

**SITE PLAN REVIEW SHEET  
ENVIRONMENTAL VARIANCE REQUEST ONLY**

**CASE:** SP-2019-0417D

**ZAP COMMISSION DATE:** 16/06/2020

**PROJECT NAME:** Additional 300K Ground Water Storage Improvements 360

**APPLICANT:** Gray Engineering, Inc.

**AGENT:** David Gray

**ADDRESS OF SITE:** 5418-1/2 Buckman Mountain Road, Austin, TX 78746

**COUNTY:** Travis

**WATERSHED:** Lake Austin (Water Supply Rural) **JURISDICTION:** ETJ

**EXISTING ZONING:** N/a

**PROPOSED DEVELOPMENT:** Water Storage Tank

**DESCRIPTION OF VARIANCE:**

The applicant requests the following:

1. Request to vary from LDC 25-8-341 to allow for cut that exceeds four feet in depth and not more than 8 feet.

**STAFF RECOMMENDATION:**

Staff recommends this variance, having determined the findings of fact to have been met.

**ENVIRONMENTAL BOARD ACTION:**

**20/05/2020:** The Environmental Board voted in (11) favor, (0) against, (0) absentia

**ZONING AND PLATTING COMMISSION ACTION:**

**ENVIRONMENTAL REVIEW STAFF:** Hank Marley

**PHONE:** 512-974-2067; hank.marley@austintexas.gov

**CASE MANAGER:** Jeremy Siltala

**PHONE:** 512-974-2945; Jeremy.siltala@austintexas.gov

**ENVIRONMENTAL COMMISSION MOTION 20200520-006a**

**Date:** May 20, 2020

**Subject:** Additional 300K Ground Water Storage Tank Improvements 360, SP-2019-0417D

**Motion by:** Kevin Ramberg

**Seconded by:** Mary Ann Neely

**RATIONALE:**

**WHEREAS**, the Environmental Commission recognizes the applicant is requesting a variance from LDC 25-8-341 to allow cut in excess of four feet in depth and not more than 8 feet; and

**WHEREAS**, the Environmental Commission recognizes that staff recommend the variance with conditions having determined the findings of fact have been met.

**THEREFORE**, the Environmental Commission recommends approval of the requested variance from LDC 25-8-341 to allow cut in excess of 4 feet and not more than 8 feet with the following;

**Staff Conditions:**

1. Preserve the following trees next to the hammer head turnaround, the water quality pond, and the water tank: #524 Cedar; #525 Cedar; #526 Cedar; #527 Cedar and #534 Cedar; and
2. Re-vegetate all disturbed areas including the staging and storage area near the Buckman Mountain Road with City Standard Specification 604S.6 Native Grass and Forb Seeding.

**VOTE 11-0**

For: Creel, Smith, Thompson, Nill, Neely, Coyne, Maceo, Ramberg, Guerrero, Gordon, and Bedford

Against: None

Abstain: None

Recuse: None

Absent: None

Approved By:

Linda Guerrero, Environmental Commission Chair



Development Services Department  
Staff Recommendations Concerning Required Findings

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Project Name:	SP-2019-0417D Additional 300K Ground Water Storage Tank Improvements 360
Ordinance Standard:	Watershed Protection Ordinance
Variance Request:	For cut (LDC 25-8-341) exceeding 4 feet in depth in the Drinking Water Protection Zone

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Include an explanation with each applicable finding of fact.

A. Land Use Commission variance determinations from Chapter 25-8-41 of the City Code:

1. The requirement will deprive the applicant of a privilege available to owners of similarly situated property with approximately contemporaneous development subject to similar code requirements.

Yes                      Many water supply corporations, municipal utility districts and public utility districts in the area are obligated to expand water storage capacity to meet the needs of their customer base in a known geographical region that they are mandated by the state to service. Therefore, not granting the variance would deprive the owner a privilege available to owners of similarly situated properties.

2. The variance:

- a) Is not necessitated by the scale, layout, construction method, or other design decision made by the applicant, unless the design decision provides greater overall environmental protection than is achievable without the variance;

Yes                      The Loop 360 Water Supply Corporation is required to provide an additional 300,000 gallons of storage to its customers. The proposed water storage tank is designed to be connected to and support the existing tank that sits on the adjacent easement. The adjacent tank has an overflow elevation of 870 feet. Therefore, the proposed tank will also have an overflow elevation of 870 feet as it will be filled simultaneously by the same water pumps used for the existing tank. The cut in excess of four feet is needed so that the required 300,000 gallons of water storage is contained under the 870 foot elevation. In addition, the footprint of the tank

cannot be expanded because the tank must be designed to fit within the allotted easement. Within this easement, there is also surface area required to provide a sidewalk / concrete trickle channel to convey overflow drainage towards the pond and an earthen berm that will prevent off-site surface water flows onto the site. Furthermore, the allotted easement cannot be expanded as there are two existing guy wire anchors for the communication tower immediately adjacent to the west of the project site. Options to adjust the location or configuration of the proposed tank are infeasible based on the site characteristics unique to this property and based on the required design specifications for the proposed tank. See Staff Exhibit 1 – Proposed Site Plan.

- b) Is the minimum deviation from the code requirement necessary to allow a reasonable use of the property;

Yes Since a minimum of 300,000 gallons are required to meet the demands of the water supply corporations customer base during peak flow and be able to contain that storage capacity under an overflow elevation of 870 feet, then a cut that exceeds 4 feet in depth below the water tank is required. The maximum depth of cut required is no more than 5.5 feet. Also, the area within the allotted easement must be designed to include a required water quality pond to treat onsite flows and provide a required hammer head turn-around. Thus, minimizing surface area to be used to widen the water storage tank. Therefore, the variance is the minimum deviation from the code requirement necessary to allow a reasonable use of the property.

- c) Does not create a significant probability of harmful environmental consequences.

Yes A retaining wall to ensure slope stability has been designed at the location of the cut exceeding four feet. Furthermore, the proposed project has been designed to preserve as many trees as possible, even though the site is entirely within the City's Extra Territorial Jurisdiction (ETJ); where City code does not extend tree preservation requirements. Without the variance these trees could not be preserved. Therefore, the variance would not create a significant probability of harmful environmental consequences.

