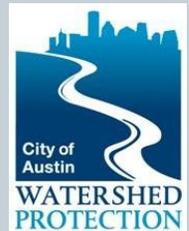


A site-specific SOS Amendment for the Eliza Spring Outlet Daylighting Project



DONELLE ROBINSON, ENVIRONMENTAL SCIENTIST

**CITY OF AUSTIN
WATERSHED PROTECTION DEPARTMENT**



Overview of Presentation



- USFWS permit information
- History of Eliza Spring Amphitheater
- Need for Daylighting Project
- Overview of Key Design Elements
- Public Outreach
- Project Timeline

Tonight:

- Seeking a recommendation for site-specific SOS amendment and associated variances

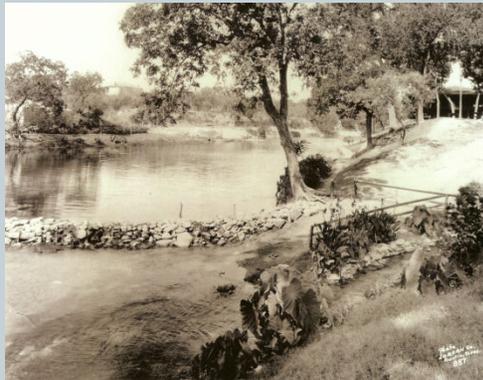
Habitat Conservation Plan

US Fish & Wildlife Service 10(a)1(B) permit

- Allows the City of Austin to keep Barton Springs Pool open for recreation despite it being endangered species habitat
- 20 year permit
- Formal agreement between Parks and Watershed



Eliza Spring Modifications



- Amphitheater built
- Outflow buried
- Concrete floor
- Salamander habitat



Why Daylighting?



- Need to replace failing buried pipe
 - Recreates historical waterway
- Part of the Barton Springs Salamander Habitat Conservation Plan
 - Increase salamander habitat and improve resiliency of species

Proposed Stream



Public Outreach



- **Public meetings:**
 - Nov 14, 2012
 - October 23, 2013
 - Nov 20, 2013
 - Dec 18, 2013
 - Feb 5, 2014
 - Mar 19, 2014
 - April 9, 2014
 - May 21, 2014
- **Parks Board**
 - April 22, 2014
 - Lands Facilities Feb 8, 2016
- **Joint Committee of the Parks Board and Environmental Commission:**
 - March 19, 2012
 - August 6, 2013
 - March 18, 2014
 - September 30, 2014
 - November 12, 2014
 - January 19, 2016
- **Memo to Council**
 - July 29, 2013
- **Codes & Ordinances**
 - April 21, 2015

Project Timeline



- **Current Processes**
 - Site plan in review
 - Finalize permitting with Tx Historic Comm, US Army Corps of Engineers, Tx Comm on Environmental Quality
- **SOS amendment/variances**
 - March 23 – Environmental Commission
 - April 19 - Codes and Ordinances Subcommittee
 - May 10 - Planning Commission
 - June 9 - City Council public hearing
- **Bidding April-May**
- **Construction Fall 2016-Spring 2017**

