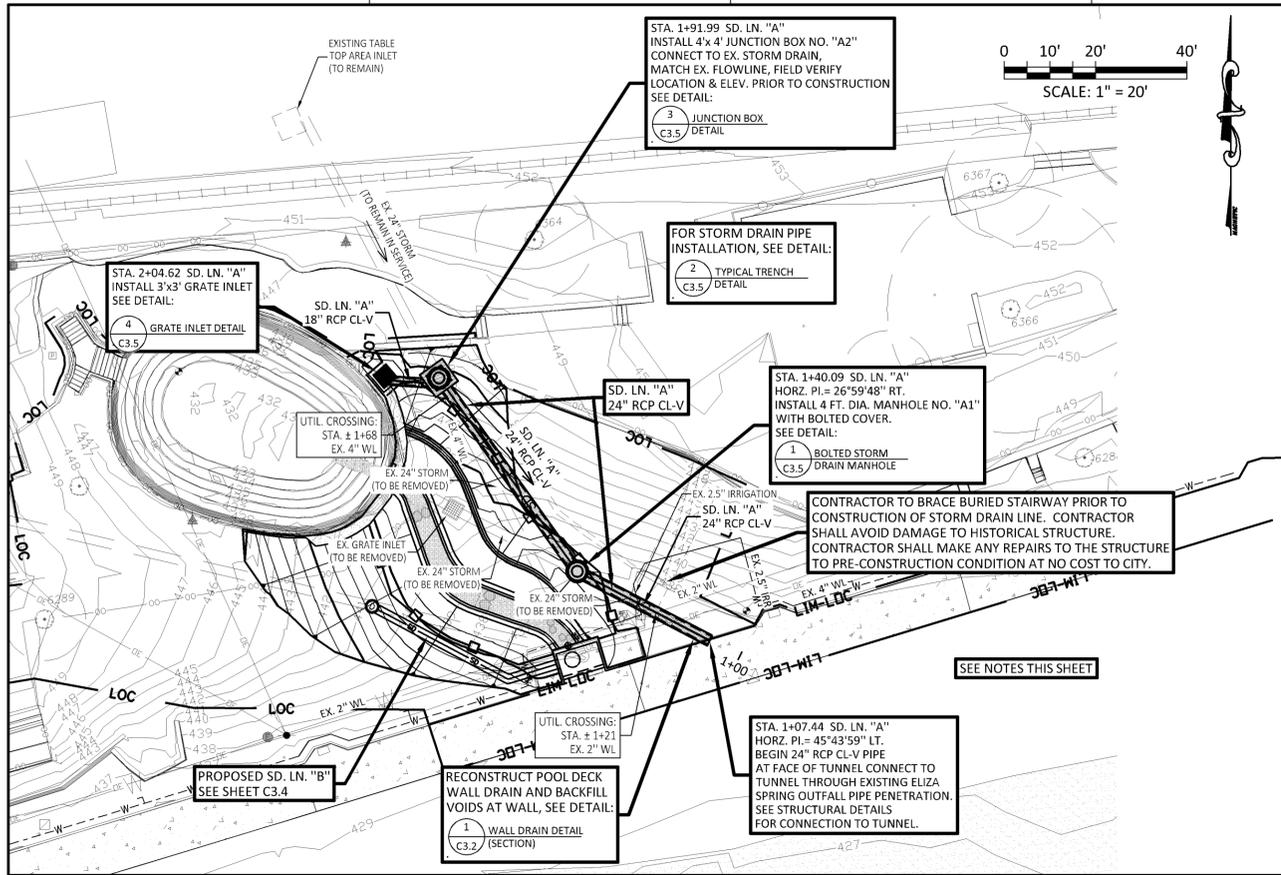
**ELIZA SPRING
 OUTLET DAYLIGHTING**

Austin, Texas

**STORM DRAIN LINE "A"
 DRAINAGE AREA MAP**

0 1" 2"

FILENAME: C-1049--DRAINAGE_MAP2.DWG SHEET C3.1
 SCALE:

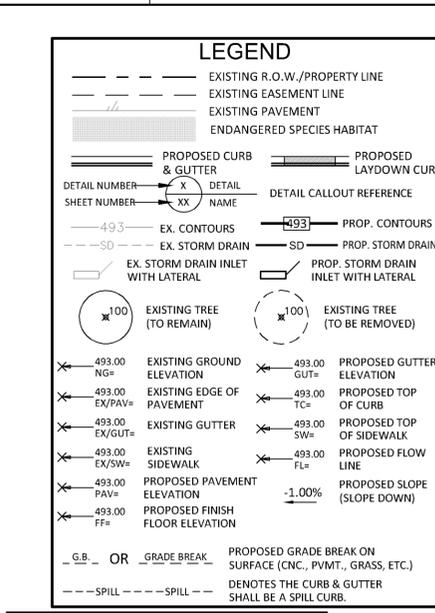


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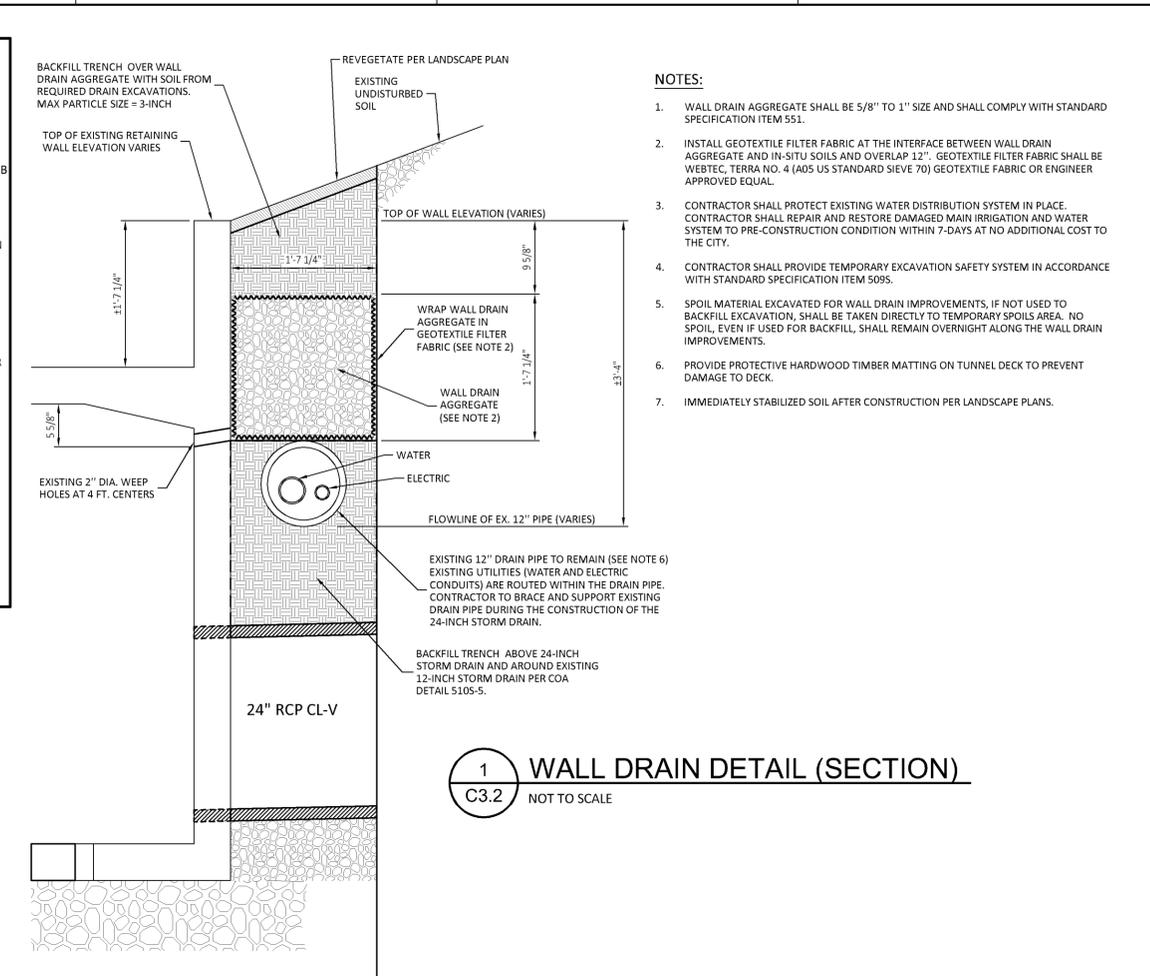


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DESIGNED BY	
DRAWN BY	
CHECKED BY	
DATE	
PROJECT NUMBER	220162



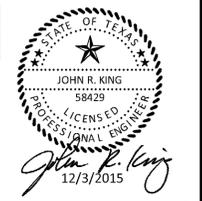
CONTRACTOR NOTES:
 EXISTING UNDERGROUND & OVERHEAD UTILITIES IN VICINITY. CONTRACTOR TO CONTACT UTILITY COMPANIES & CITY OF AUSTIN PRIOR TO CONSTRUCTION. CONTRACTOR SHOULD CONTACT PARD FOR IRRIGATION AND SPRING WATER DELIVERY SYSTEM. CONTRACTOR TO FIELD VERIFY EXISTING UTILITY LOCATIONS & DEPTH PRIOR TO BEGINNING CONSTRUCTION.
 CONTRACTOR SHALL CONSIDER PROPOSED UTILITY IMPROVEMENTS AND PROVIDE ADEQUATE HORIZONTAL AND VERTICAL CLEARANCE DURING INSTALLATION OF ALL UTILITY INFRASTRUCTURE.



- NOTES:**
- WALL DRAIN AGGREGATE SHALL BE 5/8" TO 1" SIZE AND SHALL COMPLY WITH STANDARD SPECIFICATION ITEM 551.
 - INSTALL GEOTEXTILE FILTER FABRIC AT THE INTERFACE BETWEEN WALL DRAIN AGGREGATE AND IN-SITU SOILS AND OVERLAP 12". GEOTEXTILE FILTER FABRIC SHALL BE WEBTEC, TERRA NO. 4 (A05 US STANDARD SIEVE 70) GEOTEXTILE FABRIC OR ENGINEER APPROVED EQUAL.
 - CONTRACTOR SHALL PROTECT EXISTING WATER DISTRIBUTION SYSTEM IN PLACE. CONTRACTOR SHALL REPAIR AND RESTORE DAMAGED MAIN IRRIGATION AND WATER SYSTEM TO PRE-CONSTRUCTION CONDITION WITHIN 7-DAYS AT NO ADDITIONAL COST TO THE CITY.
 - CONTRACTOR SHALL PROVIDE TEMPORARY EXCAVATION SAFETY SYSTEM IN ACCORDANCE WITH STANDARD SPECIFICATION ITEM 509S.
 - SPOIL MATERIAL EXCAVATED FOR WALL DRAIN IMPROVEMENTS, IF NOT USED TO BACKFILL EXCAVATION, SHALL BE TAKEN DIRECTLY TO TEMPORARY SPOILS AREA. NO SPOIL, EVEN IF USED FOR BACKFILL, SHALL REMAIN OVERNIGHT ALONG THE WALL DRAIN IMPROVEMENTS.
 - PROVIDE PROTECTIVE HARDWOOD TIMBER MATTING ON TUNNEL DECK TO PREVENT DAMAGE TO DECK.
 - IMMEDIATELY STABILIZED SOIL AFTER CONSTRUCTION PER LANDSCAPE PLANS.

1 WALL DRAIN DETAIL (SECTION)
 C3.2 NOT TO SCALE

- NOTES**
- CONSTRUCT GRATE INLET IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATION ITEM NO. 508S AND ITS CROSS REFERENCED MATERIALS AND SPECIFICATIONS.
 - CONSTRUCT STORM DRAIN PIPE IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATION ITEM NO. 510 AND ITS CROSS REFERENCED MATERIALS AND SPECIFICATIONS. ALL STORM DRAIN JOINTS SHALL MEET SPECIFICATION 510 REQUIREMENTS.
 - DESIGN, FURNISH, INSTALL, MAINTAIN, AND REMOVE TEMPORARY EXCAVATION SAFETY SYSTEMS IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATION ITEM NO. 509S AND ITS CROSS REFERENCED MATERIALS.
 - CONSTRUCT STORM DRAIN MANHOLE IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATION ITEM NO. 506 AND ITS CROSS REFERENCED MATERIALS AND SPECIFICATIONS.
 - POTHOLE AND CONFIRM EXISTING UTILITY CROSSINGS.
 - POTHOLE AND CONFIRM EXISTING STORM DRAIN PIPE ALIGNMENT AND GRADE AT CONNECTION LOCATIONS. CONTRACTOR TO MINIMIZE IMPACT TO 12-INCH STORM DRAIN PIPE AND CORRESPONDING WATER AND ELECTRIC LINES WITHIN THE PIPE.
 - CONSTRUCT ALL STORM DRAIN LINES FROM DOWNSTREAM TO UPSTREAM. IN THE EVENT EXISTING STORM DRAIN LINES ARE DEMOLISHED, PROVIDE PROVISIONS TO DRAIN STORM WATER RUNOFF DURING CONSTRUCTION OF THE NEW LINES IN CASE OF A STORM EVENT. THESE PROVISIONS SHALL INCLUDE TEMPORARY STORM DRAIN LINES (PVC SCHEDULE 40 PIPE IS ACCEPTABLE), BY-PASS PUMPING, AND/OR BY OTHER MEANS.
 - BACKFILL ALL VOIDS AND TRENCHES CREATED BY THE DEMOLITION, EXCAVATION, AND REMOVAL OF EXISTING STORM DRAIN STRUCTURES, PIPES, AND CONDUITS IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATION NO. 401S AND ITS CROSS REFERENCED MATERIALS AND SPECIFICATIONS.
 - REFER TO EROSION/SEDIMENTATION CONTROL PLAN FOR EROSION AND SEDIMENTATION CONTROLS AND TREE PROTECTION MEASURES ASSOCIATED WITH STORM DRAIN IMPROVEMENTS.
 - ALL STORM DRAIN PIPES ARE CLASS V UNLESS OTHERWISE NOTED.
 - ALL MANHOLES SHALL BE RATED FOR AN EQUIVALENT AASHTO HS-20 DIRECT LOADING.
 - EXCAVATION SAFETY SYSTEMS SHALL BE DESIGNED TO INCLUDE LOADING FROM POTENTIAL UNSTABLE FILL MATERIAL (INCLUDING TRENCH SPOILS AND BACKFILL AND BEDDING OF ADJACENT UTILITY TRENCHES), GROUND WATER, AND LOADING FROM THRUST AND LEAKAGE FROM WATER UTILITY LINES.
 - ALL STORM DRAIN MANHOLES SHALL HAVE BOLTED COVERS.
 - PROVIDE NOTIFICATIONS, SUSPEND CONSTRUCTION, AND FURNISH AND INSTALL MITIGATION MEASURES FOR VOIDS AND WATER FLOW FEATURES DISCOVERED IN BED ROCK DURING EXCAVATION ACTIVITIES IN ACCORDANCE WITH CITY OF AUSTIN STANDARD ITEM NO. 658S.
 - THE STORM DRAIN PIPE FOR STORM DRAIN LINE "A" FROM STATION 1+40.09 TO STATION 2+04.62 SHALL HAVE A BEDDING ENVELOPE COMPOSED OF CONTROLLED LOW STRENGTH MATERIAL (CLSM) IN COMPLIANCE WITH COA STANDARD SPECIFICATION NO. 402S. THE BEDDING ENVELOPE DEPTH AND WIDTH SHALL MEET SPECIFICATION 510.3 (14) REQUIREMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR STABILIZING STORM DRAIN PIPE UNTIL CLSM HARDENS TO ENSURE PIPE MEETS SPECIFIED ALIGNMENTS AND SLOPE.
 - COMPLETELY BACKFILL GRATE INLET WITH CLSM IN COMPLIANCE WITH COA STANDARD SPECIFICATION NO. 402S.
 - BACKFILL JUNCTION BOX WITH CLSM TO TOP OF ADJACENT STORM DRAIN'S BEDDING ENVELOPE. REMAINDER OF BACKFILL SHALL MEET SPECIFICATION NO. 506S REQUIREMENTS.



**ELIZA SPRING
 OUTLET DAYLIGHTING**
 Austin, Texas

**STORM DRAIN LINE "A"
 PLAN & PROFILE**

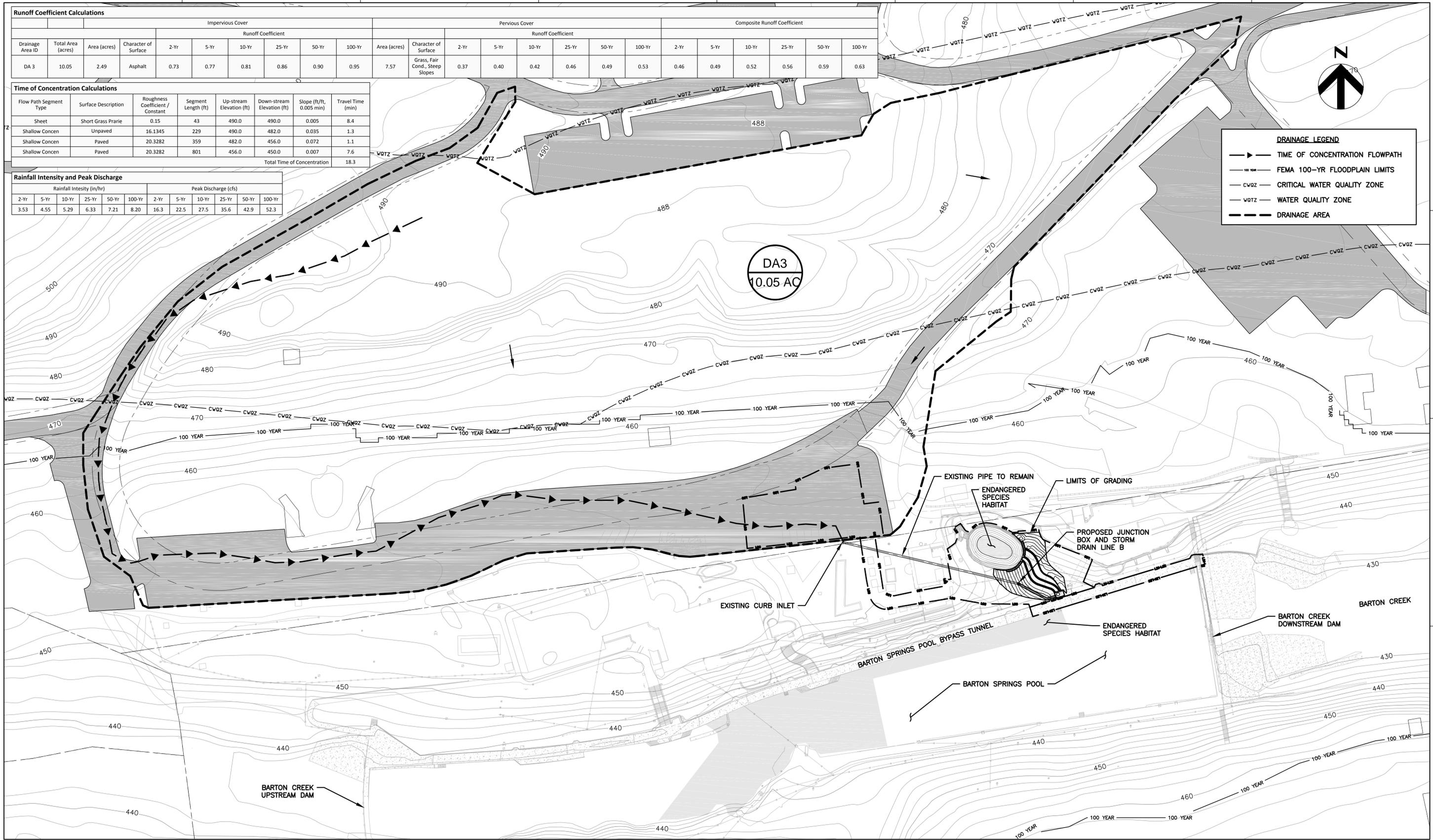
0 1" 2"

FILENAME: C-1049--STORM PNP.DWG SHEET: C3.2
 SCALE:

Runoff Coefficient Calculations																							
Impervious Cover						Pervious Cover						Composite Runoff Coefficient											
Drainage Area ID	Total Area (acres)	Area (acres)	Character of Surface	Runoff Coefficient						Area (acres)	Character of Surface	Runoff Coefficient											
				2-Yr	5-Yr	10-Yr	25-Yr	50-Yr	100-Yr			2-Yr	5-Yr	10-Yr	25-Yr	50-Yr	100-Yr						
DA 3	10.05	2.49	Asphalt	0.73	0.77	0.81	0.86	0.90	0.95	7.57	Grass, Fair Cond., Steep Slopes	0.37	0.40	0.42	0.46	0.49	0.53	0.46	0.49	0.52	0.56	0.59	0.63

Time of Concentration Calculations							
Flow Path Segment Type	Surface Description	Roughness Coefficient / Constant	Segment Length (ft)	Up-stream Elevation (ft)	Down-stream Elevation (ft)	Slope (ft/ft, 0.005 min)	Travel Time (min)
Sheet	Short Grass Prairie	0.15	43	490.0	490.0	0.005	8.4
Shallow Concn	Unpaved	16.1345	229	490.0	482.0	0.035	1.3
Shallow Concn	Paved	20.3282	359	482.0	456.0	0.072	1.1
Shallow Concn	Paved	20.3282	801	456.0	450.0	0.007	7.6
Total Time of Concentration							18.3

Rainfall Intensity and Peak Discharge											
Rainfall Intensity (in/hr)						Peak Discharge (cfs)					
2-Yr	5-Yr	10-Yr	25-Yr	50-Yr	100-Yr	2-Yr	5-Yr	10-Yr	25-Yr	50-Yr	100-Yr
3.53	4.55	5.29	6.33	7.21	8.20	16.3	22.5	27.5	35.6	42.9	52.3



