

Les Lacs Pond Liner Replacement and Site Improvements Project

Addison City Council 9-12-23

The logo for Addison City Council, featuring the word "ADDISON" in blue capital letters inside a white circle, which is set against a blue background with a white diagonal line.



- In 2016 & 2017 Staff made several presentations to Council regarding the failing pond edge and life expectancy of the existing pond liner at Les Lacs Pond. As a result of these presentations, it was determined that staff select a consultant to provide a proposal to begin Schematic level design solutions for:
 - A base project that would remove and replace the pond liner with a simple earthen edge treatment.
 - Look at alternative pond edge treatments for their aesthetic value and durability.
 - Look at additional site and landscape enhancements.
 - Gather public feedback related to the proposed pond edge, site and landscape enhancements.
 - Develop an Opinion of Probable Cost for the options.
- May 23, 2017, Council awarded a contract to Westra Consultants for initial development of Schematic Design and stakeholder involvement for the replacement Les Lacs Pond liner, edge treatments and potential site enhancements.

Background



LEGEND

- 01** PROPERTY BOUNDARY
- 02** EXISTING FOUNTAINS
- 03** EXISTING DECK AND WATERFALL
- 04** EXISTING TREES TO REMAIN
- 05** EXISTING CONCRETE FLUME
- 06** PROPOSED RETAINING WALLS
- 07** MAKE WALK ADA ACCESSIBLE
- 08** PROPOSED POND OVERFLOW TRASH RACK
- 09** PROPOSED SMOOTHING OF ENTIRE PERIMETER POND EDGE
- 10** APPLY STONE VENEER TO OUTFALL STRUCTURE

DESIGN TIMELINE: 4 - 6 MONTHS
 CONSTRUCTION TIMELINE: 6 - 8 MONTHS
 BASE COST - POND DEMOLITION, NEW LINER AND NATURAL EDGE: \$790,000
 CONCEPT OPTION 1 - POND LANDSCAPE, AMENITY AND SITE IMPROVEMENTS: \$297,000
 MATERIALS TESTING, CONSTRUCTION ADMINISTRATION, PERMITTING, LANDSCAPE ARCHITECTURE AND ENGINEERING, & SURVEYING SERVICES: \$271,750
 TOTAL PROBABLE COST: \$1,358,750.00

NOTES:
 OPTION 1 INCLUDES THE MINIMUM WORK REQUIRED TO REPLACE THE LINER, MEET ADA REQUIREMENTS AND SMOOTH OUT THE POND EDGE TO IMPROVE MAINTENANCE.

- Westra Consultants developed a plan for a Base Project which recommended the minimum work that would need to be completed to replace the pond liner, address the failing pond edge, address ADA issues and correct erosion / maintenance concerns.



Background



1 EDGE CONDITIONS



A NATURAL

Description - Earthen edge with sod gently sloping and terminating at water line.
Cost - \$0



B CONCRETE

Description - Formed concrete border approximately 12" wide. Color and finish to be determined.
Cost - \$632,185



C1 FLAGSTONE



C2 STONE CAP



C3 STONE BLOCKS

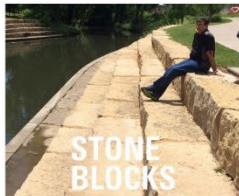
Description - Decorative stone edge to be chosen per residents' preferences. C1) Flagstone edge at consistent width (\$). C2) Stone cap, 18" wide, to hang over water's edge (\$\$). C3) Stone blocks provide seating along edge (\$\$\$).
Cost - \$632,185



D NATURAL

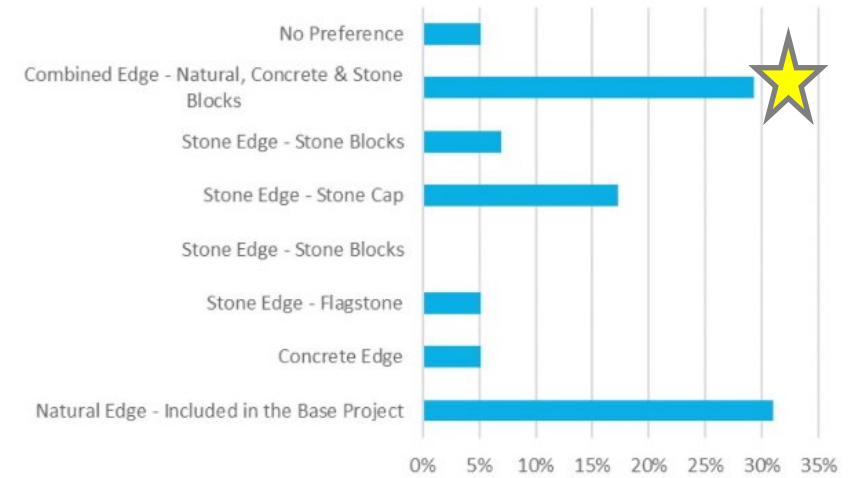


CONCRETE



STONE BLOCKS

Description - All three materials (36% Natural / 42% Concrete / 22% Stone Blocks) to be used throughout the site as shown in Option 2.
Cost - \$493,200



1

Star denotes staff recommendation made to Council April 2019

Background

2 PLANTING



A NATIVE PLANTINGS

Description - Variety of container grown native Texas grasses to undulate along the pond edge varying from 24"-36" in height.

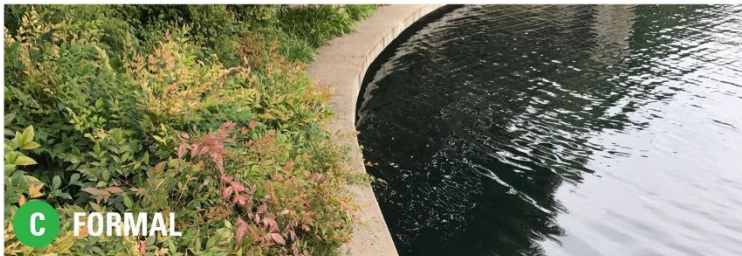
Cost - \$792,600



B HYBRID

Description - Variety of native Texas grasses and formal planting. Pockets of native Texas grasses integrated with formal planting to meander along the pond edge.

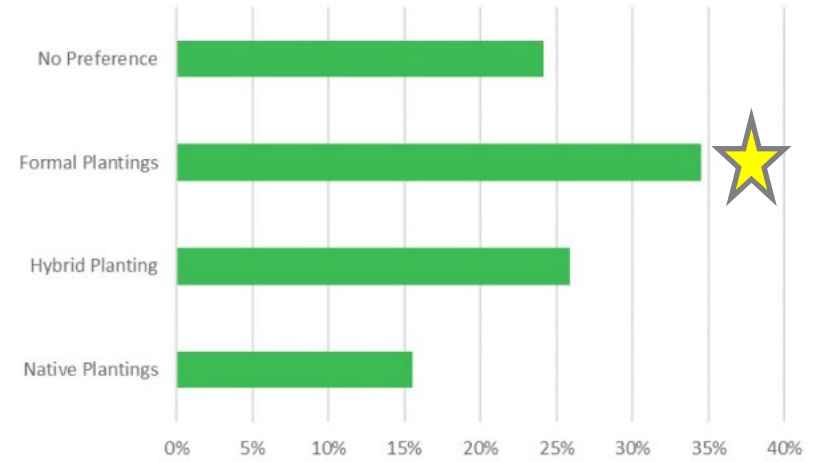
Cost - \$792,600



C FORMAL

Description - Variety of container grown formal shrubs and groundcover. Plant types to match existing formal landscape aesthetic and undulate along pond edge. Provides opportunity for evergreen plant material to maintain seasonal interest year round.

Cost - \$792,600



2

Star denotes staff recommendation made to Council April 2019

Background



3 INTERACTIVE AMENITIES



A GAMES

Description - Table games to promote community engagement.
Cost - \$36,250



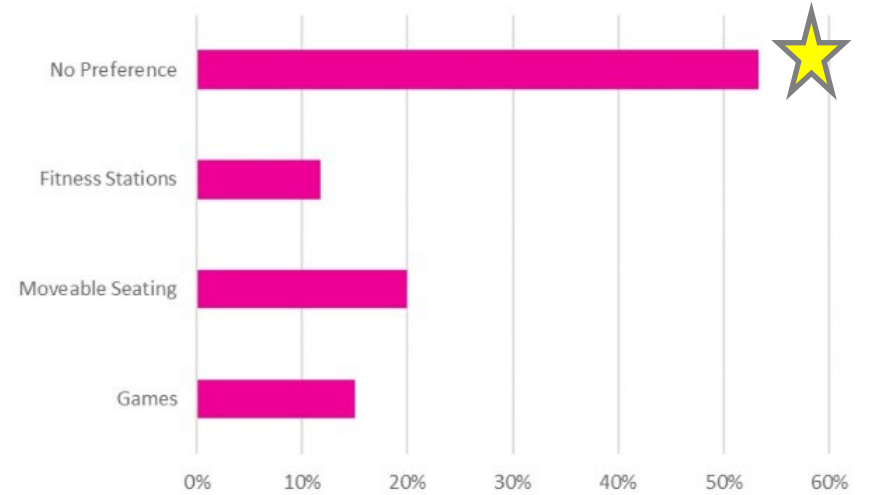
B MOVEABLE SEATING

Description - Moveable chairs, benches, and tables located on existing decking.
Cost - \$81,500



C FITNESS STATIONS

Description - Groupings of two to three metal fitness stations along walking path to provide exercise opportunities.
Cost - \$101,500



3

Star denotes staff recommendation made to Council April 2019

Background



4 SITE IMPROVEMENT AMENITIES



A RETAINING WALLS

Description - Utilize stone block walls to provide gentle grade change along pond edge.
 Cost - \$96,300



B MEANDERING WALKS

Description - Undulate straight portions of the concrete walk to provide enhanced walking experience.
 Cost - \$401,665