Project Limits of Construction

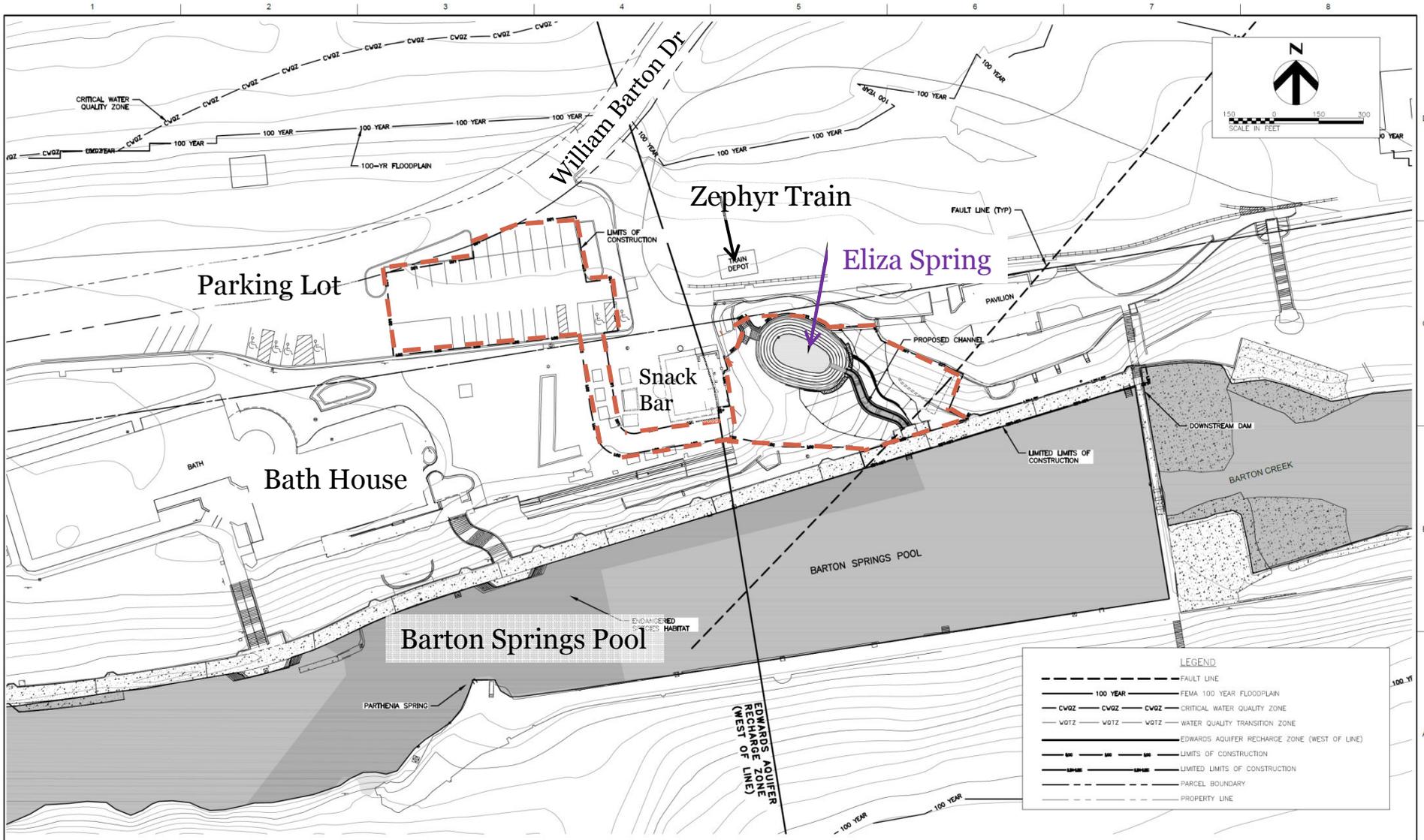