3. Development with the variance will result in water quality that is at least equal to the water quality achievable without the variance.

Yes In order to meet City code requirements, the proposed development is designed to include the construction of a water quality pond in the form of a bio filtration basin. Due to spacing constraints



within the allotted easement, without the variance the water quality pond would not be feasible.

B. The Land Use Commission may grant a variance from a requirement of Section 25-8-422 (*Water Supply Suburban Water Quality Transition Zone*), Section 25-8-452 (*Water Supply Rural Water Quality Transition Zone*), Section 25-8-482 (*Barton Springs Zone Water Quality Transition Zone*), Section 25-8-368 (*Restrictions on Development Impacting Lake Austin, Lady Bird Lake, and Lake Walter E. Long*), or Article 7, Division 1 ( *Critical Water Quality Zone Restrictions* ), after determining that::

1. The criteria for granting a variance in Subsection (A) are met;

N/a

2. The requirement for which a variance is requested prevents a reasonable, economic use of the entire property;

N/a

3. The variance is the minimum deviation from the code requirement necessary to allow a reasonable, economic use of the entire property.

N/a

Staff Determination: Staff determines that the findings of fact have been met. Staff recommends the following conditions:

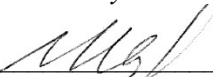
1. Preserve the following trees next to the hammer head turnaround the water quality pond and the water tank: #524 Cedar; #525 Cedar; #526 Cedar; #527 Cedar and #534 Cedar.
2. Re-vegetate all disturbed areas including the staging and storage area near the Buckman Mountain Road with City Standard Specification 604S.6 Native Grass and Forb Seeding.

Environmental Reviewer  
(DSD)

  
Hank Marley


Date 5/5/2020

Environmental Review  
Manager (DSD)

  
Mike McDougal

Date 5/3/2020

Environmental Officer  
(WPD)

  
Chris Herrington, P.E.

Date 05/05/2020



February 20, 2020



## ENVIRONMENTAL COMMISSION VARIANCE APPLICATION FORM

### PROJECT DESCRIPTION

#### Applicant Contact Information

Name of Applicant	David Gray, P.E.
Street Address	8834 North Capital of Texas Highway, Suite 140
City State ZIP Code	Austin, TX 78759
Work Phone	512-452-0371
E-Mail Address	dwg@grayengineeringinc.com

#### Variance Case Information

Case Name	Additional 300K Ground Water Storage Tank Improvements 360
Case Number	SP-2019-0417D
Address or Location	5318 1/2 BUCKMAN MOUNTAIN ROAD
Environmental Reviewer Name	Hank Marley
Environmental Resource Management Reviewer Name	
Applicable Ordinance	LDC 25-8-341
Watershed Name	Lake Austin Watershed
Watershed Classification	<input type="checkbox"/> Urban <input type="checkbox"/> Suburban <input type="checkbox"/> Water Supply Suburban <input checked="" type="checkbox"/> Water Supply Rural <input type="checkbox"/> Barton Springs Zone

Edwards Aquifer Recharge Zone	<input type="checkbox"/> Barton Springs Segment <input type="checkbox"/> Northern Edwards Segment <input checked="" type="checkbox"/> Not in Edwards Aquifer Zones
Edwards Aquifer Contributing Zone	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Distance to Nearest Classified Waterway	5,750 FT (LAKE AUSTIN)
Water and Waste Water service to be provided by	
Request	The variance request is as follows (Cite code references:

Impervious cover  square footage:  acreage:  percentage:	<b>Existing</b>  2173.96 SF <hr/> .05 ACRES <hr/> 1.154% OF NET SITE AREA <hr/>	<b>Proposed</b>  7333.99 SF (ADDITIONAL) <hr/> 0.168 ACRES (ADDITIONAL) 0.213 ACRES (TOTAL) <hr/> 5.05% OF NET SITE AREA (TOTAL) <hr/>
Provide general description of the property (slope range, elevation range, summary of vegetation / trees, summary of the geology, CWQZ, WQTZ, CEFs, floodplain, heritage trees, any other notable or outstanding characteristics of the property)	<div style="border: 2px solid black; padding: 10px;"> <p>The site is within the 10.013 lot 11 of the Mary Jane Lee Subdivision. Improvements will occur inside a 0.334 Acre "Water Tank Easement" (DOC NO. 2019059274 OPRTCT) within this property. Slopes within the water tank easement range from 0% - 40%. Slopes within the whole property range from 0% - 70%. There are trees over 8" within this easement, listed on the Erosion Control Sheet of the construction plans. 8 Trees are proposed to be removed with this development, none of which are heritage trees. Elevations within the developable easement range from 846.00 to 860.75 sloping downward from North to South. The property is not in the 100 year floodplain, CWQZ, or WQTZ.</p> </div>	

February 20, 2020

Clearly indicate in what way the proposed project does not comply with current Code (include maps and exhibits)

LDC 25-8-341 states that cut may not exceed 4 feet of depth. Due to the required location and overflow elevation of the proposed tank and associated water quality rain garden, a cut of up to 5.259 feet is required. See Exhibit A - Variance Request Letter for further explanation.

EXHIBIT A - VARIANCE REQUEST LETTER  
EXHIBIT B - AERIAL MAPS  
EXHIBIT C - SITE PHOTOS  
EXHIBIT D - CONTEXT MAP  
EXHIBIT E - CUT/FILL GRADING EXHIBIT

EXHIBIT F - APPROVED ERI  
EXHIBIT G - TOPOGRAPHIC/SLOPE MAP  
EXHIBIT H - CONSTRUCTION PLAN SET

## FINDINGS OF FACT

As required in LDC Section 25-8-41, in order to grant a variance the Land Use Commission must make the following findings of fact:

Include an explanation with each applicable finding of fact.

Project:

Ordinance:

A. Land Use Commission variance determinations from Chapter 25-8-41 of the City Code:

1. The requirement will deprive the applicant of a privilege available to owners of similarly situated property with approximately contemporaneous development subject to similar code requirements.

Yes/ No

The construction of the proposed tank with the required storage capacity, location, and overflow elevation would not be possible without exceeding 4' of cut. See explanation for this in section 2a) below. The adjacent property is subject to similar code requirements and has an identical ground water storage tank with greater capacity (400,000 gallon).