DRAINAGE LEGEND

- ▶—▶—▶ TIME OF CONCENTRATION FLOWPATH
- FEMA 100-YR FLOODPLAIN LIMITS
- CWQZ- CRITICAL WATER QUALITY ZONE
- WQZ- WATER QUALITY ZONE
- - - DRAINAGE AREA

c:\pwworking\harr0473928\CS3.dwg



ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	S. MUCHARD
DESIGNED BY	S. MUCHARD
DRAWN BY	C. AMARAL
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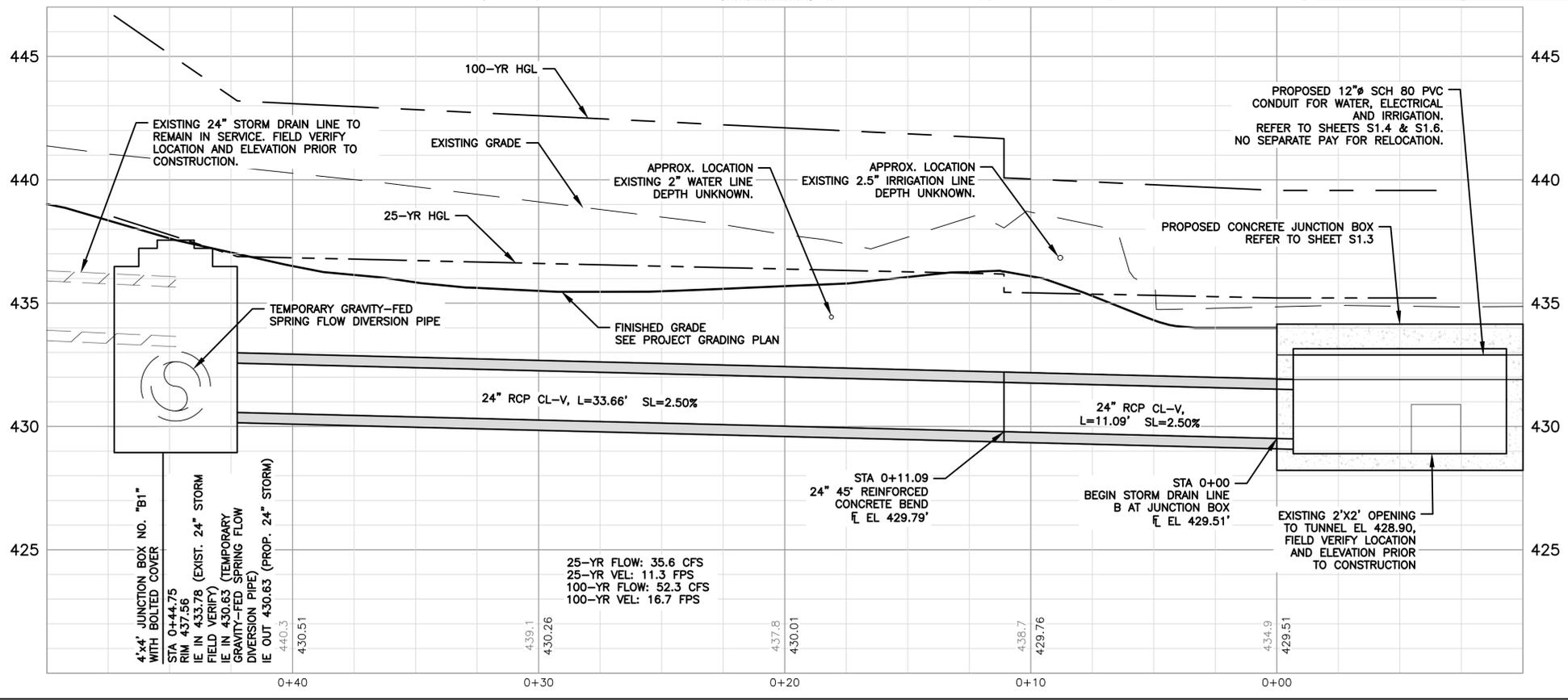
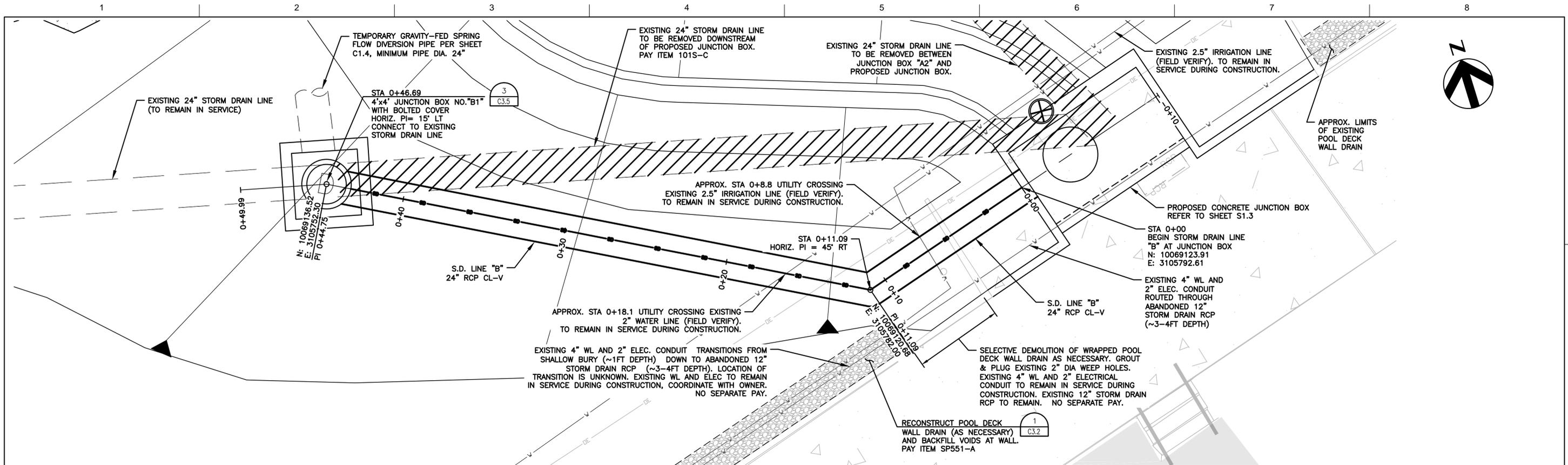


**ELIZA SPRING
OUTLET DAYLIGHTING**
Austin, Texas



FILENAME | C3.3.DWG
SCALE | 1" = 50'

SHEET
C3.3



- NOTES:**
- EXISTING UNDERGROUND AND OVERHEAD UTILITIES IN VICINITY. CONTRACTOR TO CONTACT UTILITY COMPANIES AND ONE CALL CENTER (1-800-344-8377) PRIOR TO CONSTRUCTION. CONTRACTOR TO POT-HOLE AND FIELD VERIFY EXISTING UTILITY LOCATIONS AND DEPTH PRIOR TO BEGINNING CONSTRUCTION.
 - CONTRACTOR SHALL CONSIDER PROPOSED UTILITY IMPROVEMENTS AND PROVIDE ADEQUATE HORIZONTAL AND VERTICAL CLEARANCE DURING INSTALLATION OF ALL UTILITY INFRASTRUCTURE.
 - PROPOSED STORM DRAIN LINE IS LOCATED WITHIN 100-YR AND 25-YR FLOODPLAIN OF BARTON CREEK. STORM DRAIN LINE HGL COMPUTED ASSUMING WATER ELEVATION IN BARTON SPRINGS POOL BYPASS TUNNEL AT TOP OF EXISTING 2'x2' OPENING TO TUNNEL.
 - NOTES ON STORM DRAIN LINE "A" SHEET C3.2 APPLY TO STORM DRAIN LINE "B".
 - REFER TO SP510 FOR STORM DRAIN JOINT REQUIREMENTS.

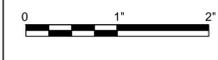


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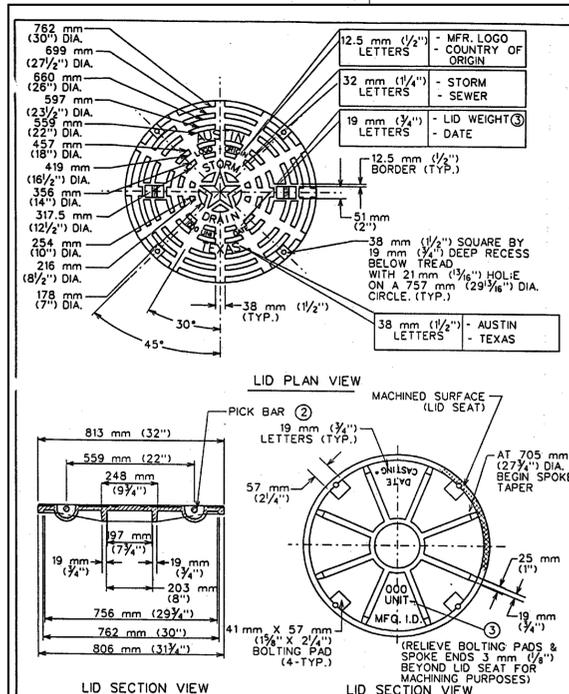


**STORM DRAIN LINE B
 PLAN & PROFILE**

FILENAME C3.4.DWG
 SCALE 1"=3'

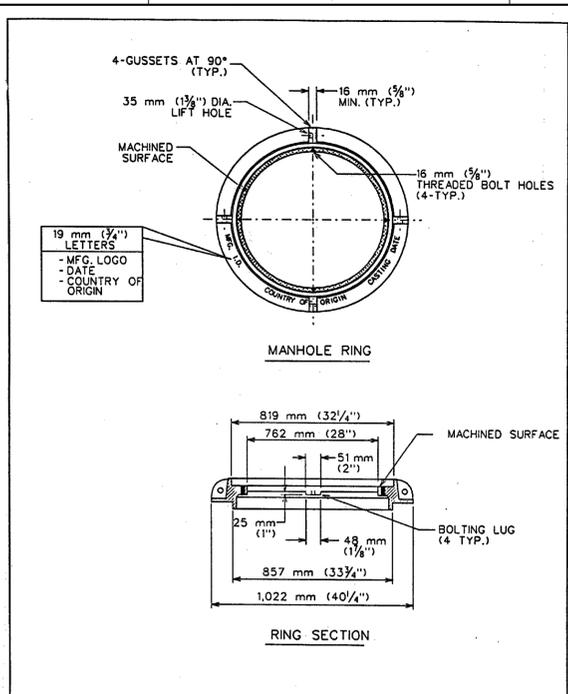
SHEET
C3.4

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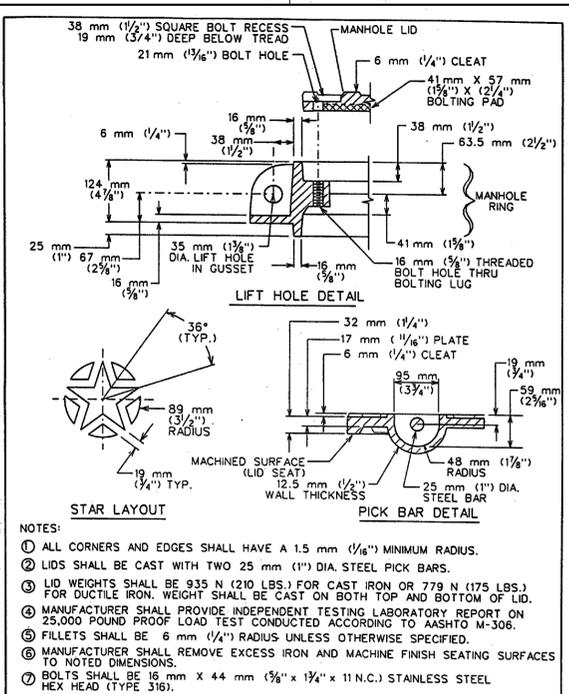
CITY OF AUSTIN DEPARTMENT OF WATERED PROTECTION AND DEVELOPMENT REVIEW	BOLTED STORM DRAIN MANHOLE RING AND 813 mm (32") COVER	STANDARD NO. 503S-5S
<i>George E. Oswald</i>	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	1 OF 3

1
C3.5



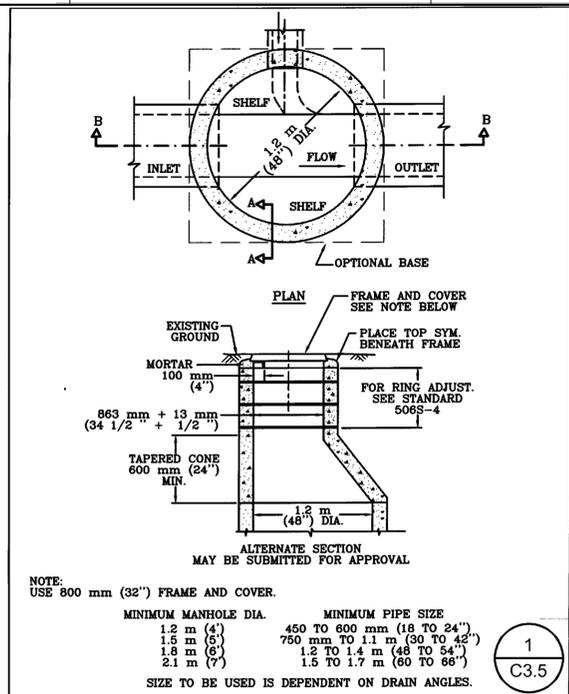
CITY OF AUSTIN DEPARTMENT OF WATERED PROTECTION AND DEVELOPMENT REVIEW	BOLTED STORM DRAIN MANHOLE RING AND 813 mm (32") COVER	STANDARD NO. 503S-5S
<i>George E. Oswald</i>	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	2 OF 3

1
C3.5



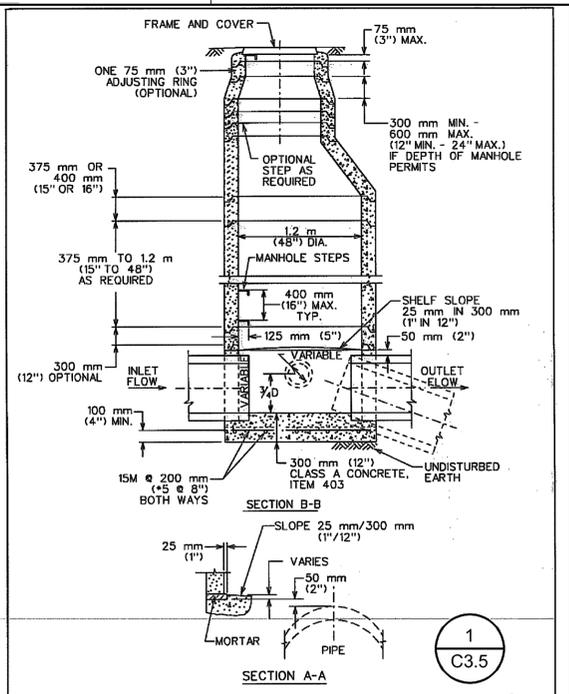
CITY OF AUSTIN DEPARTMENT OF WATERED PROTECTION AND DEVELOPMENT REVIEW	BOLTED STORM DRAIN MANHOLE RING AND 813 mm (32") COVER	STANDARD NO. 503S-5S
<i>George E. Oswald</i>	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	3 OF 3

1
C3.5



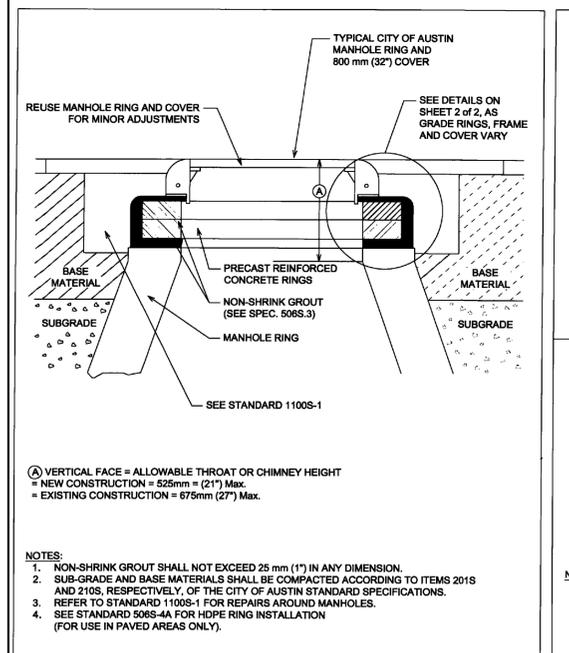
CITY OF AUSTIN DEPARTMENT OF WATERED PROTECTION AND DEVELOPMENT REVIEW	PRE-CAST CONCRETE STORM DRAIN MANHOLE	STANDARD NO. 506S-3
<i>George E. Oswald</i>	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	1 OF 2

1
C3.5



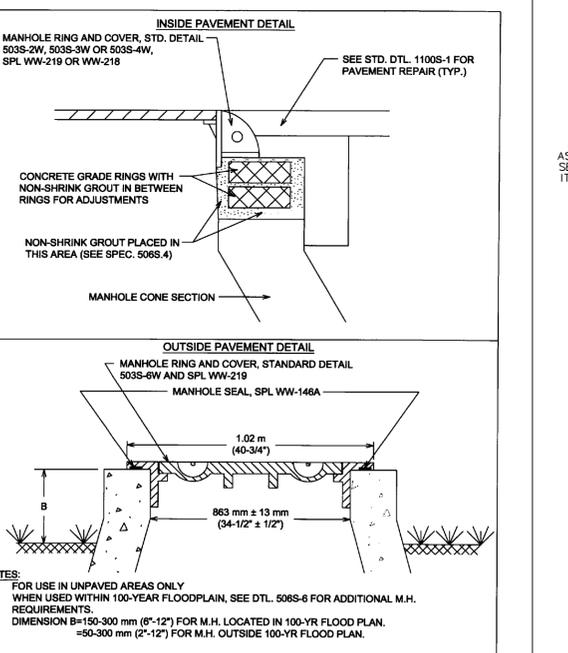
CITY OF AUSTIN DEPARTMENT OF WATERED PROTECTION AND DEVELOPMENT REVIEW	PRE-CAST CONCRETE STORM DRAIN MANHOLE	STANDARD NO. 506S-3
<i>George E. Oswald</i>	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	2 OF 2

1
C3.5



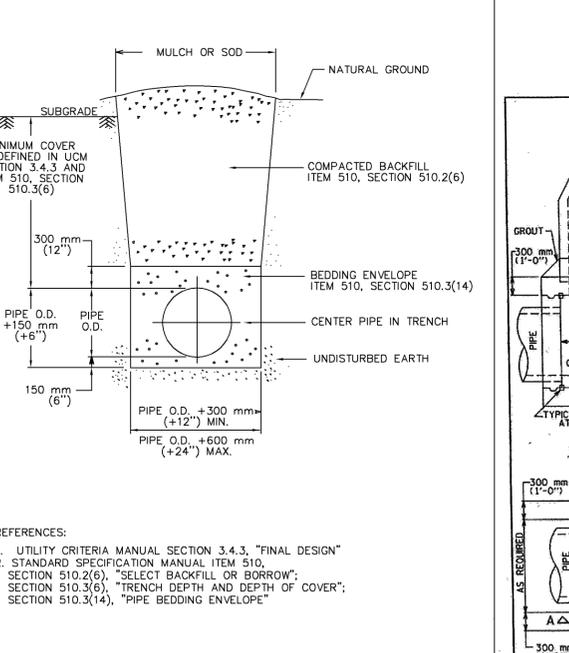
CITY OF AUSTIN AUSTIN WATER UTILITY	MINOR MANHOLE ADJUSTMENT & NEW MANHOLE CONSTRUCTION	STANDARD NO. 506S-4
<i>Kathie A. Blawie</i>	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	1 OF 2

1
C3.5



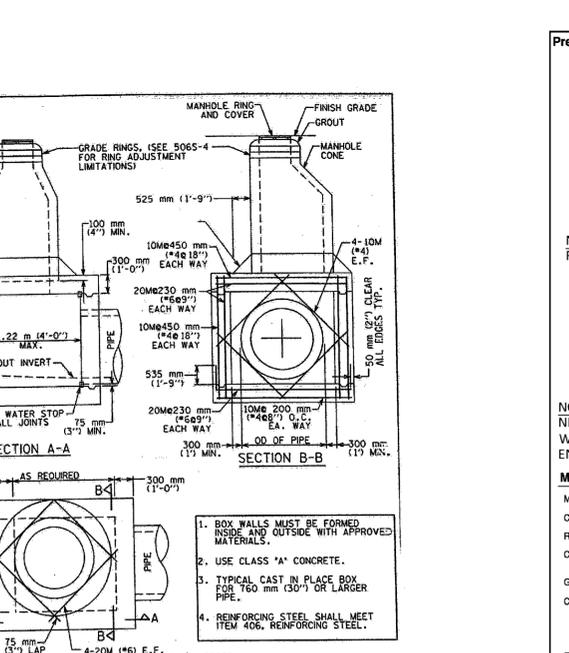
CITY OF AUSTIN AUSTIN WATER UTILITY	MINOR MANHOLE ADJUSTMENT & NEW MANHOLE CONSTRUCTION	STANDARD NO. 506S-4
<i>Kathie A. Blawie</i>	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	2 OF 2

1
C3.5



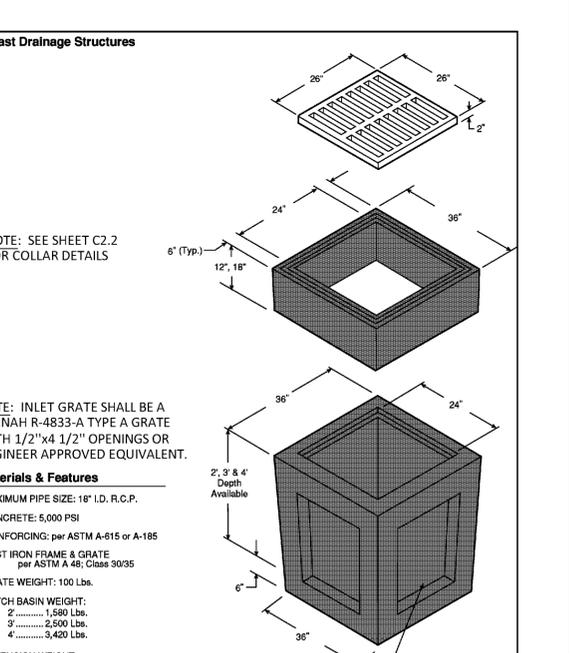
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPICAL TRENCH DETAIL WITH UNFINISHED SURFACE	STANDARD NO. 510S-5
<i>Bill Gardner</i>	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	ADOPTED