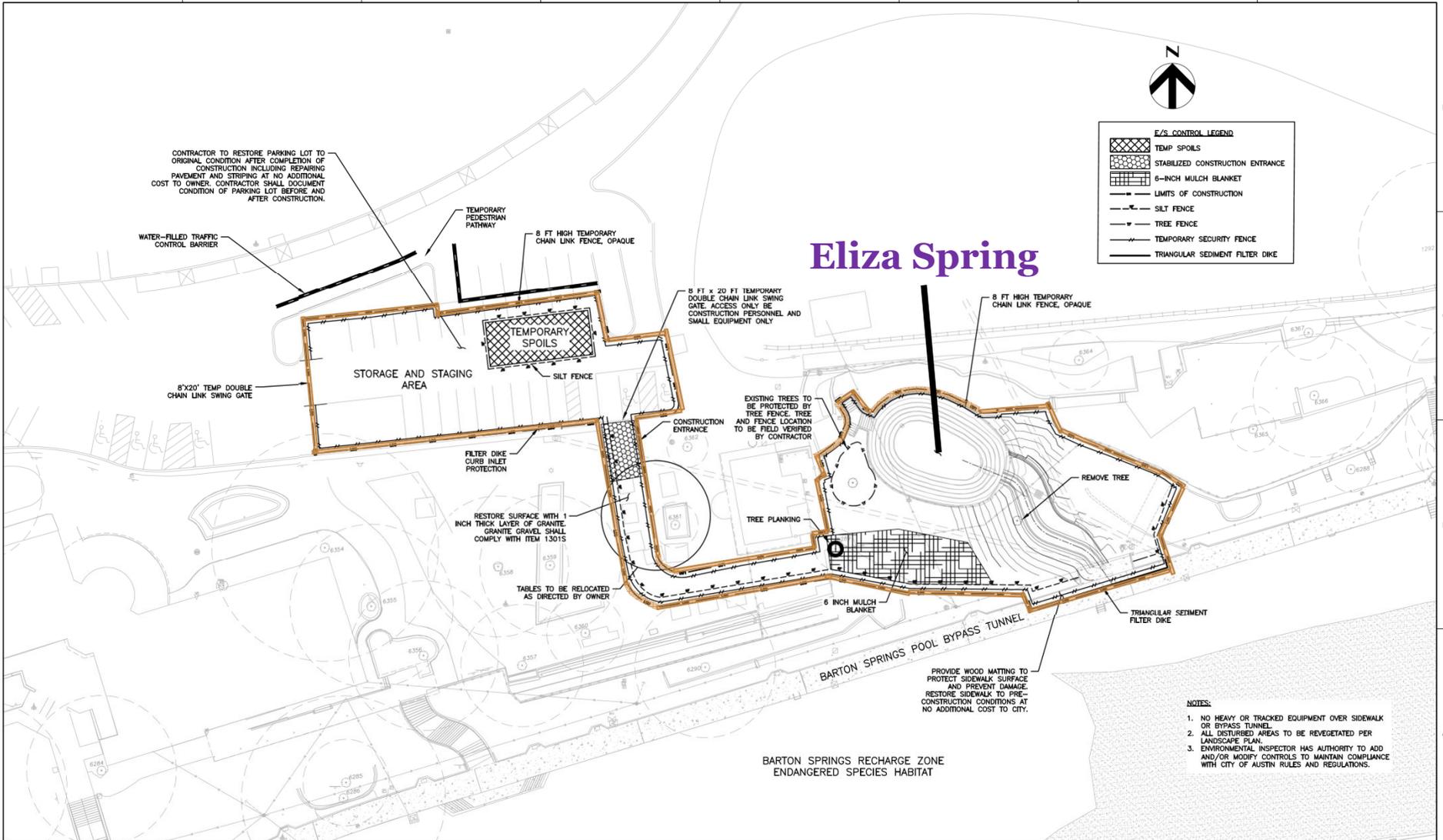
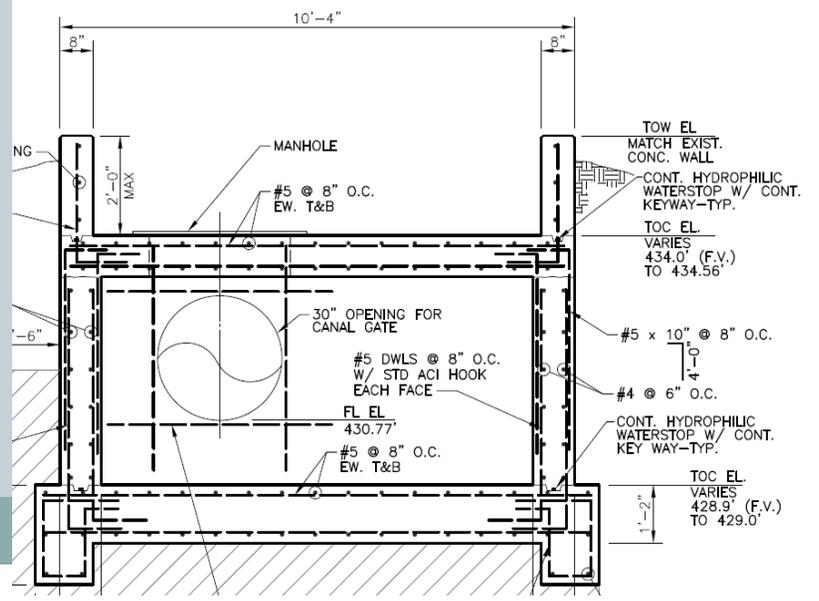
