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**Please Email ALL Questions:**

**[MailTo:ContractAdministration@TampaGov.net](mailto:ContractAdministration@TampaGov.net)**

**Please Let Us Know If You Plan To Bid**

City of Tampa  
Contract Administration Department  
306 E. Jackson St. #280A4N  
Tampa, FL 33602  
(813)274-8456

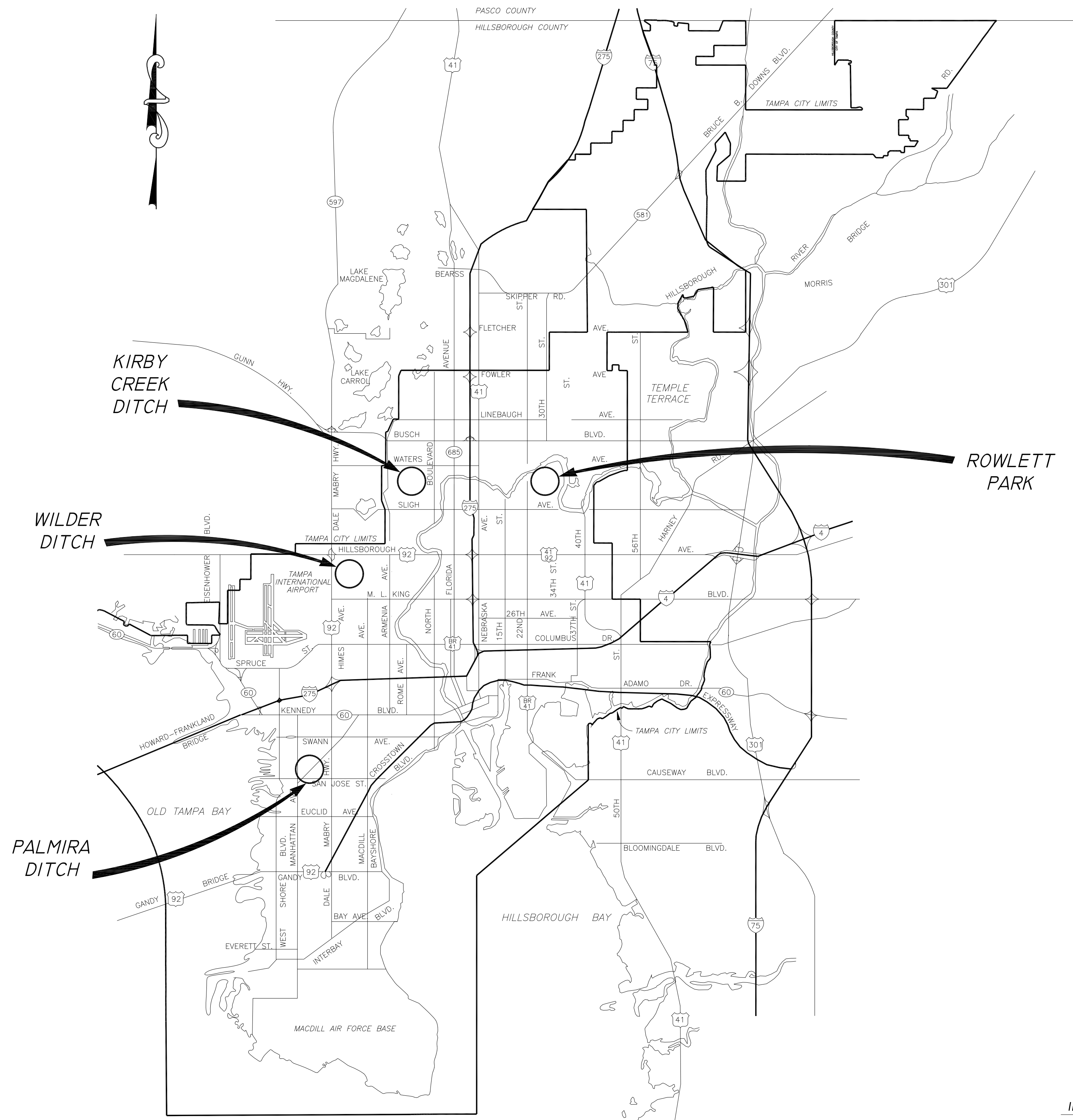
CITY of TAMPA



DEPARTMENT OF  
TRANSPORTATION AND STORMWATER SERVICES  
STORMWATER ENGINEERING DIVISION

PLANS FOR  
DITCH STABILIZATION PROJECT

CONTRACT NO.  
16-C-00029



INDEX

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5	KIRBY CREEK DITCH @ NEWPORT AVE
6	ROWLETT PARK DITCH & WILDER DITCH NOTES
7	DETAILS AND GENERAL NOTES

RICHARD ALFRED HOEL, P.E. #41026  
CHIEF ENGINEER

No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
2			5		
1			4		

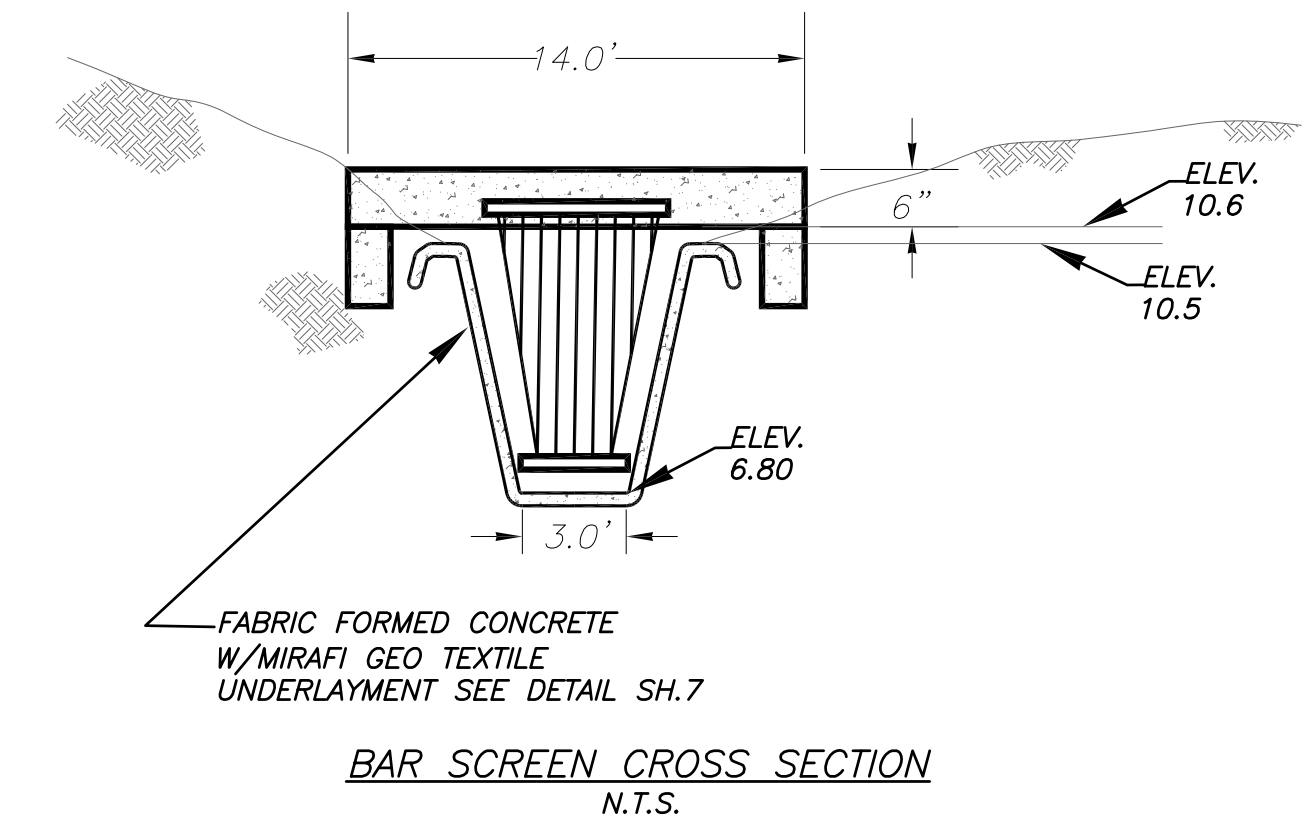
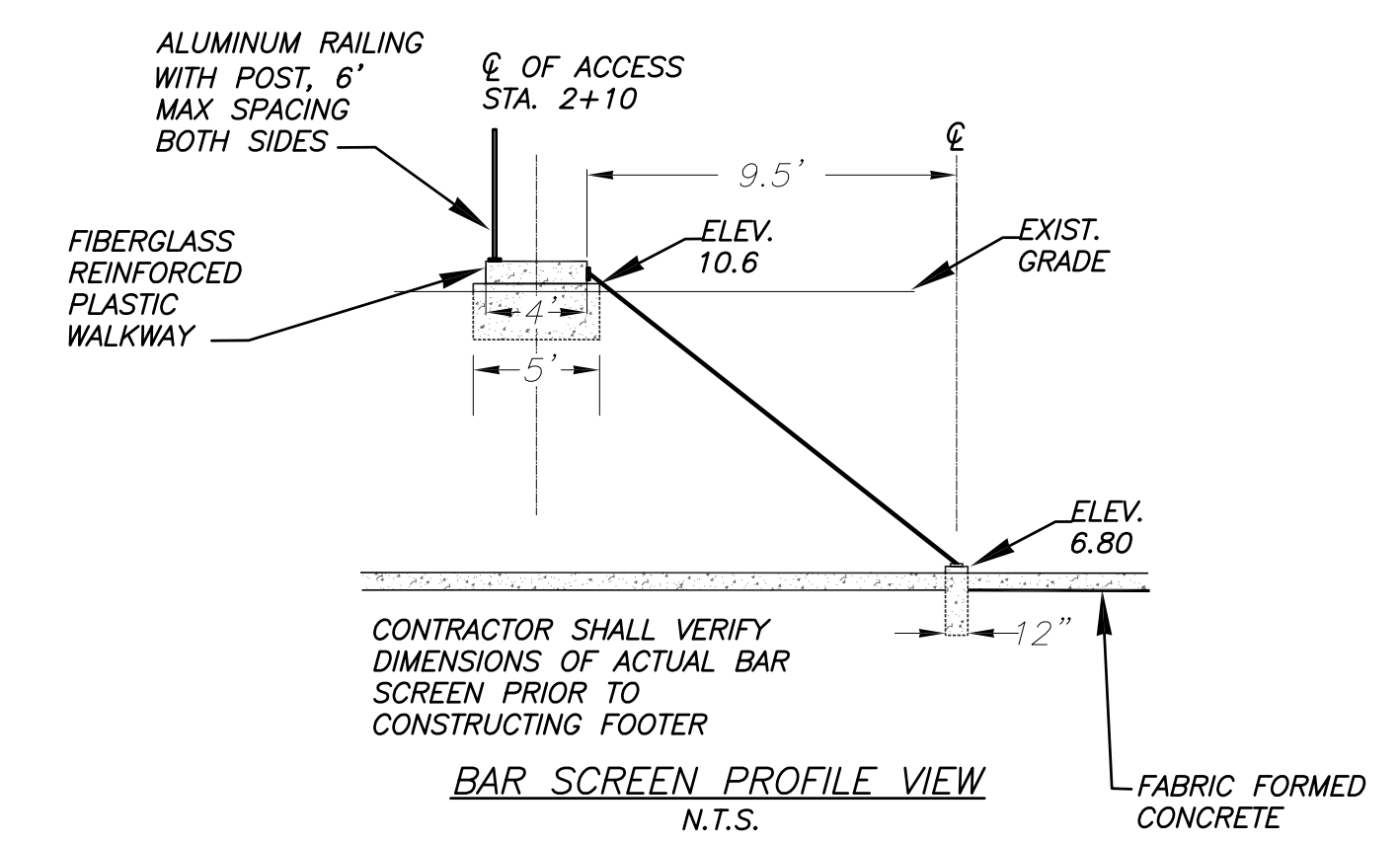
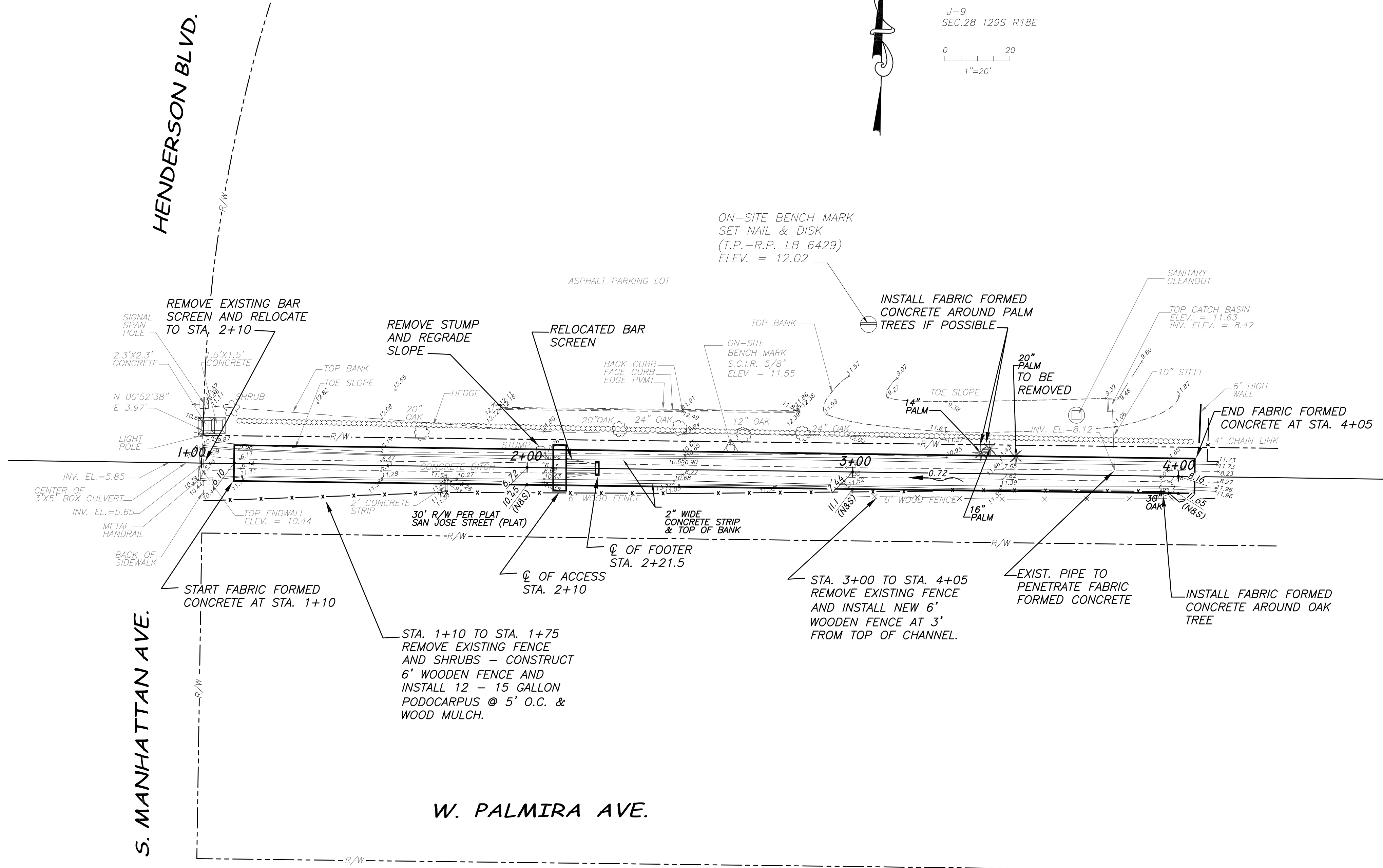
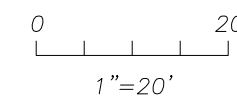
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Department of Transportation  
and Stormwater Services  
Stormwater Engineering Division