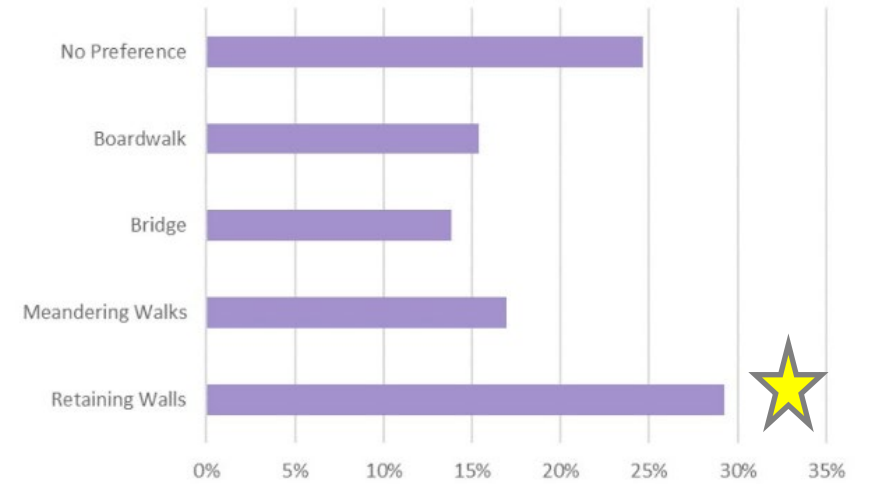
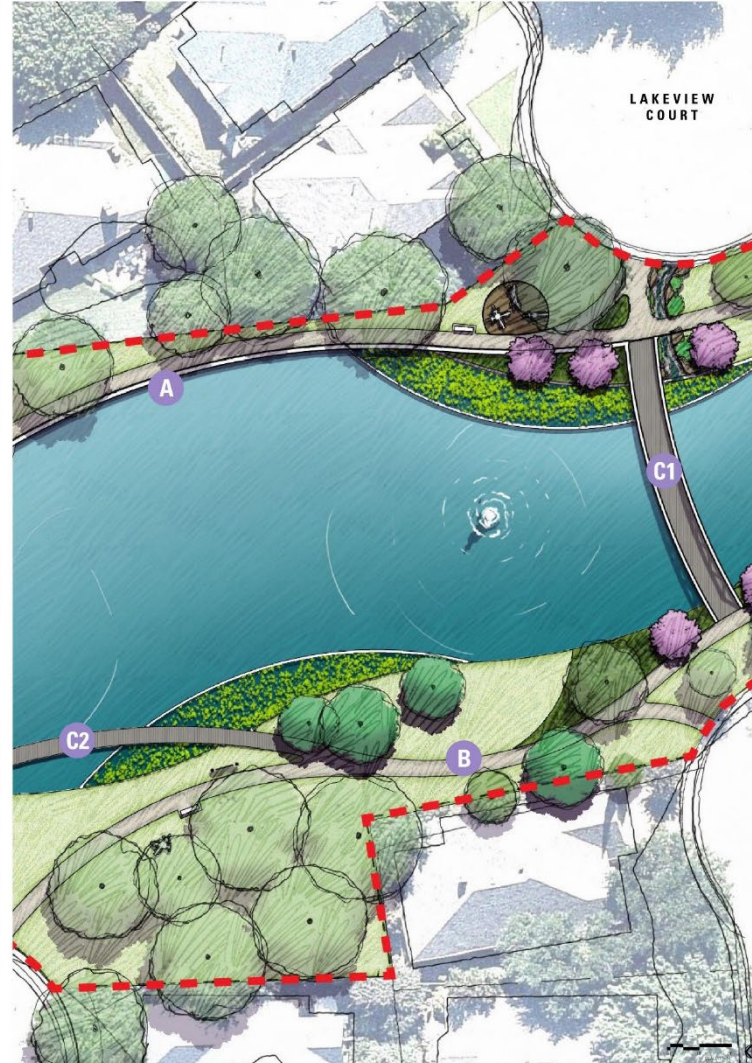


C1 BRIDGE



C2 BOARDWALK

Description - Provide an additional circulation route and an opportunity for pedestrians to better engage with the water. Bridge to be metal that is painted black. Boardwalk to be concrete with wooden rails.
 Cost - C1 Bridge \$188,500 / C2 Boardwalk \$290,000



Star denotes staff recommendation made to Council April 2019

Background



5 ENVIRONMENTAL AMENITIES



A EDUCATIONAL SIGNAGE

Description - Attractive, durable, pedestal signage along trail to educate users about the pond ecosystem.
Cost - \$29,000



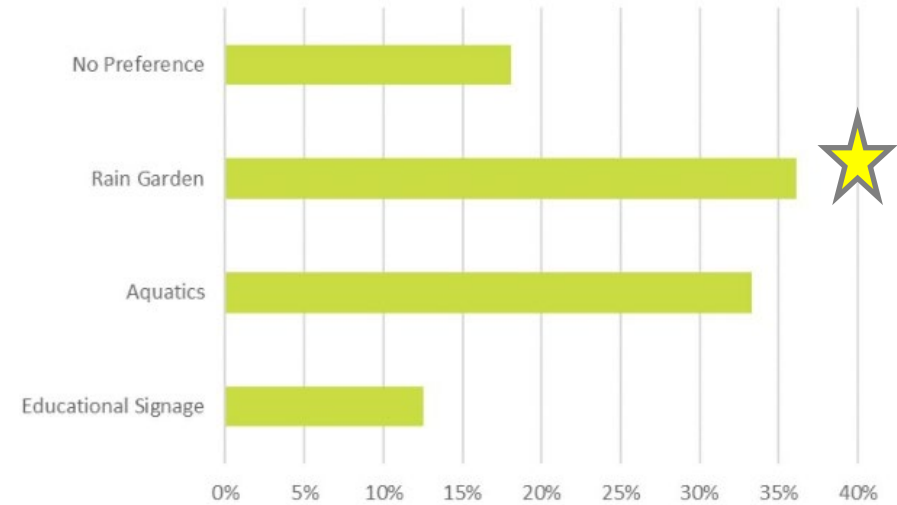
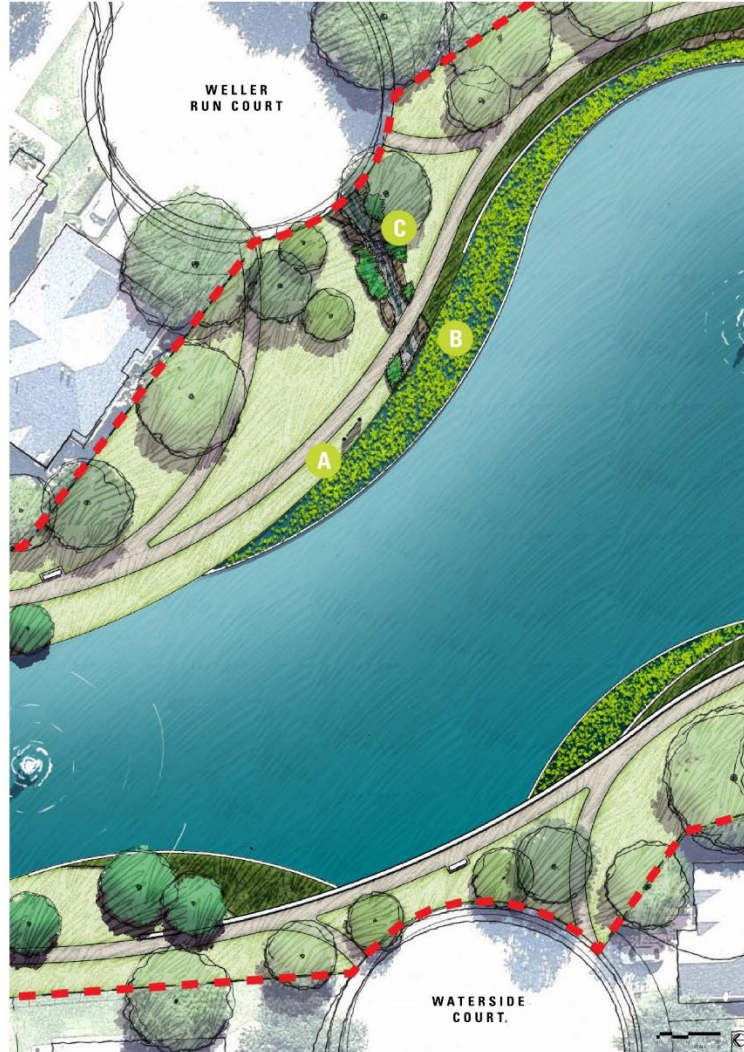
B AQUATICS

Description - Aquatic plant material set within the pond to catch and filter stormwater runoff from the neighborhood.
Cost - \$229,000



C RAIN-GARDEN

Description - Catch and filter stormwater runoff from the streets by converting concrete flumes into rain-gardens.
Cost - \$43,500



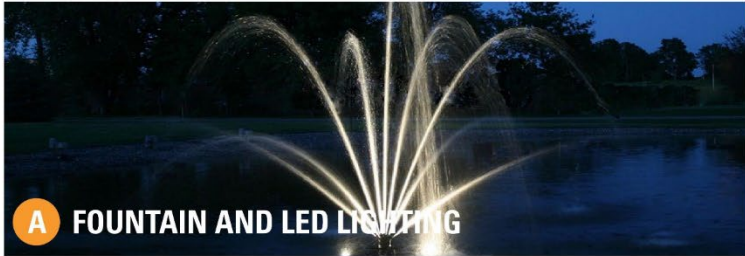
5

Star denotes staff recommendation made to Council April 2019

Background



6 AESTHETIC IMPROVEMENT AMENITIES



A FOUNTAIN AND LED LIGHTING

Description - Provide an attractive and functional fountain for water aeration and circulation. Add LED lights.
Cost - \$61,625



ADDISON ARBOR FOUNDATION

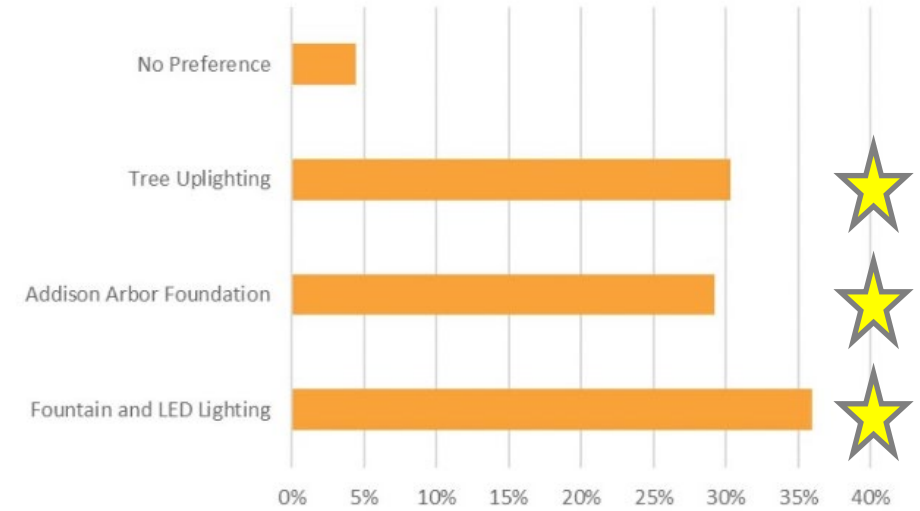
B ART

Description - Provide visual interest with art chosen by the Addison Arbor Foundation.
Cost - \$0



C LIGHT

Description - Provide tree uplights to enhance evening park experience.
Cost - \$68,150