2. The variance:
  - a) Is not necessitated by the scale, layout, construction method, or other design decision made by the applicant, unless the design decision provides greater overall environmental protection than is achievable without the variance;

Yes/ No

The cut depth in excess of 4 feet is necessary to meet the required volume of the tank (300,000 gallons). This is the additional storage capacity required for Loop 360 Water Supply Corporation to provide to its customers. The reason the tank cannot be placed at a higher elevation is that the tank has a required overflow elevation of 870'. All water storage tanks must have an overflow elevation. The overflow elevation provides relief of excess water if the pumps filling the tank malfunction and do not turn off when they are supposed to. The overflow elevation of this tank is required to be 870' because it will be filled simultaneously with the existing tank. Even if the new tank's overflow elevation was above 870', it will still be unable to fill up over 870' because it will be connected to the existing tank. Therefore the overflow elevation, and all 300,000 gallons of required storage capacity must be under the 870' elevation.

The footprint of the tank can not be increased to achieve this required volume, because it is required due to spacing constraints. The tank, walls and channel around the tank, berms, water quality rain garden, and drive must all be within the water tank easement (Doc No. 2019059274 OPRTCT). Furthermore there are two existing guy wire anchors for the nearby communications tower to the west of the easement that make it impossible to have the tank located any further west.

Since the tank footprint, location, overflow elevation, and volume are required, the depth of the tank is also required, and thus cut in excess of 4 feet is required.

The position and elevation of the pond is also required because it needs to accept flows from the site, while providing the required water quality volume, and being able to outflow at the proper location. Also note that all cut over 4 feet within the rain garden will be filled with biofiltration media, as part of the requirements for a rain garden.

The smaller footprint of the tank achieved with the required depth also provides greater environmental protection. The smaller footprint reduces increase in impervious cover, minimizes impact to existing grade, and reduces the number of trees needed to be removed.

With extra depth of cut in the pond, the footprint of the pond is also reduced. This also minimizes impact to existing grade and reduces the number of trees needed to be removed.

Also note that City Arborist Taylor Horton has accepted that "all design alternatives which could save trees have been evaluated," and that our plan presents the best option for preserving the most trees.

- b) Is the minimum deviation from the code requirement necessary to allow a reasonable use of the property;

☒ Yes ☐ No

This tank will allow Loop 360 Water Supply Corporation to provide additional water storage capacity to it's customers. This is a reasonable and necessary use for this property. For construction of the water storage tank, and water quality rain garden, the minimum necessary deviation from the code has been taken. Construction of the tank requires cut of up to 5.259 feet, while construction of the rain garden requires cut of up to 5.13 feet. The reasons for this are explained in section 2a) above. Providing the necessary water tank storage capacity and water quality controls, while preserving as many trees as possible, would not be possible without this minimum deviation from the code. Note that all cut over 4 feet within the rain garden will be filled with biofiltration media.

- c) Does not create a significant probability of harmful environmental consequences.

☒ Yes ☐ No

A wall has been proposed behind the tank, at the location of cut exceeding 4 feet. This wall has been designed by a structural engineer to ensure slope stability behind the wall. Walls in the pond are under 3', and the proposed maximum grading other than the walls is 3:1. Therefore there is not a "significant probability of environmental harm at these locations." The variance allows for the preservation of several trees, which would not be possible without the variance.

3. Development with the variance will result in water quality that is at least equal to the water quality achievable without the variance.

☒ Yes ☐ No

A water quality rain garden is being constructed along with storage tank. The rain garden has been designed to meet City of Austin water quality requirements (ECM Appendix R-11). This can be seen on the Pond Plan sheet in the attached construction plans (Exhibit H). Also, the minimal cut over 4 feet will not effect water quality compared to the water quality achievable without the variance.

- B. Additional Land Use Commission variance determinations for a requirement of Section 25-8-422 (Water Quality Transition Zone), Section 25-8-452 (Water Quality Transition Zone), Article 7, Division 1 (Critical Water Quality Zone Restrictions), or Section 25-8-368 (Restrictions on Development Impacting Lake Austin, Lady Bird Lake, and Lake Walter E. Long):

1. The criteria for granting a variance in Subsection (A) are met;

☒ Yes ☐ No

This project is not in the water quality transition zone, or in the critical water quality zone. All requirements in subchapter (A) have been met except 25-8-341, which is the section we are requesting a variance. The subchapter (A), section 25-8-41 criteria for granting a variance have been met, as explained in part A section 1,2, and 3 above.

2. The requirement for which a variance is requested prevents a reasonable, economic use of the entire property;

☒ Yes ☐ No

This tank will allow Loop 360 Water Supply Corporation to provide additional water storage capacity to it's customers. This is a reasonable and necessary use for this property. Without this variance construction of the tank with the required storage capacity, location, and overflow elevation would not be possible. Design of the rain garden to meet ECM appendix R-11 requirements, while preserving as many trees (8" and larger) as possible, would also not be possible.

3. The variance is the minimum deviation from the code requirement necessary to allow a reasonable, economic use of the entire property.

☒ Yes ☐ No

This tank will allow Loop 360 Water Supply Corporation to provide additional water storage capacity to it's customers. This is a reasonable and necessary use for this property. For construction of the water storage tank, and water quality rain garden, the minimum necessary deviation from the code has been taken. Construction of the tank requires cut of up to 5.259 feet, while construction of the rain garden requires cut of up to 5.13 feet. Providing the necessary water tank storage capacity and water quality controls, while preserving as many trees as possible, would not be possible without this minimum deviation from the code. Note that all cut over 4 feet within the rain garden will be filled with biofiltration media.