COVER SHEET

User: 1217 - Drawing Name: K:\Stormwater Design\Sector Projects\MTM\Ditch Stabilization Project\Cover\_Sheet.dwg  
 Operator: JLR 06/20/2016 10:43:08 AM - Computer: JLR

J-9  
SEC.28 T29S R18E



**CONSTRUCTION NOTES:**

1. FABRIC FORMED CONCRETE TO BE INSTALLED TO ACHIEVE GRADES AND SLOPES OF EXISTING CONCRETE LINED DITCH.
2. TRANSITIONS BETWEEN PROPOSED FABRIC FORMED CONCRETE AND EXISTING CONCRETE LINING, AS WELL AS, PROPOSED FOOTER SHALL BE GROUTED.
3. BAR SCREEN TO BE SECURED TO FOOTER WITH 3/8" STAINLESS STEEL RED HEAD FASTENER W/2 1/2" EMBEDDED.
4. ALUMINUM RAILING SHALL BE FDOT INDEX 870.
5. FIBERGLASS REINFORCED PLASTIC WALKWAY TO BE ANCHORED TO FOOTER AND BAR SCREEN SECURED TO WALKWAY WITH STAINLESS STEEL FASTENERS.
6. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OF PROPOSED WALKWAY WITH CALCULATIONS SIGNED & SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF FLORIDA.

LEGEND			
	CONCRETE SLAB		CONCRETE SLAB
	LIGHT POLE		BACK OF CURB
	SIGNAL SPAN POLE		EDGE OF PAVEMENT
	OAK TREE		FACE OF CURB
	TREE UNKNOWN		STORM PIPE
	PALM TREE		LANE LINE
	STUMP		EXIST R/W LINE
	SHRUB		EXIST FENCE
	MONUMENT		
	SANITARY CLEANOUT		
	SPOT GRADE		

AVE. = AVENUE  
 BLVD. = BOULEVARD  
 ELEV. = ELEVATION  
 EXIST. = EXISTING  
 INV. = INVERT  
 R/W = RIGHT OF WAY  
 S.C.I.R. = SET CAPPED IRON ROD 5/8"  
 T.P.-R.P. LB 6429  
 T.P.-R.P. = TRAVERSE POINT - REFERENCE POINT

No.	DATE	REVISIONS	No.	DATE	REVISIONS
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Stormwater Engineering Division

**DITCH STABILIZATION PROJECT**  
**PALMIRA DITCH AT HENDERSON BLVD.**

User: s217 - Drawing Name: K:\Stormwater\_Drafting\Active\_Projects\MTM\Utch\_Stabilization\_Project\Palma\_Ditch.dwg  
C:\Users\j...  
2016 - 3:12pm  
CIB - Tompkins.cib

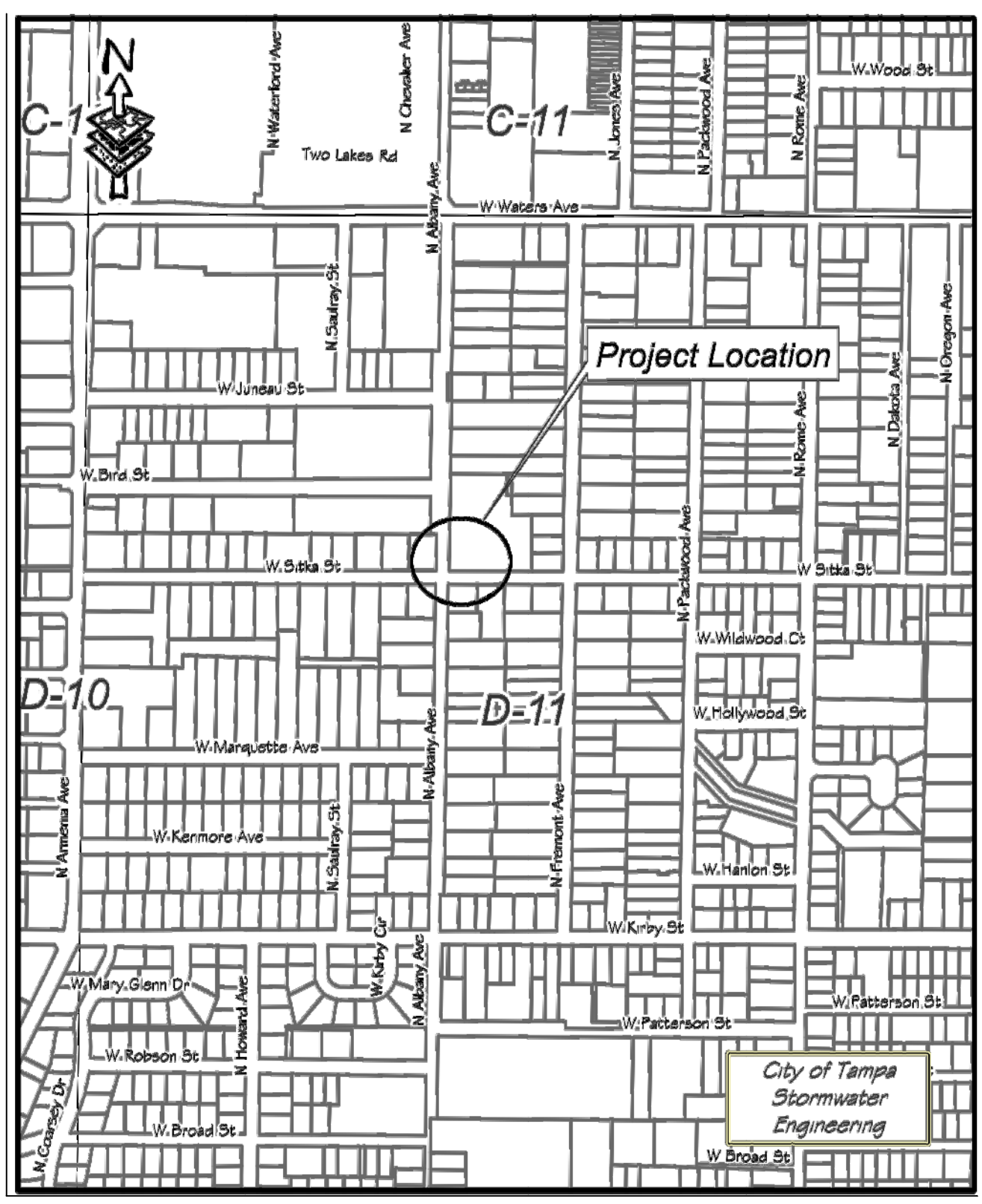
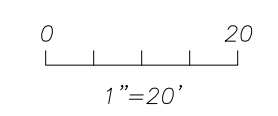
TECO ENERGY  
(UNABLE TO OBTAIN DEED)