2
C3.5



CITY OF AUSTIN WATER AND WASTEWATER UTILITY	TYPICAL BOX MANHOLE 760 mm (30") & LARGER PIPE	STANDARD NO. 506S-5
<i>Kathie A. Blawie</i>	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	ADOPTED

3
C3.5



CITY OF AUSTIN WATER AND WASTEWATER UTILITY	GRATE INLET DETAIL	STANDARD NO. 506S-5
<i>Kathie A. Blawie</i>	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	ADOPTED

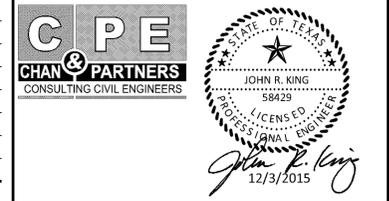
4
C3.5

CHAN & PARTNERS ENGINEERING, LLC
4319 JAMES CASEY STREET, #300
AUSTIN, TEXAS 78745
512-480-8155 (PH) • 512-480-8811 (FAX)
E-mail: info@chanpartners.com
WWW.CHANPARTNERS.COM
TEXAS REGISTRATION NO. F-13013



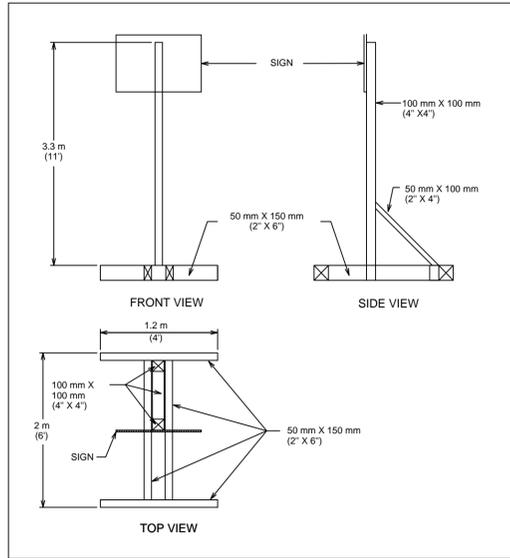
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	S. MUCHARD
DESIGNED BY	
DRAWN BY	
CHECKED BY	
DATE	
PROJECT NUMBER	220162



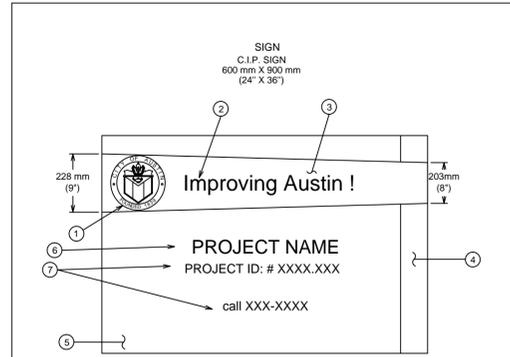
CITY OF AUSTIN
ELIZA SPRING
OUTLET DAYLIGHTING
Austin, Texas

CONSTRUCTION DETAILS			
FILENAME	C-1049--DETAILS.DWG	SHEET	C3.5
SCALE			



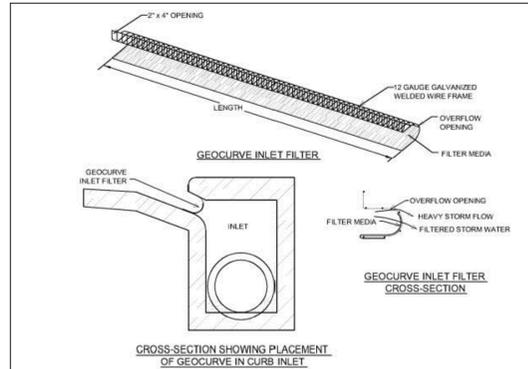
- NOTES:
1. ALL MATERIALS SHALL BE FURNISHED BY THE CONTRACTOR.
 2. LUMBER DIMENSIONS ARE NOMINAL.
 3. SIGN MUST BE IN COLOR.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		600mmx900mm (24"x36") C. I. P. MOVABLE SIGN TYPE II	STANDARD NO. 802S-2 1 OF 2
RECORD COPY SIGNED BY KERI JUAREZ	01/04/11 DATE	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	



- 1 225 mm (9") CITY SEAL (4 COLOR PROCESS)
- 2 50 mm (2") WHITE LETTERS
- 3 TRANSPARENT BLUE PAINT
- 4 75 mm (3") WIDE- TRANSPARENT YELLOW PAINT STRIPE
- 5 HIGH INTENSITY WHITE REFLECTIVE SHEETING, .080 ALUMINUM 2290, 3M CO. OR EQUAL
- 6 63 mm (2 1/2") BLUE LETTERS
- 7 25 mm (1") BLUE LETTERS

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		600mmx900mm (24"x36") C. I. P. MOVABLE SIGN TYPE II	STANDARD NO. 802S-2 2 OF 2
RECORD COPY SIGNED BY KERI JUAREZ	01/04/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	



- NOTES:
1. THE GEOCURVE INLET FILTER SHALL BE FORCED INTO THE CURB INLET TO CREATE A COMPRESSION FIT INTO THE INLET.
 2. THE FILTER MEDIA FOR PROJECTS WITHIN CITY OF AUSTIN JURISDICTION IS TO BE GEOSOLUTIONS CI-1 WOVEN FILTER FABRIC.
 3. THE FILTER MEDIA IS TO BE ATTACHED TO THE WIRE FRAME WITH HOG RINGS LEAVING AN OVERFLOW OPENING ABOVE THE FILTER MEDIA.
 4. INSPECTION SHALL BE MADE BY THE CONTRACTOR AND SILT ACCUMULATION MUST BE REMOVED WHEN THE DEPTH REACHES 2 INCHES.
 5. INLET FILTER SHALL BE REMOVED UPON STABILIZATION OF THE SEDIMENT SOURCE.

FILTER MEDIA PROPERTIES: Mono-filament Woven Filter Fabric			
PROPERTY	ASTM TEST METHOD	VALUE	C.O.A. REQ'T
Fabric Weight	D 3776	4.5 oz/sy	3 oz/sy
Grab Tensile Strength	D 4632	170 lbs	----
Mullen Burst Strength	D 3786	410 lbs/sq in	120 lbs/sq in
UV Stability	D 4355	80%	70%
Water Flow Rate	D 4491	325 gal/min/sf	275 gal/min/sf

GeoSolutions, Inc. 4417 Burleson Road Austin, Texas 78744
512-330-0796

**"GEOCURVE" INLET FILTER
(OR APPROVED EQUAL)**

N.T.S.

c:\pwworking\harr0473928\CS3.6.dwg



ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	S. MUCHARD
DESIGNED BY	S. MUCHARD
DRAWN BY	C. AMARAL
CHECKED BY	C. PARKER
DATE	DECEMBER 2015
PROJECT NUMBER	220162



**ELIZA SPRING
OUTLET DAYLIGHTING**

Austin, Texas

CONSTRUCTION DETAILS



FILENAME | C3.6.DWG
SCALE | NONE

SHEET
C3.6

STRUCTURAL GENERAL NOTES

GENERAL NOTES

1. THESE GENERAL NOTES SHALL APPLY UNLESS OTHERWISE SPECIFICALLY NOTED ON PLANS AND DETAILS.
2. CONSTRUCTION WORKMANSHIP, AND MATERIALS SHALL COMPLY WITH THE 2012 INTERNATIONAL BUILDING CODE (IBC).
3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SHALL COORDINATE ALL STRUCTURAL PLANS AND DETAILS WITH CIVIL DRAWINGS BEFORE STARTING WORK. IN CASE OF DISCREPANCY, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF SAME IN A TIMELY MANNER.
4. COMPLETE SHOP DRAWINGS FOR THE STRUCTURAL WORK SHALL BE SUBMITTED FOR REVIEW PRIOR TO COMMENCEMENT OF CONSTRUCTION IN ACCORDANCE WITH THE SPECIFICATIONS. REVIEW OF SHOP DRAWINGS BY THE ENGINEER DOES NOT RELIEVE THE CONTRACTOR OF FULL RESPONSIBILITY FOR CORRECT FABRICATION AND CONSTRUCTION OF THE WORK.
5. THE STRUCTURAL DRAWINGS SHALL NOT BE SCALED FOR DETERMINATION OF QUANTITIES, LENGTHS, OR FIT OF MATERIALS.
6. PRINCIPAL OPENINGS ARE SHOWN ON THE STRUCTURAL DRAWINGS, THE CONTRACTOR SHALL REFER TO CIVIL DRAWINGS FOR SLEEVES, CURBS, INSERTS AND SIMILAR DETAILS NOT SHOWN. SIZE AND LOCATION OF ALL OPENINGS SHALL BE VERIFIED BY THE CONTRACTOR. ANY DEVIATION FROM OPENINGS SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO CONSTRUCTION.
7. THE STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHODS OF CONSTRUCTION UNLESS SO STATED OR NOTED. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE WORKERS AND ALL OTHER PERSONS DURING CONSTRUCTION.
8. THE CONTRACTOR SHALL PROVIDE TEMPORARY ERECTION BRACING AND SHORING OF ALL STRUCTURAL WORK AS REQUIRED FOR STABILITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CONSTRUCTION MANAGER OF ANY CONDITION WHICH, IN HIS OPINION, MIGHT ENDANGER THE STABILITY OF THE STRUCTURE OR CAUSE DISTRESS IN THE STRUCTURE.
9. REFERENCE SPECIFICATIONS IN PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS. WHERE DISCREPANCY EXISTS AMONG CONSTRUCTION DRAWINGS, SPECIFICATIONS, OR OTHER COMPONENTS OF CONSTRUCTION DOCUMENTS, CONTRACTOR SHALL BRING DISCREPANCIES TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD. THE MOST STRINGENT OF REQUIREMENTS SHALL APPLY- AS DETERMINED BY THE ENGINEER OF RECORD.

PROTECTION OF HISTORICAL STRUCTURE - NOTES

1. TO MINIMIZE POTENTIAL DAMAGE TO HISTORIC STRUCTURES AND MATERIALS, CONTRACTOR SHALL REMOVE ALL INFILL STONE IN CONTACT WITH THE WALLS AND STEPS OF THE AMPHITHEATER USING HAND TOOLS.
2. CONTRACTOR SHALL REMOVE ALL VEGETATION ROOTED IN CRACKS IN THE WORK AREA AND WITHIN TWO FEET OF THE WORK AREA BY HAND. THE USE OF HERBICIDES OR OTHER CHEMICALS TO REMOVE VEGETATION IS EXPRESSLY FORBIDDEN.
3. CONTRACTOR IS RESPONSIBLE FOR PREVENTING DAMAGE TO HISTORIC STRUCTURE DURING THE ENTIRE CONSTRUCTION PROJECT, ESPECIALLY DURING REMOVAL OF EXISTING INFILL STONE. CONTRACTOR WILL EXERCISE UTMOST CAUTION AND WILL TAKE MEASURES TO PROTECT HISTORIC WALLS AND STEPS.
4. IN CASE DAMAGE OCCURS, CONTRACTOR SHALL PROTECT THE DAMAGED AREA AND NOTIFY THE PROJECT MANAGER.
5. CONTRACTOR SHALL REPAIR, AT HIS OWN EXPENSE, ANY HISTORIC MATERIALS DAMAGED IN THE COURSE OF EXECUTING THE WORK. CONTRACTOR IS RESPONSIBLE FOR LOCATING REPLACEMENT SOURCE FOR HISTORIC MATERIALS DAMAGED IN THE COURSE OF THE WORK. THE CONTRACTOR SHALL NOTIFY TEXAS HISTORICAL COMMISSION (THC) OF THE DAMAGE AND SHALL OBTAIN APPROVAL FROM THE OWNER AND THC FOR THE PROPOSED REPAIRS PRIOR TO EXECUTION OF REPAIR WORK.

DESIGN CRITERIA

1. LOADS:
 - ALL CONCRETE STRUCTURES:
 - LIVE LOADS: 100 PSF
 - ALL STAIRS/ EXITS/ WALKWAYS LEVEL:
 - LIVE LOADS: 100 PSF
2. WIND LOAD: VARIES WITH BUILDING HEIGHT AS PER THE I.B.C. BASED ON 115 MPH, ULTIMATE WIND SPEED, EXPOSURE C, RISK CATEGORY II
3. SEISMIC DESIGN:
 - ASSUMING SOIL SITE CLASS "D" (AS PERMITTED BY BUILDING CODE- EXCEPT BUILDING OFFICIAL MAY REQUIRE SOIL SITE CLASS TO BE DETERMINED BY GEOTECHNICAL INVESTIGATION), THE FOLLOWING SEISMIC PARAMETERS APPLY:
 - $S_{DS} = 0.068g$ $S_{D1} = 0.052g$
 - $S_0 = 0.068g$ $S_1 = 0.052g$
 - BASE SHEAR (V) = 912 #
3. GROUND SNOW LOAD: 5 PSF
4. FOUNDATION DESIGN
 - FOUNDATION DESIGN IS BASED ON THE RECOMMENDATIONS PROVIDED BY HDR, INC. AND INVESTIGATIONAL SOIL BORINGS PROVIDED BY HOLT ENGINEER, INC:
 - A. REFERENCE LETTER FROM HOLT ENGINEERING, INC. DATED 3/10/2015 FILE NO. 0307015.
 - B. PER AUSTIN, TEXAS TRANSPORTATION CRITERIA MANUAL (SAFETY FACTORS):
 - SLIDING1.5
 - OVERTURNING2.0

FOUNDATION DESIGN CONTINUED:

- C. SOIL DESIGN VALUES PROVIDED BY HDR, INC. AS FOLLOWS:
 - 85 PCF ACTIVE SOIL PRESSURE (EQ. FLUID).
 - 400 PCF PASSIVE SOIL PRESSURE (EQ. FLUID). (NEGLECTING UPPER 1'-0")
 - 0.43 FRICTION FACTOR BETWEEN CAST-IN-PLACE FOOTING AND UNCLASSIFIED FILL OR STIFF, COMPACTED CLAY.
 - 2000 PSF ALLOWABLE BEARING CAPACITY ON UNCLASSIFIED FILL OR STIFF, COMPACTED CLAY.

CONCRETE NOTES

1. CONCRETE WORK SHALL CONFORM TO THE AMERICAN CONCRETE INSTITUTE (ACI) SPECIFICATION, ACI #301 BUILDING CODE REQUIREMENTS, ACI #318, LATEST EDITION, FOR BUILDING STRUCTURES & BUILDING CODE REQUIREMENTS, ACI #350-06, OR ENVIRONMENTAL STRUCTURES.
2. DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS, UNLESS OTHERWISE NOTED, MUST FOLLOW THE ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE", ACI #315, LATEST EDITION.
3. UNLESS SHOWN OTHERWISE IN THE SPECIFICATIONS, CONCRETE SHALL BE CLASS 'S' CONCRETE WITH 4000 PSI MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS. ALSO REFER TO SPECIFICATIONS FOR ADDITIONAL CONCRETE MIX DESIGN REQUIREMENTS.
4. ACCESSORIES SHALL BE IN ACCORDANCE WITH THE ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE", ACI #315, LATEST EDITION. ACCESSORIES FOR INTERIOR CONCRETE SURFACES EXPOSED TO VIEW SHALL HAVE PLASTIC COATED FEET. ACCESSORIES FOR CONCRETE SURFACES EXPOSED TO EARTH, WEATHER, WATER, OR HIGH HUMIDITY SHALL BE FABRICATED OF STAINLESS STEEL OR PLASTIC. PROVIDE BOLSTERS AT SUSPENDED SLABS, WALLS AND WIDE BEAMS. PROVIDE STANDEES AT ALL SLABS WITH TWO LAYERS OF REINFORCING. FOR SLAB-ON-GRADE REINFORCING, PROVIDE CHAIRS MANUFACTURED FROM HOT-DIPPED GALVANIZED STEEL, STAINLESS STEEL, PLASTIC, OR PRECAST CONCRETE BLOCKS OF EQUAL OR GREATER COMPRESSIVE STRENGTH AS THE CONCRETE BEING POURED.
5. CONCRETE PLACED BY PUMPING SHALL MEET THE FOLLOWING REQUIREMENTS:
 - a. COARSE AGGREGATE (AGG) SHALL BE GRADED FROM A MAXIMUM OF 1 1/2".
 - b. MAXIMUM ALLOWABLE INCREASE IN CEMENT FACTOR SHALL BE 1/2 SACK PER CUBIC YARD OVER NORMAL MIX DESIGN.
 - c. MAXIMUM WATER CEMENT RATIO WILL CONFORM TO REQUIREMENTS STATED IN THE PROJECT SPECIFICATIONS. IF MORE WORKABILITY IS REQUIRED, AN APPROVED ADMIXTURE MAY BE USED. SEE CONCRETE ADMIXTURE SECTION 405S OF THE SPECIFICATION FOR REQUIREMENTS.
 - d. MAXIMUM WEIGHT RATIO OF FINE AGGREGATES TO COARSE AGGREGATES (AGG) SHALL NOT EXCEED 2/3.
 - e. REFER TO ACI 301, LATEST EDITION, SECTION 800, FOR OTHER PUMPING REQUIREMENTS.
 - f. IN NO CASE SHALL CONCRETE BE PUMPED THROUGH AN ALUMINUM TUBE.
6. REINFORCING BARS SHALL BE NEW BILLET STEEL CONFORMING TO ASTM SPECIFICATION A615, GRADE 60.
7. STANDARD PROTECTIVE COVER OF REINFORCING BARS UNLESS OTHERWISE NOTED SHALL BE:
 - WHERE CAST AGAINST EARTH OR FILL 3 IN.
 - EXPOSED TO EARTH, WATER
 - OR WEATHER 2 IN.
 - SLABS AND WALLS 2 IN.
 - OTHER 2 IN.
8. BARS SCHEDULED AND DETAILED "CONT" SHALL BE LAPPED 30 BAR DIAMETERS UNLESS OTHERWISE NOTED.
9. MAINTAIN A MINIMUM OF ONE BAR DIAMETER (BUT NOT LESS THAN 1") BETWEEN ALL REINFORCING BARS (INCLUDING LAPS) ON ALL SLABS, AND A MINIMUM OF 1-1/2 TIMES THE MAXIMUM COARSE AGGREGATE SIZE IN ALL CASES.
10. SHOP DRAWINGS SHALL BE PREPARED FOR ALL REINFORCING STEEL AND SUBMITTED FOR REVIEW BY ENGINEER. ENGINEERING DRAWINGS SHALL NOT BE REPRODUCED AND USED AS SHOP DRAWINGS.
11. VERTICAL CONSTRUCTION JOINTS IN FLOOR OR ROOF SLABS ARE TO BE AS SHOWN ON PLANS. NO HORIZONTAL JOINTS WILL BE PERMITTED IN SLABS UNLESS OTHERWISE NOTED.
12. WELDING OF REINFORCING BARS SHALL NOT BE PERMITTED, UNLESS APPROVED BY ENGINEER.
13. DURING PLACEMENT OF CONCRETE, USE TREMIE OR OTHER MEANS TO LIMIT FREE-FALL OF CONCRETE TO 5'-0".
14. SELF-EXPANDING STRIP WATERSTOPS SHALL BE MANUFACTURED RECTANGULAR OR TRAPEZOIDAL STRIP, NON-BENTONITE, HYDROPHYLIC MATERIAL FOR ADHESIVE BONDING TO CONCRETE. THESE WATERSTOPS SHALL BE MANUFACTURED FROM HYDRO-EXPANSIVE RUBBER WITH A MINIMUM EXPANSION CAPABILITY OF 200% OF ITS ORIGINAL VOLUME AFTER IMMERSION IN WATER. INSTALL IN CONSTRUCTION JOINTS AND AT OTHER LOCATIONS INDICATED. ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS, BONDING OR MECHANICALLY FASTENING AND FIRMLY PRESSING INTO PLACE. INSTALL IN LONGEST LENGTHS PRACTICAL. SUBJECT TO SPECIFICATION REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
 - a) SWELLSEAL JOINT; DE NEEF CONSTRUCTION CHEMICALS (U.S) INC.
 - b) HYDROTITE; GREENSTREAK
 - c) ADEKA ULTRA SEAL; MITSUBISHI INTERNATIONAL CORPORATION
 - d) APPROVED EQUAL
15. AT ALL OPENINGS OR PENETRATIONS THRU CONCRETE WALLS OR SLABS, PROVIDE ADDITIONAL REINFORCINGS ADJACENT TO THE OPENINGS PER TYPICAL DETAIL 4&5/S1.7, UNO.
16. ALL EXPOSED CONCRETE CORNERS SHALL HAVE A 3/4" CHAMFER U.N.O.