**\*\*Variance approval requires all above affirmative findings.**

## Exhibits for Commission Variance

- Aerial photos of the site
- Site photos
- Aerial photos of the vicinity
- Context Map—A map illustrating the subject property in relation to developments in the vicinity to include nearby major streets and waterways
- Topographic Map - A topographic map is recommended if a significant grade change on the subject site exists or if there is a significant difference in grade in relation to adjacent properties.
- For cut/fill variances, a plan sheet showing areas and depth of cut/fill with topographic elevations.
- Site plan showing existing conditions if development exists currently on the property
- Proposed Site Plan- full size electronic or at least legible 11x17 showing proposed development, include tree survey if required as part of site or subdivision plan
- Environmental Map – A map that shows pertinent features including Floodplain, CWQZ, WQTZ, CEFs, Setbacks, Recharge Zone, etc.
- An Environmental Resource Inventory pursuant to ECM 1.3.0 ([if required by 25-8-121](#))
- Applicant's variance request letter





O 512.452.0371 ; F 512.454.9933

8834 North Capital of Texas Highway, Suite 140  
Austin, Texas 78759 : [www.grayengineeringinc.com](http://www.grayengineeringinc.com)

TBPE 2946

February 20, 2020

City of Austin Planning and Development Review Department  
One Texas Center  
505 Barton Springs Road  
Austin, TX 78704

**RE:    Loop 360 Water Supply Corporation  
        Additional 300K Ground Water Storage Tank Improvements 360  
        Case No. SP-2019-0417D  
        CUT/FILL Variance Request  
        Site Development Plan  
        GEI No. 1325-11139-33**

Dear Reviewer:

Please accept this letter and attached variance application form as a formal request for a variance to Section 25-8-341, Cut Requirements of the City of Austin Land Development Code. Construction of the Ground Water Storage Tank (Project), and the related water quality rain garden improvements require a cut in excess of 4 feet.

Due to the required storage capacity, location, and overflow elevation of the proposed ground water storage tank, a cut of up to 5.259 feet is required. The Project is being constructed by the Loop 360 Water Supply Corporation to improve its water storage capacity capabilities to its customers. The location of the storage tank is required due to the allotted area provided by the property owner, LIN Television of Texas, L.P. (KXAN) to the Corporation for all proposed improvements, including drives, water quality controls, and grading. Additionally, the location of all proposed improvements ensures the preservation of as many trees (8" and larger) as possible.

Design of the required water quality rain garden requires cut of up to 5.13 feet in order to meet the rain garden requirements outlined in ECM appendix R-11, and Stormwater Management requirements in DCM chapter 8. The position and elevation of the pond is also required because it needs to accept flows from the site, while being able to outflow at the proper location, and preserving as many trees as possible. Also note that all cut over 4 feet within the rain garden will be filled with biofiltration media.

A summary of the items attached for your review is as follows:

1. Environmental Commission Variance Application Form
2. Exhibit A - Variance Request Letter
3. Exhibit B - Aerial Maps
4. Exhibit C - Site Photos
5. Exhibit D - Context Map
6. Exhibit E - Cut/Fill Grading Exhibit
7. Exhibit F - Approved ERI
8. Exhibit G - Topographic/Slope Map
9. Exhibit H - Construction Plan Set





City of Austin Planning and Development Review Department

February 20, 2020

Page 2 of 2

If you have any questions or need additional information regarding this variance request, please call me at (512) 452-0371.

Sincerely,

**GRAY ENGINEERING, INC.**

A handwritten signature in black ink, appearing to read 'David W. Gray', with a long horizontal flourish extending to the right.