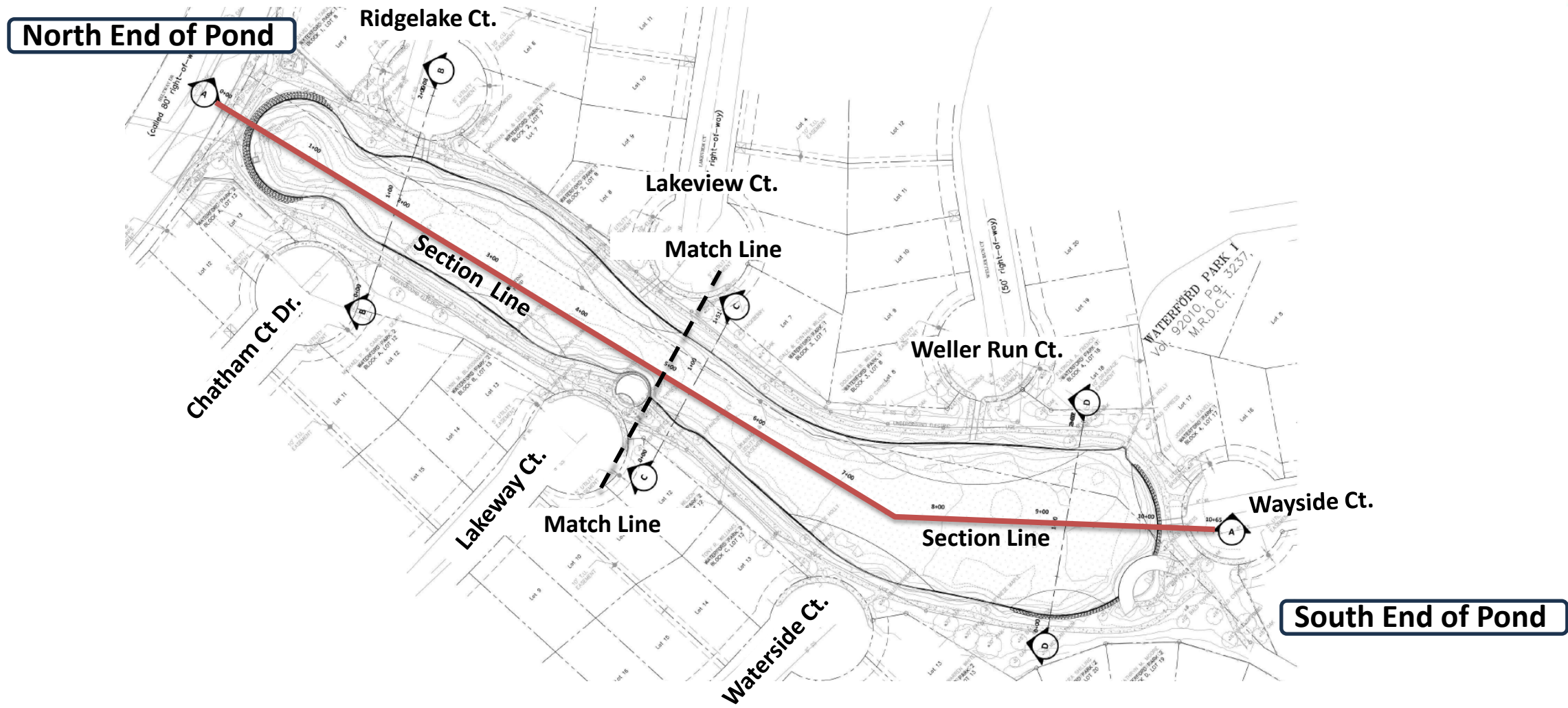


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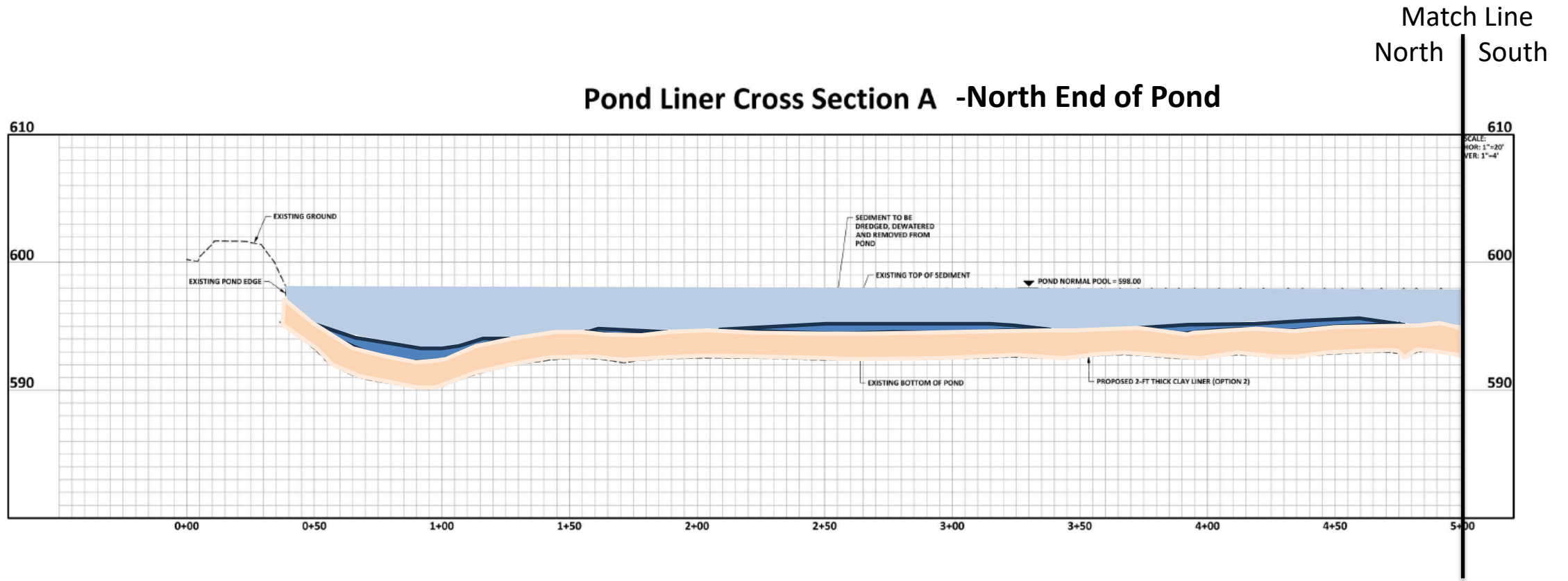
Star denotes staff recommendation made to Council April 2019


- Staff used the community's preferences for amenities gathered in Imagine Addison to present a recommended project to the 2019 Bond Election Committee.
- The November 5th, 2019, Bond Election approved \$3,282,110 for the Les Lacs Pond Improvements Project as a part of Proposition C. Approved elements of the project, if budget allows are as follows:
 - **BASE BID-POND LINER REPLACEMENT WITH HDPE LINER-(CLAY LINER- ALTERNATE BID 1, CLAY LINER AND DEEPING TO 8'- ALTERNATE BID 2)**
 - **ADA IMPROVEMENTS AND RETAINING WALLS (INCLUDED IN POND LINER BASE BID AND ALTERNATE BIDS 2 AND 3)**
 - **BASE BID- LANDSCAPE (LAKE EDGE COMBINATION OF NATURAL, CONCRETE AND STONE & LANDSCAPE BEDS)**
 - **LANDSCAPE ALTERNATE 1- (POND FOUNTAINS & LIGHTS)**
 - **LANDSCAPE ALTERNATE 2- (TREE UPLIGHTS ON EXISTING TREES)**
 - **LANDSCAPE ALTERNATE 3- (RAIN GARDENS AND SIDEWALK CROSSINGS)**
 - **LANDSCAPE ALTERNATE 4- (SCREENING WALL DECORATIVE MOSAIC ALONG BELTWAY DRIVE)**


Design- Bathymetric (underwater) Survey

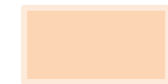


Design- Bathymetric (underwater) Survey



 Pond- Average depth is approximately 3'

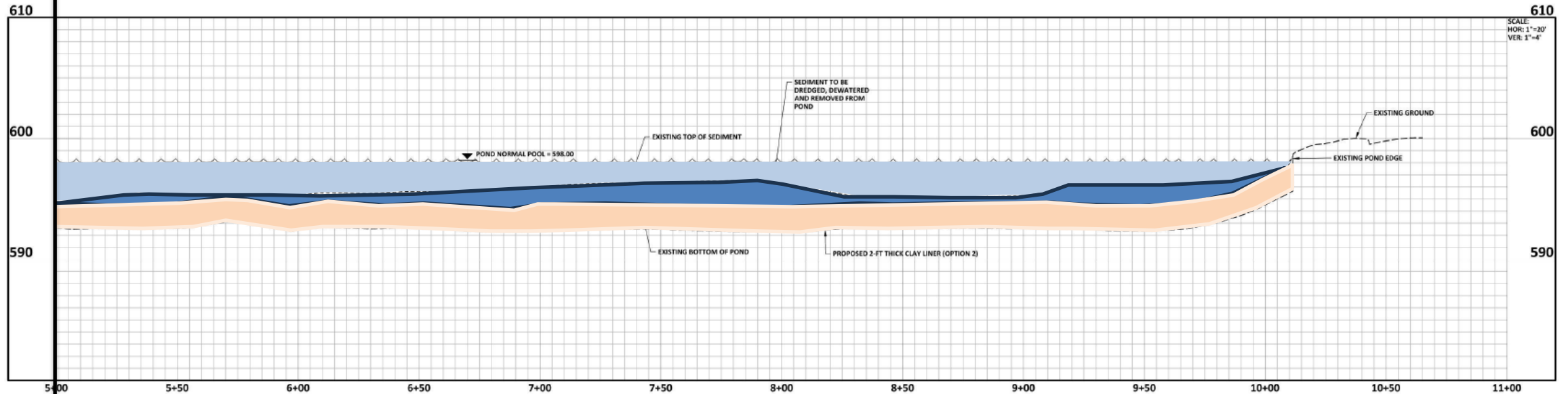
 Existing Sediment- Depth varies


 Clay Liner- Requires 2' additional excavation depth


Design- Bathymetric (underwater) Survey

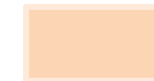
Match Line
North | South

Pond Liner Cross Section A -South End of Pond



 Pond- Average depth is approximately 3'