FOUNDATION NOTES

1. FOUNDATIONS ARE DESIGNED FOR A AN ALLOWABLE NET BEARING PRESSURE OF 2000 PSF.
2. PRIMARY EXCAVATION:
 - a. ACCORDING TO SOIL BORINGS REPORTED BY HOLT ENGINEERING, INC. AND OTHER SOIL BORINGS THAT HAVE BEEN DOCUMENTED IN THE VICINITY OF THE PROPOSED WORK. EXCAVATION OPERATIONS WILL LIKELY PENETRATE SOIL TYPES THAT CAN BE GENERALLY DESCRIBED AS EITHER UNCLASSIFIED FILL (WHICH CONSISTS OF SILTY, SANDY CLAY WITH GRAVEL), CLAYER GRAVEL WITH SAND, OR ALLUVIAL FILL. WITHIN THE FOOTPRINT OF THE STRUCTURE AND FOR A DISTANCE OF 3 FEET OUTSIDE THE FOOTPRINT, REMOVE AND DISPOSE OF EXISTING SURFACE FAT CLAY, ORGANICS, OTHER DELETERIOUS MATERIALS, AT LEAST 6 INCHES OF THE SURFACE SOIL.
 - b. EXCAVATION WITH SLOPES STEEPER THAN 1.5H:1V OR BELOW GROUNDWATER TABLE MAY NEED TO BE BENCHED OR SHORED TO PROVIDE FOR SAFE WORKING AREAS. EXCAVATION SPOIL OR HEAVY EQUIPMENT SHOULD NOT BE PERMITTED WITHIN A LATERAL DISTANCE EQUIVALENT TO THE DEPTH OF THE EXCAVATION UNLESS SPECIFICALLY CONSIDERED BY THE CONTRACTOR DURING DEVELOPMENT OF EXCAVATION.
 - c. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DESIGN AND CONSTRUCT STABLE, TEMPORARY EXCAVATIONS AND TO ASSURE THE PROPER SHORING, SLOPING OR BENCHING UTILIZED FOR THE SIDES OF THE EXCAVATION. AT A MINIMUM AND SUBJECT TO REQUIREMENTS OF SPECIFICATION SECTION 509S, ALL EXCAVATIONS AT THE SITE MUST BE PERFORMED IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS, AS DESCRIBED UNDER THE HEADING "CONSTRUCTION STANDARD FOR EXCAVATION, 29 CFR, PART 1926, SUBPART P" IN VOLUME 59, NO 209 OF THE FEDERAL REGISTER.
3. PAD PREPARATION:
 - a. AFTER EXCAVATION TO THE DEPTH OF REQUIRED FOUNDATION EMBEDMENT. THE CONTRACTOR SHALL SCHEDULE FOR THE ADEQUATE TESTING OF THE EXCAVATED AREA PRIOR TO CONCRETE PLACEMENT. IN ADDITION, CONTRACTOR TO ATTAIN APPROVAL FROM GEOTECHNICAL ENGINEER OF RECORD OF EXCAVATION PRIOR TO CONCRETE PLACEMENT.
 - b. THE SOIL SUBGRADE SHOULD NOT BE ALLOWED TO DRY OUT OR BECOME SATURATED PRIOR TO PLACEMENT OF FOUNDATION STRUCTURE.
4. SEE SPECIFICATION FOR OTHER REQUIREMENTS RELATED TO EXCAVATION, BACKFILL, AND EXCAVATION SAFETY.

POST-INSTALLED REBAR AND ANCHORS

THE BELOW PRODUCTS ARE THE DESIGN BASIS FOR THIS PROJECT. PRODUCT DIAMETER AND EMBEDMENT SHALL BE SHOWN IN THE DETAILS. INSTALL PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII). CONTRACTOR SHALL CONTACT MANUFACTURER'S REPRESENTATIVE FOR PRODUCT INSTALLATION TRAINING AND SHALL SUBMIT LETTER TO THE ENGINEER-OF-RECORD (EOR) INDICATING TRAINING HAS TAKEN PLACE. REFER TO THE PROJECT BUILDING CODE AND/OR EVALUATION REPORT FOR SPECIAL INSPECTIONS AND PROOF LOAD REQUIREMENTS. SUBSTITUTION REQUESTS FOR PRODUCTS OTHER THAN THOSE LISTED BELOW MAY BE SUBMITTED BY THE CONTRACTOR TO THE EOR FOR REVIEW. SUBSTITUTIONS WILL ONLY BE CONSIDERED FOR PRODUCTS HAVING A RESEARCH REPORT RECOGNIZING THE PRODUCT FOR THE APPROPRIATE APPLICATION UNDER THE PROJECT BUILDING CODE. SUBSTITUTION REQUESTS SHALL INCLUDE CALCULATIONS THAT DEMONSTRATE THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE EQUIVALENT PERFORMANCE VALUES OF THE DESIGN BASIS PRODUCT.

UNLESS OTHERWISE NOTED ON THE PLANS, ANCHORS SHALL BE:

1. FOR ANCHORING INTO CONCRETE:
 - A. MECHANICAL ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ACI 355.2 AND ICC-ES AC193 FOR CRACKED CONCRETE. PRE-APPROVED PRODUCTS INCLUDE:
 - I. SIMPSON STRONG-TIE "STRONG-BOLT 2" (ICC-ES ESR-2713)
 - II. SIMPSON STRONG-TIE "TITAN-HD" (ICC-ES ESR-3037)
 - III. HILTI "KWIK BOLT 3" (ICC-ES ESR-2302)
 - B. ADHESIVE FOR REBAR AND ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ACI 355.4 AND ICC-ES AC308 FOR CRACKED CONCRETE APPLICATIONS. DESIGN ADHESIVE BOND STRENGTH HAS BEEN BASED ON ACI 355.4 TEMPERATURE CATEGORY B WITH INSTALLATIONS INTO DRY HOLES DRILLED USING CARBIDE DRILL BIT INTO CRACKED CONCRETE THAT HAS CURED FOR AT LEAST 21 DAYS. ADHESIVE ANCHORS REQUIRING CERTIFIED INSTALLATIONS SHALL BE INSTALLED BY A CERTIFIED ADHESIVE ANCHOR INSTALLER PER ACI 318-11 D.9.2.2. INSTALLIONS REQUIRING CERTIFIED INSTALLERS SHALL BE INSPECTED PER ACI 318-11 D.9.2.4. PRE-APPROVED PRODUCTS INCLUDE:
 - I. SIMPSON STRONG-TIE "AT-XP" (APMO-UES ER-263)
 - II. SIMPSON STRONG-TIE "SET-XP" (ICC-ES ESR-2508)
 - III. HILTI "HIT-HY 200" (ICC-ES ESR-3187)
 - IV. HILTI "HIT-RE 500-SD" (ICC-ES ESR-2322)

PROJECT MANAGER	R/JG
DESIGNED BY	BMB
DRAWN BY	FS
CHECKED BY	
DATE	12-10-15
PROJECT NUMBER	220162



ELIZA SPRING OUTLET DAYLIGHTING

Austin, Texas

STRUCTURAL GENERAL NOTES SHEET 1 OF 2



FILENAME | \$FILEABBREV\$
SCALE | AS NOTED

SHEET

S1.1

CADFILE:\13025_Eliza_Springs_Daylighting_Design\DRAWINGS\CAD\S1.1.dwg Plotted: Dec 10, 15 @ 8:02 pm by: fsolis Scale: 1:24

Jose I. Guerra, Inc.
Consulting Engineers
2401 South IH-35 Suite 210
Austin, Texas 78741
(512) 445-2090
Structural • Civil • Mechanical • Electrical
TBPE FIRM F-3

Texas P.E. Firm
Registration No. F-754

ISSUE	DATE	DESCRIPTION

STATEMENT OF SPECIAL INSPECTION PER IBC 2012, CHAPTER 17

PER SECTION 1705 OF THE 2012 INTERNATIONAL BUILDING CODE, THE FOLLOWING IS A LIST OF THE REQUIRED SPECIAL INSPECTIONS APPLICABLE FOR THIS PROJECT :

2012 IBC SECTION	INSPECTION / ASSURANCE	TYPE OF SPECIAL INSPECTIONS AND EXTENT	APPLICABLE	NON APPLICABLE	NON STRUCTURAL
1705.2	AISC 360	STEEL CONSTRUCTION	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1705.2.2	IBC TABLE 1705.2.2	STEEL CONSTRUCTION OTHER THAN STRUCTURAL STEEL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1705.2.2.1.1	AWS D1.3	COLD-FORMED WELDING INSPECTION	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1705.2.2.1.2	AWS D1.4 AND ACI 318	REINFORCING STEEL WELDING INSPECTION	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1705.2.2.2	INDICATED IN SECTION	COLD-FORMED STEEL TRUSSES SPANNING 60 FEET OR GREATER	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1705.3	IBC TABLE 1705.3	CONCRETE CONSTRUCTION	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1705.4	INSPECTION: TMS 420/ACI 530/ASCE 5 ASSURANCE: TMS 620/ACI 530.1/ASCE 6	MASONRY CONSTRUCTION	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1705.5	INDICATED IN SECTION	WOOD CONSTRUCTION	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1705.6	INDICATED IN SECTION	SOILS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1705.7	INDICATED IN SECTION	DRIVEN DEEP FOUNDATIONS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1705.8	INDICATED IN SPECIFICATION	CAST-IN-PLACE DEEP FOUNDATIONS (PIERS)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1705.9	INDICATED IN SECTION	HELICAL PILE FOUNDATIONS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1705.10	INDICATED IN SECTION	SPECIAL INSPECTION FOR WIND RESISTANCE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1705.11	INDICATED IN SECTION	SPECIAL INSPECTION FOR SEISMIC RESISTANCE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1705.12	INDICATED IN SECTION	TESTING AND QUALIFICATION FOR SEISMIC RESISTANCE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1705.13	INDICATED IN SECTION	SPRAYED FIRE-RESISTANCE MATERIALS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1705.14	AWCI 12-B	MASTIC AND INTUMESCENT FIRE-RESISTANT COATINGS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1705.15	INDICATED IN SECTION & ASTM E2570	EXTERIOR INSULATION AND FINISH SYSTEMS/ WATER-RESISTIVE BARRIER COATING	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1705.16	INDICATED IN SECTION	FIRE-RESISTANCE PENETRATIONS AND JOINTS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1705.17	INDICATED IN SECTION	SPECIAL INSPECTION FOR SMOKE CONTROL	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

PER CHAPTER 17 OF THE 2012 INTERNATIONAL BUILDING CODE, THE FOLLOWING IS A LIST OF OTHER TYPES OF SPECIAL INSPECTIONS APPLICABLE TO THIS PROJECT * :

2012 IBC SECTION	TYPE OF SPECIAL INSPECTIONS AND EXTENT	APPLICABLE	NON APPLICABLE	DETAILS
1706	DESIGN STRENGTH OF MATERIALS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1707	ALTERNATIVE TEST PROCEDURES	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1708	TEST SAFE LOAD	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1709	IN-SITU LOAD TESTS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1710	PRECONSTRUCTION LOAD TESTS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1711	MATERIAL AND TEST STANDARDS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

* ADDITIONAL SPECIAL INSPECTIONS PER 2012 IBC SHALL ALSO BE REQUIRED FOR PROPOSED WORK THAT IS, IN THE OPINION OF THE BUILDING OFFICIAL, UNUSUAL IN NATURE.

SUBMITTALS

SEE SPECIFICATIONS SECTION 01300 FOR SUBMITTAL REQUIREMENTS

COORDINATION

- IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO OBTAIN ALL CONTRACT DOCUMENTS AND LATEST ADDENDA AND TO SUBMIT SUCH DOCUMENTS TO ALL SUBCONTRACTORS AND MATERIAL SUPPLIERS PRIOR TO THE SUBMITTAL OF SHOP DRAWINGS, FABRICATION OF ANY STRUCTURAL MEMBERS, AND CONSTRUCTION.
- THE GENERAL CONTRACTOR SHALL COMPARE THE ARCHITECTURAL, STRUCTURAL AND CIVIL DRAWINGS AND REPORT ANY DISCREPANCY BETWEEN EACH SET OF DRAWINGS AND WITHIN EACH SET OF DRAWINGS TO THE ARCHITECT AND ENGINEER PRIOR TO THE FABRICATION AND INSTALLATION OF ANY STRUCTURAL MEMBERS.
- SHOP DRAWINGS SHALL BE PREPARED FOR ALL STRUCTURAL ITEMS AND SUBMITTED FOR REVIEW BY THE ENGINEER. CONTRACT DRAWINGS SHALL NOT BE REPRODUCED AND USED AS SHOP DRAWINGS. ALL ITEMS DEVIATING FROM THE CONTRACT DRAWINGS OR FROM PREVIOUSLY SUBMITTED SHOP DRAWINGS SHALL BE CLOUDED.
- THE DETAILS DESIGNATED AS "TYPICAL DETAILS" APPLY GENERALLY TO THE DRAWINGS IN ALL AREAS WHERE CONDITIONS ARE SIMILAR TO THOSE DESCRIBED IN THE DETAILS.
- ALL DIMENSIONS AND CONDITIONS OF EXISTING CONSTRUCTION SHALL BE VERIFIED BY THE CONTRACTOR AT THE JOB SITE VERIFIED. DIFFERENCES BETWEEN EXISTING CONSTRUCTION AND THE DRAWINGS SHALL BE REFERRED TO THE ARCHITECT AND ENGINEER OF RECORD. DIFFERENCES SHALL ALSO BE CLOUDED ON THE SHOP DRAWINGS.
- THE DESIGN AND PROVISION OF ALL TEMPORARY SUPPORTS SUCH AS GUYS, BRACES, FALSEWORK, SUPPORTS AND ANCHORS FOR SAFETY LINES, CRIBBING OR ANY OTHER TEMPORARY ELEMENTS REQUIRED FOR THE EXECUTION OF THE CONTRACT ARE NOT INCLUDED IN THE DRAWINGS AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. TEMPORARY SUPPORTS SHALL NOT RESULT IN THE OVERSTRESS OR DAMAGE OF THE ELEMENTS TO BE BRACED NOR ANY ELEMENTS USED AS BRACE SUPPORTS.
- THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE, AND, EXCEPT WHERE SPECIFICALLY SHOWN, DO NOT INDICATE THE METHOD OR MEANS OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES, AND SEQUENCE.
- THE ENGINEER SHALL NOT HAVE CONTROL OF, AND SHALL NOT BE RESPONSIBLE FOR, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES, FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, FOR THE ACTS OR OMISSION OF THE CONTRACTOR, SUBCONTRACTOR, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- UNLESS NOTED OTHERWISE, PERIODIC SITE OBSERVATION BY FIELD REPRESENTATIVES OF JOSE I. GUERRA, INC. IS SOLELY FOR THE PURPOSE OF DETERMINING IF THE WORK OF THE CONTRACTOR IS PROCEEDING IN ACCORDANCE WITH THE STRUCTURAL CONTRACT DOCUMENTS. THIS LIMITED SITE OBSERVATION IS INTENDED TO BE A CHECK OF THE QUALITY OR QUANTITY OF THE WORK, BUT RATHER PERIODIC IN AN EFFORT TO INFORM THE OWNER AGAINST DEFECTS AND DEFICIENCIES IN THE WORK OF THE CONTRACTOR.

ABBREVIATIONS

A.B.	ANCHOR BOLT	MAX	MAXIMUM
ADDL	ADDITIONAL	MB	MACHINE BOLT
A.F.F.	ABOVE FINISH FLOOR	M.E.P.	MECHANICAL, ELECTRICAL, AND PLUMBING
AL	ALUMINUM	MECH	MECHANICAL
ALT	ALTERNATE	MIN	MINIMUM
ANC	ANCHOR	MTL	METAL
APVD	APPROVED	NDT	NON-DESTRUCTIVE TESTING
ARCH	ARCHITECT, ARCHITECTURAL	N.I.C.	NOT IN CONTRACT
BC	BOTTOM CHORD	NS	NEAR SIDE
B.O.C.	BOTTOM OF CONCRETE	NTS	NOT TO SCALE
B.O.S.	BOTTOM OF STEEL	O.C.	ON CENTER
BOT	BOTTOM, BOTTOM OF TRENCH	O.D.	OUTSIDE DIAMETER
BM	BEAM	O.F.	OUTSIDE FACE
BRG	BEARING	O/O	OUT TO OUT
BTWN	BETWEEN	OPENG.	OPENING
CC	CENTER TO CENTER	OPNG	OPENING
CHKD	CHECKERED	OPP.	OPPOSITE
C.I.P.	CAST IN PLACE	OSH	OVERSIZED HOLE
C.J.	CONSTRUCTION JOINT	PC	PRECAST
CL	CENTERLINE	PLCS	PLACES
CLR	CLEARANCE	P.J.F.	PREMOLDED JOINT FILLER
CMU	CONCRETE MASONRY UNIT	PL	PLATE
COL	COLUMN	PROJ	PROJECTION
CONC	CONCRETE	PVC	POLYVINYL CHLORIDE
CONN	CONNECTION	RD	ROOF DRAIN
CONT	CONTINUOUS	REF.	REFERENCE
CTR	CENTER	REINF	REINFORCE, REINFORCING
CTRD	CENTERED	REQD	REQUIRED
D.B.A	DEFORMED BAR ANCHOR	RT	RADIOGRAPHIC TESTING
DIA, Ø	DIAMETER	RTN	RETURN
DP	DEEP	S.B.D.	SCHED. BEAM DEPTH
DWG	DRAWING	S.B.W.	SCHED. BEAM WIDTH
EA	EACH	S.J.D.	SCHED. JOIST DEPTH
ECS	EPOXY COATED STEEL	S.J.W.	SCHED. JOIST WIDTH
E.E.	EACH END	SHPO	STATE HISTORIC PRESERVATION OFFICER
E.F.	EACH FACE	SHT	SHEET
EL, ELEV	ELEVATION	S.I.B.	STRUCTURAL ISOLATION BREAK
EOR	ENGINEER OF RECORD	SIM.	SIMILAR
EQ.	EQUALLY SPACED	SLV	SHORT LEG VERTICAL
E.S.	EACH SIDE	SPCG	SPACING
E.W.	EACH WAY	SPCS	SPACES
EXP	EXPANSION	SPECS	SPECIFICATIONS
EXST	EXISTING	SQ	SQUARE
FD	FLOOR DRAIN	S.S.	STAINLESS STEEL
FDN	FOUNDATION	S.S.D.	SCHED. SLAB DEPTH
FIN	FINISH	SSH	SHORT SLOTTED HOLE
FLG	FLANGE	STD	STANDARD
FLR	FLOOR	STIFF	STIFFENER
FO	FACE OF	STL	STEEL
FRMG	FRAMING	SW	STUD WELD
FRP	FIBER REINFORCED PLASTIC	SYM.	SYMMETRICAL
FS	FAR SIDE	T&B	TOP & BOTTOM
FTG	FOOTING	T/SL	TOP OF SLAB
FV	FIELD VERIFY	TC	TOP CHORD
GA	GAUGE, GAGE	TD	TRUSS DIAGONAL
GALV	GALVANIZED	THC	TEXAS HISTORICAL COMMISSION
GRD	GRADE	THK	THICK
GRT	GROUT	TO.	TOP OF
GRTG	GRATING	T.O.C.	TOP OF CONCRETE
H	HIGH	T.O.F.	TOP OF FOOTING
H.C.A.	HEADED CONCRETE ANCHOR	T.O.L.	TOP OF LUG
HORIZ	HORIZONTAL	T.O.G.	TOP OF GRATING
HSA	HEADED STUD ANCHOR	T.O.S.	TOP OF STEEL
IF	INSIDE FACE	T.O.W.	TOP OF WALL
IN	INCHES	TRANS	TRANSVERSE
JT.	JOINT	TV	TRUSS VERTICAL
L	LOW	TYP	TYPICAL
LONG	LONGITUDINAL	U.N.O.	UNLESS NOTED OTHERWISE
LLH	LONG LEG HORIZONTAL	UT	ULTRASONIC TESTING
LLV	LONG LEG VERTICAL	VERT	VERTICAL
LSH	LONG SLOTTED HOLE	W	WIDE
MFR	MANUFACTURER	W/	WITH
		WS	WATERSTOP
		W.W.F.	WELDED WIRE FABRIC

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Texas P.E. Firm
 Registration No. F-754

ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	RJG
DESIGNED BY	BMB
DRAWN BY	FS
CHECKED BY	
DATE	12-10-15
PROJECT NUMBER	220162



**ELIZA SPRING
 OUTLET DAYLIGHTING**

Austin, Texas



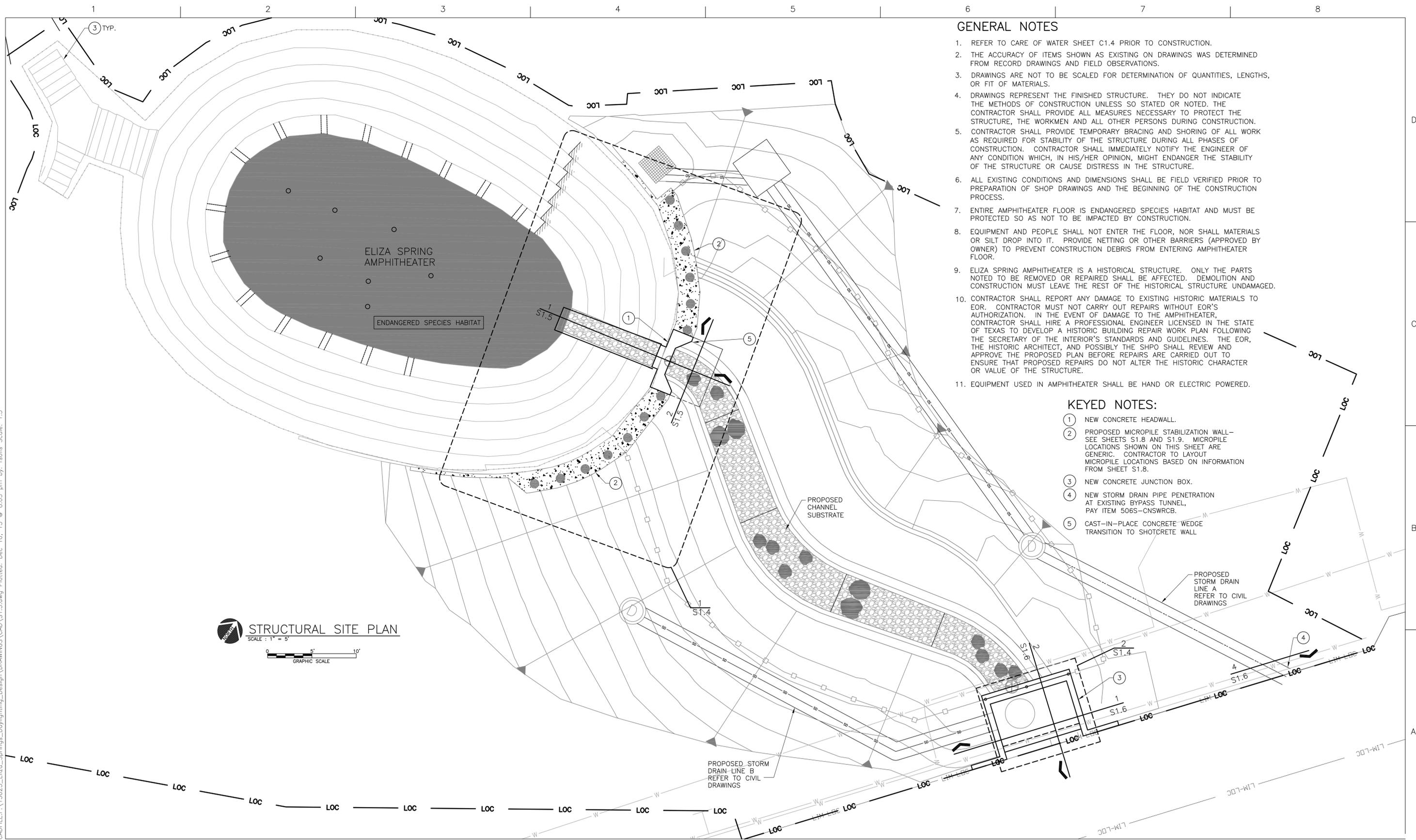
**STRUCTURAL
 GENERAL NOTES**
 SHEET 2 OF 2