David W. Gray, P.E.  
President

DWG:IH:ad

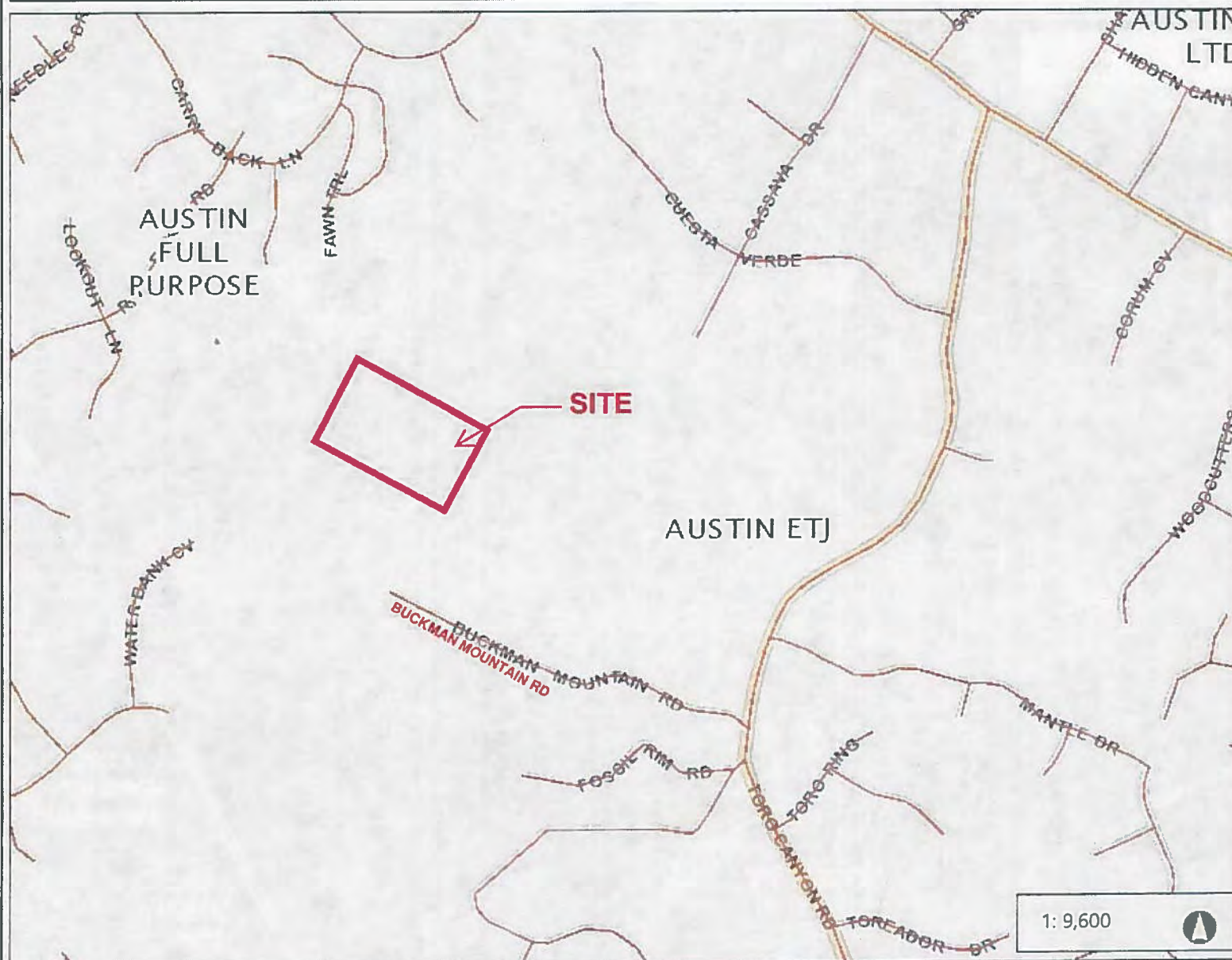
**Attachments**

cc: Board of Directors; Loop 360 Water Supply Corporation (w/o attachments)  
Ms. Natasha Martin; Graves Dougherty Hearon & Moody (w/attachments)  
Mr. Brett Lanham; AWR Services, Inc. (w/o attachments)  
Mr. Herb Edmonson, Jr.; GEI (w/o attachments)  
Mr. Steven Minor, P.E.; GEI (w/o attachments)



# Property Profile

## LOCATION MAP



### Legend

- Streets
- Jurisdiction
  - FULL PURPOSE
  - LIMITED PURPOSE
  - EXTRATERRITORIAL JURISDICTION
  - 2 MILE ETJ AGRICULTURAL AGR
  - OTHER CITY LIMITS
  - OTHER CITIES ETJ
- Jurisdiction
  - FULL PURPOSE
  - LIMITED PURPOSE
  - EXTRATERRITORIAL JURISDICTION
  - 2 MILE ETJ AGRICULTURAL AGR
  - OTHER CITY LIMITS
  - OTHER CITIES ETJ

### Notes

0.3 0 0.15 0.3 Miles

NAD\_1983\_StatePlane\_Texas\_Central\_FIPS\_4203\_Feet

Date Printed:

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# Property Profile

## CURRENT AERIAL MAP



### Legend

- Streets
- Jurisdiction
  - FULL PURPOSE
  - LIMITED PURPOSE
  - EXTRATERRITORIAL JURISDICTION
  - 2 MILE ETJ AGRICULTURAL AGR
  - OTHER CITY LIMITS
  - OTHER CITIES ETJ
- Lot Line
- ▣ Recorded Subdivision

### Notes

0.2 0 0.08 0.2 Miles

NAD\_1983\_StatePlane\_Texas\_Central\_FIPS\_4203\_Feet

Date Printed:

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[illegible]

ADDITIONAL 300K  
GROUND WATER  
STORAGE TANK  
IMPROVEMENTS

## EXISTING COND & DEMOLITION PLAN

PROJECT NO: 1325-11139

DESIGNED BY: SB

DRAWN BY: SB

CHECKED BY: DWG

**NOTICE:**  
ALTERATION OF A  
SEALED DRAWING  
WITHOUT PROPER  
NOTIFICATION TO THE  
RESPONSIBLE ENGINEER  
IS A VIOLATION OF THE  
TEXAS ENGINEERING  
PRACTICE ACT.









[illegible]