REMOVE AND DISPOSE OF  
EXISTING STABILIZATION

END @ STA. 4+65  
MATCH EX. GRADE

REESE AVENUE (P)  
(UNOPENED)

D-11  
SEC. 26 T29S R18E



82

81

24

REMOVE AND DISPOSE OF  
STUMP

END @ STA. 3+83  
MATCH EX. GRADE

DO NOT DISTURB  
EXISTING STABILIZATION

PROPOSED  
FABRIC FORMED  
CONCRETE

RE-GRADE & RE-ESTABLISH  
SLOPE. INSTALL CONCRETE  
STABILIZATION MAT SUCH AS  
FLEXAMAT. SEE DETAIL SH.7

19  
END BASELINE (SND)  
STA 2+53.57  
N = 1340899.6185  
E = 501526.0504

LOT 1

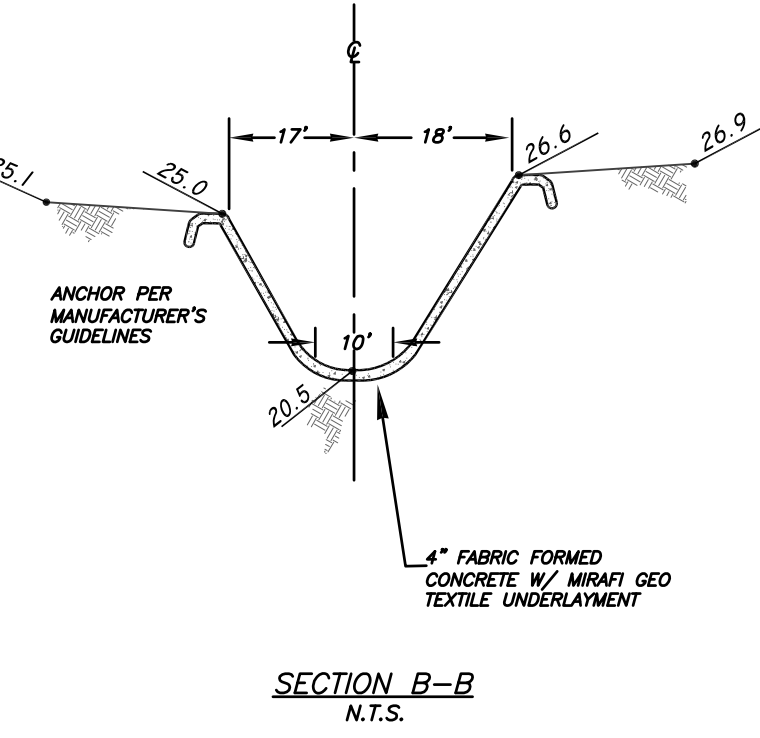
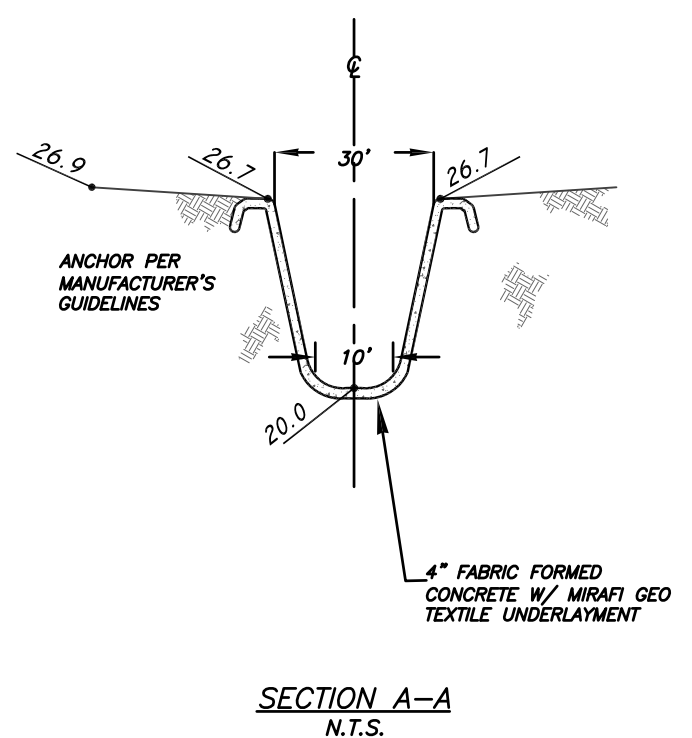
STA EQUATION (SND)  
N ALBANY AVENUE  
STA 2+56.52  
W SITKA STREET  
STA 0+00  
N = 1340900.3157  
E = 501272.4838

TBM (NAVD 88)  
FCM EL=26.06

N. ALBANY AVE.

CONC RETAINING WALL

W. SITKA ST.



TREE LEGEND

- ◆ = BAY TREE
- ⊙ = BOTTLE BRUSH TREE
- ⊙ = CAMPHOR TREE
- ⊙ = CEDAR
- ⊙ = CHINABERRY TREE
- ⊙ = CITRUS TREE
- ⊙ = CYPRESS TREE
- △ = ELM TREE
- ⊙ = EUCALYPTUS TREE
- ⊙ = MAGNOLIA TREE
- ⊙ = PINE TREE
- ⊙ = OAK TREE
- ⊙ = OTHER SPECIES
- ◆ = PALM TREE
- ⊙ = PECAN TREE
- ⊙ = PERSIMMON TREE
- ⊙ = SYCAMORE TREE
- ⊙ = WILLOW TREE

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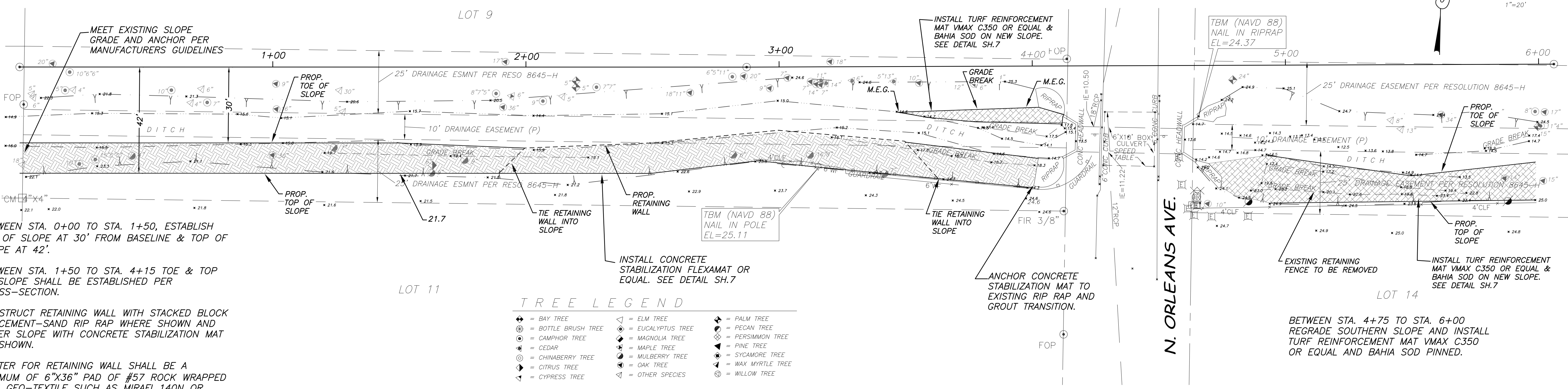
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Department of Transportation  
and Stormwater Services  
Stormwater Engineering Division