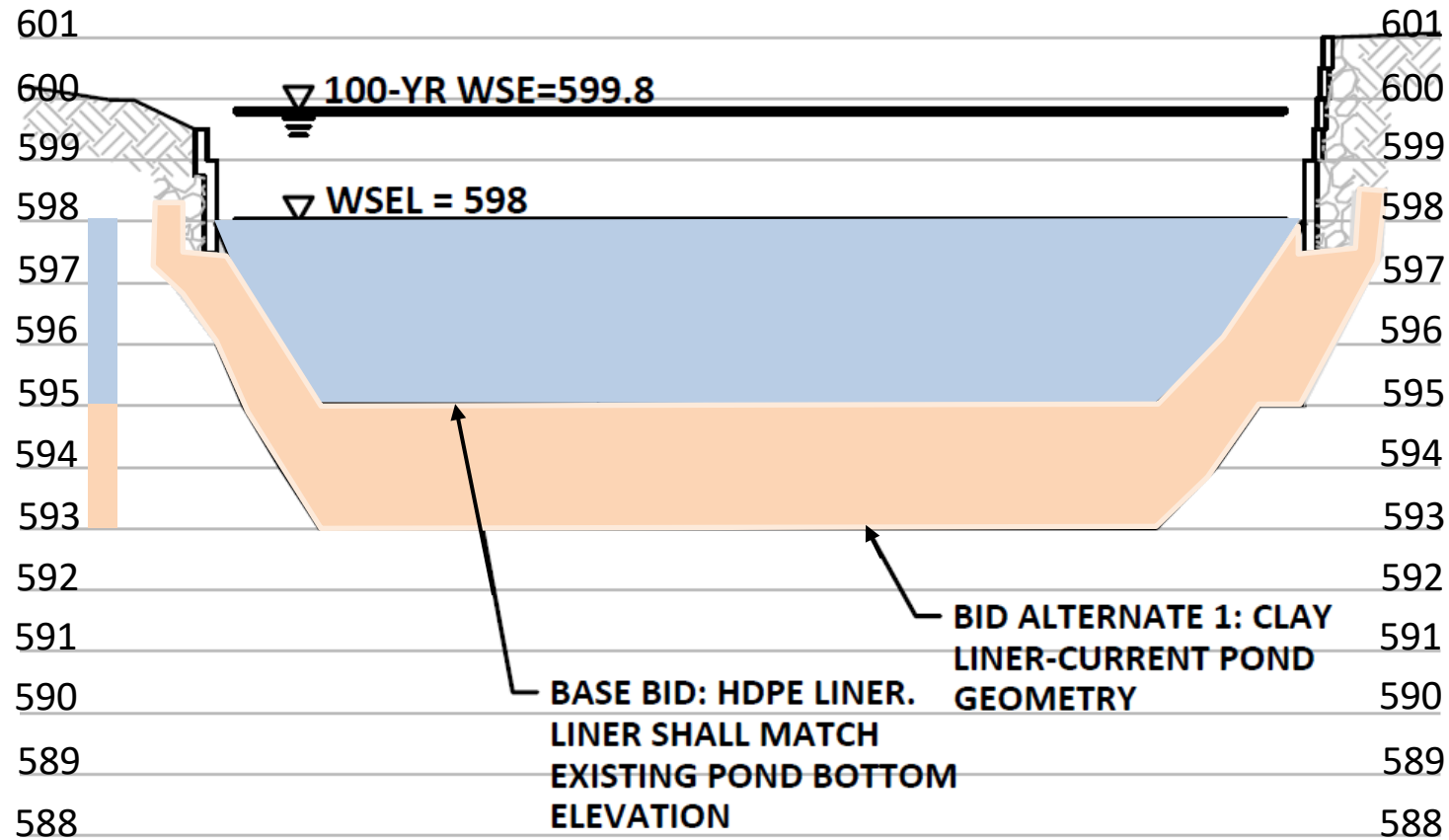
 Existing Sediment- Depth varies

 Clay Liner- Requires 2' additional excavation depth

Design- Failing Pond Liner

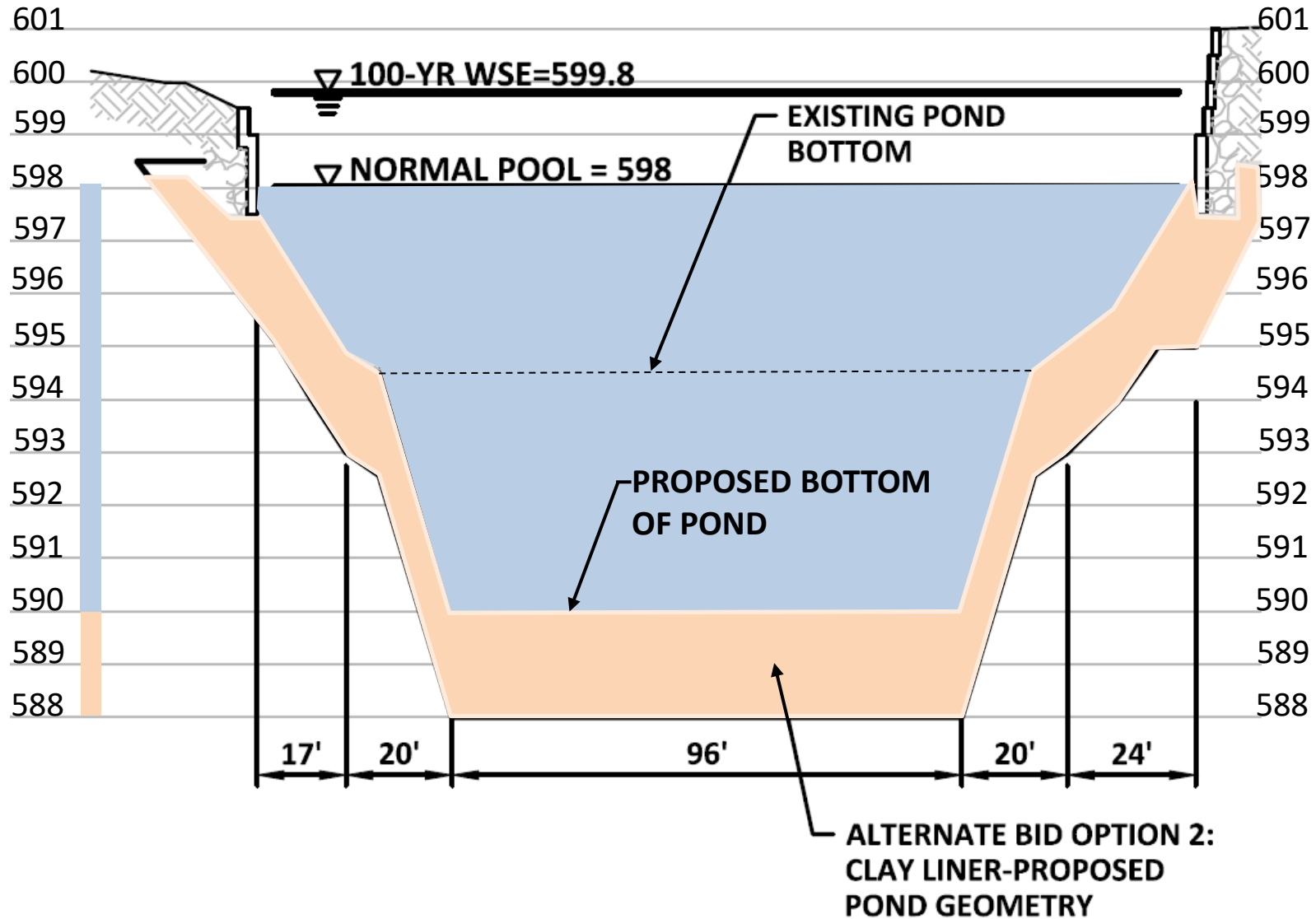


Design-Base Bid and Alternate 1 Bid