ADDITIONAL 300K  
GROUND WATER  
STORAGE TANK  
IMPROVEMENTS

## SITE DIMENSION PLAN

PROJECT NO: 1325-11139

DESIGNED BY: SB

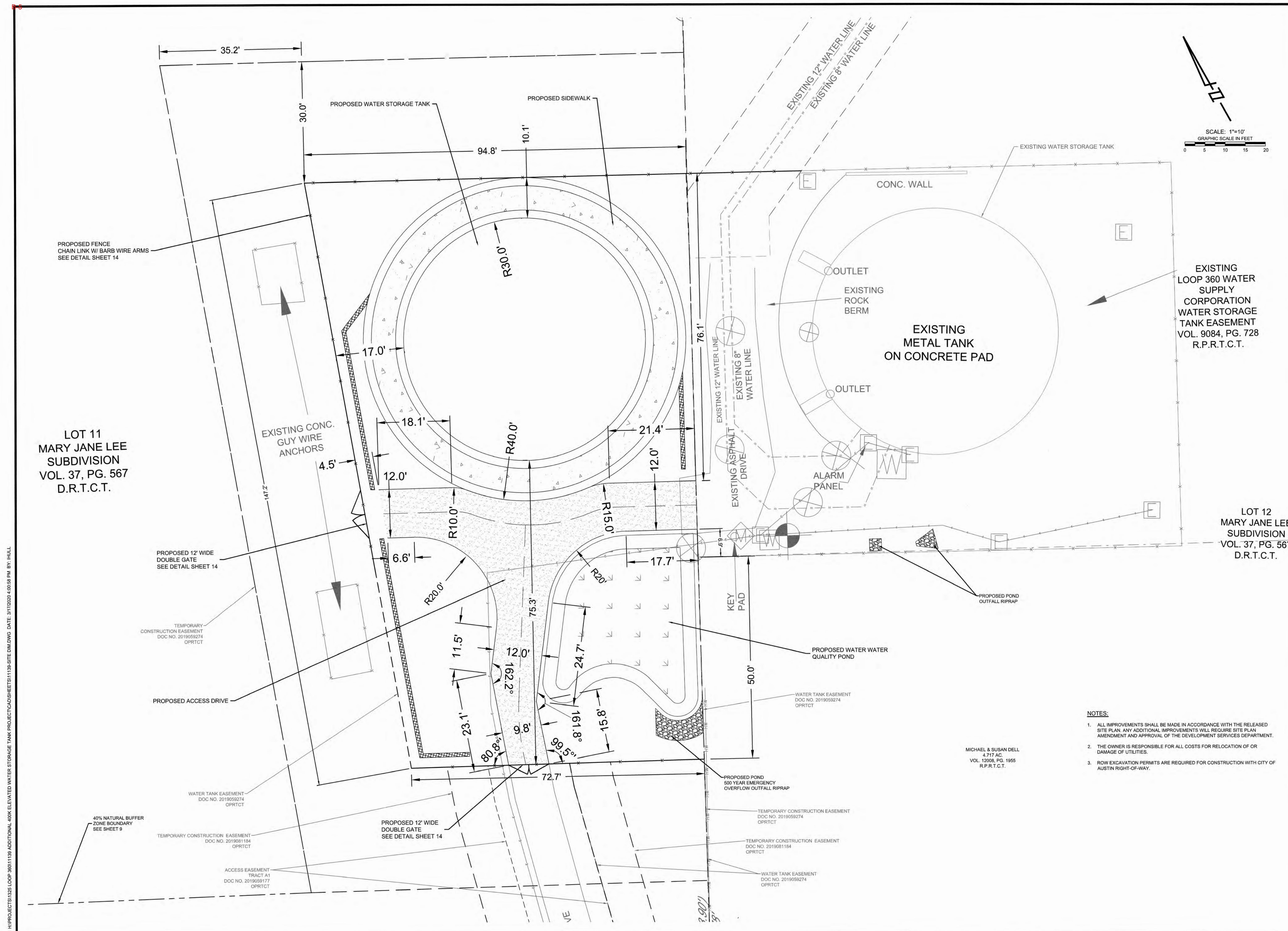
DRAWN BY: CB

DRAWN BY: SB

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WITHOUT PROPER  
NOTIFICATION TO THE  
RESPONSIBLE ENGINEER  