FILENAME | \$FILEABBREV\$
 SCALE | AS NOTED

SHEET

S1.2

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GENERAL NOTES

- REFER TO CARE OF WATER SHEET C1.4 PRIOR TO CONSTRUCTION.
- THE ACCURACY OF ITEMS SHOWN AS EXISTING ON DRAWINGS WAS DETERMINED FROM RECORD DRAWINGS AND FIELD OBSERVATIONS.
- DRAWINGS ARE NOT TO BE SCALED FOR DETERMINATION OF QUANTITIES, LENGTHS, OR FIT OF MATERIALS.
- DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHODS OF CONSTRUCTION UNLESS SO STATED OR NOTED. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE, THE WORKMEN AND ALL OTHER PERSONS DURING CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE TEMPORARY BRACING AND SHORING OF ALL WORK AS REQUIRED FOR STABILITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY CONDITION WHICH, IN HIS/HER OPINION, MIGHT ENDANGER THE STABILITY OF THE STRUCTURE OR CAUSE DISTRESS IN THE STRUCTURE.
- ALL EXISTING CONDITIONS AND DIMENSIONS SHALL BE FIELD VERIFIED PRIOR TO PREPARATION OF SHOP DRAWINGS AND THE BEGINNING OF THE CONSTRUCTION PROCESS.
- ENTIRE AMPHITHEATER FLOOR IS ENDANGERED SPECIES HABITAT AND MUST BE PROTECTED SO AS NOT TO BE IMPACTED BY CONSTRUCTION.
- EQUIPMENT AND PEOPLE SHALL NOT ENTER THE FLOOR, NOR SHALL MATERIALS OR SILT DROP INTO IT. PROVIDE NETTING OR OTHER BARRIERS (APPROVED BY OWNER) TO PREVENT CONSTRUCTION DEBRIS FROM ENTERING AMPHITHEATER FLOOR.
- ELIZA SPRING AMPHITHEATER IS A HISTORICAL STRUCTURE. ONLY THE PARTS NOTED TO BE REMOVED OR REPAIRED SHALL BE AFFECTED. DEMOLITION AND CONSTRUCTION MUST LEAVE THE REST OF THE HISTORICAL STRUCTURE UNDAMAGED.
- CONTRACTOR SHALL REPORT ANY DAMAGE TO EXISTING HISTORIC MATERIALS TO EOR. CONTRACTOR MUST NOT CARRY OUT REPAIRS WITHOUT EOR'S AUTHORIZATION. IN THE EVENT OF DAMAGE TO THE AMPHITHEATER, CONTRACTOR SHALL HIRE A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF TEXAS TO DEVELOP A HISTORIC BUILDING REPAIR WORK PLAN FOLLOWING THE SECRETARY OF THE INTERIOR'S STANDARDS AND GUIDELINES. THE EOR, THE HISTORIC ARCHITECT, AND POSSIBLY THE SHPO SHALL REVIEW AND APPROVE THE PROPOSED PLAN BEFORE REPAIRS ARE CARRIED OUT TO ENSURE THAT PROPOSED REPAIRS DO NOT ALTER THE HISTORIC CHARACTER OR VALUE OF THE STRUCTURE.
- EQUIPMENT USED IN AMPHITHEATER SHALL BE HAND OR ELECTRIC POWERED.

KEYED NOTES:

- NEW CONCRETE HEADWALL.
- PROPOSED MICROPILE STABILIZATION WALL— SEE SHEETS S1.8 AND S1.9. MICROPILE LOCATIONS SHOWN ON THIS SHEET ARE GENERIC. CONTRACTOR TO LAYOUT MICROPILE LOCATIONS BASED ON INFORMATION FROM SHEET S1.8.
- NEW CONCRETE JUNCTION BOX.
- NEW STORM DRAIN PIPE PENETRATION AT EXISTING BYPASS TUNNEL, PAY ITEM 506S-CNSWRCB.
- CAST-IN-PLACE CONCRETE WEDGE TRANSITION TO SHOTCRETE WALL

STRUCTURAL SITE PLAN
SCALE: 1" = 5'



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PROJECT MANAGER	RJG
DESIGNED BY	BMB
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**ELIZA SPRING
OUTLET DAYLIGHTING**

Austin, Texas



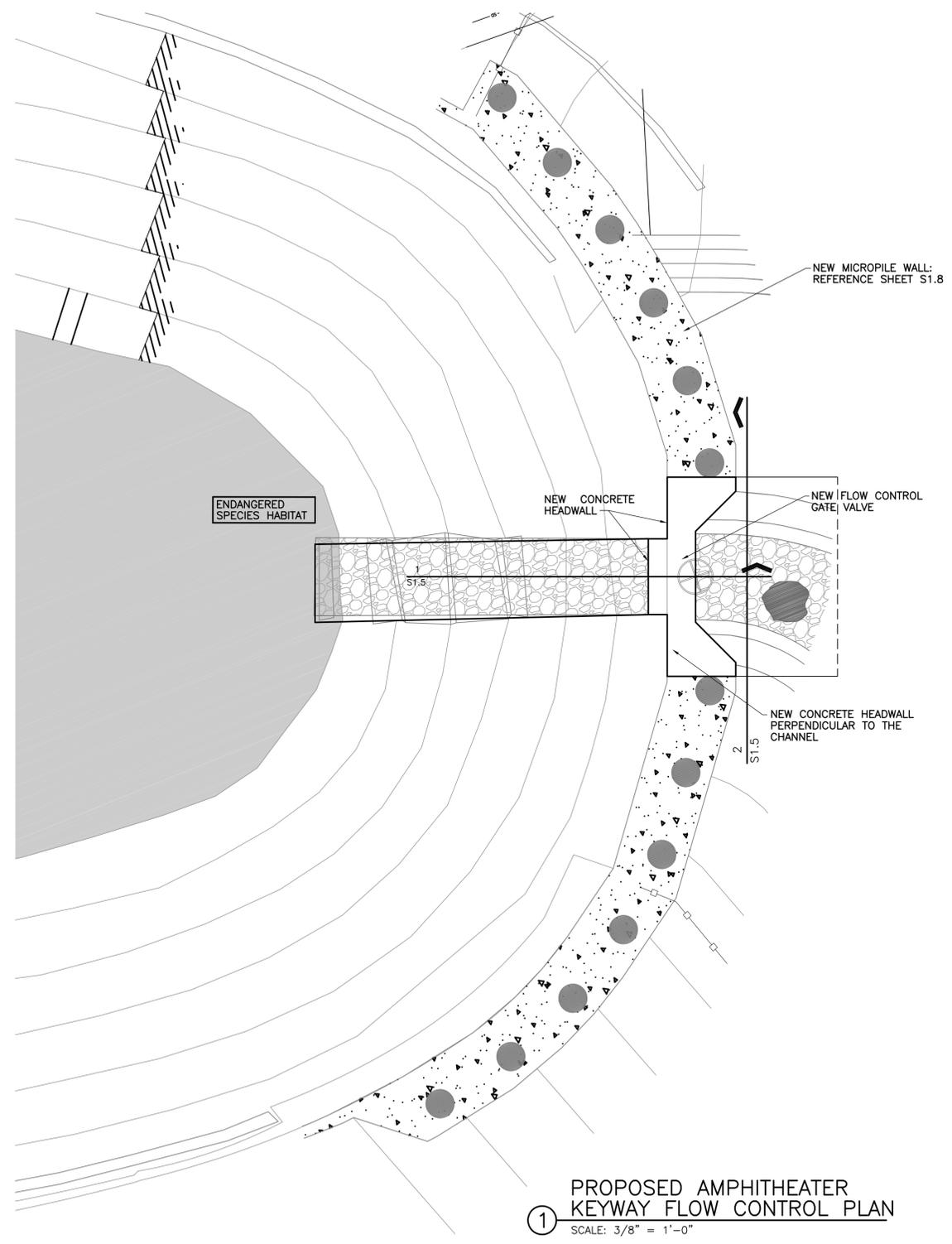
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SITE PLAN**

FILENAME
SCALE AS NOTED

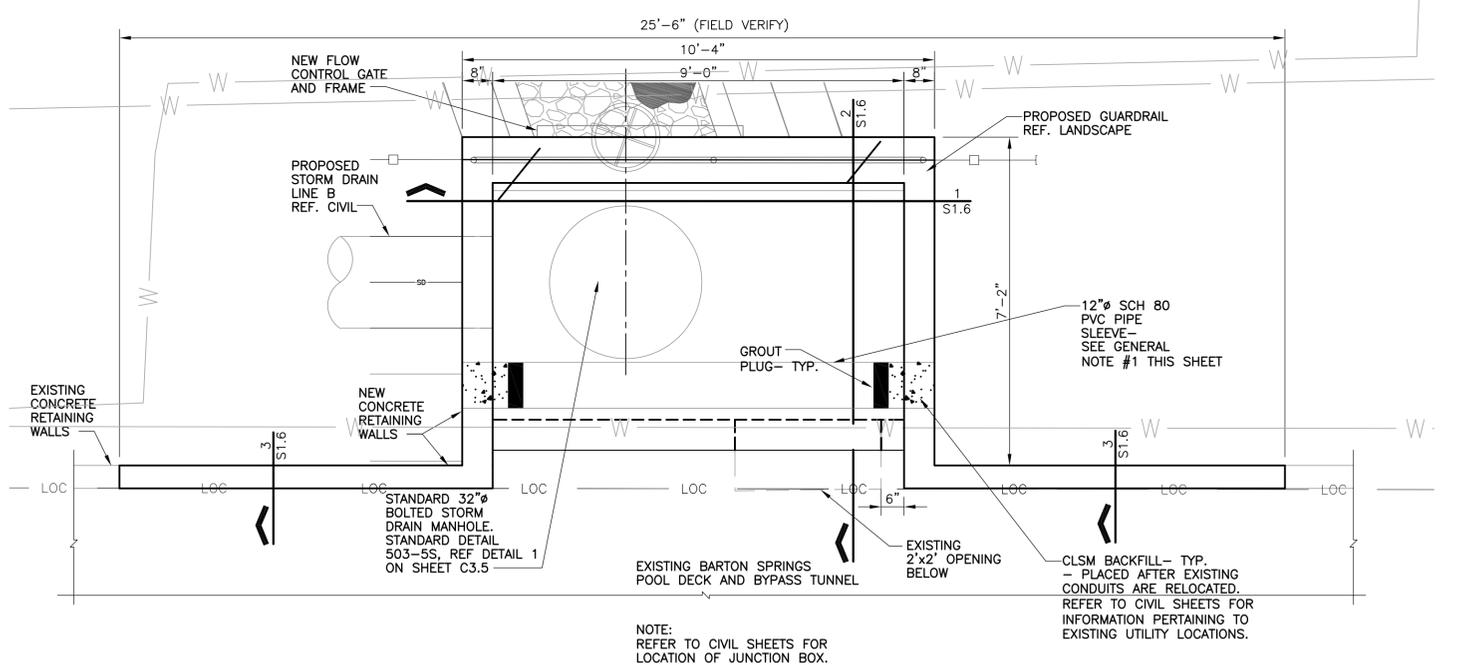
SHEET
S1.3

GENERAL NOTES

1. STAINLESS STEEL CLEVIS TYPE SUPPORT HANGER W/ MIN. 400# CAPACITY AT CENTER OF PVC SPAN AND ANCHORED WITH 3/4" DIA. SS SIMPSTON STRONG BOLT 2. W/ 3 1/2" MIN. EMBEDMENT INTO ROOF SLAB. CONTRACTOR SHALL SUBMIT PROPOSED PIPE HANGER FOR APPROVAL. PLUG AND BACKFILL EACH END OF THE PIPE- AS INDICATED.
2. REFER TO SHEET S1.3 FOR ADD'L GENERAL NOTES.



1 PROPOSED AMPHITHEATER KEYWAY FLOW CONTROL PLAN
SCALE: 3/8" = 1'-0"



2 PROPOSED CONCRETE JUNCTION BOX PLAN
SCALE: 1/2" = 1'-0"

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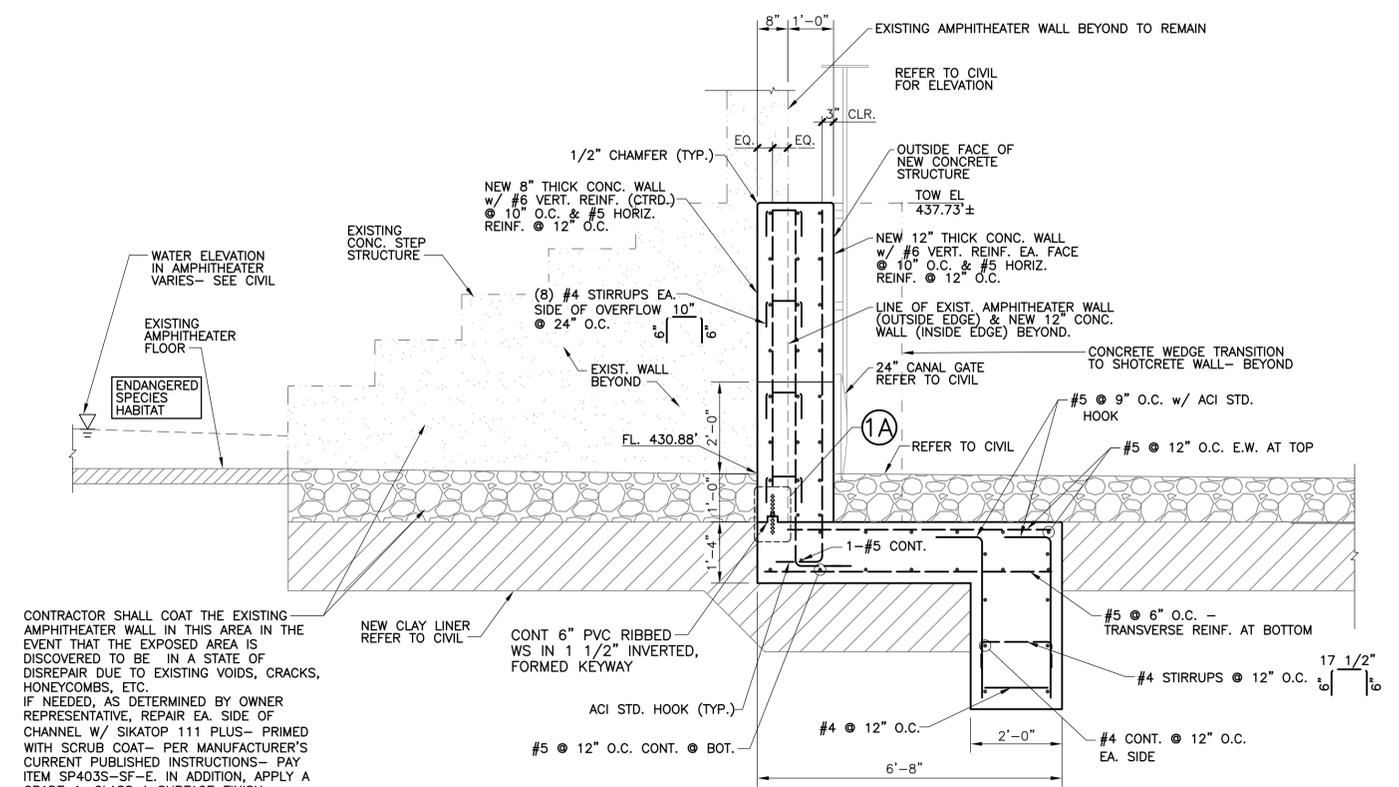
**ELIZA SPRING
OUTLET DAYLIGHTING**

Austin, Texas

**STRUCTURAL
ENLARGED PLANS**



FILENAME: _____
SCALE: AS NOTED



CONTRACTOR SHALL COAT THE EXISTING AMPHITHEATER WALL IN THIS AREA IN THE EVENT THAT THE EXPOSED AREA IS DISCOVERED TO BE IN A STATE OF DISREPAIR DUE TO EXISTING VOIDS, CRACKS, HONEYCOMBS, ETC. IF NEEDED, AS DETERMINED BY OWNER REPRESENTATIVE, REPAIR EA. SIDE OF CHANNEL W/ SIKATOP 111 PLUS- PRIMED WITH SCRUB COAT- PER MANUFACTURER'S CURRENT PUBLISHED INSTRUCTIONS- PAY ITEM SP403S-SF-E. IN ADDITION, APPLY A GRADE 1, CLASS A SURFACE FINISH; REFERENCE SPECIFICATION 411S AND MATCH EXISTING AMPHITHEATER- PAY ITEM SP403S-SF-E. CONTRACTOR SHALL PREPARE AND SUBMIT TO OWNER SAMPLE PANELS- FOR APPROVAL AND METHOD OF APPLICATION- PRIOR TO PROCEEDING WITH WORK.

DESIGN CRITERIA SUMMARY (PER IBC 2012 except O.T. Safety Factor 2.0 in lieu of 1.5)

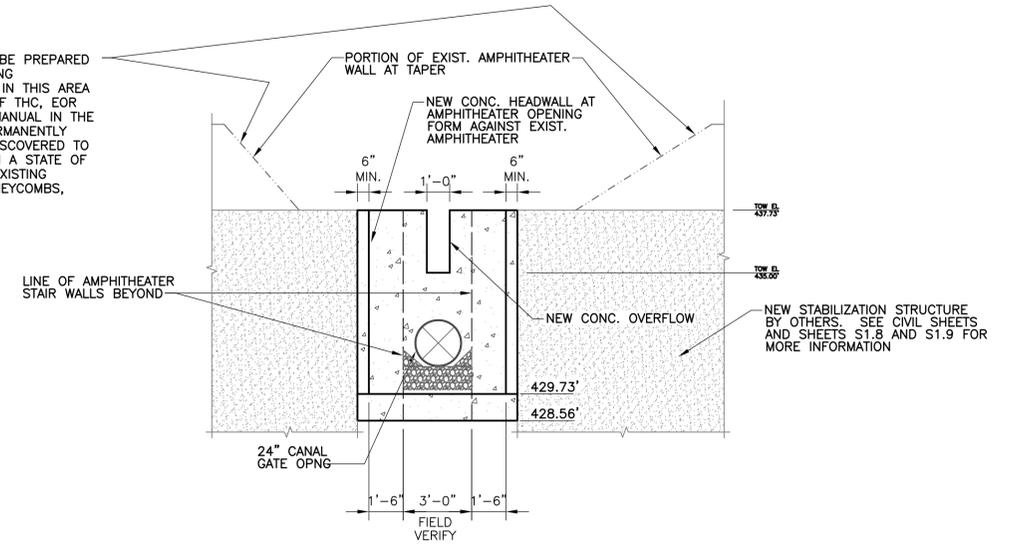
FOUNDATION MATERIAL	SLIDING FACTOR OF SAFETY		OVERTURNING FACTOR OF SAFETY		BEARING CAPACITY FACTOR OF SAFETY	
	COMPUTED	CRITERIA	COMPUTED	CRITERIA	COMPUTED	CRITERIA
UNCLASSIFIED FILL/COMPACTED, STIFF CLAY	2.35	1.50	2.06	2.00	3.20	3.00

NOTE:
8" CONCRETE WALL & 12" CONCRETE WALL PLACED MONOLITHICALLY.

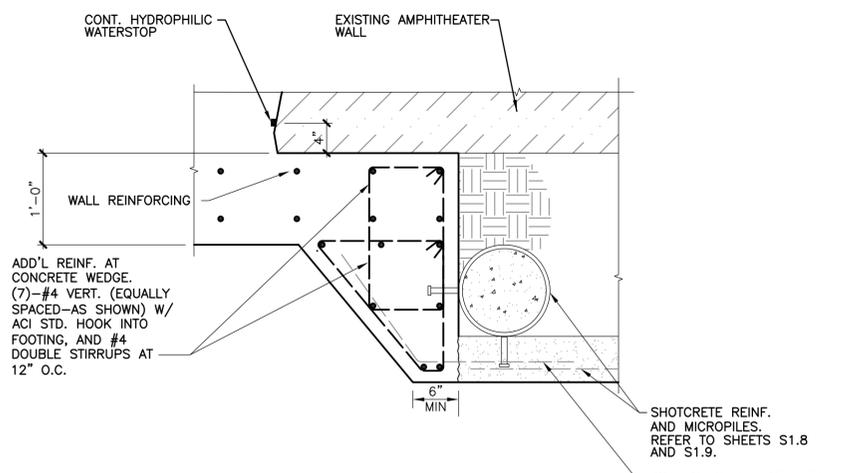
1 PROPOSED AMPHITHEATER HEADWALL CONTROL SECTION
SCALE: 1/2" = 1'-0"

1A INVERTED KEYWAY ENLARGED VIEW
SCALE: 1 1/2" = 1'-0"

CONTRACTOR SHALL BE PREPARED TO COAT THE EXISTING AMPHITHEATER WALL IN THIS AREA AT THE DIRECTION OF THE EOR AND THE PROJECT MANUAL IN THE EVENT THAT THE PERMANENTLY EXPOSED AREA IS DISCOVERED TO BE UNSIGHTLY OR IN A STATE OF DISREPAIR DUE TO EXISTING VOIDS, CRACKS, HONEYCOMBS, ETC.