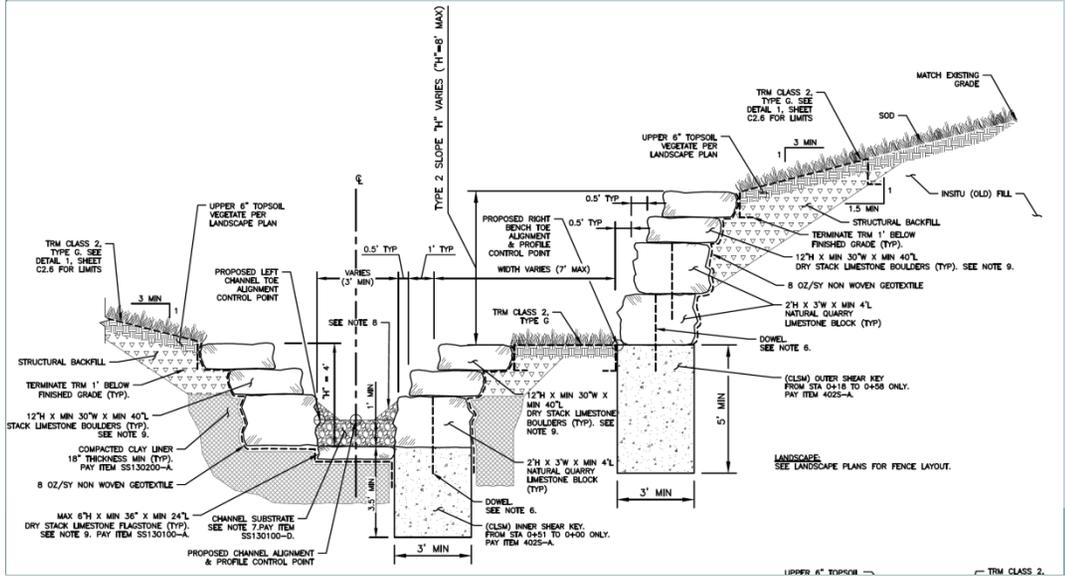
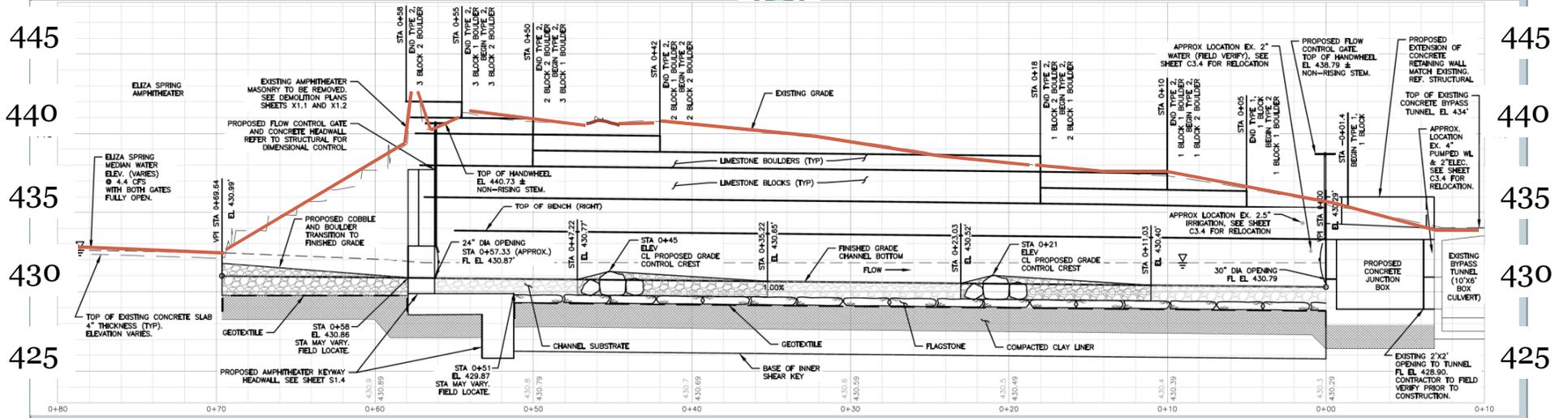