IS A VIOLATION OF THE  
TEXAS ENGINEERING  
PRACTICE ACT.



SHEET 8 OF 26



H:\PROJECTS\1325 LOOP 360\11139 ADDITIONAL 400K ELEVATED WATER STORAGE TANK PROJECT\CAD\SHEETS\11139-SITE DIM.DWG DATE: 3/17/2020 4:00:58 PM BY: HULL

SP-2019-04171



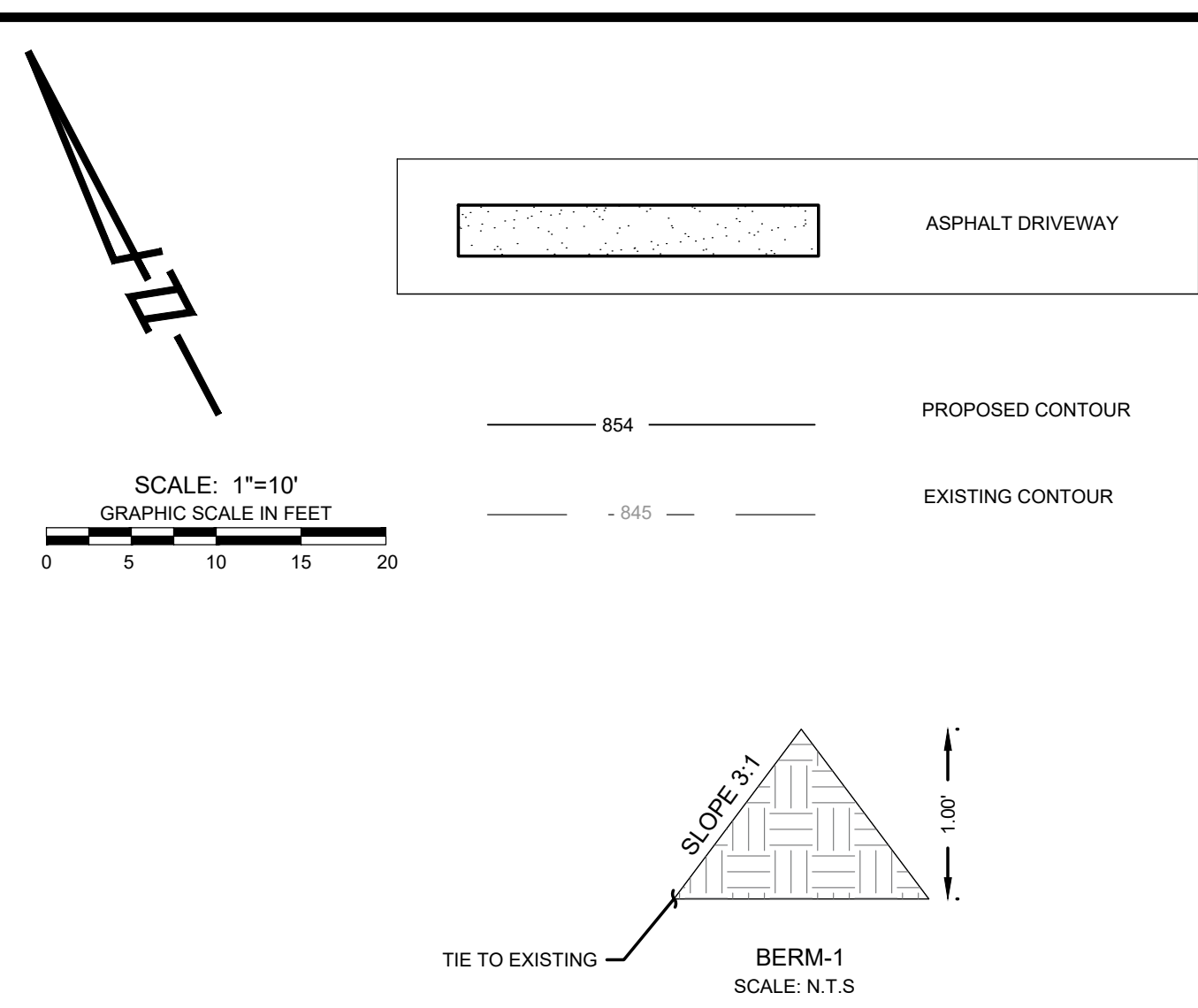
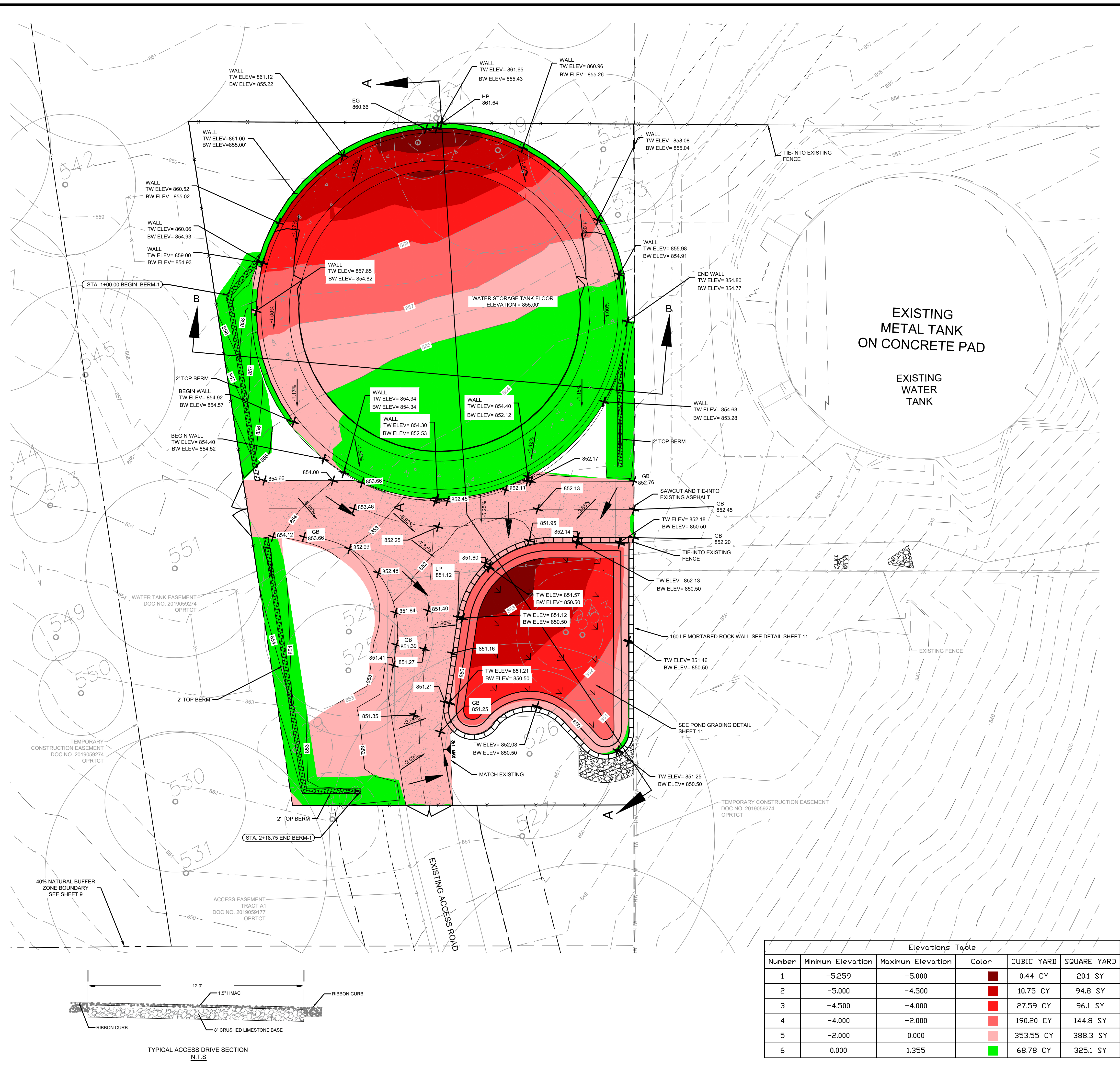