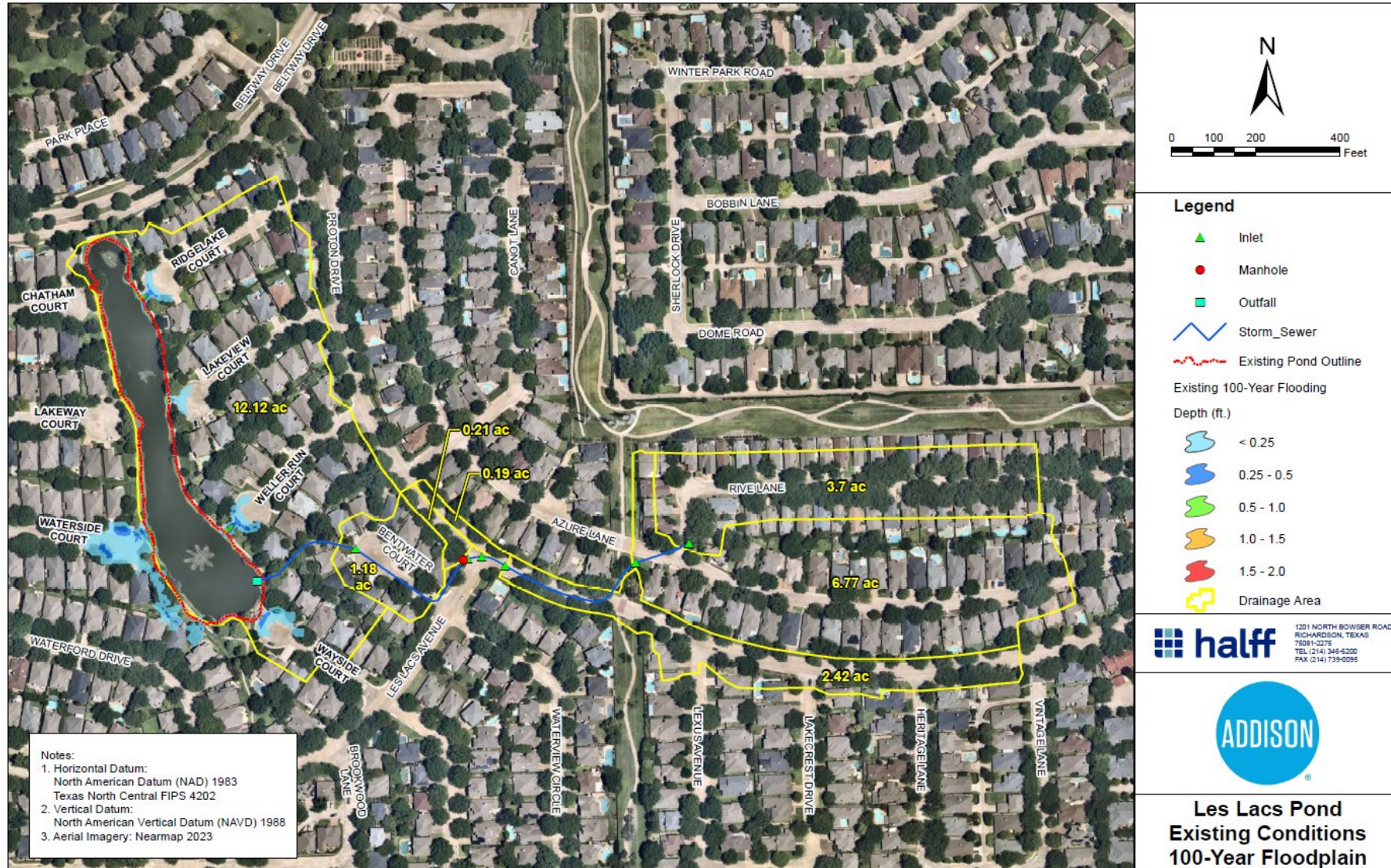


Base Bid and Bid Alternate 1

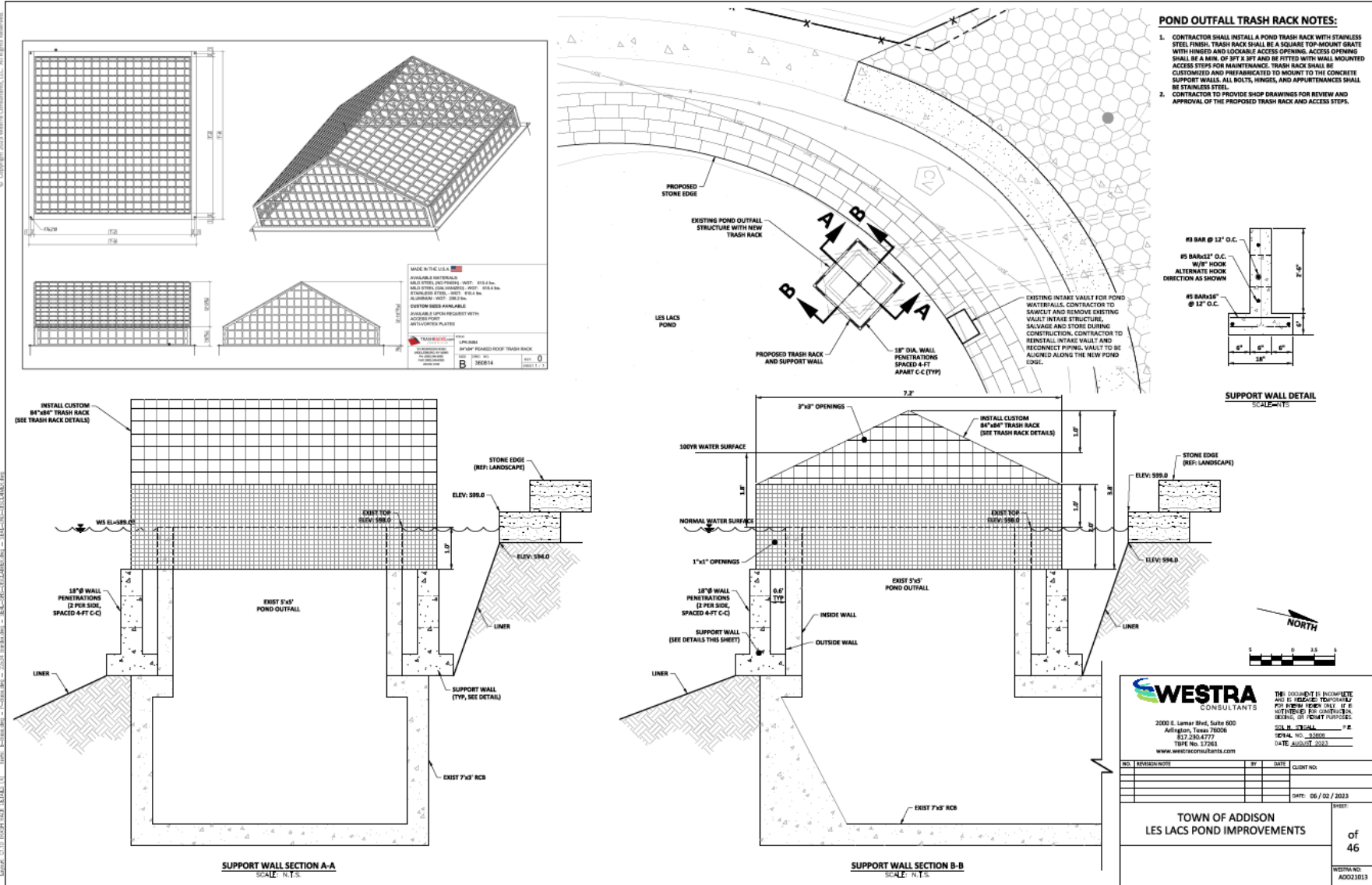
Design- Alternate 2 Bid



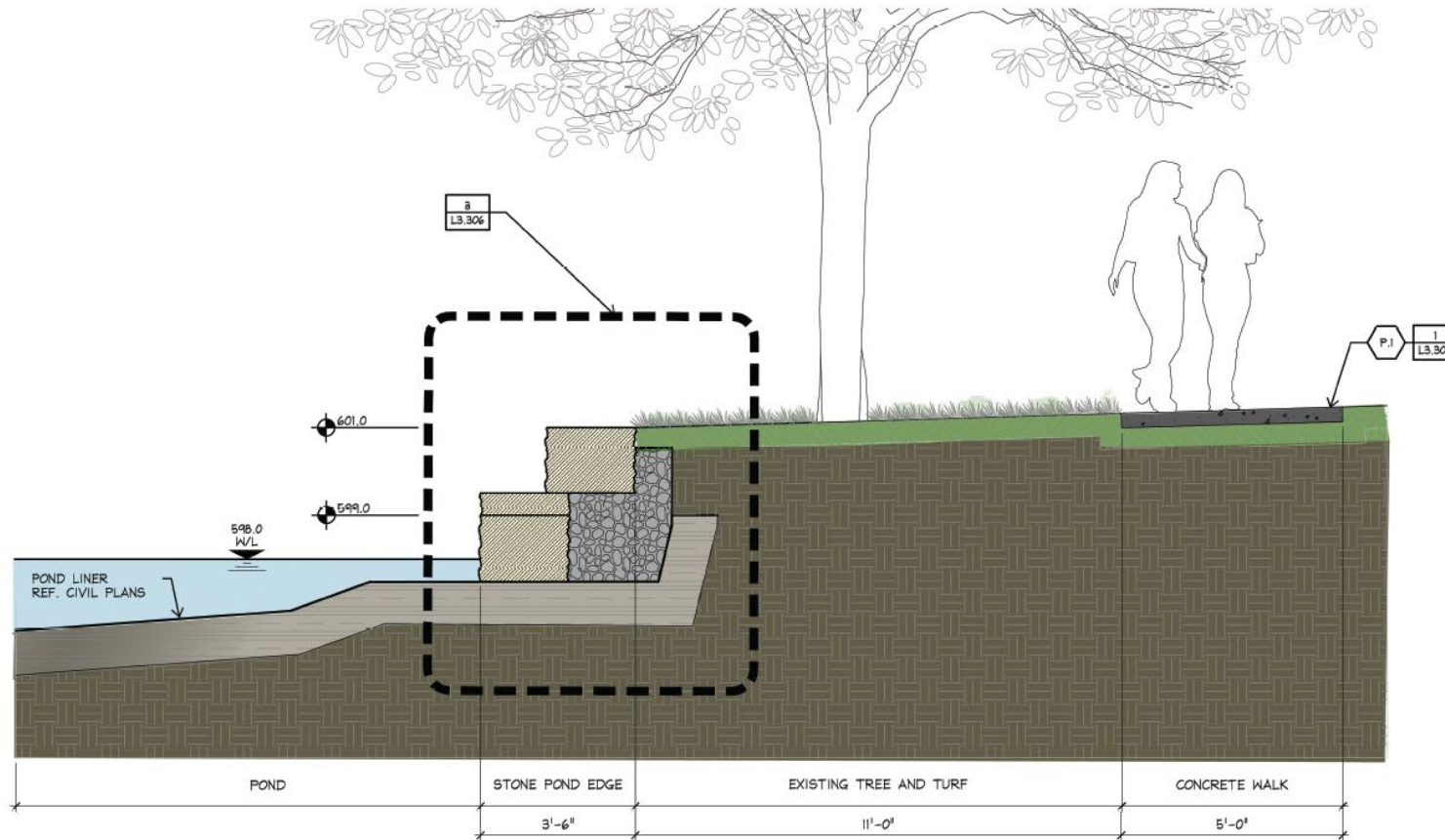
Design- Current Conditions Hydraulic Analysis