2 PROPOSED ELEVATION OF KEYWAY HEADWALL
SCALE: NTS



3 CONCRETE WEDGE AT TRANSITION TO SHOTCRETE WALL
SCALE: 1" = 1'-0"

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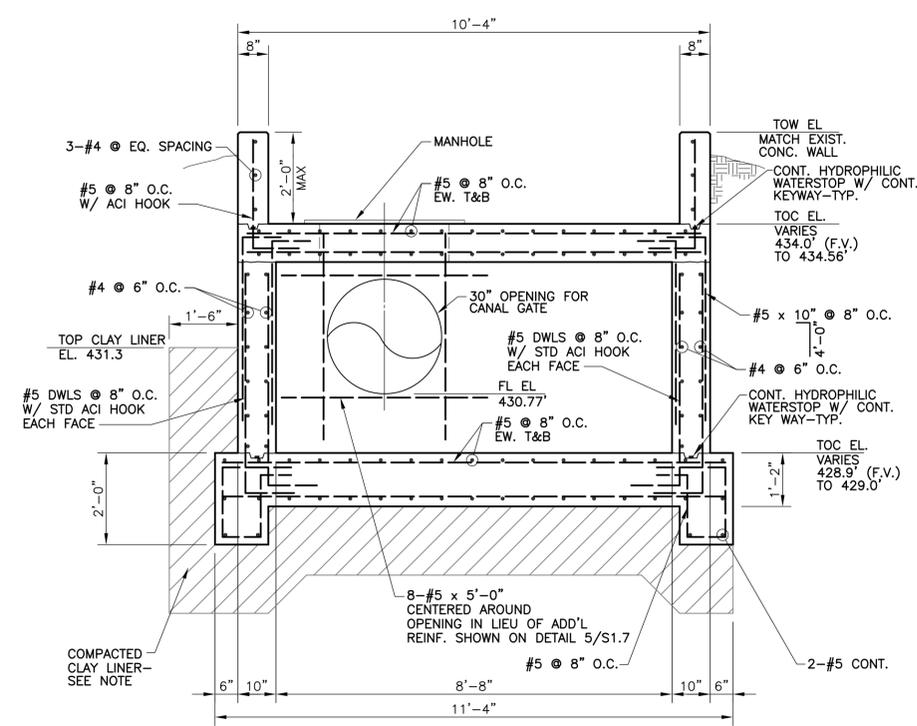
Austin, Texas

**STRUCTURAL
SECTIONS AND DETAILS**
SHEET 1 OF 3

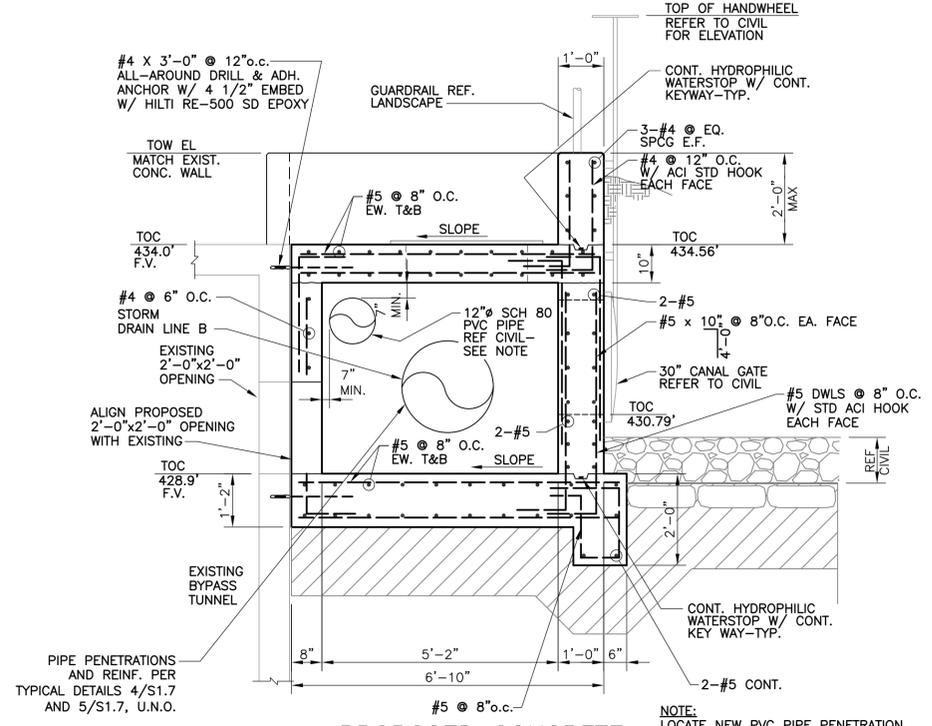


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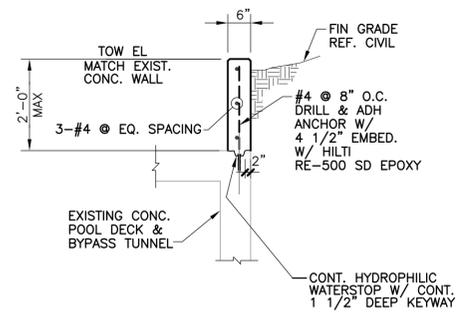
SHEET
S1.5



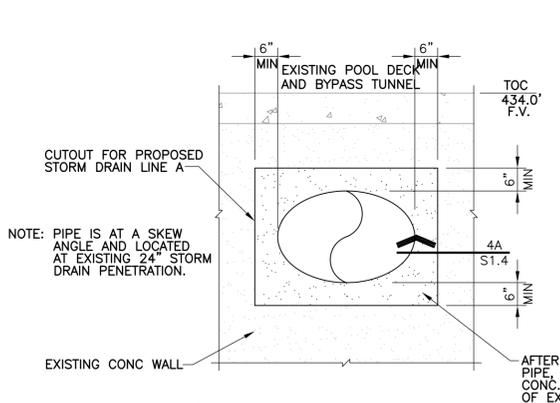
1 PROPOSED CONCRETE JUNCTION BOX SECTION
SCALE: 1/2" = 1'-0"



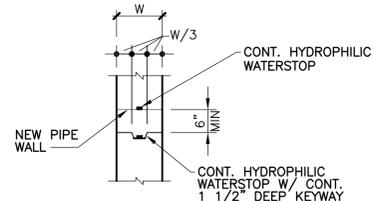
2 PROPOSED CONCRETE JUNCTION BOX SECTION
SCALE: 1/2" = 1'-0"



3 PROPOSED CONCRETE RETAINING WALL DETAIL
SCALE: 1/2" = 1'-0"



4 PROPOSED 24" SD PENETRATION THROUGH EXISTING BYPASS TUNNEL WALL DETAIL
SCALE: 1/2" = 1'-0"



4A KEYWAY DETAIL
SCALE: 1/2" = 1'-0"

- NOTES:
1. PROVIDE 1/2" PILOT HOLES AROUND PERIMETER OF REPAIR AREA.
 2. PROVIDE 1/2" DEEP SAWCUT ON EACH SIDE OF WALL. JACKHAMMER REMAINING DEPTH OF REMOVAL TO PROVIDE ROUGHEN SURFACE OF 1/4" MIN. AMPLITUDE (TYP).
 3. AVOID DAMAGE TO EXIST. REINF. WITHIN THE ZONE OF REPAIR.

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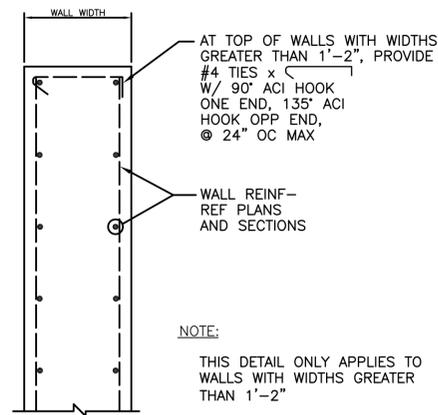
Austin, Texas

**STRUCTURAL
SECTIONS AND DETAILS**
SHEET 2 OF 3

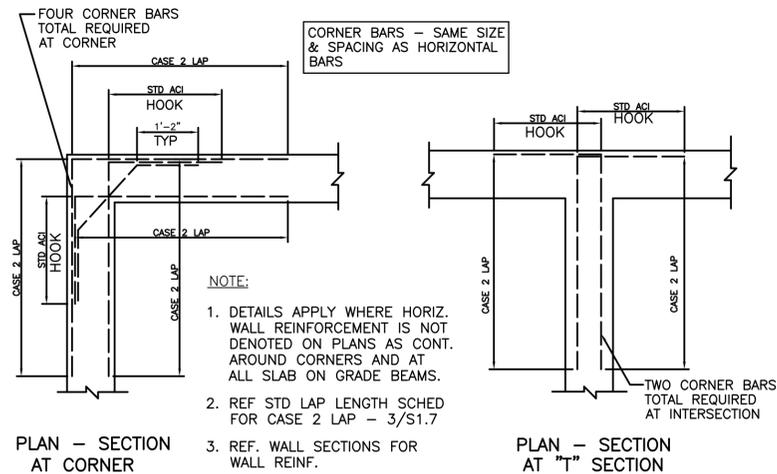


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SCALE: AS NOTED

SHEET
S1.6



1 TYPICAL TOP OF WALL REINFORCING DETAIL
SCALE: NTS

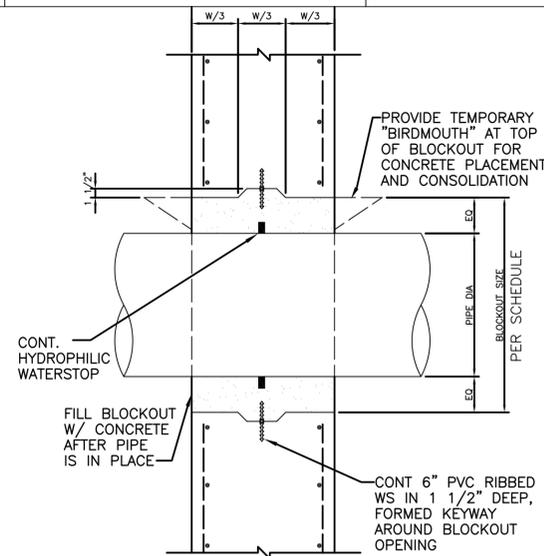


2 TYPICAL WATER RETAINING CONCRETE WALLS CORNER BAR DETAILS
SCALE: NTS

BAR SIZE	BAR POSITION	
	CASE 1	CASE 2
#3	19"	24"
#4	25"	32"
#5	31"	40"
#6	36"	48"
#7	60"	72"
#8	62"	80"
#9	70"	90"
#10	80"	102"
#11	88"	114"

CASE 1: HORIZONTAL BARS WITH LESS THAN 12" OF CONC BELOW BARS, AND ALL VERTICAL BARS.
 CASE 2: HORIZONTAL BARS W/ 12" OR MORE CONC BELOW BARS.
 NOTE: FOR BARS SPACED GREATER THAN 6" OC AND WITH MIN 3" CLR COVER MULTIPLY LAP LENGTH SHOWN BY 0.8

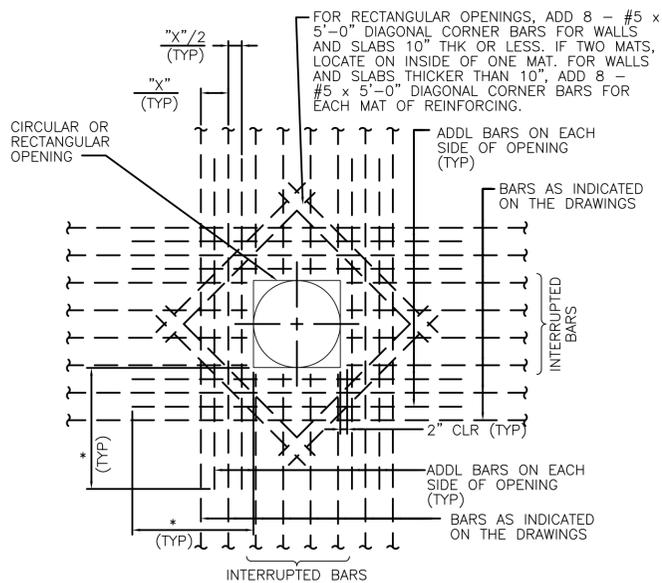
3 STANDARD LAP LENGTHS
SCALE: NTS



NOMINAL PIPE DIAMETER (IN)	BLOCKOUT SIZE (IN)
18	30
20	32
24	36
30	42
36	50
42	58
48	64
54	72
60	76
64	80

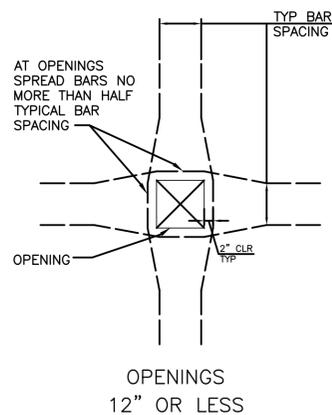
NOTES:
 1. BLOCKOUT TO BE AT CONTRACTORS OPTION FOR PIPES 18" AND LARGER.
 2. REF 5/S1.7 FOR TYPICAL, ADDITIONAL REINF AROUND BLOCKOUT.
 3. PROVIDE "BIRDMOUTH" AT TOP OF BLOCKOUT FOR CONCRETE PLACEMENT. REMOVE "BIRDMOUTH" AFTER FORMS HAVE BEEN REMOVED.

4 TYPICAL CONCRETE WALL BLOCKOUT AT PIPE PENETRATION
SCALE: NTS

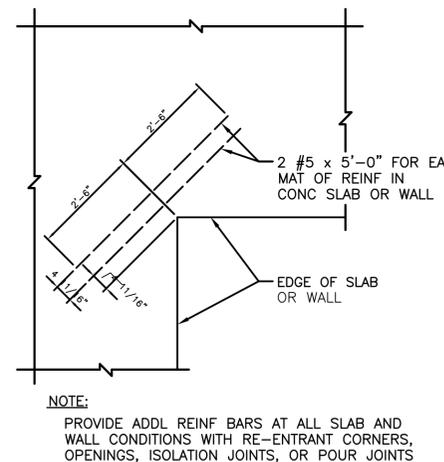


NOTE:
 1. SPREAD AND/OR CUT REINF AT OPENINGS. SPREAD BARS NO MORE THAN HALF TYPICAL BAR SPACING.
 2. THE "*" DIMENSION EQUALS OPENING DIMENSION MEASURED PERPENDICULAR TO ADDL BARS PLUS TENSION LAP LENGTH.
 3. PROVIDE STD ACI HOOKS ON BARS IF STRAIGHT EXTENSIONS DO NOT FIT.
 4. PLACE DIAGONAL BARS ON THE INSIDE OF MAIN REINF.

5 TYPICAL CONCRETE REINFORCEMENT AT WALL/ SLAB PENETRATIONS
SCALE: NTS



6 TYPICAL CONCRETE REINFORCING AT WALL/ SLAB SMALL OPENINGS
SCALE: NTS



7 TYPICAL CONCRETE RE-ENTRANT CORNER REINFORCEMENT DETAIL
SCALE: NTS

CADFILE:\13025_Eliza_Springs_Daylighting_Design\DRAWINGS\CAD\S1.7.dwg Plotted: Dec 10, 15 @ 8:06 pm by: fsolis Scale: 1:24

Jose I. Guerra, Inc.
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 Structural • Civil • Mechanical • Electrical
 TBPE FIRM P-3



Texas P.E. Firm
 Registration No. F-754

ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	RJG
DESIGNED BY	BMB
DRAWN BY	FS
CHECKED BY	
DATE	12-10-15
PROJECT NUMBER	220162



**ELIZA SPRING
 OUTLET DAYLIGHTING**

Austin, Texas

**STRUCTURAL
 SECTIONS AND DETAILS**
 SHEET 3 OF 3



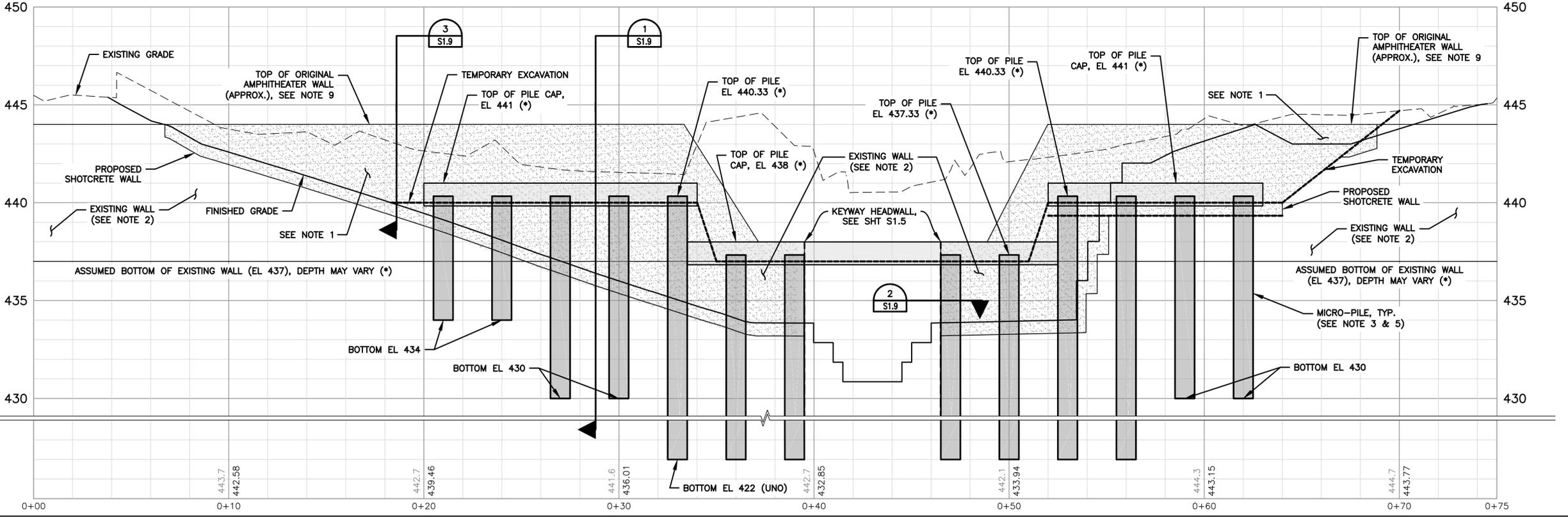
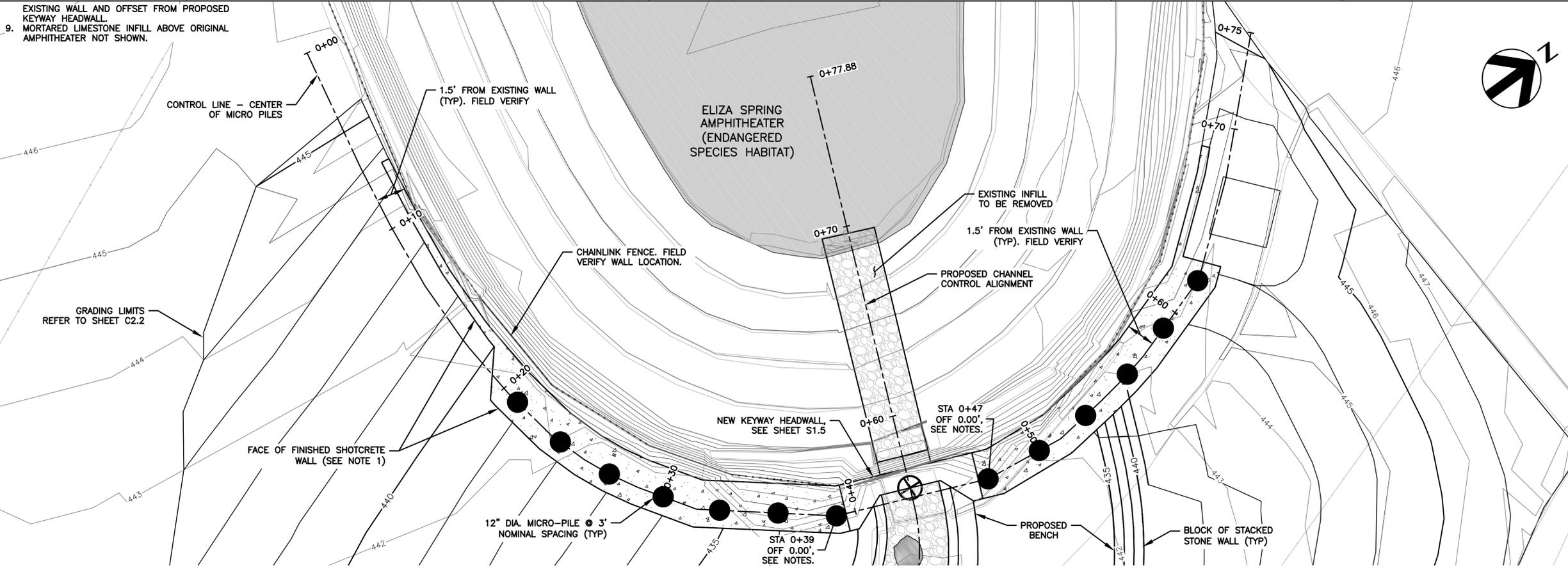
FILENAME: \$FILEABBREV\$
 SCALE: AS NOTED