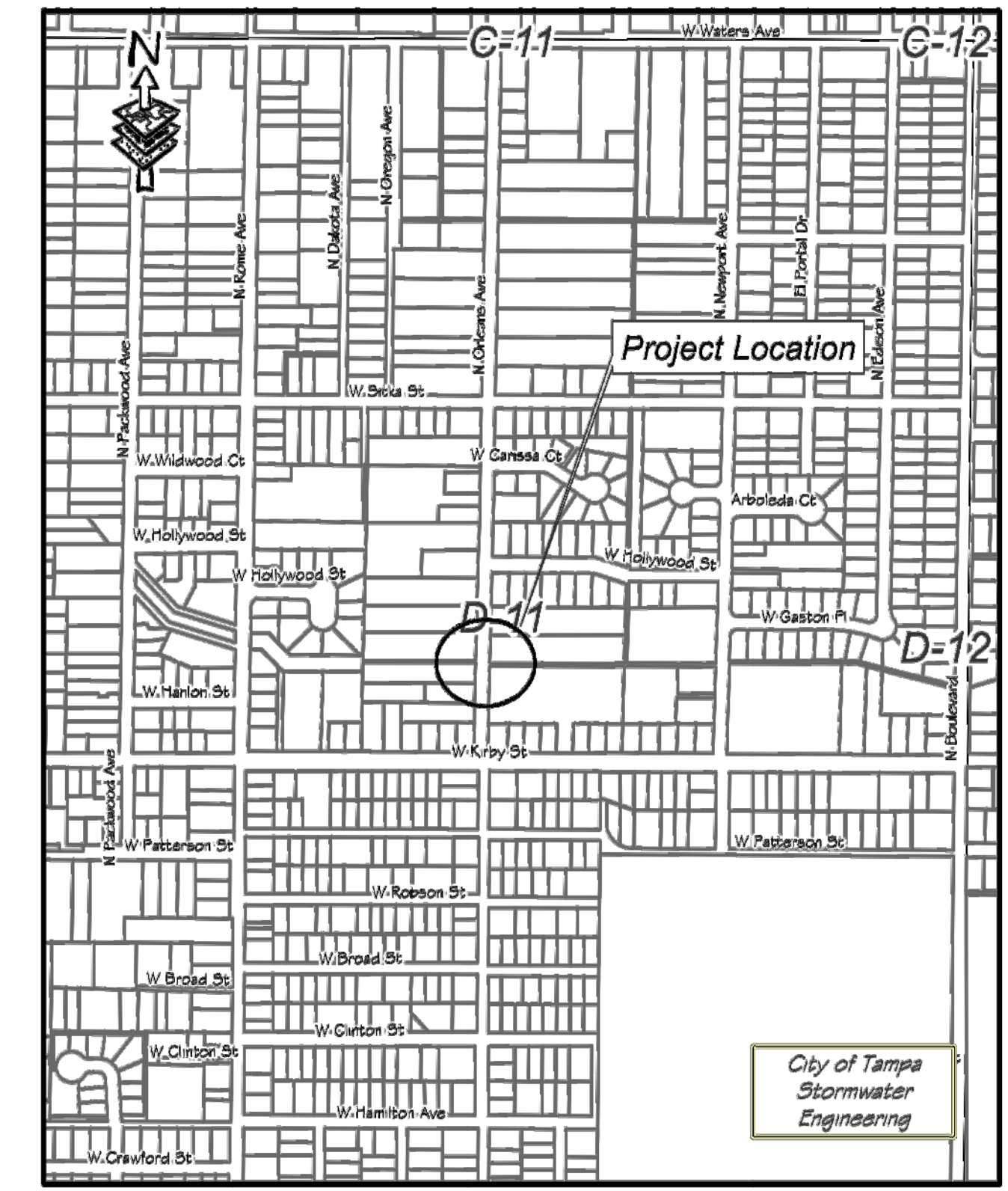
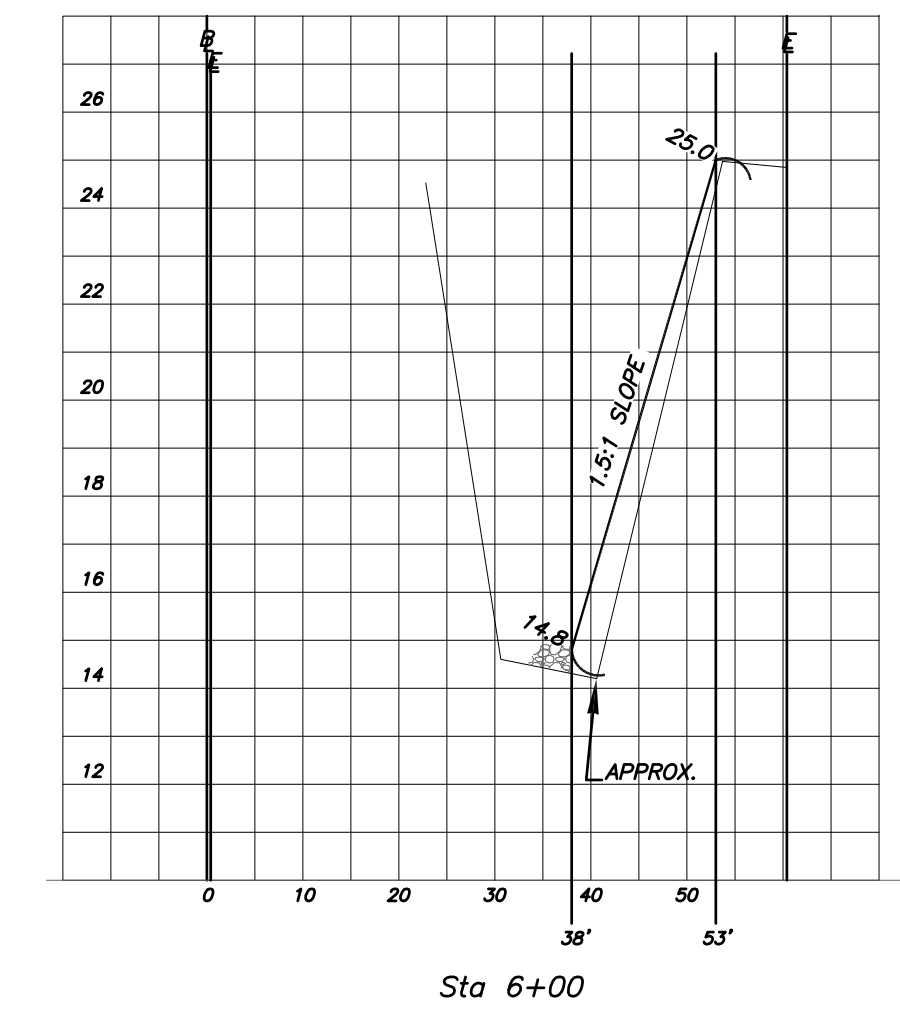
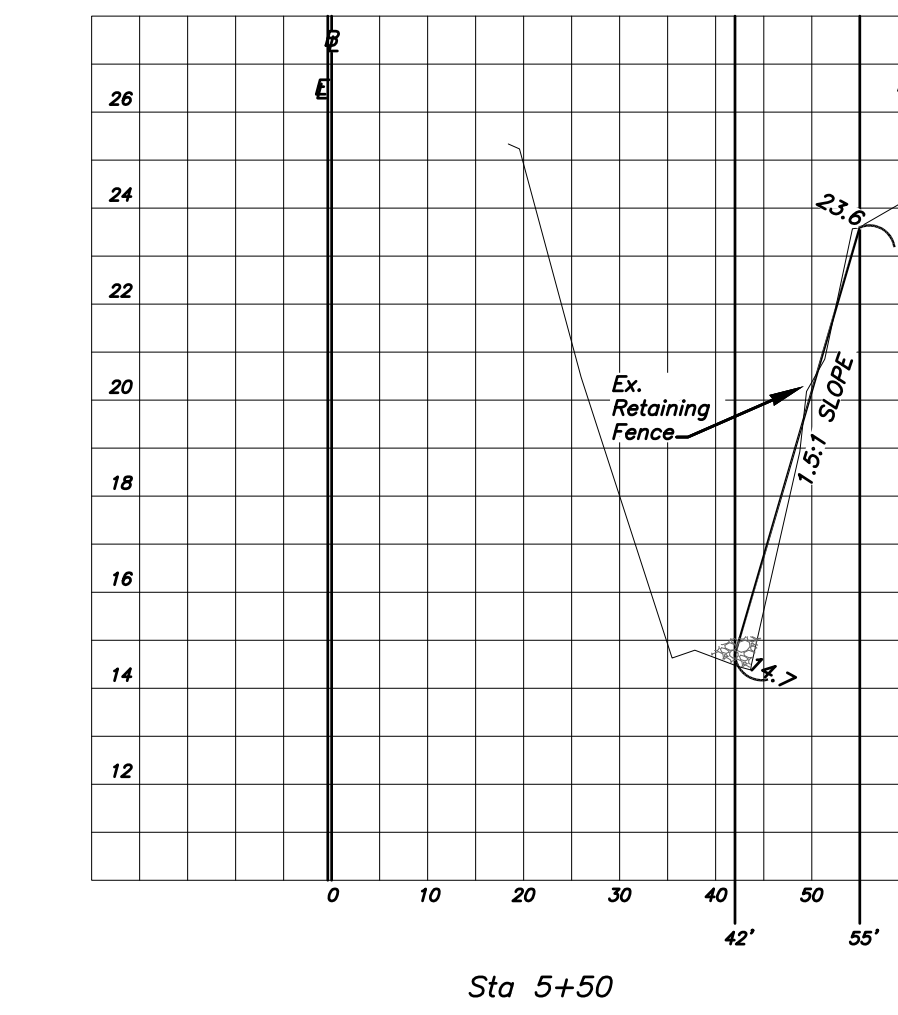
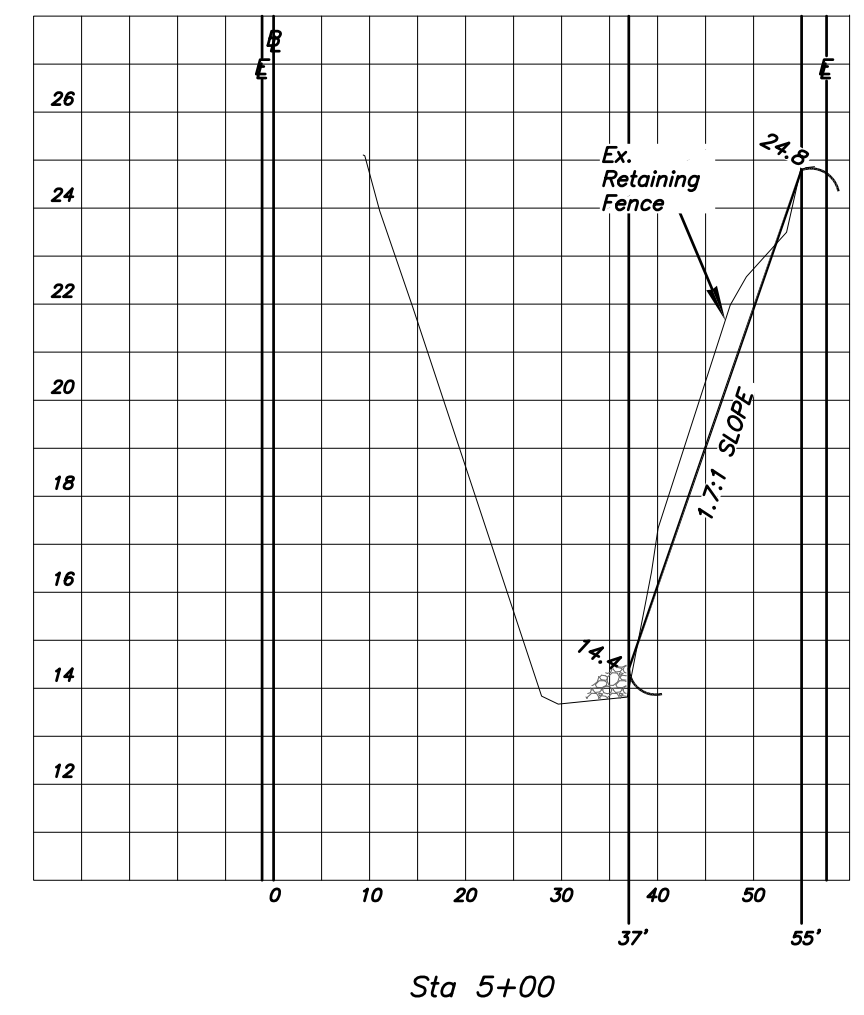
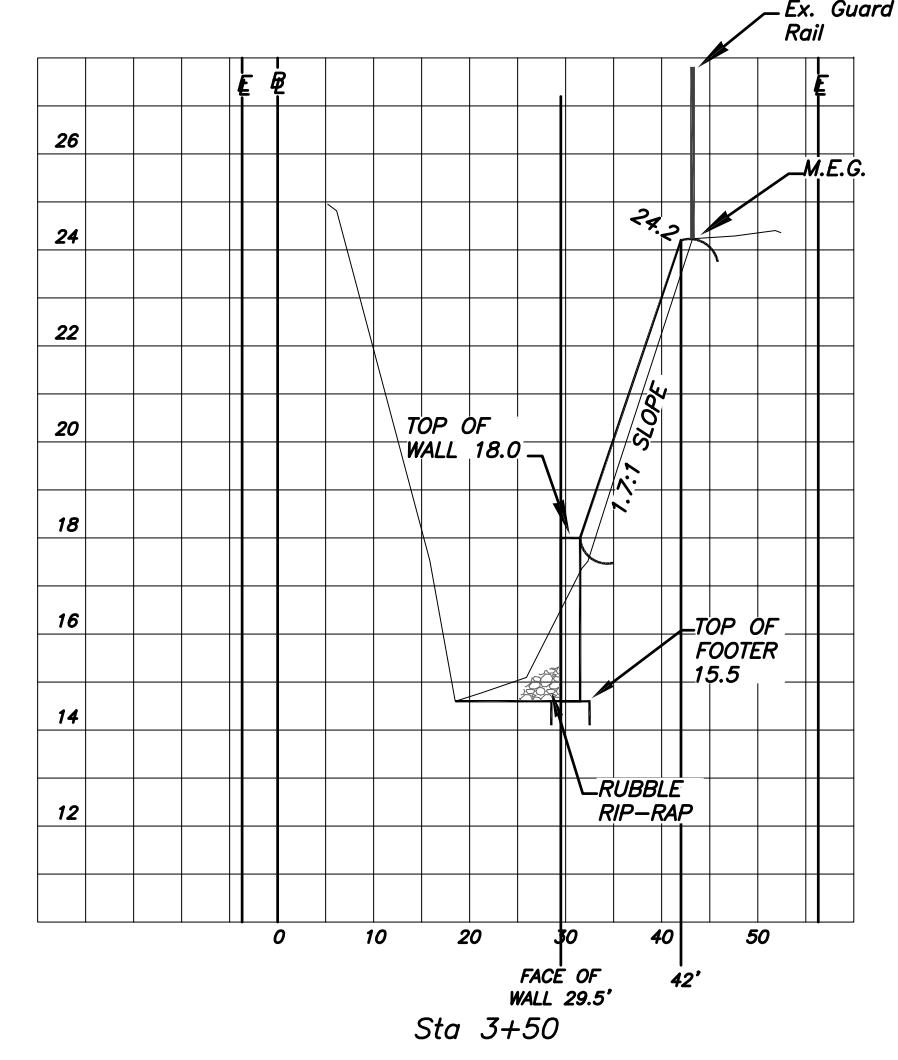
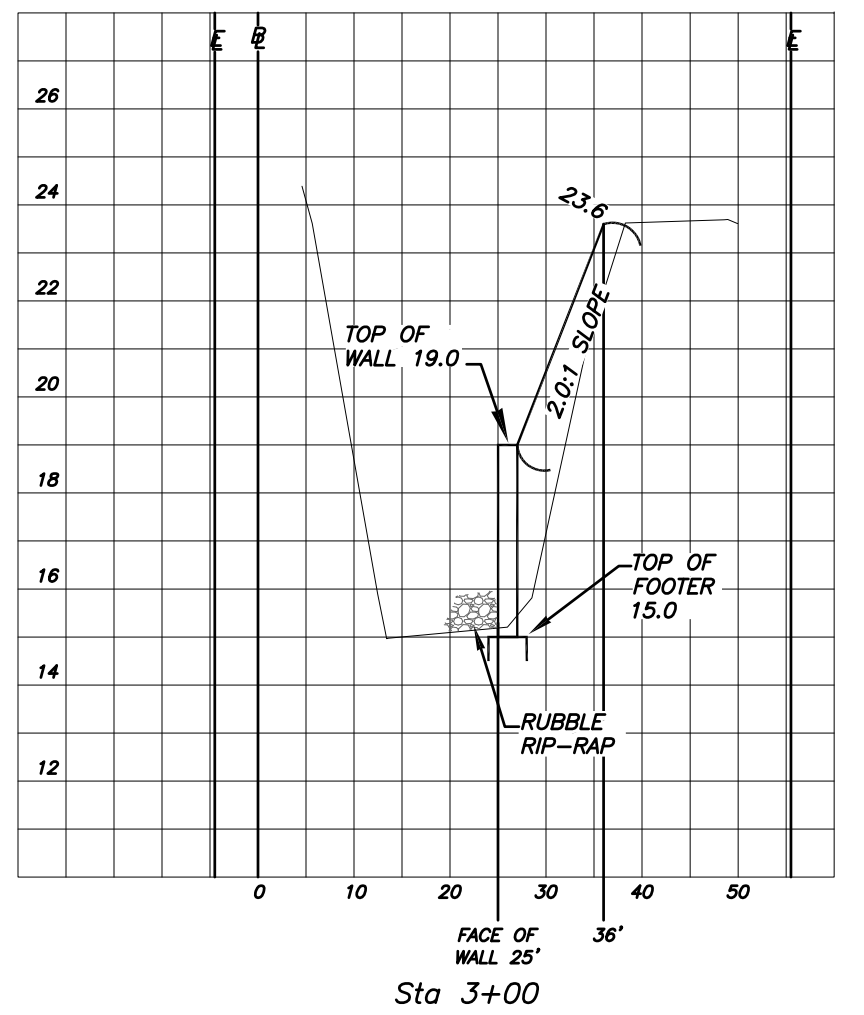