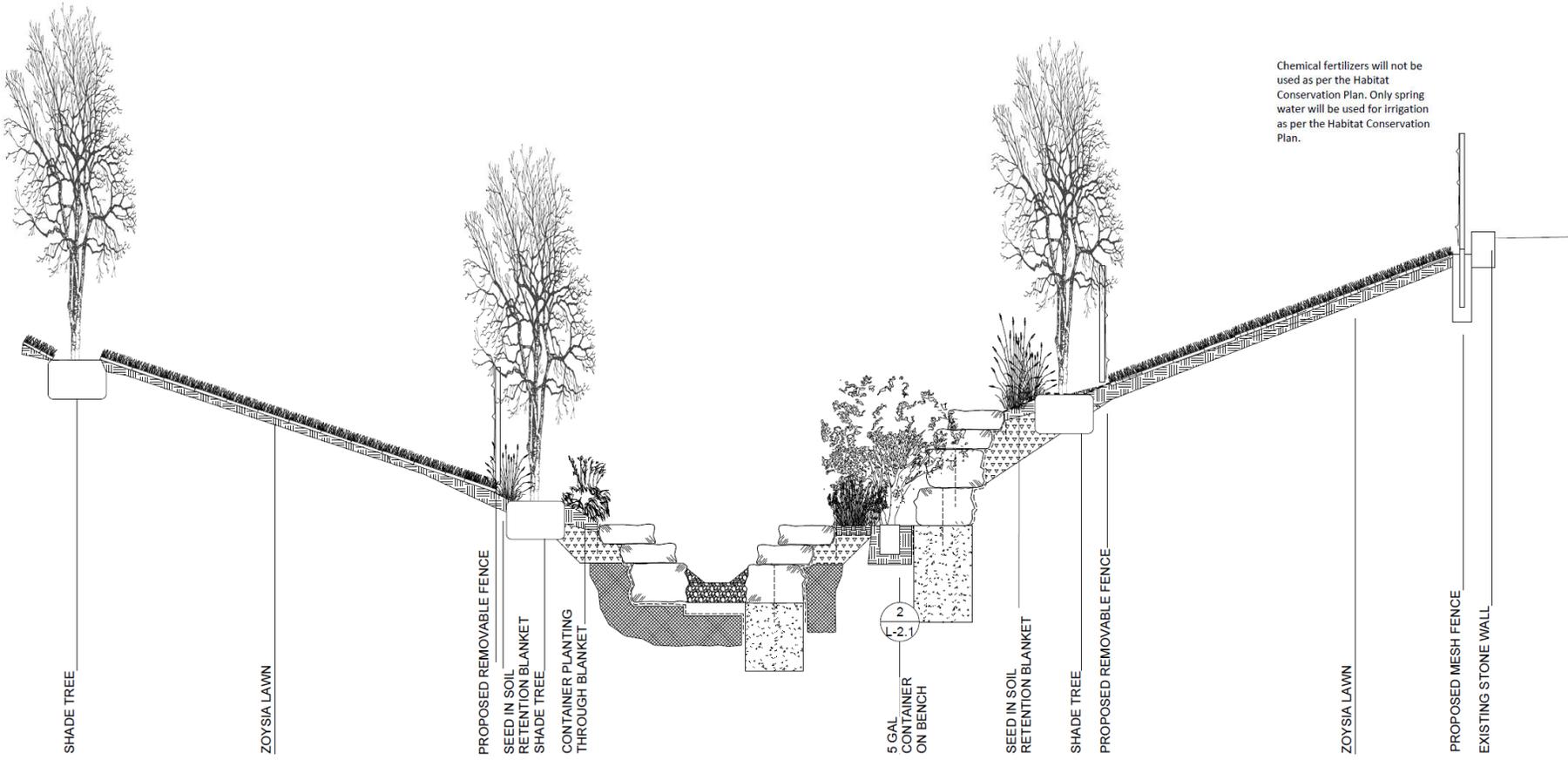
Exhibit A: Limits of Construction



Stream Profile, Cross Sections



Planting Plan Cross Section



Plant List

Plant List							
Tag	Common Name	Botanical Name	Qty	Scheduled Size	Height	Spread	Comments
Trees							
BCyp	Bald Cypress	Taxodium distichum	2	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	2	3" caliper	15'	5'	
Cotwood	Cottonwood	Populus deltoides	1	2" caliper	10'	4'	
GAsh	Green Ash	Fraxinus pennsylvanica	2	2" caliper	10'	4'	
RB Vib	Rusty Blackhaw Viburnum	Viburnum rufidulum	1	15 gal	5'	4'	
TRBud	Texas redbud	Cercis canadensis var. texensis	2	45 gal	8'	3'	
YH	Yaupon Holly	Ilex vomitoria	3	45 gal	6'	4'	female
Shrubs, Grasses, Vines & Groundcover							
LMuhly	Big Muhly	Muhlenbergia lindheimeri	5	5 gal			
BCherry	Dwarf Barbados cherry	Malpighia glabra nana	1	1 gal			
GRMist	Gregg's Mistflower	Conoclinium greggii	2	1 gal			
ISO	Inland Sea Oats	Chasmanthium latifolium	13	1 gal			
Mist	Mistflower	Ageratina havanensis	7	1 gal			
Ptto	Palmetto	Sabal minor	1	45 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		65				

TREE MITIGATION							
Removed?	Tree #	Species	Cal. Inch	AppF?	Factor	Condition	Repl. Inch
X	8A	Elm	6" multi	Yes	1		6
					TOTAL		6.00