Stormwater Management- Trash Rack



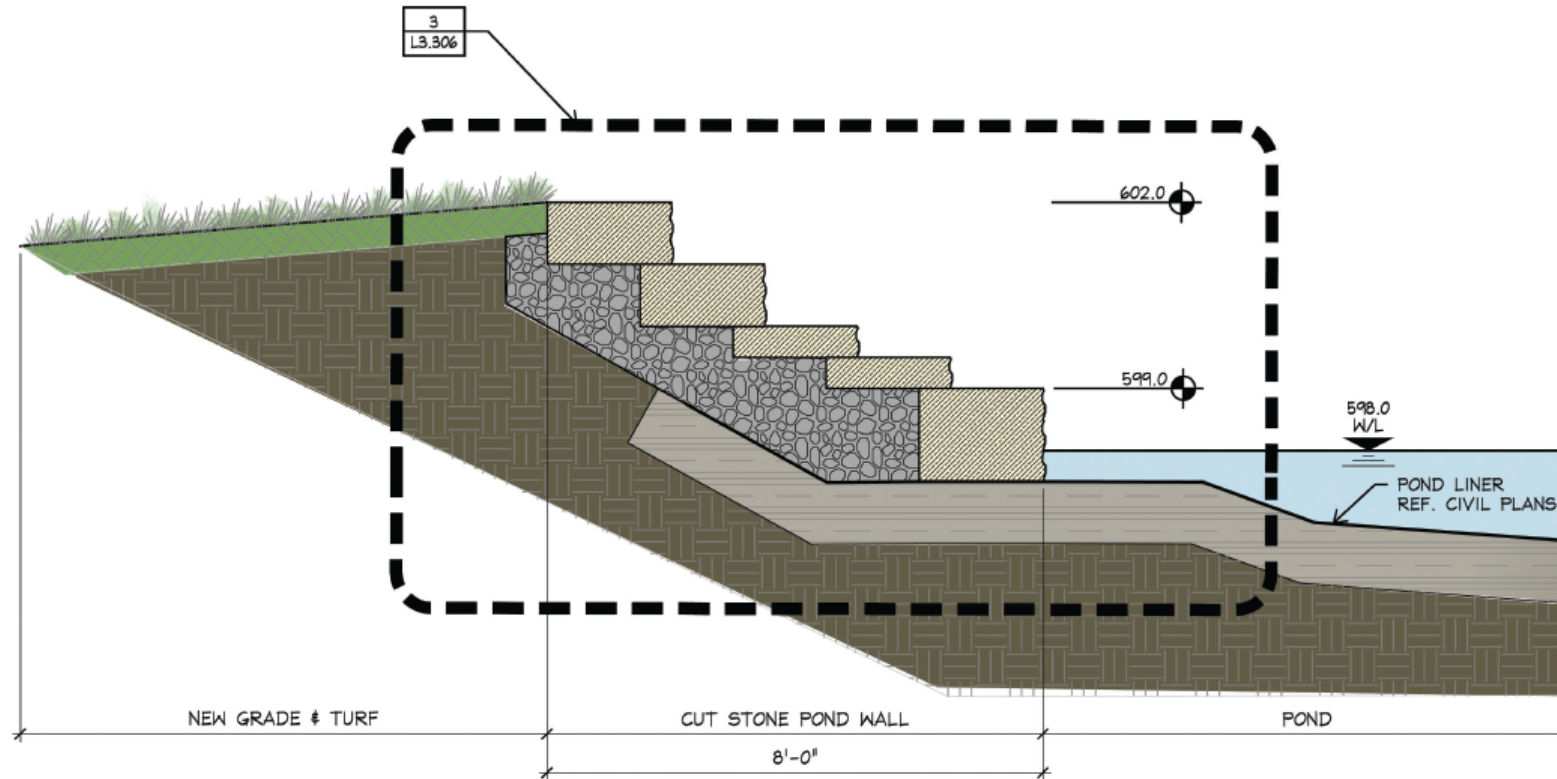
Design Elements- Pond Edge



1 SECTION POND EDGE - CUT STONE EDGE AT PROTECTED TREE

SCALE: 1/2"=1'-0"

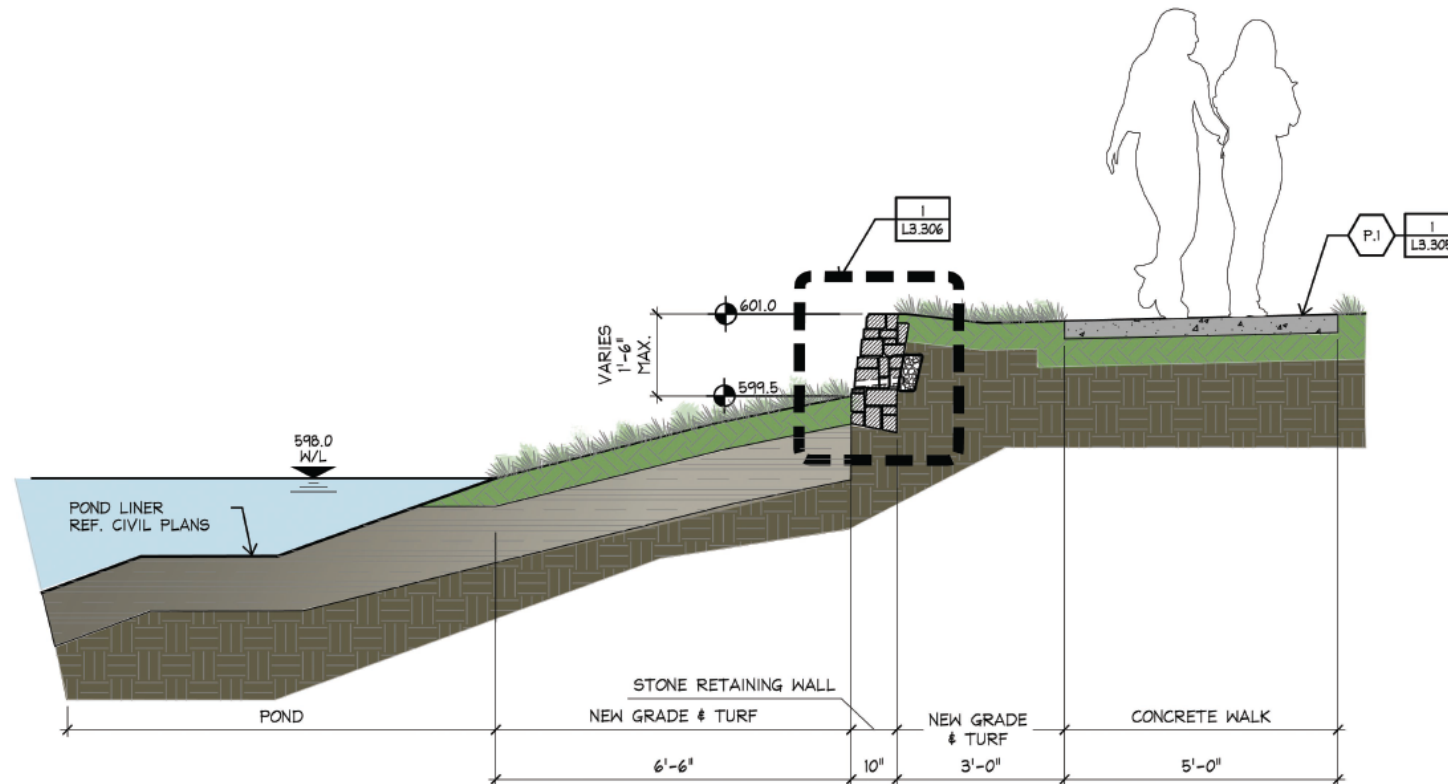
Design Elements- Pond Edge



3 POND EDGE - CUT STONE EDGE WITH VARIED STONE HEIGHT
SECTION

SCALE: 1/2"=1'-0"

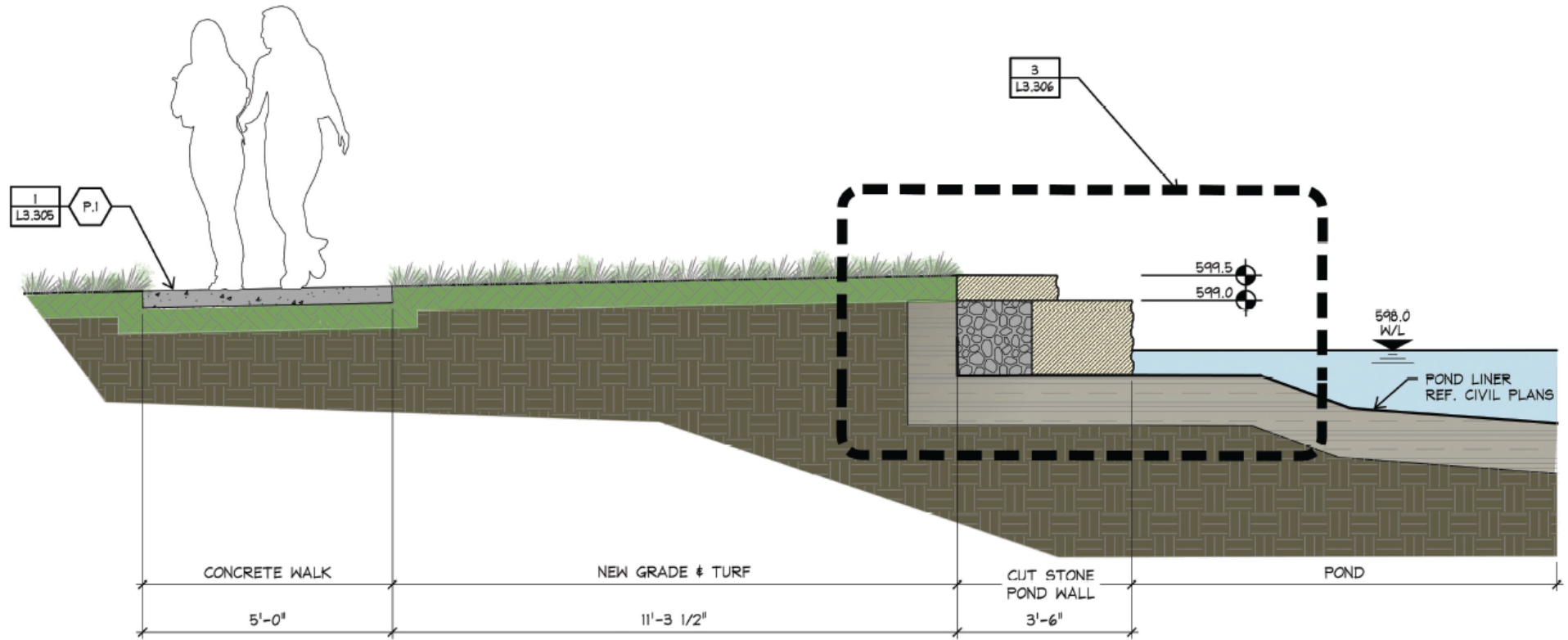
Design Elements- Pond Edge



2 POND EDGE - NATURAL EDGE & STONE RETAINING WALL
SECTION

SCALE: 1/2"=1'-0"

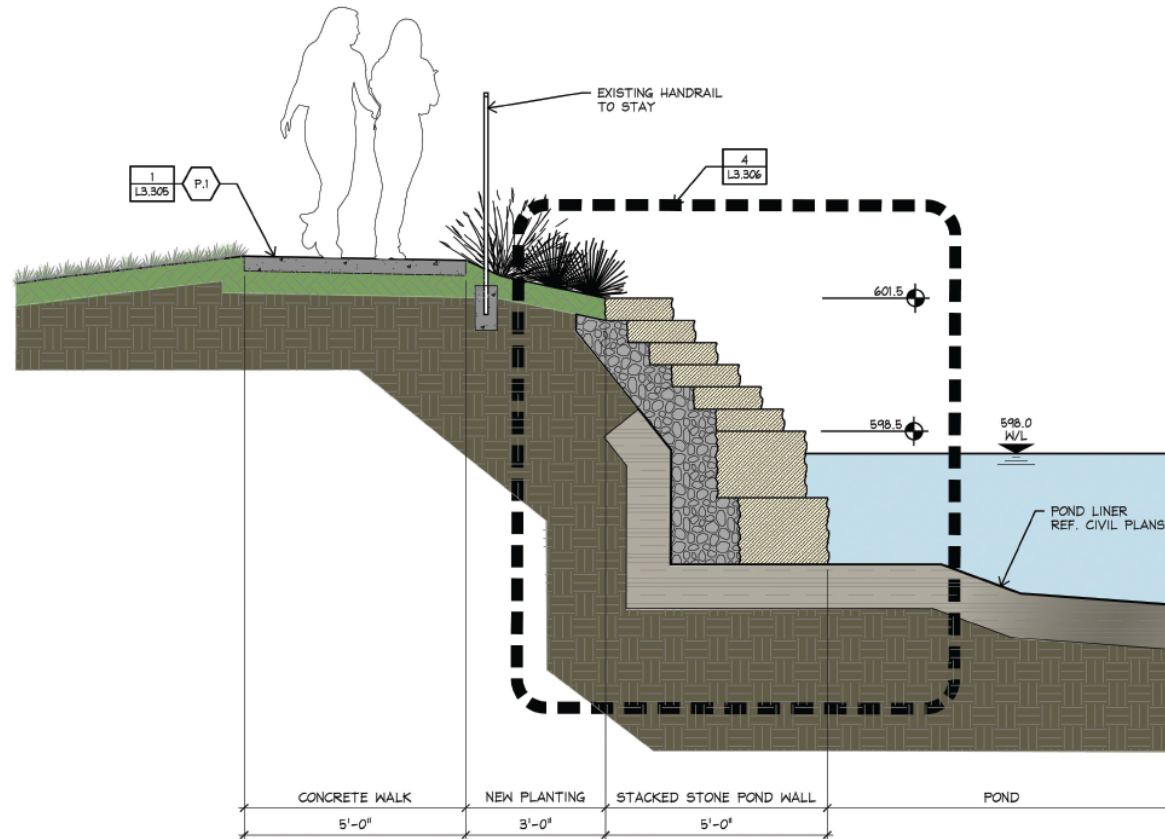
Design Elements- Pond Edge



1 POND EDGE - CUT STONE EDGE WITH TWO STONE LAYERS
SECTION

SCALE: 1/2"=1'-0"