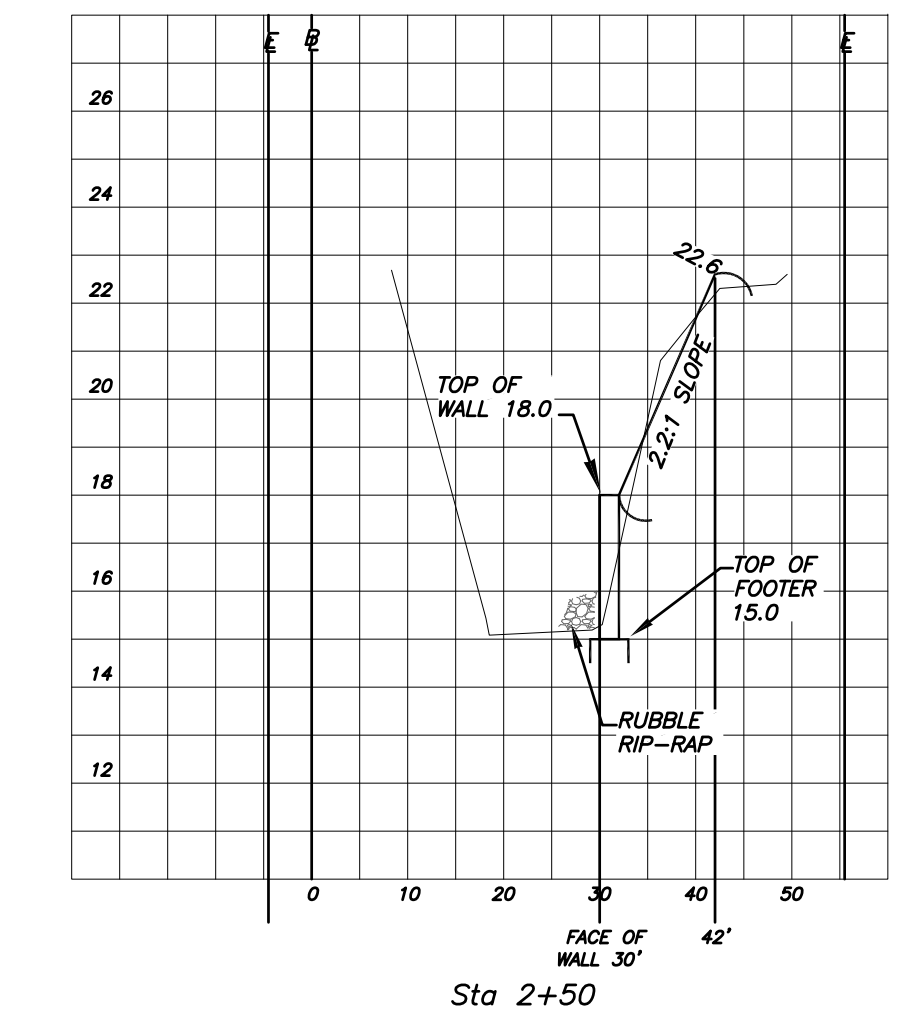
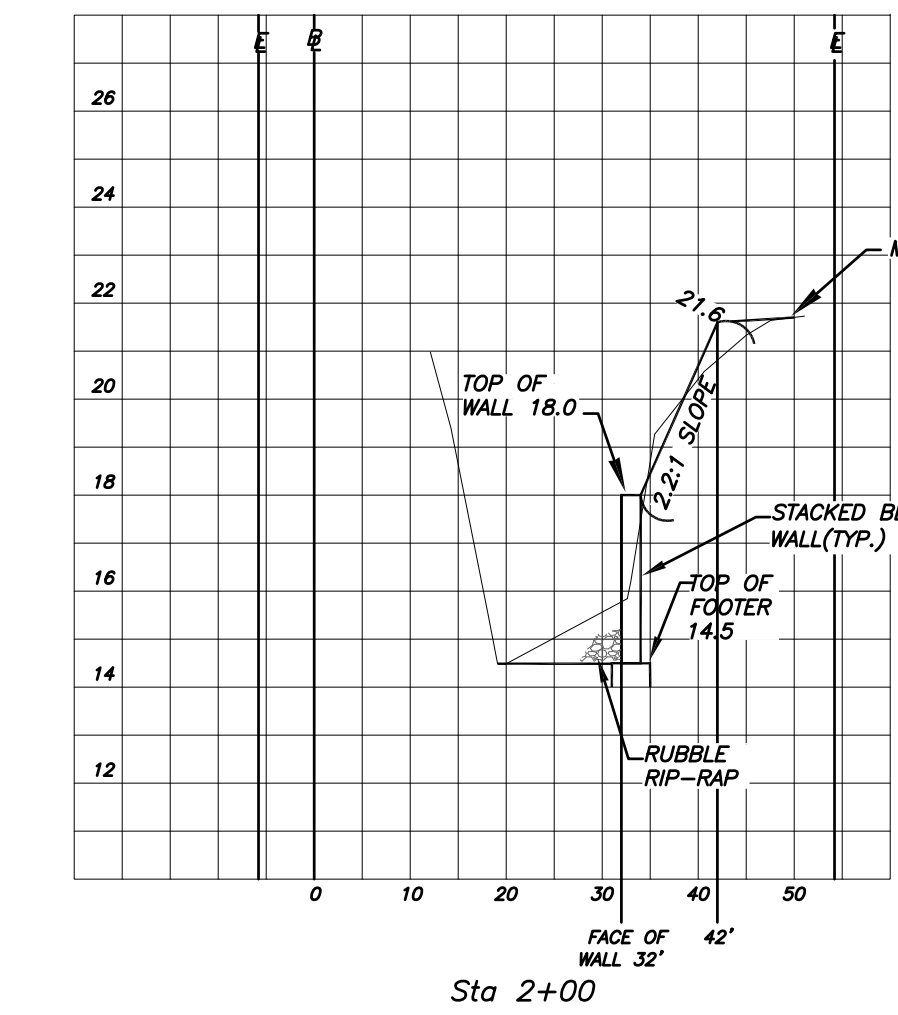
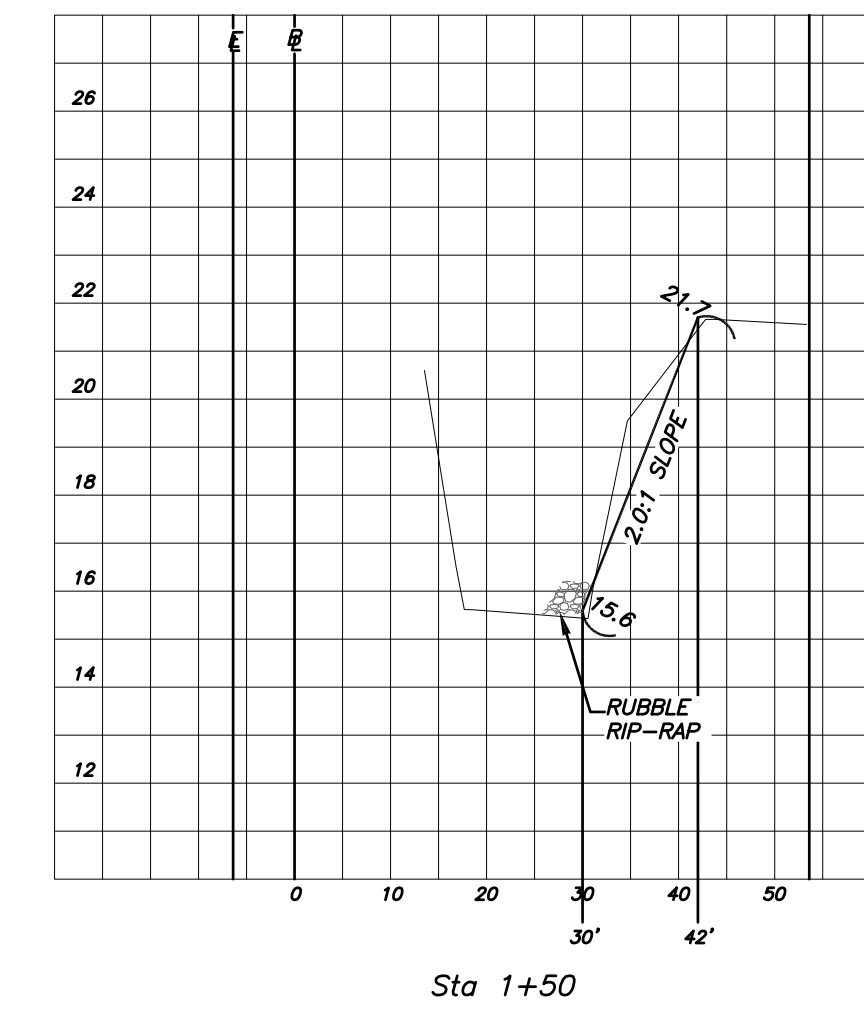
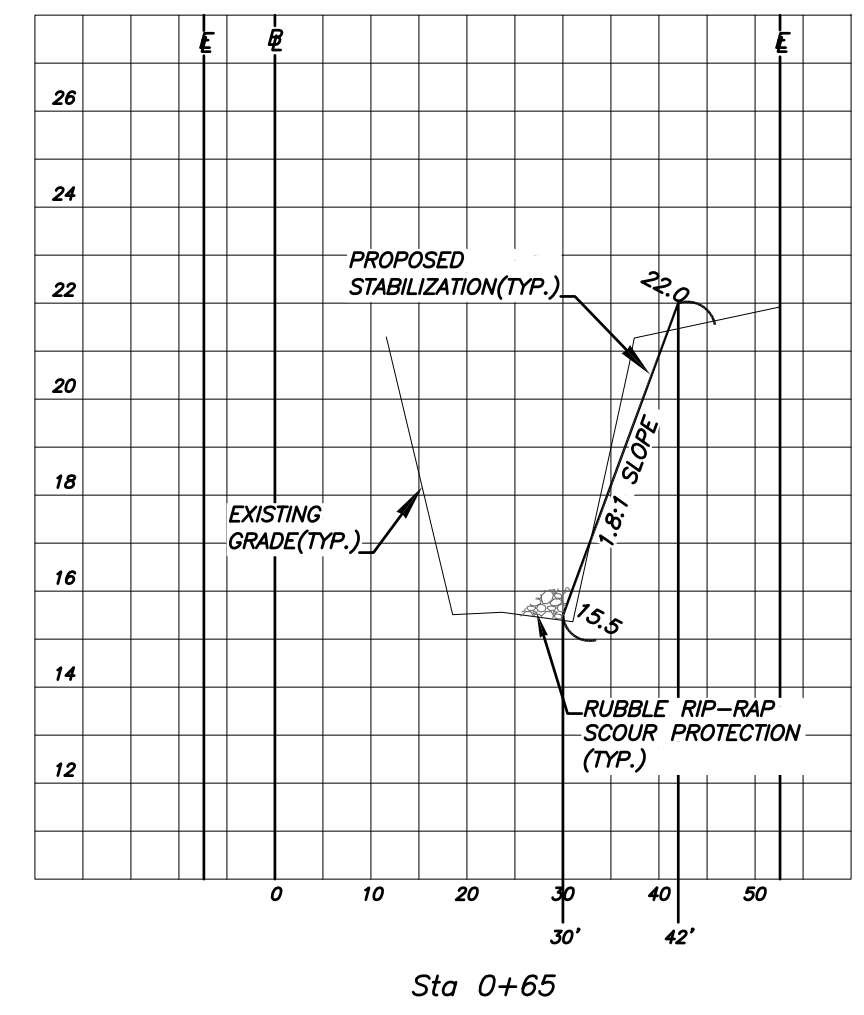
DITCH STABILIZATION PROJECT  
KIRBY CK@ ALBANY AV & SITKA ST