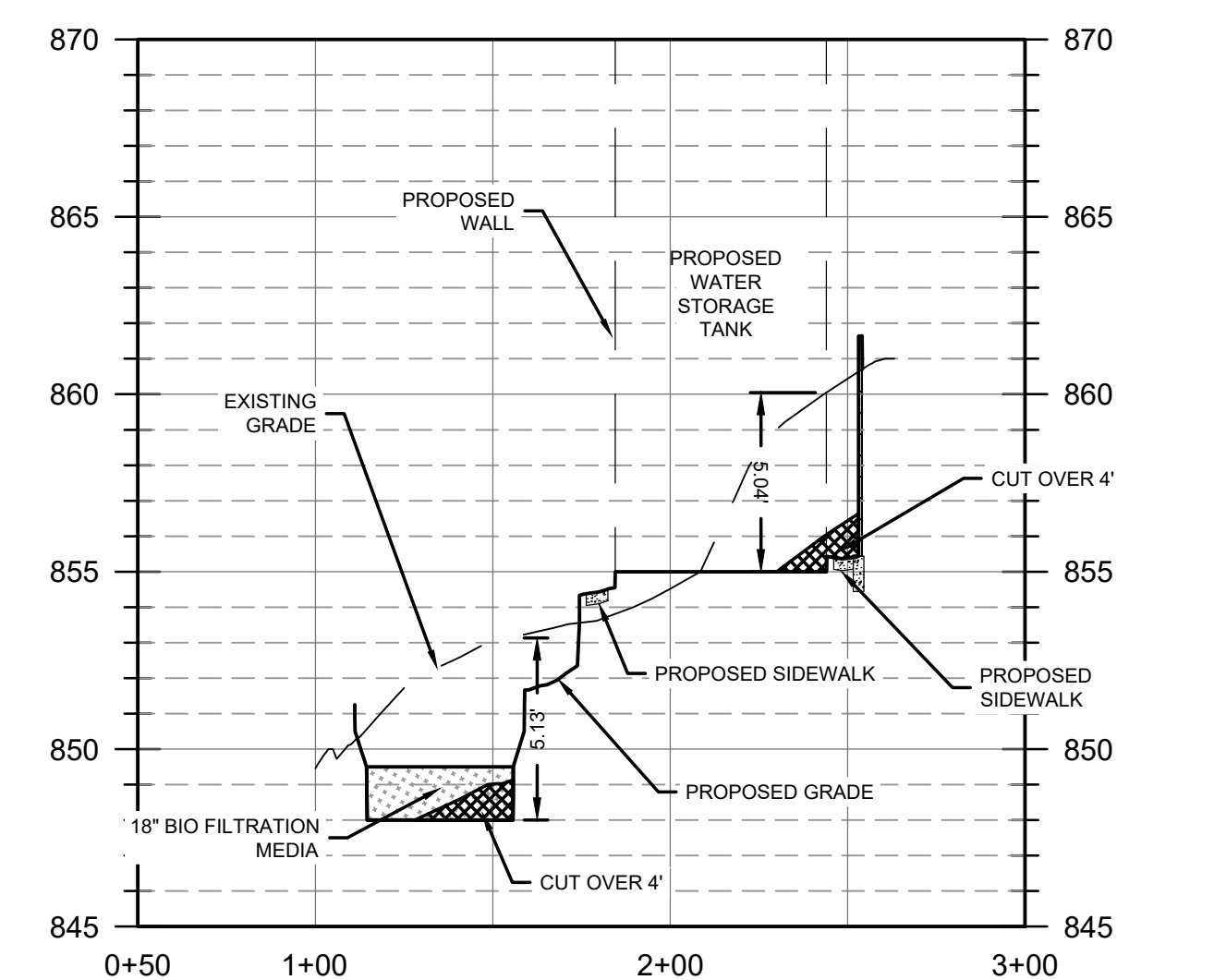




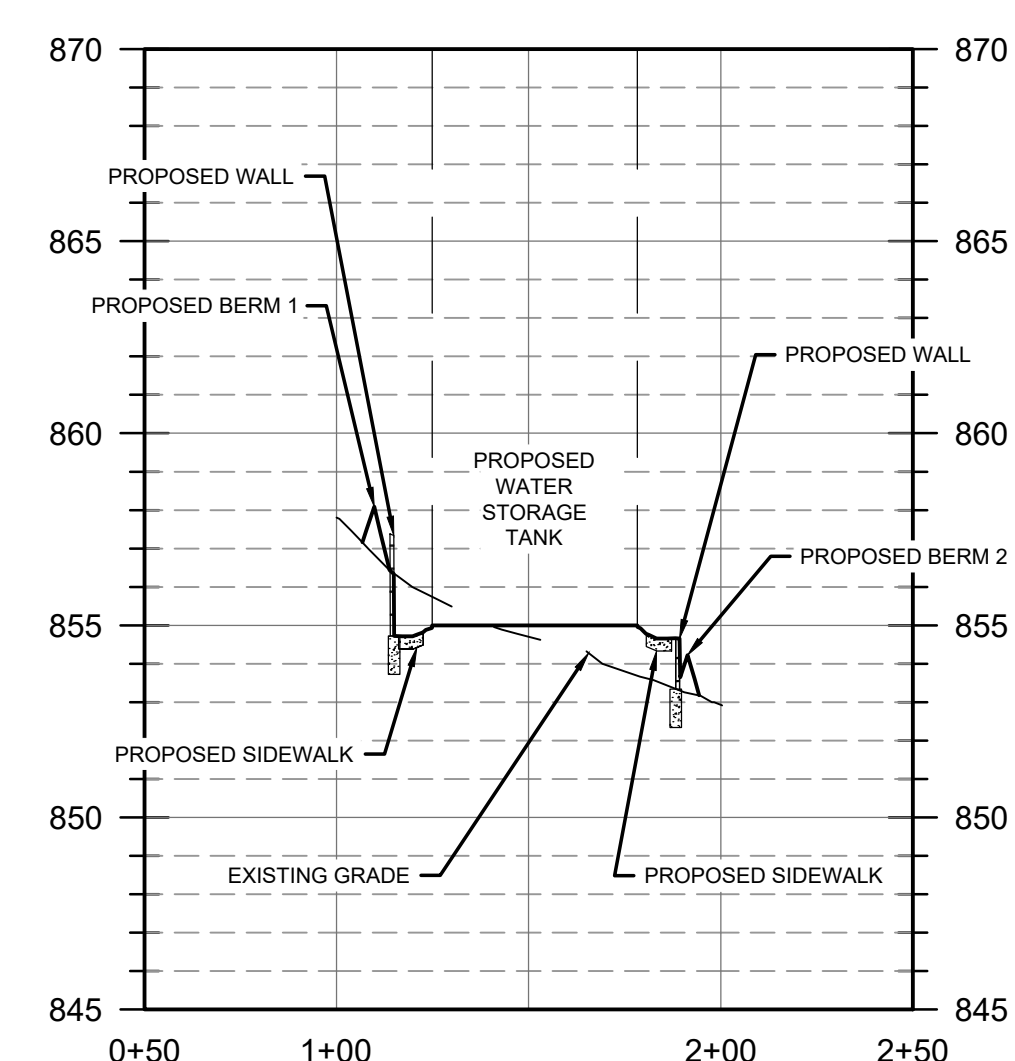
HYPROJECTS\1325\LOOP 3601\1139 ADDITIONAL 40% ELEVATED WATER STORAGE TANK PROJECT\ADMIN\SUBMITTALS\CITY OF AUSTIN\DO - CUT-FILL VARIANCE\CAVE\EXHIBIT D - CUT-FILL EXHIBIT.DWG DATE: 2/11/2020 7:40:35AM BY: B-6



SECTION A-A



SECTION B-B



Elevations Table					
Number	Minimum Elevation	Maximum Elevation	Color	CUBIC YARD	SQUARE YARD
1	-5.259	-5.000	Dark Red	0.44 CY	20.1 SY
2	-5.000	-4.500	Red	10.75 CY	94.8 SY
3	-4.500	-4.000	Light Red	27.59 CY	96.1 SY
4	-4.000	-2.000	Light Pink	190.20 CY	144.8 SY
5	-2.000	0.000	Light Green	353.55 CY	388.3 SY
6	0.000	1.355	Green	68.78 CY	325.1 SY

8834 N. Capital of Texas Hwy.  
Suite 140  
Austin, Texas 78759  
(512)452-0371  
FAX (512)454-9933  
TBE FIRM #2946

NO.	BY	DATE	REVISION DESCRIPTION

ADDITIONAL 300K  
GROUND WATER  
STORAGE TANK  
IMPROVEMENTS

CUT/FILL EXHIBIT

PROJECT NO: 1325-11139  
DESIGNED BY: SB  
DRAWN BY: SB  
CHECKED BY: DWG

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SHEET 1 OF 1