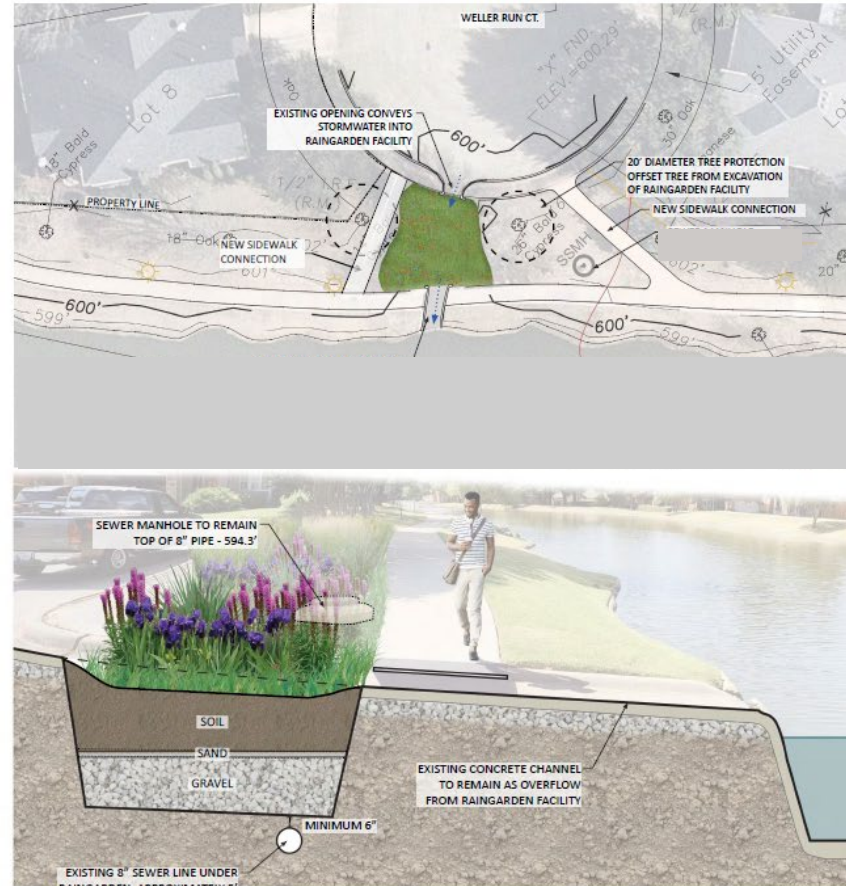
Design Elements- Pond Edge



2 POND EDGE - NEW STACKED STONE WALL (TIGHT STACK) AT EXISTING WEST OVERLOOK
SECTION

SCALE: 1/2"=1'-0"

Design Elements- Rain Gardens Alternate



LES LACS POND - STORMWATER MANAGEMENT ENHANCEMENT
ADDISON, TEXAS



LES LACS POND
SITE RENOVATIONS

RAIN GARDEN

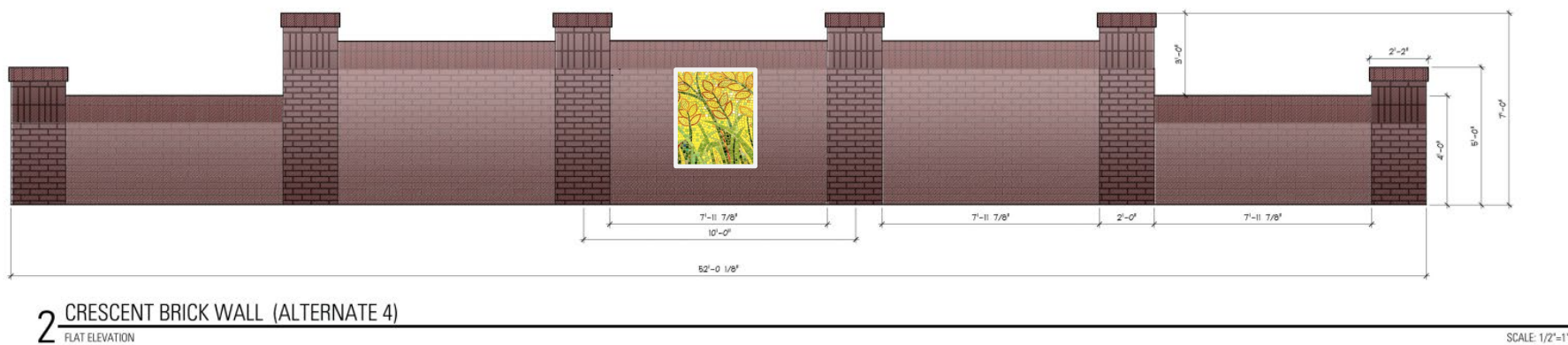
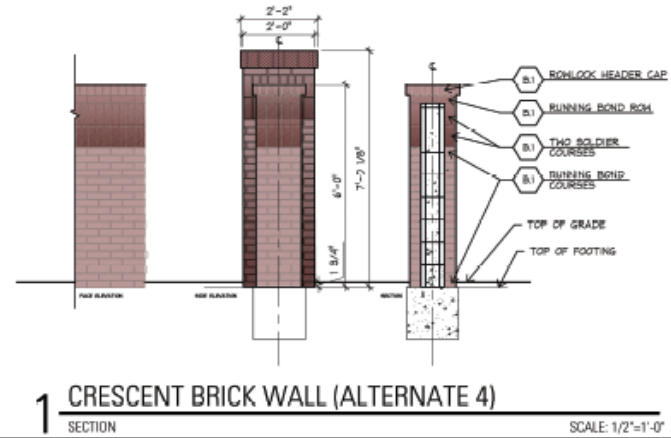
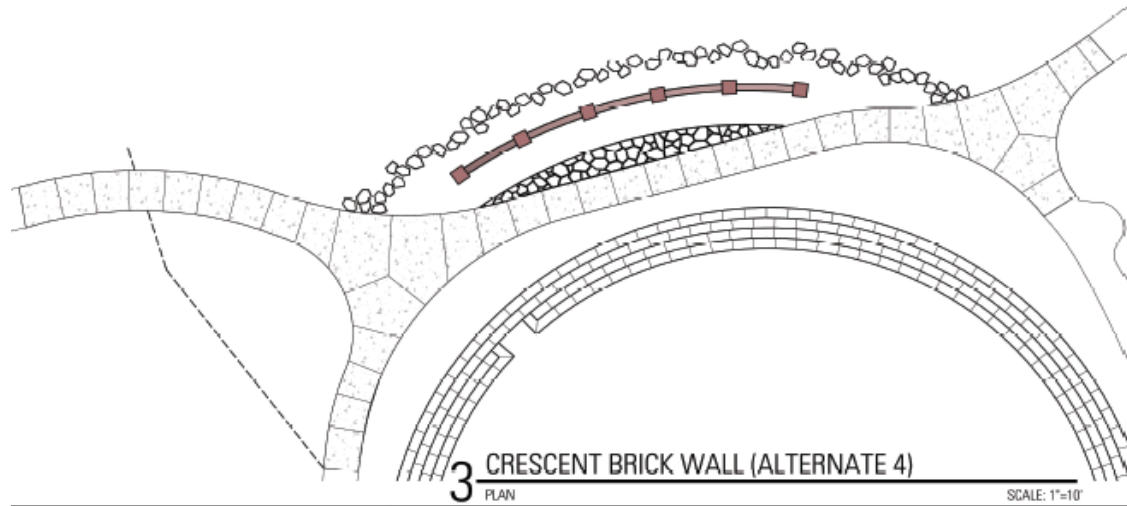


Addison, Texas
11/07/22

T&B
2000 Spring Street
Addison, Texas 75001
214.464.0200
tbg@tbg.com

The information shown
is based on the data
information available
and is subject to change
without notice.

Design Elements- Crescent Brick Wall- Alternate



Mosaic Art to be Provided by the Addison Arbor Foundation

Contractor Procurement- CSP Process

- The Competitive Sealed Proposal Process guides the selection of a contractor based on best value to the Town of Addison. This process is a method of procurement in accordance with Texas Government Code Chapter 2269, Subchapter D.
- The Owner will consider the Contract Price, Statement of Qualifications and other criteria requested of the Offerors to determine which Proposal offers the best value to the Owner. The Proposals will be evaluated using the criteria and weighting described below.