SHEET  
3  
OF 7

User: 8177, Drawing Name: 61Stormwater Ditching Projects (MWD) Ditch Stabilization Project (Kirby Creek @ Albany Ave) Layout: Jul 29, 2016 - 3:12pm, CTB - TampaStorm.ctb



- BETWEEN STA. 0+00 TO STA. 1+50, ESTABLISH TOE OF SLOPE AT 30' FROM BASELINE & TOP OF SLOPE AT 42'.
- BETWEEN STA. 1+50 TO STA. 4+15 TOE & TOP OF SLOPE SHALL BE ESTABLISHED PER CROSS-SECTION.
- CONSTRUCT RETAINING WALL WITH STACKED BLOCK OR CEMENT-SAND RIP RAP WHERE SHOWN AND COVER SLOPE WITH CONCRETE STABILIZATION MAT AS SHOWN.
- FOOTER FOR RETAINING WALL SHALL BE A MINIMUM OF 6"x36" PAD OF #57 ROCK WRAPPED WITH GEO-TEXTILE SUCH AS MIRAFI 140N OR EQUAL.
- CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OF THE PROPOSED RETAINING WALL WITH CALCULATIONS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF FLORIDA.
- SHOP DRAWINGS FOR THE RETAINING WALL SHALL BE PROVIDED PRIOR TO CONSTRUCTION.



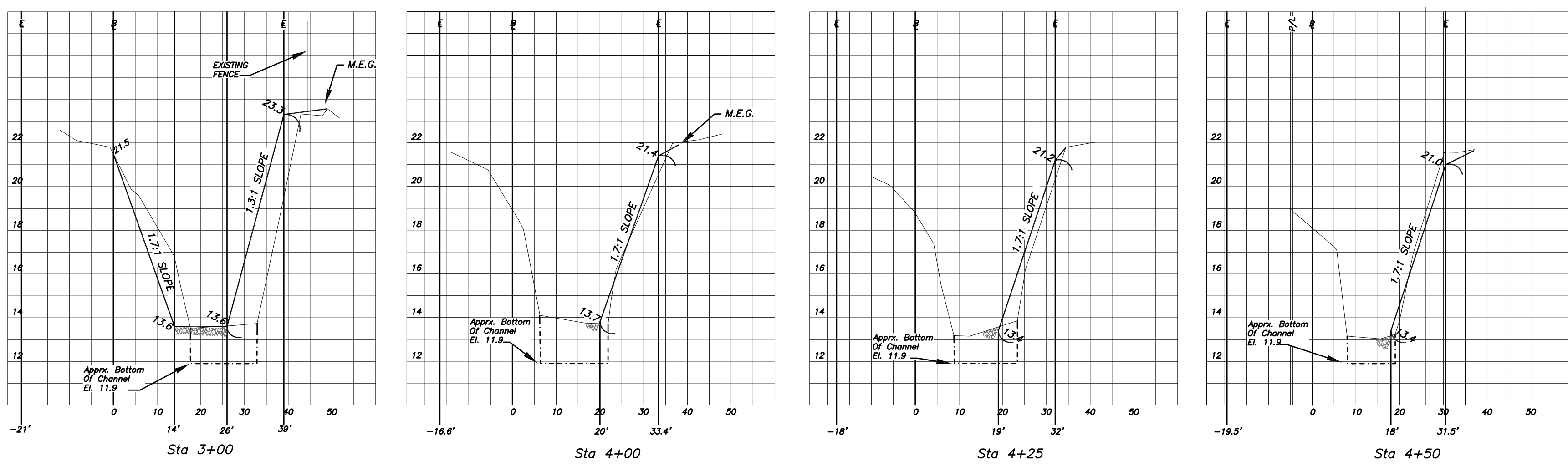
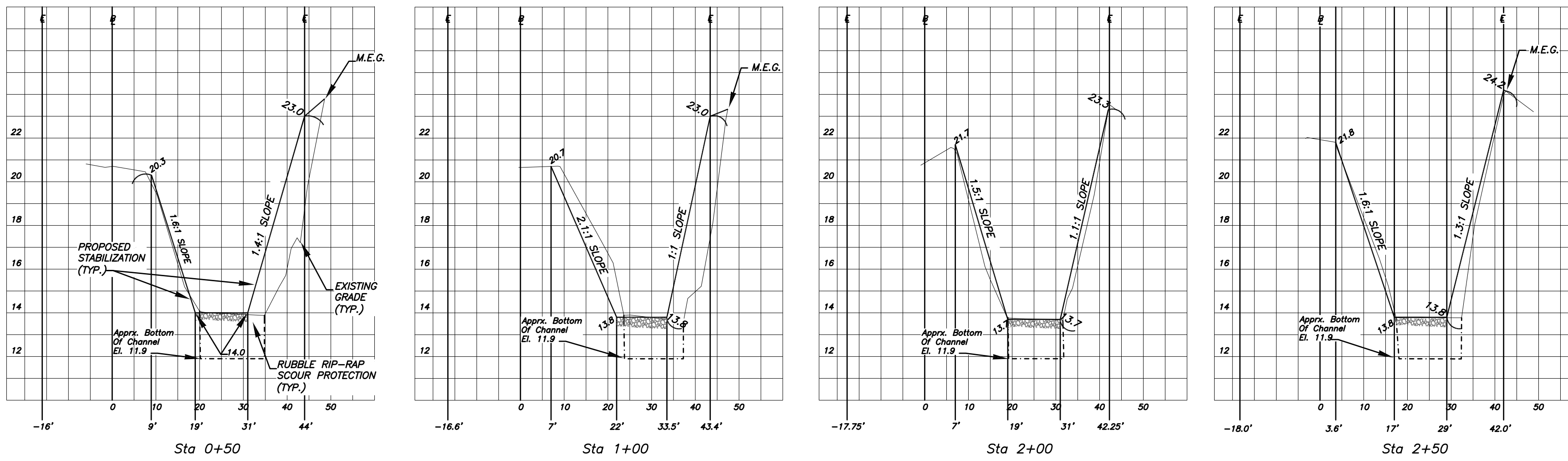
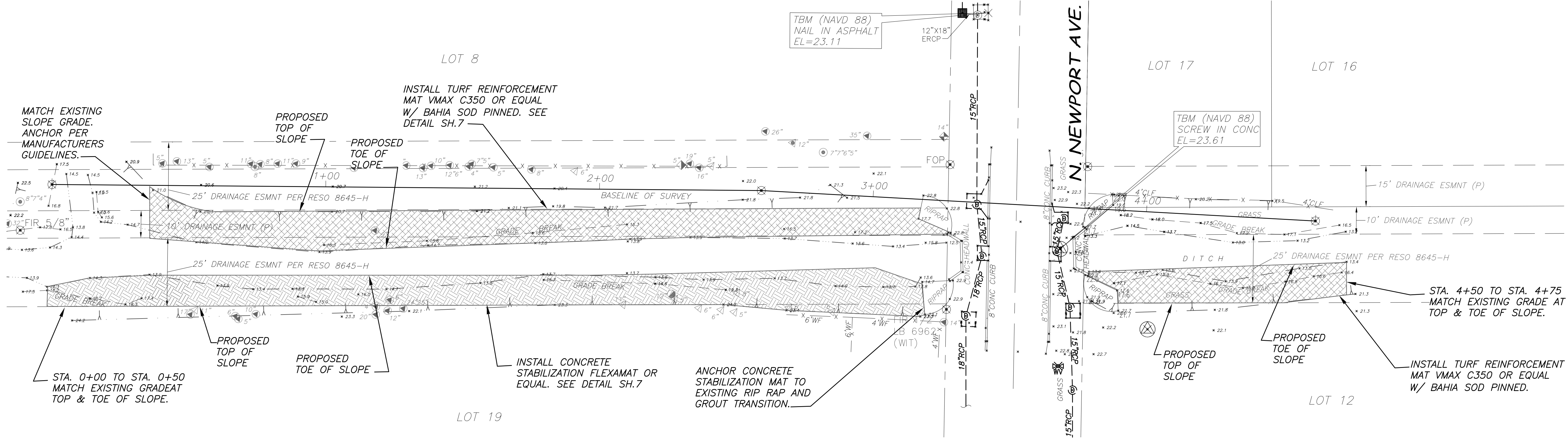
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CITY of TAMPA  
Department of Transportation  
and Stormwater Services  
Stormwater Engineering Division