SHEET
S1.7

NOTES:

1. REFERENCE SHEET S1.0 AND S1.1 FOR GENERAL STRUCTURAL NOTES.
2. SHOTCRETE (5" MIN) FROM TOP OF ORIGINAL AMPHITHEATER WALL TO EXPOSED PORTION OF WALL AND MATCH EXISTING AMPHITHEATER WALL FINISH. SHOTCRETE SHALL EXTEND 8" MIN BELOW FINISHED GRADE UNLESS OTHERWISE SHOWN. MOCK UP OF SHOTCRETE FINISH SHALL BE SUBMITTED TO CITY OF AUSTIN FOR APPROVAL, SEE SHOTCRETE SPEC SS33713.
3. SEQUENCE OF CONSTRUCTION FOR MICRO-PILE WALL SHALL BE AS FOLLOWS:
 - A. TOP DOWN EXCAVATION IN LIFTS THAT WILL NOT CAUSE DAMAGE TO THE EXISTING AMPHITHEATER STRUCTURE. TEMPORARY SHOTCRETE OF BACK FACE OF EXISTING AMPHITHEATER WALL MAY BE REQUIRED TO KEEP FROM DETERIORATING. DURING EACH STAGE OF EXCAVATION PICTURES AND DOCUMENTATION OF CONDITION AND STRUCTURE SHALL BE MADE OF THE EXISTING AMPHITHEATER WALL/FOUNDATION.
 - B. PERFORM EXPLORATORY BORING AT EACH PROPOSED MICRO-PILE LOCATION.
 - C. INSTALL MICRO-PILE CASING TO ELEVATIONS INDICATED IN THE DRAWINGS.
 - D. FILL MICRO-PILES WITH CONCRETE.
 - E. PLACE PILE CAPS.
 - F. EXCAVATE DOWN AS REQUIRED TO INSTALL PERMANENT SHOTCRETE WALL AND INSTALL MICRO-PILES.
 - G. PROCEED WITH CONSTRUCTION OF OTHER WALLS AND COMPONENTS AS NOTED IN SEQUENCE OF CONSTRUCTION ON SHEET C1.2.
4. CAREFUL TOP DOWN EXCAVATION IS REQUIRED AROUND EXISTING AMPHITHEATER STRUCTURE. STOP EXCAVATION AND REPORT TO ENGINEER IF ANY DISTRESS, SUCH AS MOVEMENT, CRACKING, SLIDING, OVERTURNING, ETC., IN EXISTING STRUCTURE OCCURS.
5. SEE MICRO-PILE SPEC SS4568 FOR REQUIREMENTS.
6. ELEVATION INDICATED WITH (*) MAY NEED TO BE ADJUSTED BASED ON EXISTING STRUCTURE FOUNDATION AND SUPPORT OF FOUNDATION. REPORT DISCREPANCIES ON DEPICTED FOUNDATION STRUCTURE (SHOWN ON DETAIL 1 ON SHEET S1.9) TO ENGINEER.
7. CONTRACTOR SHALL DRILL A MINIMUM 3 INCH DIAMETER EXPLORATORY BOREHOLE AT ALL MICROPILE LOCATIONS PRIOR TO THE START OF MICROPILE CONSTRUCTION. THE BOTTOM ELEVATION OF THE EXPLORATORY BOREHOLE SHALL COINCIDE WITH THE BOTTOM ELEVATION OF THE MICROPILE (AS SHOWN ON PLANS) OR 6 INCHES INTO BEDROCK, WHICHEVER OCCURS FIRST. CONTRACTOR SHALL LOG EACH EXPLORATORY BOREHOLE FOR SOIL TYPES AND DRILLING RESISTANCE, AND NOTE OBSTRUCTIONS, SUCH AS BOULDERS OR BURIED CONCRETE FOUNDATION. CONTRACTOR SHALL SUBMIT THE EXPLORATORY BOREHOLE DATA TO THE OWNER FOR REVIEW. THE CONTRACTOR SHALL NOT COMMENCE WITH MICROPILE INSTALLATION UNTIL OWNER PROVIDES APPROVAL TO PROCEED. THE OWNER WILL RESPOND TO SUBMITTED DATA WITHIN 72 HOURS UPON RECEIPT OF ALL EXPLORATORY BOREHOLE DATA.
8. CONTRACTOR TO FIELD VERIFY 1.5' OFFSET FROM

9. EXISTING WALL AND OFFSET FROM PROPOSED KEYWAY HEADWALL.
10. MORTARED LIMESTONE INFILL ABOVE ORIGINAL AMPHITHEATER NOT SHOWN.

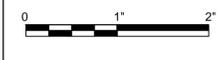


ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	S. MUCHARD
DESIGNED BY	R. BOEHM
DRAWN BY	C. AMARAL
CHECKED BY	C. ZIMMERMAN
DATE	DECEMBER 2015
PROJECT NUMBER	220162



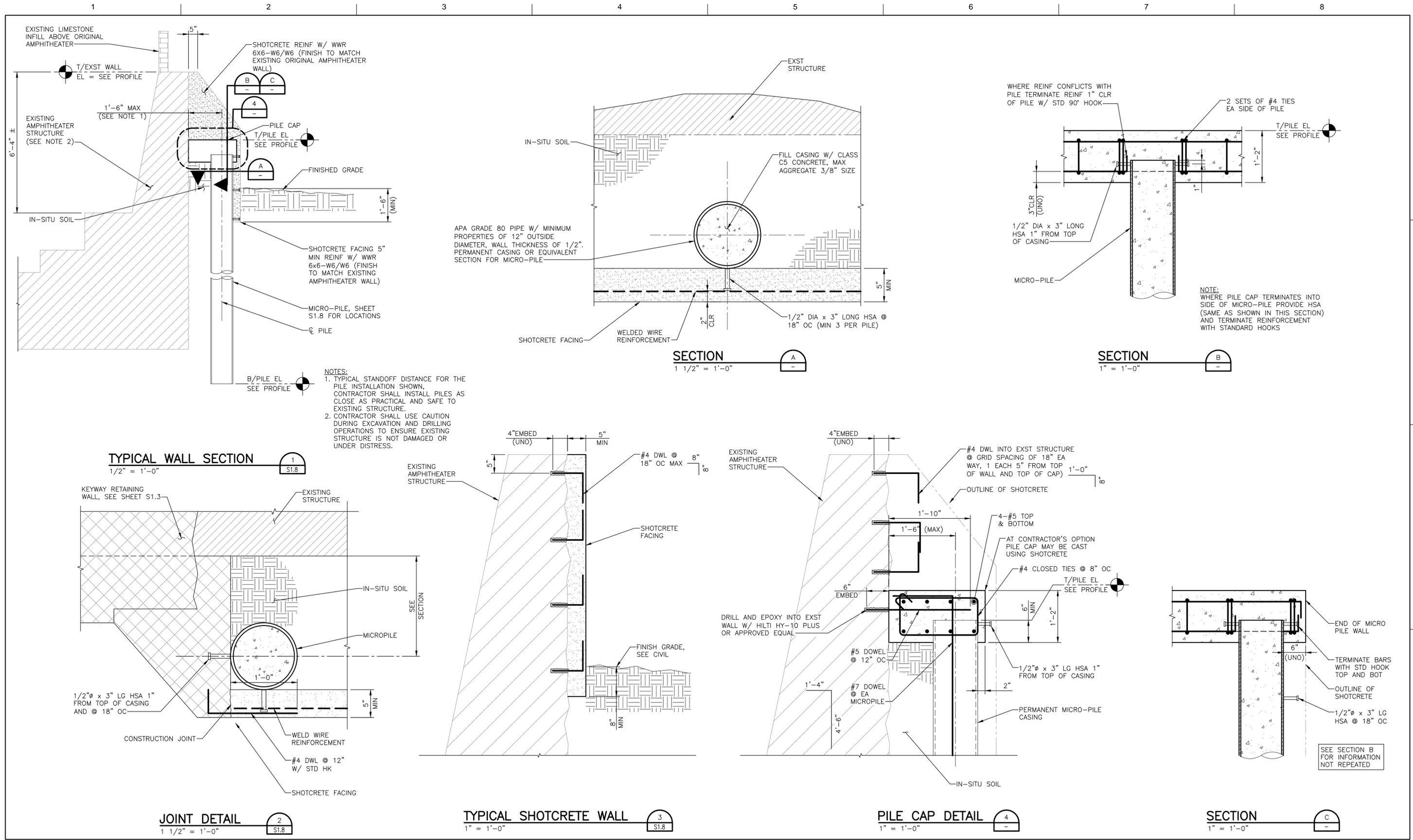
**ELIZA SPRING
OUTLET DAYLIGHTING**
Austin, Texas



**MICRO-PILE WALL
PLAN & PROFILE**
FILENAME | S1.8.DWG
SCALE | 1"=3'

SHEET
S1.8

c:\pwworking\hadr\04739282\S1.8.dwg

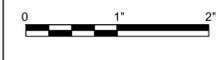


ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	S. MUCHARD
DESIGNED BY	C. ZIMMERMAN
DRAWN BY	D. GROSENBACHER
CHECKED BY	H. CLOUDT
DATE	DECEMBER 2015
PROJECT NUMBER	220162



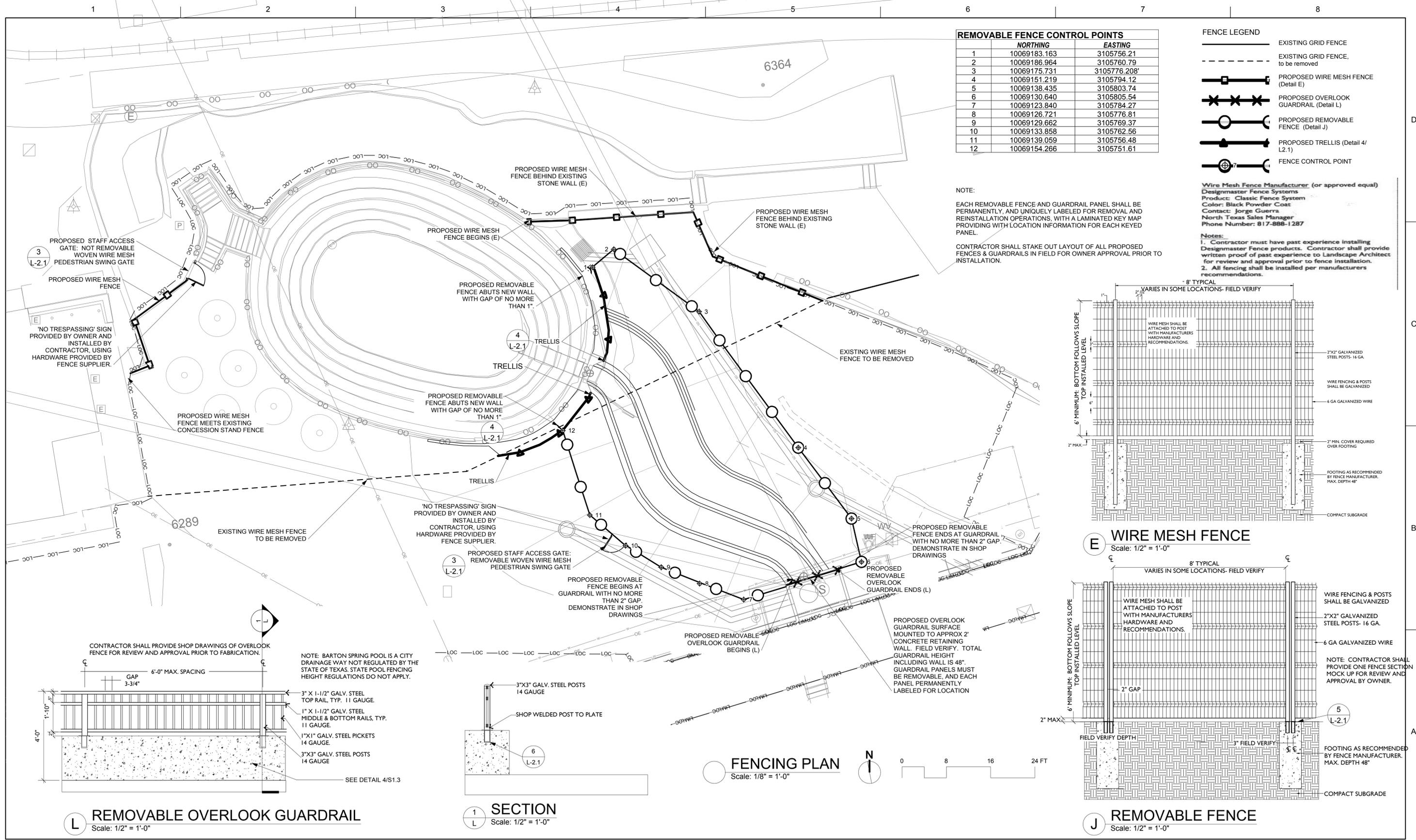
**ELIZA SPRING
OUTLET DAYLIGHTING**
Austin, Texas



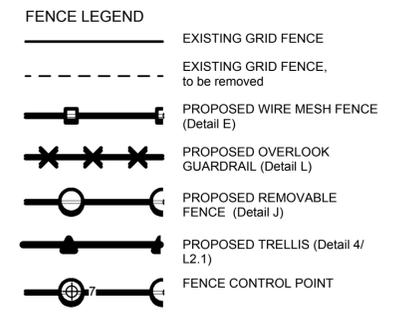
FILENAME | S1.9.DWG
SCALE | AS NOTED

SHEET
S1.9

**MICRO-PILE WALL
SECTIONS AND DETAILS**



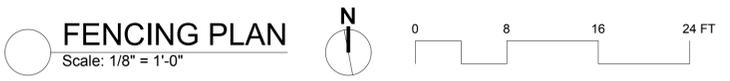
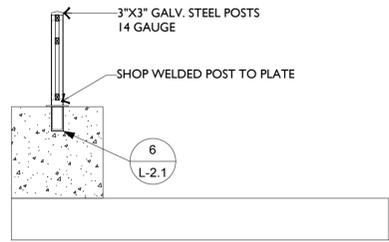
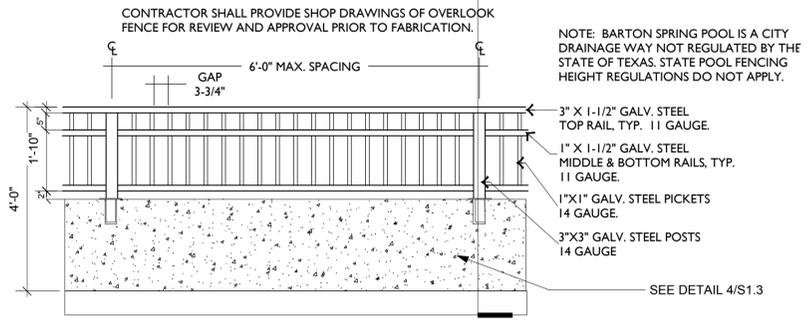
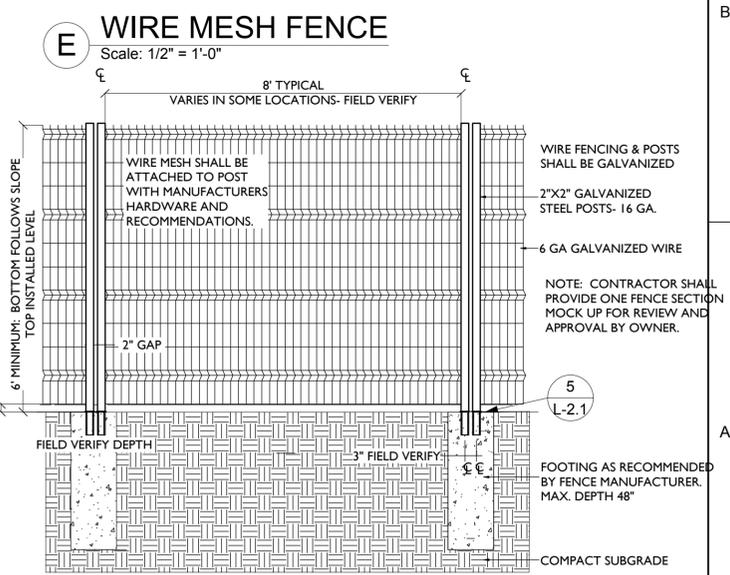
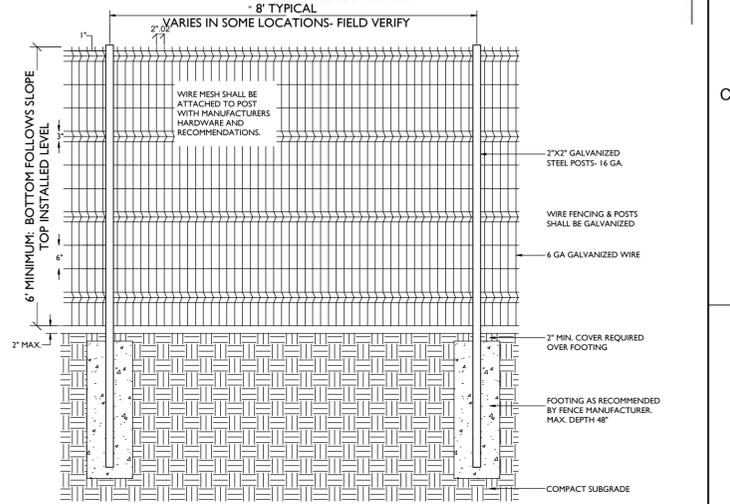
REMOVABLE FENCE CONTROL POINTS		
	NORTHING	EASTING
1	10069183.163	3105756.21
2	10069186.964	3105760.79
3	10069175.731	3105776.208'
4	10069151.219	3105794.12
5	10069138.435	3105803.74
6	10069130.640	3105805.54
7	10069123.840	3105784.27
8	10069126.721	3105776.81
9	10069129.662	3105769.37
10	10069133.858	3105762.56
11	10069139.059	3105756.48
12	10069154.266	3105751.61



Wire Mesh Fence Manufacturer (or approved equal)
 Designmaster Fence Systems
 Product: Classic Fence System
 Color: Black Powder Coat
 Contact: Jorge Guerra
 North Texas Sales Manager
 Phone Number: 817-888-1287

- Notes:**
- Contractor must have past experience installing Designmaster Fence products. Contractor shall provide written proof of past experience to Landscape Architect for review and approval prior to fence installation.
 - All fencing shall be installed per manufacturers recommendations.

NOTE:
 EACH REMOVABLE FENCE AND GUARDRAIL PANEL SHALL BE PERMANENTLY, AND UNIQUELY LABELED FOR REMOVAL AND REINSTALLATION OPERATIONS, WITH A LAMINATED KEY MAP PROVIDING WITH LOCATION INFORMATION FOR EACH KEYED PANEL.
 CONTRACTOR SHALL STAKE OUT LAYOUT OF ALL PROPOSED FENCES & GUARDRAILS IN FIELD FOR OWNER APPROVAL PRIOR TO INSTALLATION.