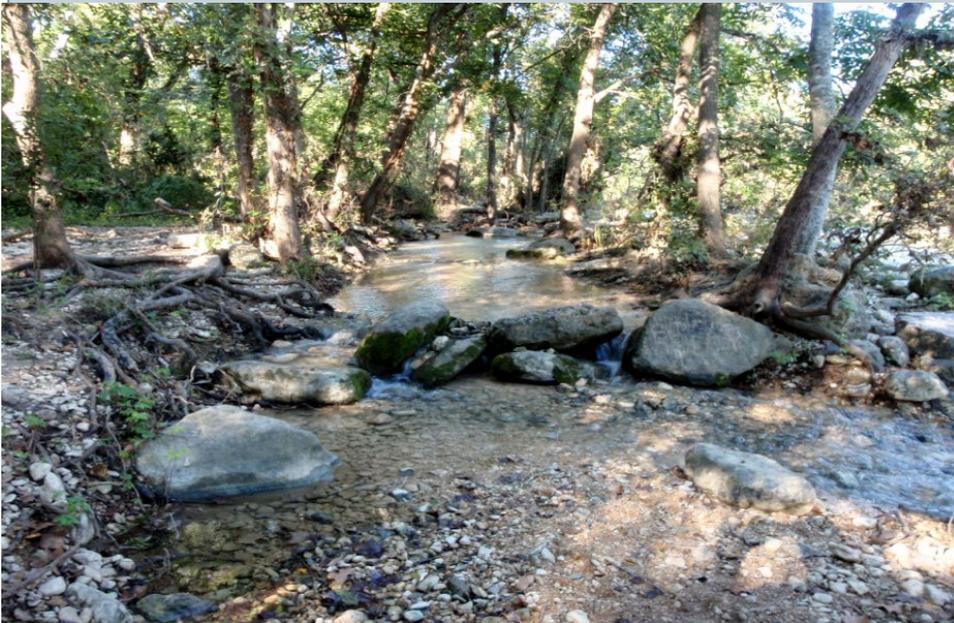
25-8-364 (D3) Floodplain modifications



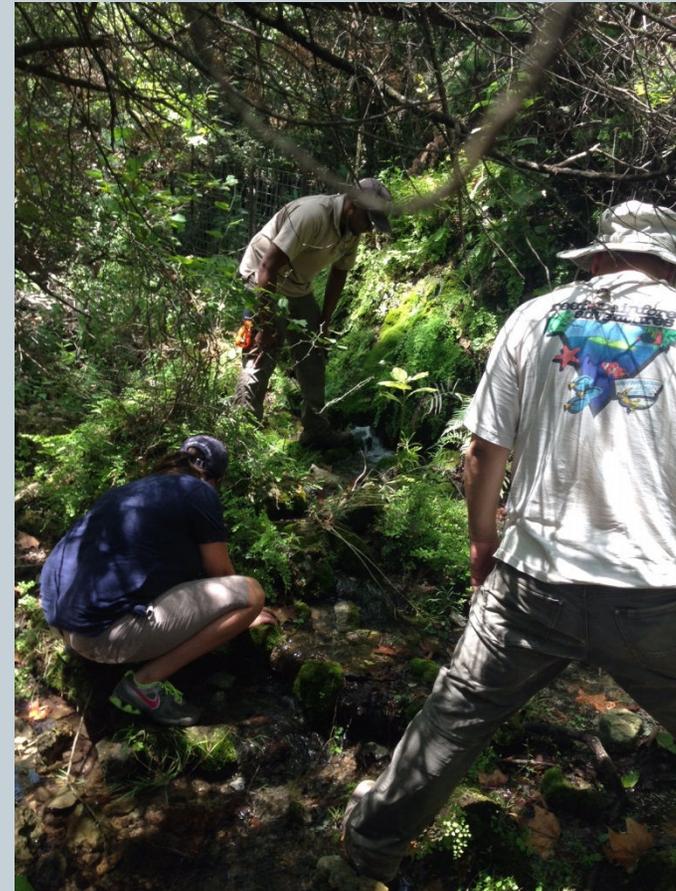
Floodplain modifications in the critical water quality zone must restore floodplain health to support natural functions and processes as prescribed in the floodplain modification criteria in the Environmental Criteria Manual.

- Project results in equal or better water quality with current landscaping plan because functional assessment is “good or better”

Natural Habitat



Upper Barton Spring



**Hays County
Water Quality Protection Lands**

Impacts of Riparian Health on Salamanders



- Barrett, K., & Price, S. (2014). Urbanization and stream salamanders: a review, conservation options, and research needs. *Freshwater Science*, 33(3), 927–940.
<http://doi.org/10.1086/677556>
 - Takeaway 1: “Protect riparian and critical upland habitat with native vegetation to protect streams.”
 - Takeaway 2: “Revegetate and restore riparian and terrestrial environments around streams.”
- Cecala, K. K., Lowe, W. H., & Maerz, J. C. (2014). Riparian disturbance restricts in-stream movement of salamanders. *Freshwater Biology*, 59(11), 2354–2364.
<http://doi.org/10.1111/fwb.12439>
 - Takeaway: The more trees present, the more likely we will close canopy gaps and help facilitate salamander movement

No variances to SOS Ordinance



§ 25-8-515 - NO EXEMPTIONS, SPECIAL EXCEPTIONS, WAIVERS OR VARIANCES.

- The requirements of this article are not subject to the exemptions, special exceptions, waivers, or variances allowed by Article 1 (*General Provisions*).
Adjustments to the application of this article to a specific project may be granted only as set out in [Section 25-8-518](#) (*Limited Adjustment To Resolve Possible Conflicts With Other Laws*) below

25-8-514: Limits impervious cover in Barton Springs Zone, no increase in pollutant loadings



- The “site” exceeds allowable impervious cover
- Modification of the “site” requires the full “site” to be brought into compliance with current code
 - Outside the scope of the daylighting project

Project results in equal or better water quality:

- Project does not increase pollutant loadings, does increase salamander habitat and improves existing floodplain function

25-8-281: Construction within buffer zone of a critical environmental feature prohibited

Project does not impair function of the Critical Environmental Feature

- Spring water diverted around construction
- No materials can enter water
- Salamander biologists inspect area to move salamanders prior to dewatering
- Salamander biologists present for all work in habitat
- Compliant with Habitat Conservation Plan requirements



25-8-341: Cut may not exceed four feet of depth



Project results in equal or better water quality:

- Erosion controls during construction
- Salamander biologist oversight throughout project
- Area to be stabilized after construction
- Area revegetated consistent with Watershed Protection Ordinance
- Improving floodplain function over existing conditions
- Suspended solids removal from water prior to discharge

Contact:



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austintexas.gov/departments/eliza-spring-daylighting