**DITCH STABILIZATION PROJECT**  
**KIRBY CK. @ ORLEANS AVE**

SHEET  
4  
of 7



**TREE LEGEND**

◆ = BAY TREE	▽ = ELM TREE	◆ = PALM TREE
⊙ = BOTTLE BRUSH TREE	◆ = EUCALYPTUS TREE	◆ = PECAN TREE
⊙ = CAMPHOR TREE	◆ = MAGNOLIA TREE	⊙ = PERSIMMON TREE
⊙ = CEDAR	◆ = MAPLE TREE	◆ = PINE TREE
⊙ = CHINABERRY TREE	◆ = MULBERRY TREE	◆ = SYCAMORE TREE
⊙ = CITRUS TREE	◆ = OAK TREE	◆ = WAX MYRTLE TREE
▲ = CYPRESS TREE	▽ = OTHER SPECIES	⊙ = WILLOW TREE



Date: 07/27/2016  
 Project Name: Kirby Creek Stormwater Detention Basin  
 Project Location: Kirby Creek Stormwater Detention Basin  
 Project No.: 16-00000000-0000-0000-0000-000000000000  
 Project Date: 07/27/2016  
 Project Time: 11:20am  
 Project User: jason@cityoftampa.gov

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DES: MTM	<b>CITY OF TAMPA</b> Department of Transportation and Stormwater Services Stormwater Engineering Division	<b>DITCH STABILIZATION PROJECT</b> <b>KIRBY CREEK @ NEWPORT AVE</b>	SHEET <b>5</b> OF 7
DRN: PE			
CKD:			
DATE:			

ROWLETT PARK DR. DITCH BETWEEN SLIGH AVE. & HILLSBOROUGH RIVER  
(SEE DETAIL SH.7)

**Background**

Many years ago much of this ditch was lined with fabric formed concrete. In recent years the CSX railroad has not maintained the ditch running along the east side of their tracks and as a result runoff accumulates in the ditch. During major storm events this water overflows out of the CSX ditch into the City's ditch. This overflow has found its way under the fabric formed concrete, eroding under the formed concrete approximately 350 feet north to the river, until it meets an intersecting lined ditch. At this point it has burst through the formed concrete, leaving a trail of broken and displaced formed concrete in its wake.



**Overflow Caused Erosion Under the Concrete Mat**

**Flow Under Mat Moved from West to East**



**Flow Under Mat Displaced and Broke Mat**

**Flow Under Mat Displaced and Broke Mat**

**Project Description**

This project will replace the damaged fabric formed concrete with new formed concrete such as Hydrotex Filter Point FP400. The existing formed concrete will be removed and disposed of off-site. No topographic survey has been conducted and the original construction plans are not available in the city archives. The ditch bank and bottom will be filled and graded to provide a continuous grade between the limits of the work. Side slopes will be a maximum of 1:1 and the bottom width shall be comparable to existing ditch width downstream (approximately 9 feet wide). At the location where the CSX ditch overflows into the City ditch, a new swale will be constructed to intersect with the City ditch and lined with fabric formed concrete. All fabric formed concrete will be placed atop of a filter fabric such as Mirafi 170N nonwoven geotextile and installed per manufacturer's guidelines. Contractor will notify CSX of work schedule and all work will be performed outside the CSX right of way. All disturbed area not covered with the concrete mat shall be sodded with Bahia grass.



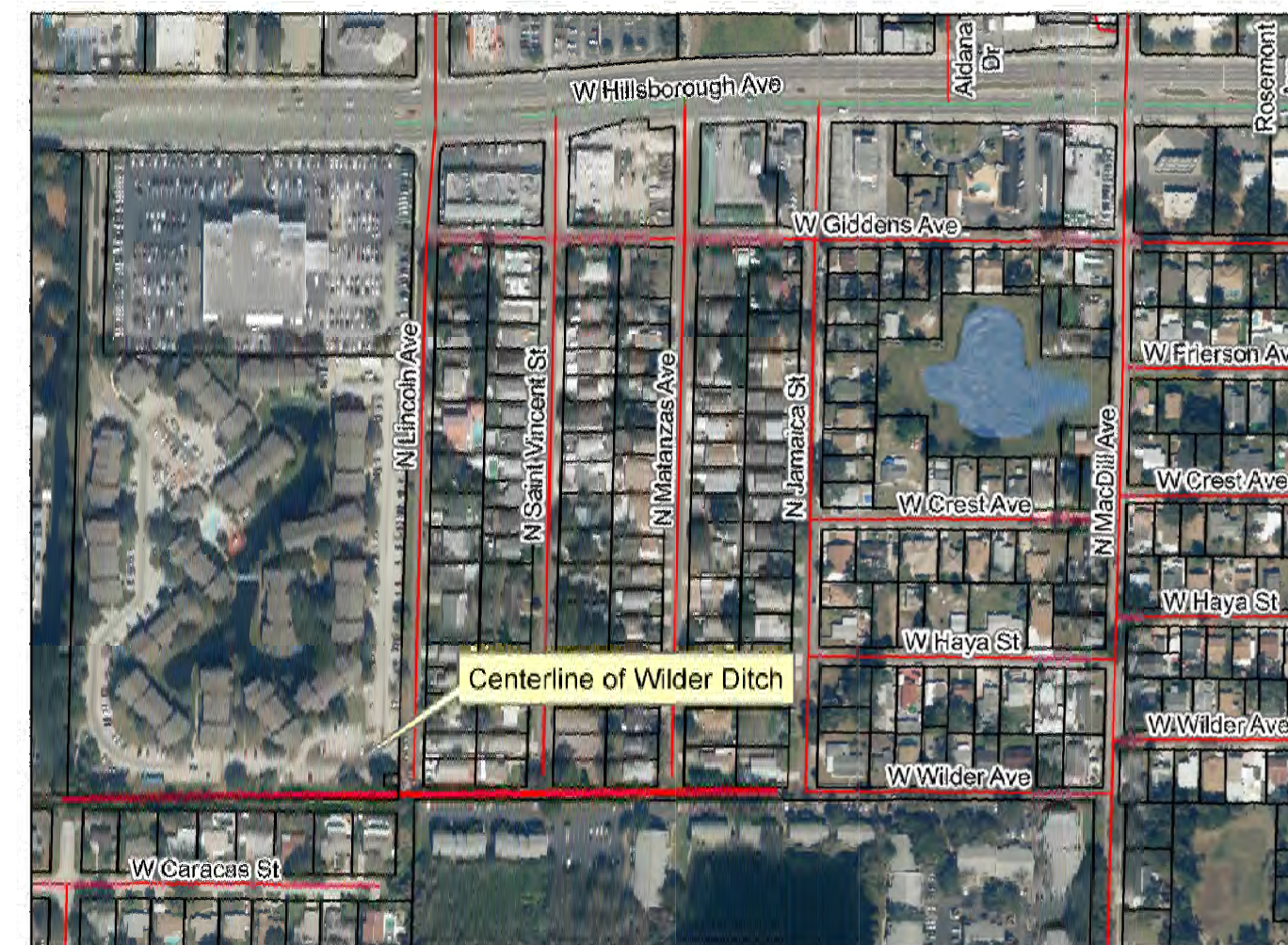
0 40 80 120 160 200 240 280 320 Feet

**Rowlett Park Drive Ditch**

WILDER DITCH BETWEEN N. LINCOLN AVE. & N. ST. VINCENT AVE  
(SEE DETAIL SH.7)

**Background**

This project was brought to the City's attention during an inspection in December 2015, when erosion was discovered at the southern terminus of N. Lincoln Ave. and N. Saint Vincent Ave. at the Wilder Ditch. The erosion at these locations is due to uncontrolled runoff from the roadway over the northern ditch bank.



0 125 250 500 750 1,000 Feet

**Figure 1 Wilder Ditch Location**



**Terminus at N. Lincoln Ave.**

**Terminus at N. Saint Vincent Ave.**

At the Lincoln Ave location there is evidence of a cellular confinement erosion control system installed years ago which has been compromised and exposed. Subsequent maintenance work at this location was limited to randomly placing rubble rip-rap. The terminus of N. Saint Vincent is subject to the same type of erosion, but this location has no evidence of erosion control. Presently the erosion at this location is isolated to the west side of the roadway and appears to be held in check so far by the tree roots.