L REMOVABLE OVERLOOK GUARDRAIL
 Scale: 1/2" = 1'-0"

1 SECTION
 Scale: 1/2" = 1'-0"

J REMOVABLE FENCE
 Scale: 1/2" = 1'-0"

Carolyn Kelley, ASLA
 Landscape Architect
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 carolyn@ccla.net



ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	S MUCHARD
DESIGNED BY	CK
DRAWN BY	CK
CHECKED BY	CK
DATE	12/9/2015
PROJECT NUMBER	220162



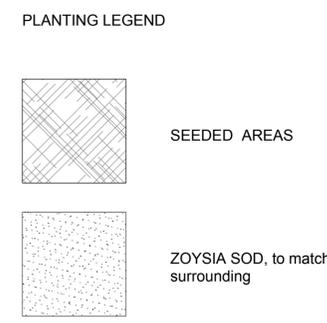
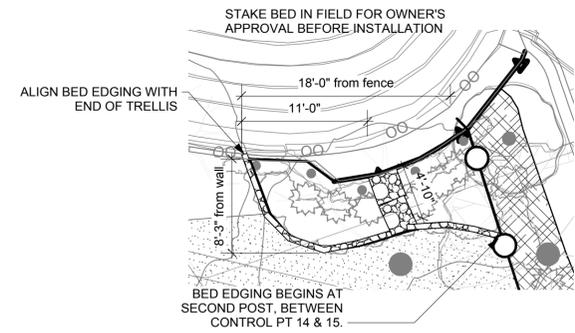
**ELIZA SPRING
 OUTLET
 DAYLIGHTING**
 Austin, Texas

FENCING PLAN

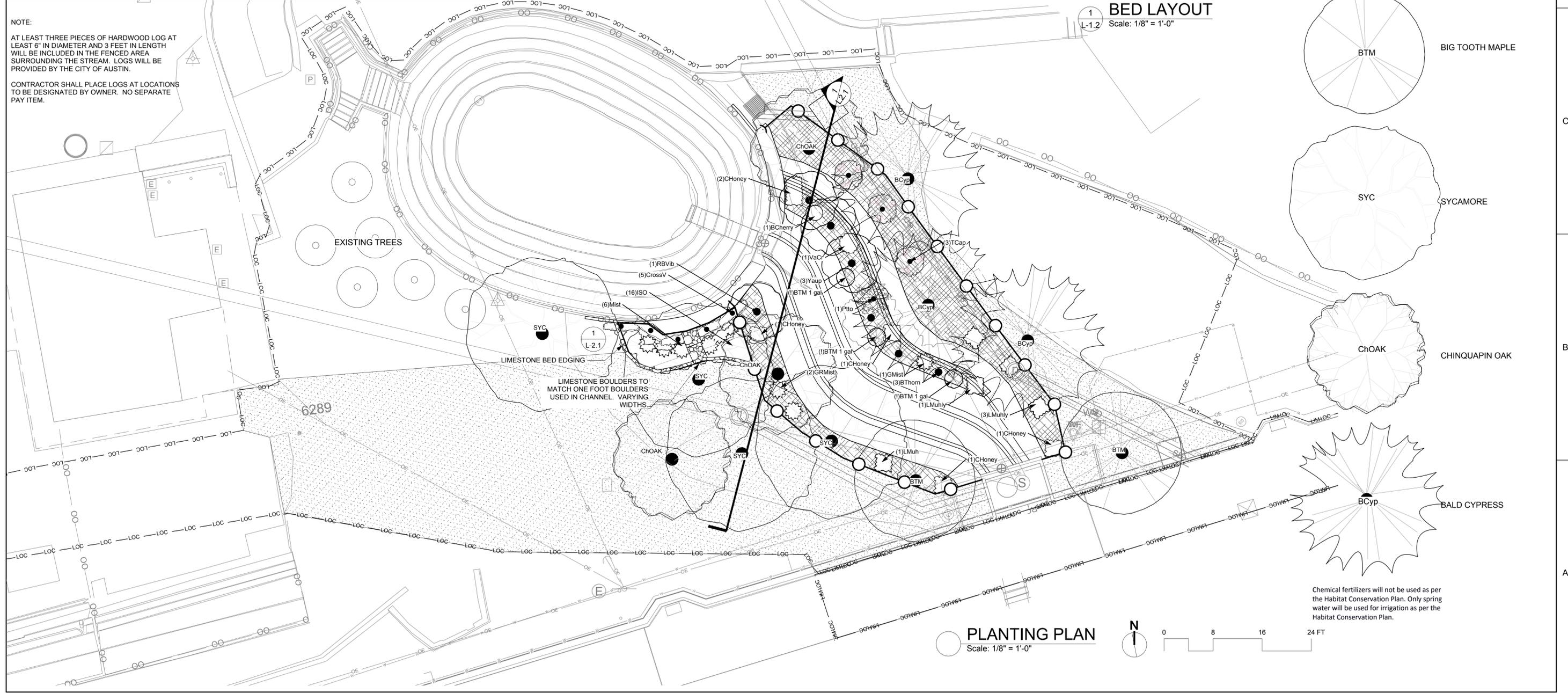
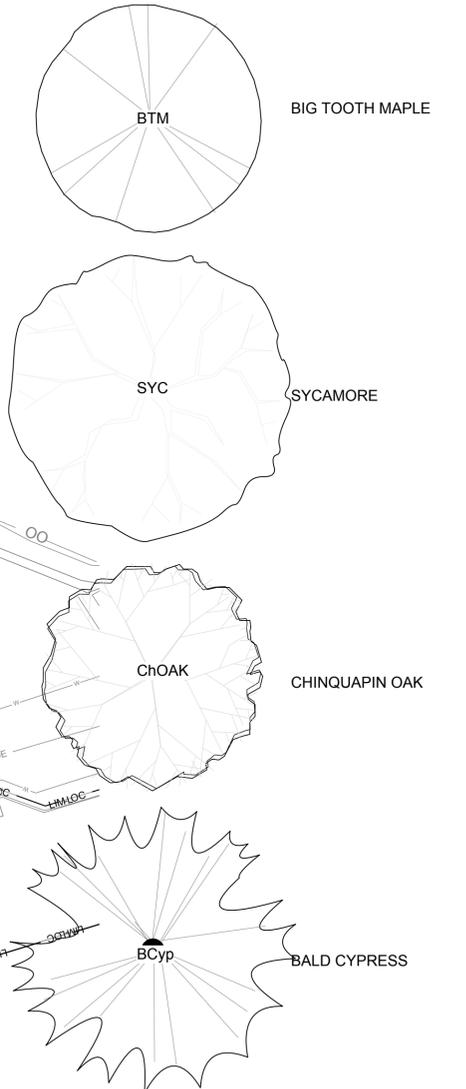
FILENAME	ELIZA04
SCALE	AS SHOWN

Tag	Common Name	Botanical Name	Qty	Scheduled Size	Height	Spread	Comments
Trees							
SYC	American Sycamore	Platanus occidentalis	4	3" caliper	15'	5'	
BCyp	Bald Cypress	Taxodium distichum	3	3" caliper	15'	4'	western seed source
BTM	Big Tooth Maple	Acer grandidentatum	2	3" caliper	12'	4'	
BTM 1 gal	Big Tooth Maple 1 gal	Acer grandidentatum 1 gal	3	1 GAL	2'	1'	
CBth	Carolina Buckthorn	Rhamnus caroliniana	3	5 gal	3'	3'	
Ch Oak	Chinquapin Oak	Quercus muhlenbergia	3	3" caliper	15'	5'	
RB Vib	Rusty Blackhaw Viburnum	Viburnum rufidulum	1	15 gal	5'	4'	
YH	Yaupon Holly	Ilex vomitoria	3	45 gal	6'	4'	female
Shrubs, Grasses, Vines & Groundcover							
LMuh	Big Muhly	Muhlenbergia lindheimeri	5	5 gal			
BCherry	Dwarf Barbados cherry	Malpighia glabra nana	1	1 gal			
GRMist	Gregg's Mistflower	Conoclinium greggii	3	1 gal			
ISO	Inland Sea Oats	Chasmanthium latifolium	13	1 gal			
Mist	Mistflower	Ageratina havanensis	7	1 gal			
TCap	Turk's Cap	Malvaviscus drummondii	3	1 gal			
CHoney	Coral Honeysuckle	Lonicera sempervirens	6	1 gal			
Crossv	Crossvine	Bignonia capreolata	5	5 gal			
VaCr	Virginia Creeper	Parthenocissus quiquefolia	1	1 gal			
Total	Total		67				

NOTE:
 AT LEAST THREE PIECES OF HARDWOOD LOG AT LEAST 6" IN DIAMETER AND 3 FEET IN LENGTH WILL BE INCLUDED IN THE FENCED AREA SURROUNDING THE STREAM. LOGS WILL BE PROVIDED BY THE CITY OF AUSTIN.
 CONTRACTOR SHALL PLACE LOGS AT LOCATIONS TO BE DESIGNATED BY OWNER. NO SEPARATE PAY ITEM.



1 BED LAYOUT
 Scale: 1/8" = 1'-0"



PLANTING PLAN
 Scale: 1/8" = 1'-0"

Chemical fertilizers will not be used as per the Habitat Conservation Plan. Only spring water will be used for irrigation as per the Habitat Conservation Plan.

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ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	S MUCHARD
DESIGNED BY	CK
DRAWN BY	CK
CHECKED BY	CK
DATE	12/9/2015
PROJECT NUMBER	220162



**ELIZA SPRING
 OUTLET
 DAYLIGHTING**

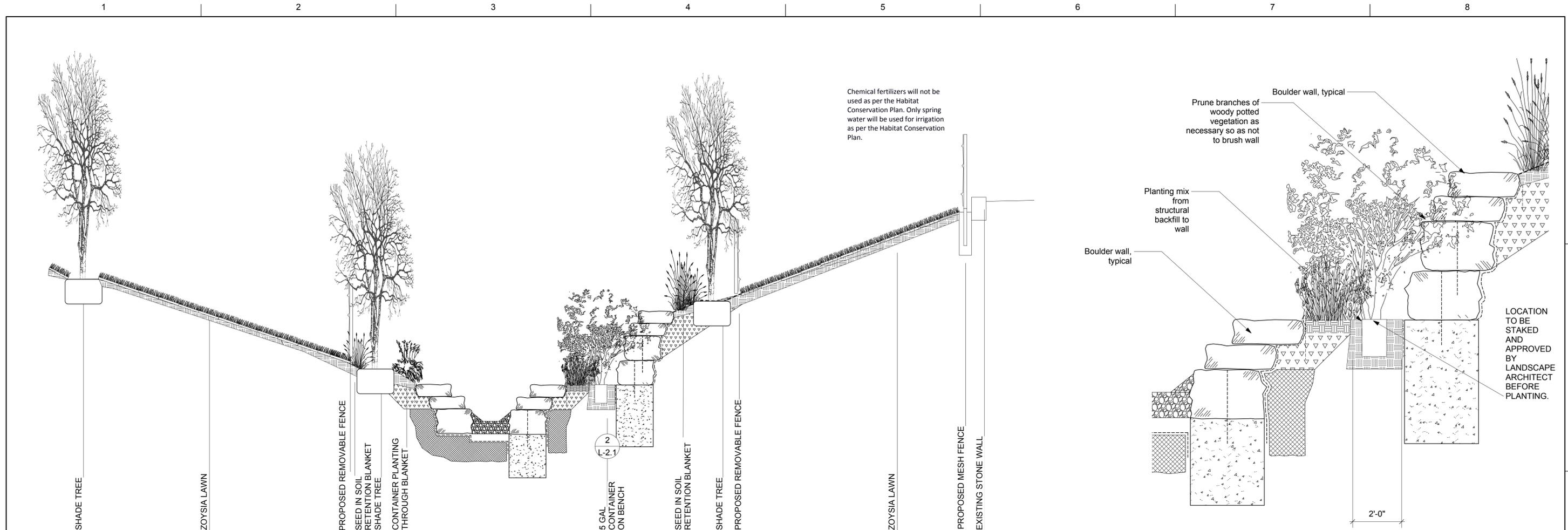
Austin, Texas

PLANTING PLAN



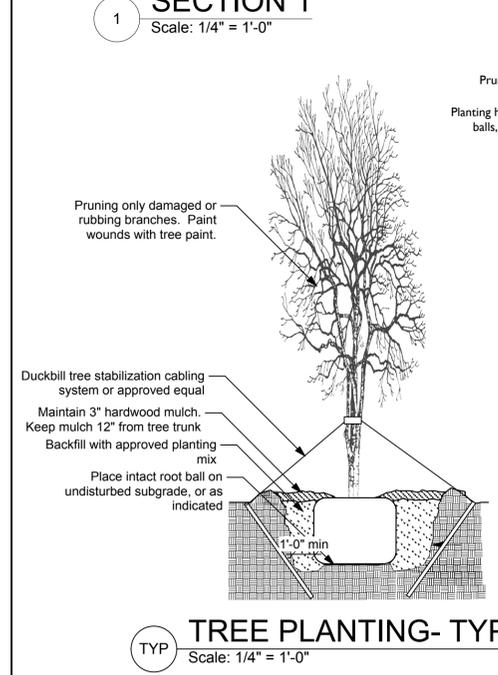
FILENAME | ELIZA04
 SCALE | AS SHOWN

SHEET
L1.2

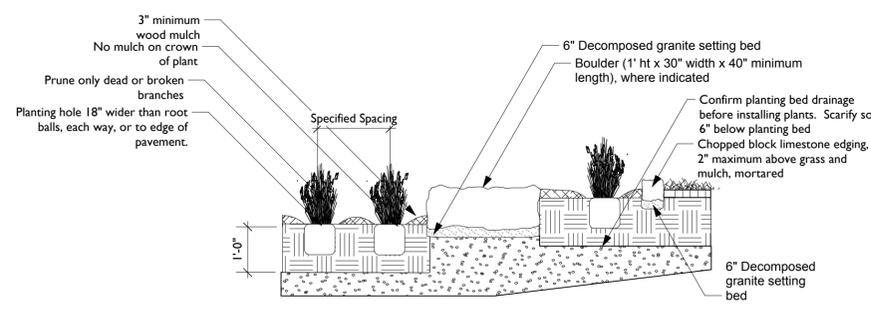


1 SECTION 1
Scale: 1/4" = 1'-0"

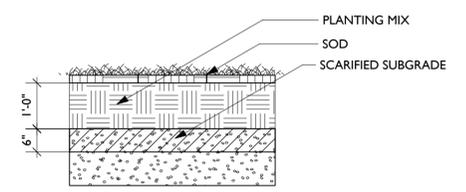
2 WOODY PLANTING IN BENCH
Scale: 1/2" = 1'-0"



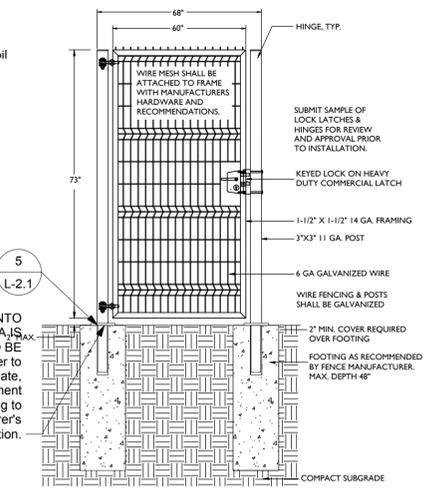
TYP TREE PLANTING-TYPICAL
Scale: 1/4" = 1'-0"



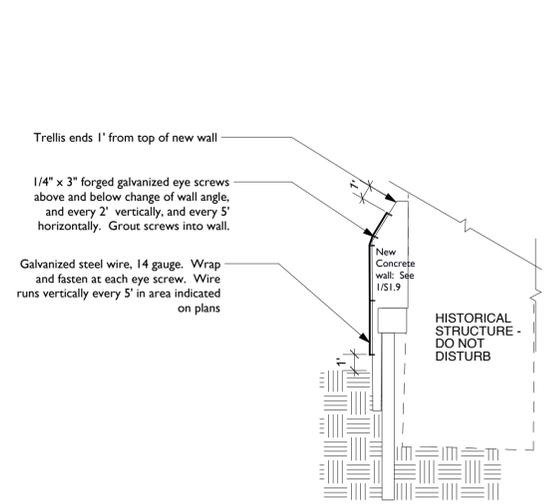
TYP TYPICAL PLANTING BED
Scale: 1/2" = 1'-0"



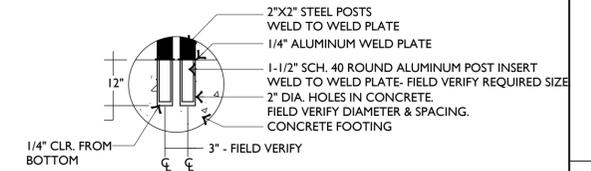
TYP TYPICAL SOD LAWN
Scale: 1/2" = 1'-0"



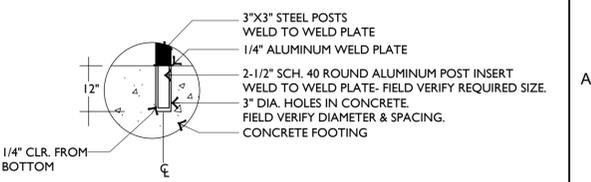
3 GATE
Scale: 1/2" = 1'-0"



4 TRELLIS DETAIL
Scale: 1/4" = 1'-0"



5 REMOVABLE FENCE FOOTING
Scale: 1" = 1'-0"



6 REMOVABLE GUARDRAIL FOOTING
Scale: 1" = 1'-0"

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ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	S MUCHARD
DESIGNED BY	CK
DRAWN BY	CK
CHECKED BY	CK
DATE	12/9/2015
PROJECT NUMBER	220162



**ELIZA SPRING
OUTLET
DAYLIGHTING**

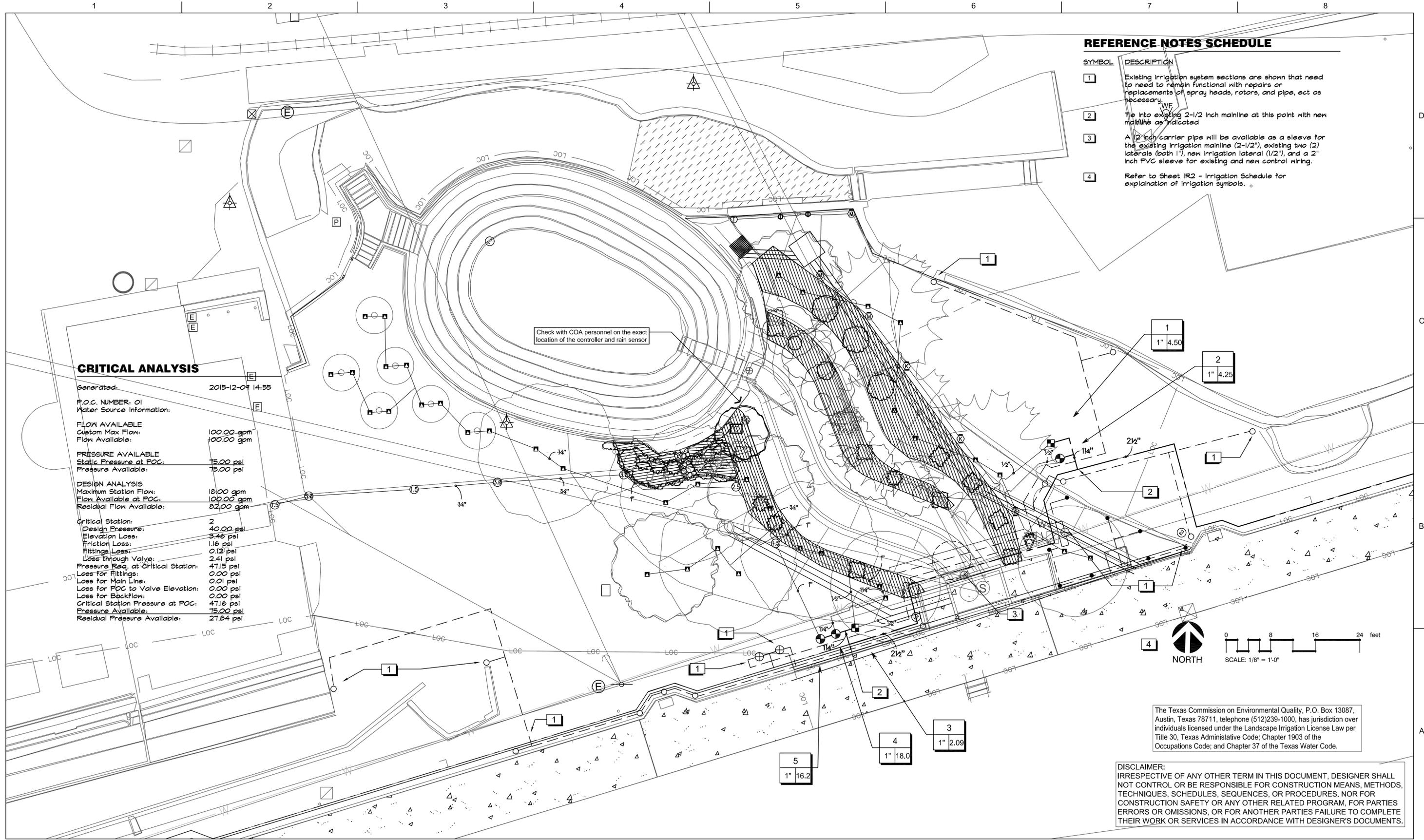
Austin, Texas

LANDSCAPE SECTIONS & DETAILS



FILENAME | ELIZA04
SCALE | AS SHOWN

SHEET
L2.1



REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
1	Existing irrigation system sections are shown that need to remain functional with repairs or replacements of spray heads, rotors, and pipe, ect as necessary.
2	Tie into existing 2-1/2 inch mainline at this point with new mainline as indicated.
3	A 1/2 inch carrier pipe will be available as a sleeve for the existing irrigation mainline (2-1/2"), existing two (2) laterals (both 1"), new irrigation lateral (1/2"), and a 2" inch PVC sleeve for existing and new control wiring.
4	Refer to Sheet IR2 - Irrigation Schedule for explanation of irrigation symbols.

CRITICAL ANALYSIS

Generated: 2015-12-04 14:55

P.O.C. NUMBER: 01
Water Source Information:

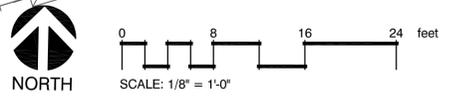
FLOW AVAILABLE
Custom Max Flow: 100.00 gpm
Flow Available: 100.00 gpm

PRESSURE AVAILABLE
Static Pressure at P.O.C.: 75.00 psi
Pressure Available: 75.00 psi

DESIGN ANALYSIS
Maximum Station Flow: 18.00 gpm
Flow Available at P.O.C.: 100.00 gpm
Residual Flow Available: 82.00 gpm

Critical Station: 2
Design Pressure: 40.00 psi
Elevation Loss: 3.46 psi
Friction Loss: 1.16 psi
Fittings Loss: 0.12 psi
Loss through Valve: 2.41 psi
Pressure Req. at Critical Station: 47.15 psi
Loss for Fittings: 0.00 psi
Loss for Main Line: 0.00 psi
Loss for P.O.C. to Valve Elevation: 0.00 psi
Loss for Backflow: 0.00 psi
Critical Station Pressure at P.O.C.: 47.16 psi
Pressure Available: 75.00 psi
Residual Pressure Available: 27.84 psi

Check with COA personnel on the exact location of the controller and rain sensor



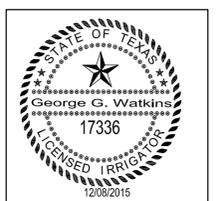
The Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711, telephone (512)239-1000, has jurisdiction over individuals licensed under the Landscape Irrigation License Law per Title 30, Texas Administrative Code; Chapter 1903 of the Occupations Code; and Chapter 37 of the Texas Water Code.

DISCLAIMER:
IRRESPECTIVE OF ANY OTHER TERM IN THIS DOCUMENT, DESIGNER SHALL NOT CONTROL OR BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SCHEDULES, SEQUENCES, OR PROCEDURES, NOR FOR CONSTRUCTION SAFETY OR ANY OTHER RELATED PROGRAM, FOR PARTIES ERRORS OR OMISSIONS, OR FOR ANOTHER PARTIES FAILURE TO COMPLETE THEIR WORK OR SERVICES IN ACCORDANCE WITH DESIGNER'S DOCUMENTS.



ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	S MUCHARD
DESIGNED BY	GW
DRAWN BY	GW
CHECKED BY	GW
DATE	12/08/2015
PROJECT NUMBER	220162



George G. Watkins



**ELIZA SPRING
OUTLET
DAYLIGHTING**

Austin, Texas

LANDSCAPE IRRIGATION PLAN



FILENAME: ELIZA03
SCALE: 1/8" = 1'

SHEET
IR1