Rating Category	Description	Weighting Value
A	Proposed Contract Price	50%
B	Similar Project References (Pond Liner)	25%
C	Listing of Proposed Suppliers and Subs/ Staff	15%
D	Construction Time based on Calendar Days	10%
Total		100%

Construction Considerations



- CONTRACTORS WILL BE SELECTED BY COMPETITIVE SEALED PROPOSAL OR BEST VALUE TO THE TOWN OF ADDISON.
- ALL PROPOSING CONTRACTOR'S SUBS TO BE PRE-QUALIFIED TO HAVE POND LINER REPLACEMENT EXPERIENCE- 5 YEARS MIN.
- WORKING HOURS WILL BEGIN AT 8:00 A.M. AND END AT 5:00 P.M.
- CONTRACTOR PARKING OR EQUIPMENT STORAGE ON THE 7 CUL-DE-SAC STREETS WILL BE PROHIBITED. MINOR EXCEPTIONS.
- SOUTH SIDE OF BELTWAY DR. WILL BE CLOSED FROM LES LACS AVENUE TO PROTON DRIVE TO BE USED AS CONSTRUCTION ENTRANCE AND CONTRACTOR VEHICLE AND EQUIPMENT PARKING. THIS IS THE ONLY INGRESS/EGRESS TO AND FROM THE SITE.
- NORTH SIDE OF BELTWAY DR. WILL BE TWO-WAY FROM LES LACS AVENUE TO PROTON DRIVE.
- CONSTRUCTION IS EXPECTED TO TAKE APPROXIMATELY 10 TO 12 MONTHS TO COMPLETE

Construction Considerations



- TOWN STAFF WILL INSPECT THE PROJECT ON A DAILY BASIS.
- REGULAR UPDATES WILL BE PROVIDED ON THE LES LACS POND IMPROVEMENTS PROJECT CONSTRUCTION PAGE.
- A CLOSED SYSTEM PERIMETER FENCE WILL BE PROVIDED WITH OPAQUE SCREENING TO MITIGATE VIEWS TO THE CONSTRUCTION SITE FROM PRIVATE PROPERTIES.
- GRASS INSIDE AND IMMEDIATELY OUTSIDE THE PERIMETER FENCE WILL BE KEPT AT 4" OR BELOW.
- NO CHANGES WILL BE MADE TO PRIVATE PROPERTY AS A RESULT OF THIS PROJECT. SITE SURVEY LOCATED ALL PRIVATE PROPERTY.
- UNPLEASANT ODORS MAY BE PRESENT, ESPECIALLY DURING THE SEDIMENT REMOVAL PROCESS.
- IF ALTERNATE BIDS ARE CHOSEN INVOLVING ROCK REMOVAL, THE PROJECT SITE MAY BECOME LOUD FOR PERIODS OF TIME DURING THE DAYTIME ONLY.

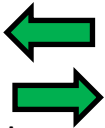
Construction- Access & Storage



Beltway E.B.
Lane Closure
Les Lacs to
Proton



Beltway two-
Way traffic N.
side of road



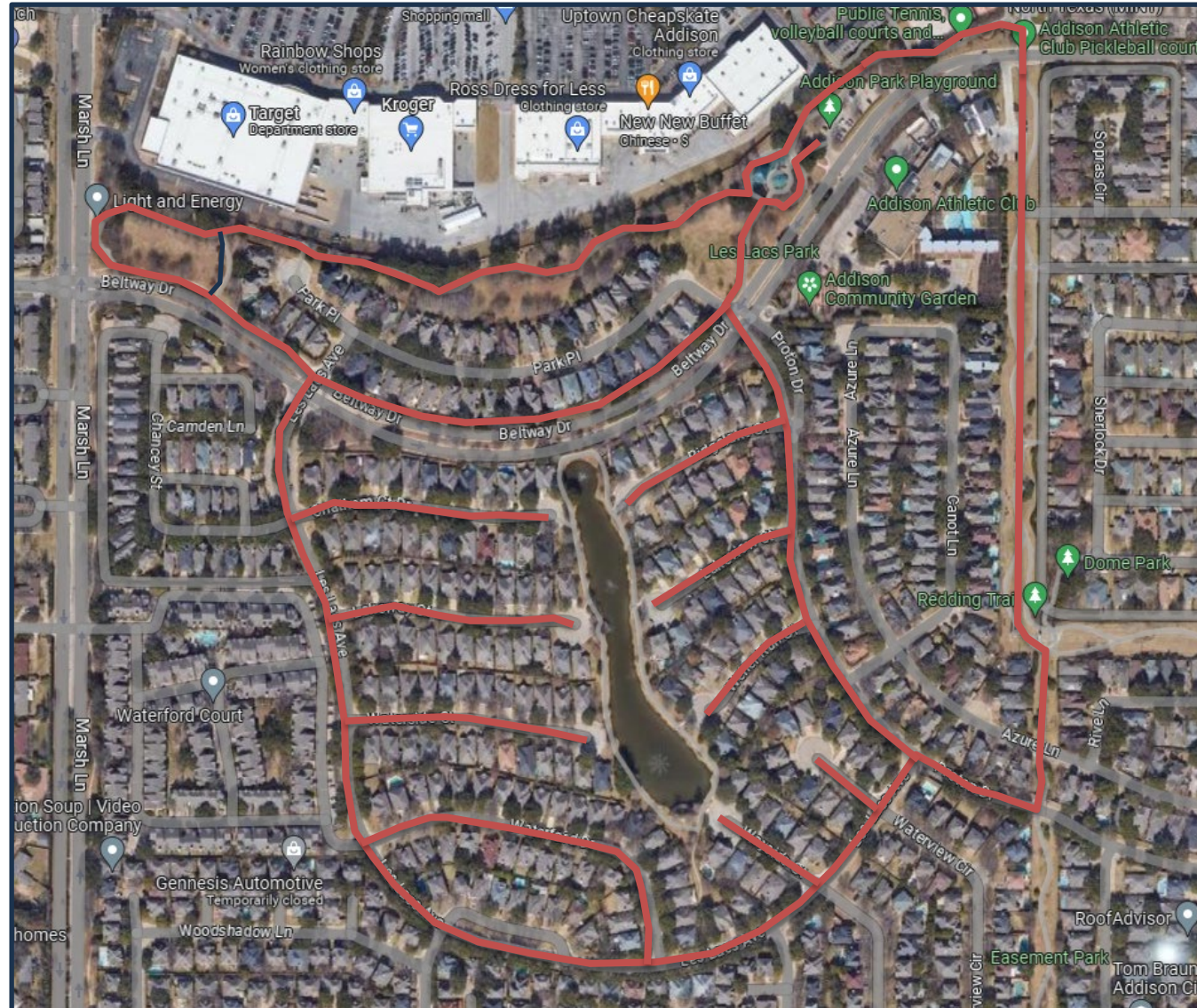
Beltway E.B.
and W.B.
traffic from Les
Lacs to Marsh
and Proton



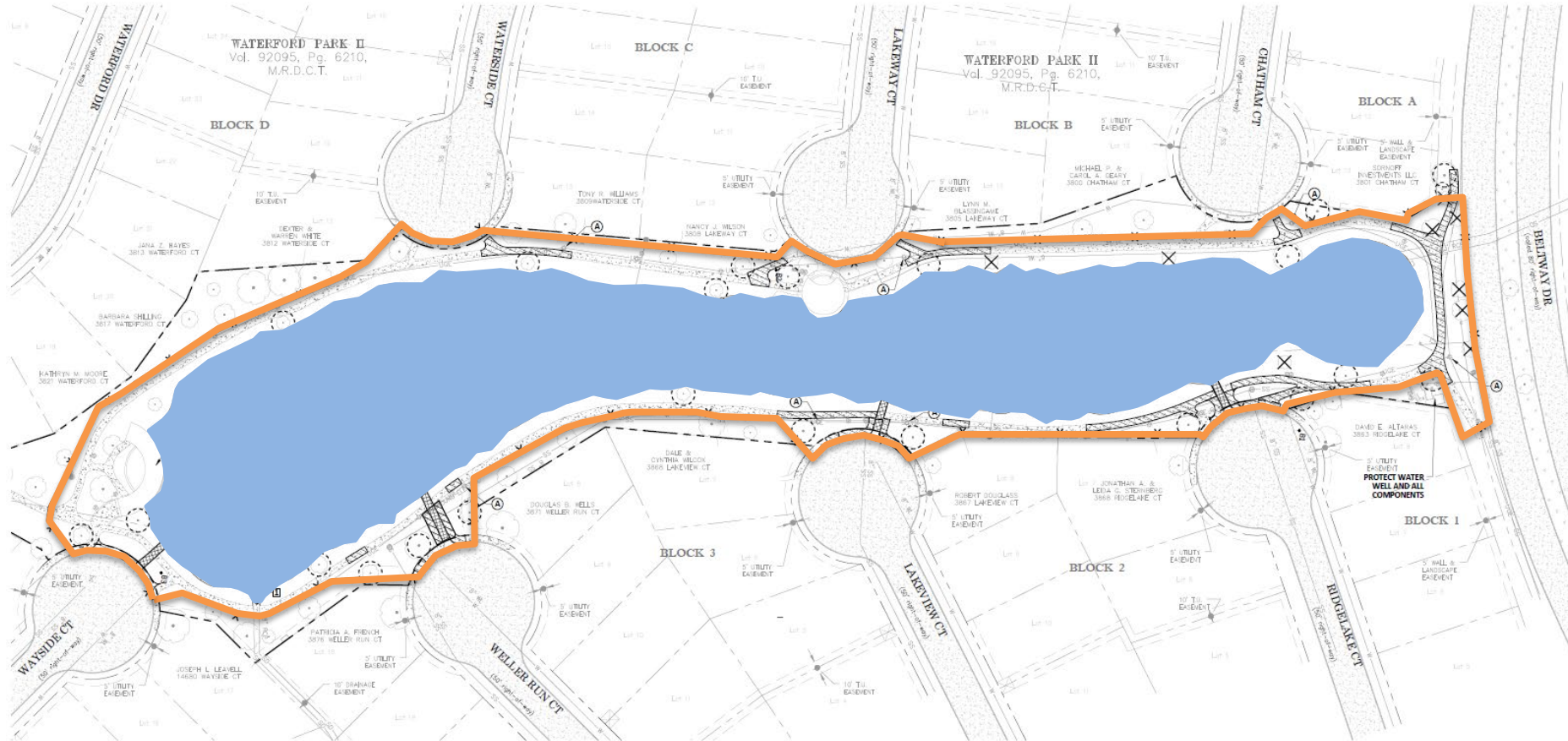
Construction- Alternate Walking Paths

Alternate Walking Paths

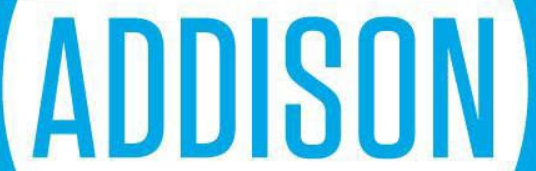
- Les Lacs Trail from north end of Redding Trail to Marsh Ln and back to Les Lacs Park Parking lot and AAC.
- Redding Trail from Beltway Dr. to Proton Drive and Les Lacs Avenue Public Sidewalks.



Construction- Perimeter Fencing & Dewatering



Questions

The logo for Addison, featuring the word "ADDISON" in a bold, blue, sans-serif font centered within a white circle. This circle is set against a blue background that is part of a larger graphic design on the right side of the slide, which includes diagonal lines and a grey triangle.