0 15 30 60 90 120 Feet

**Figure 2 - Wilder Ditch at N. Lincoln Ave.**



0 15 30 60 90 120 Feet

**Figure 3 - Wilder Ditch at N. Saint Vincent Ave.**

**Project Description**

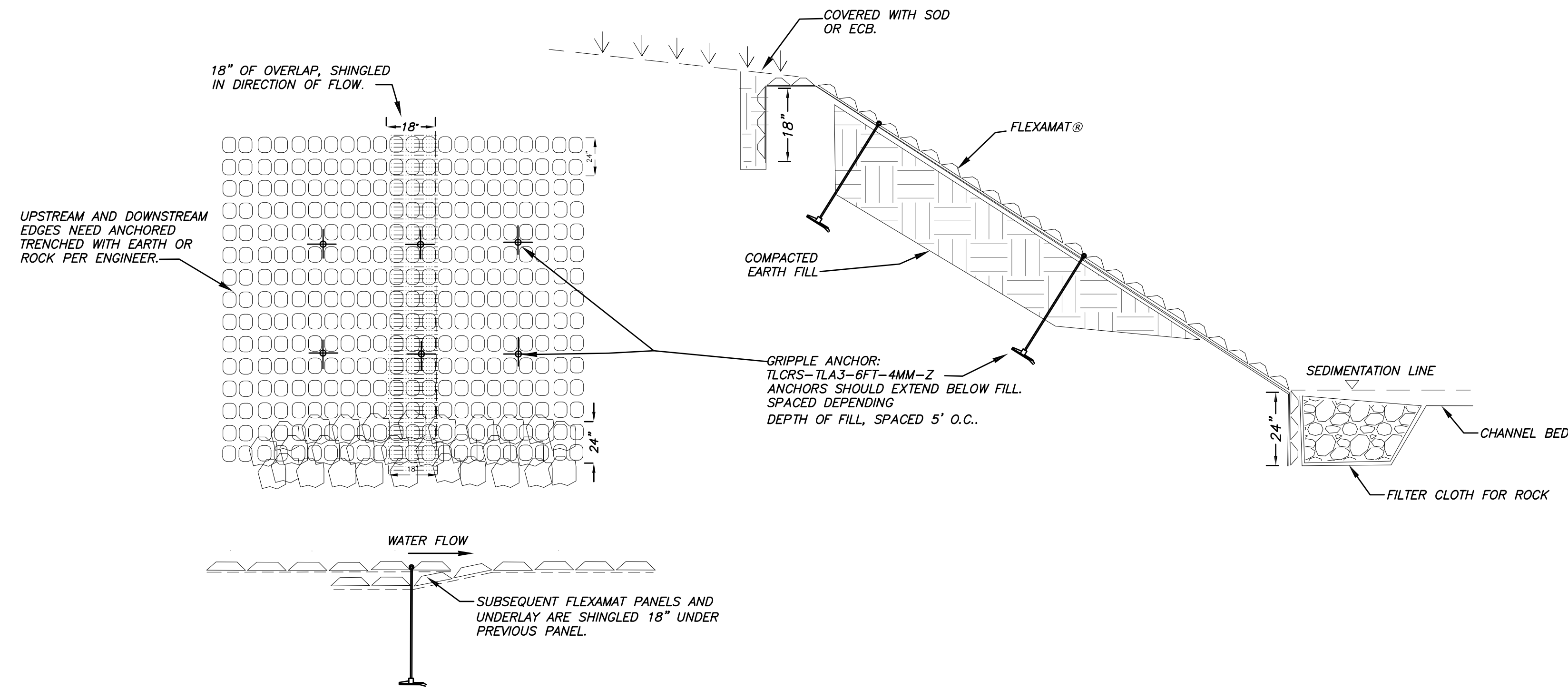
This project will address the existing condition of the northern ditch bank at the terminus of both streets: N. Lincoln Ave. and N. Saint Vincent Ave. The scope of the project will include removal of existing rubble rip-rap and cellular confinement erosion system at Lincoln Ave. and installing a concrete flume from the edge of pavement to the bottom of the ditch as shown on Figure 2. At the terminus of Saint Vincent Ave. a concrete flume will be constructed as shown on Figure 3. Proposed flume shall conform to FDOT Index 283 and 8" - 12" sized rubble rip-rap shall be installed in the ditch bottom at the flume outfall. Disturbed areas at both locations will be filled with soil, graded to restore the slope, covered with a turf mat such as VMax C350 by Tensar, and sodded with Bahia sod. Contractor shall remove all debris from the site, except the rubble rip-rap which may be used at the base of the flume in the ditch to minimize scour. Proposed system to stabilize the ditch bank shall minimize impact to existing trees and shrubs on the bank and shall not alter the flow capacity of the ditch. Work shall be conducted within the limits of existing easement and right of way, unless adjacent property owners grant temporary access to the contractor.

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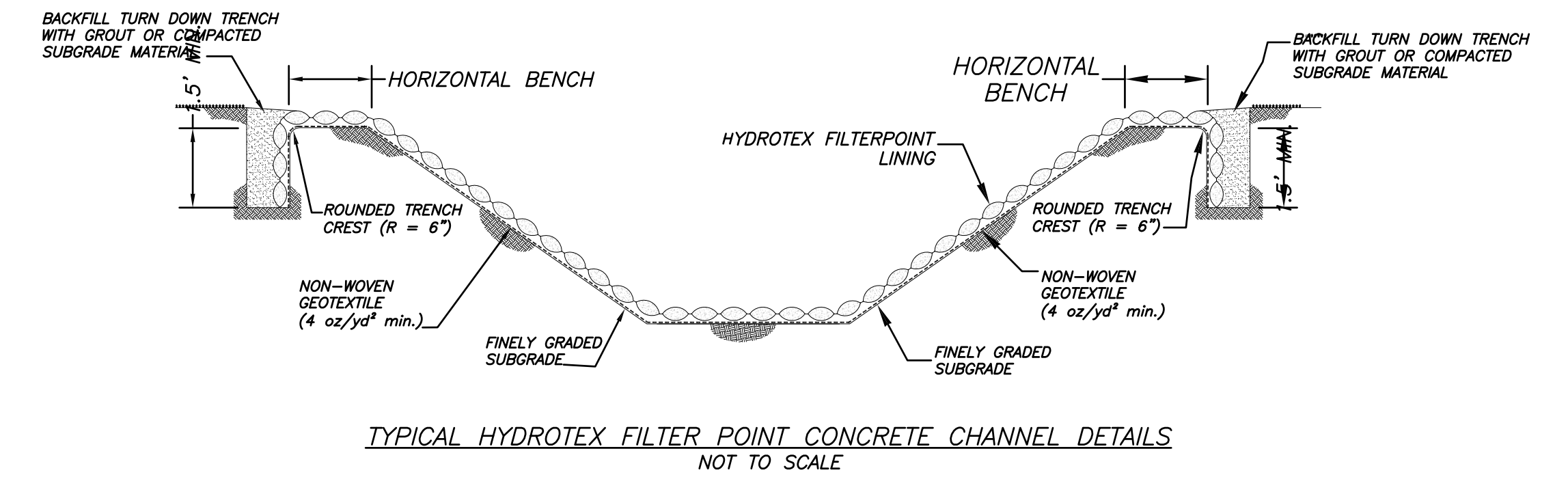
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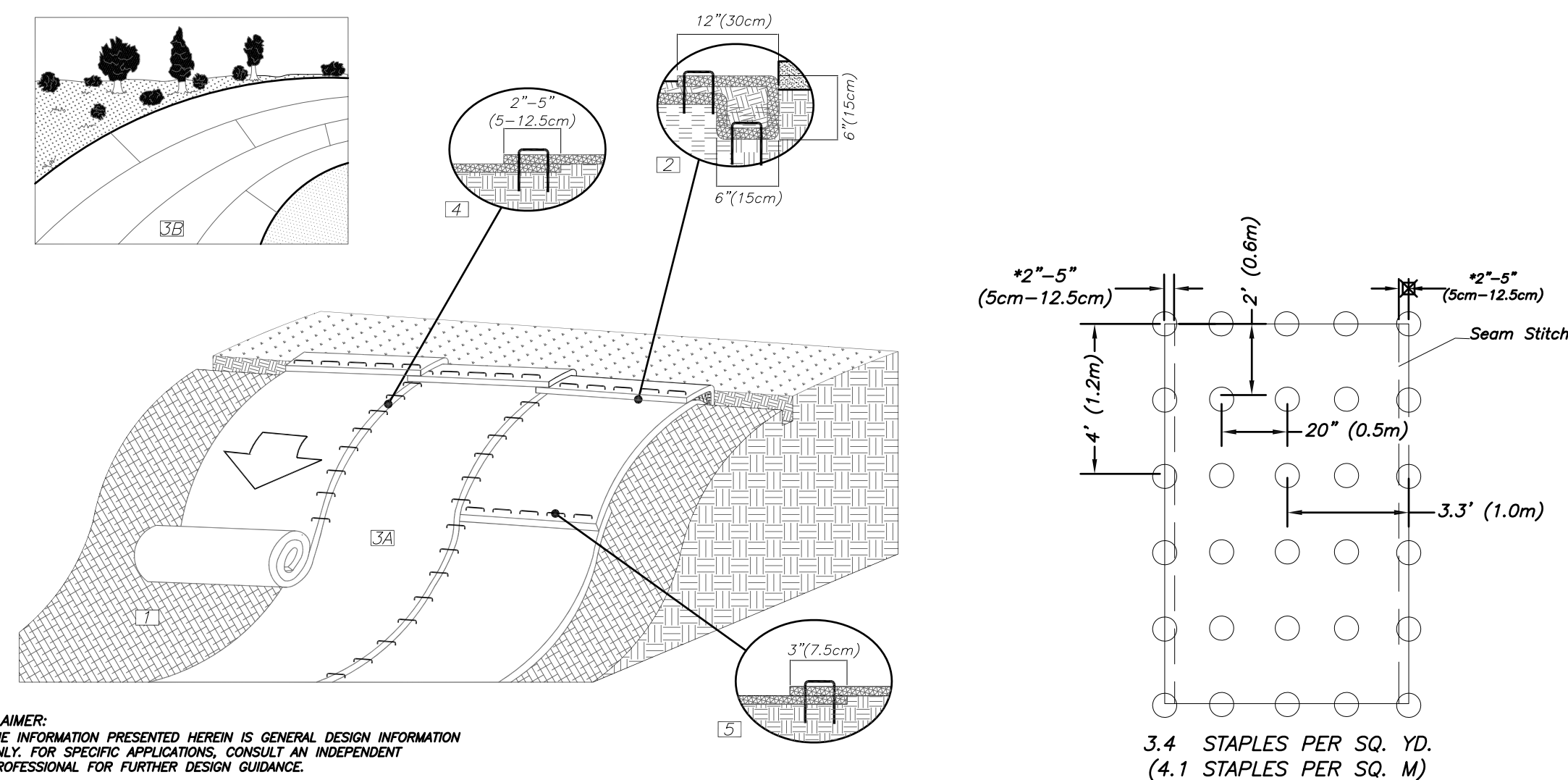
**DITCH STABILIZATION PROJECT**  
**ROWLETT PARK & WILDER DITCH**



TYPICAL CONCRETE STABILIZATION MAT INSTALLATION  
NOT TO SCALE



TYPICAL HYDROTEX FILTER POINT CONCRETE CHANNEL DETAILS  
NOT TO SCALE



SLOPE INSTALLATION DETAIL

1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECPS), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECPS IN A 6\"/>

3.4 STAPLES PER SQ. YD.  
(4.1 STAPLES PER SQ. M)

For blankets with the optional North American Green DOT System place staples/stakes through each of the WHITE colored dots.

\*Location of Seam Stitch\* will vary depending on North American Green product type.

\*NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6\"/>

CONSTRUCTION NOTES:

1. ALL SLOPES SHALL BE CLEARED OF TRASH, DEBRIS, BRUSH, SHRUBS AND TREES SMALLER THAN 5\"/>

DISCLAIMER:  
THE INFORMATION PRESENTED HEREIN IS GENERAL DESIGN INFORMATION ONLY. FOR SPECIFIC APPLICATIONS, CONSULT AN INDEPENDENT PROFESSIONAL FOR FURTHER DESIGN GUIDANCE.



TYPICAL TURF REINFORCEMENT INSTALLATION  
NOT TO SCALE

No.	DATE	REVISIONS	No.	DATE	REVISIONS
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DITCH STABILIZATION PROJECT  
DETAILS & GENERAL NOTES