

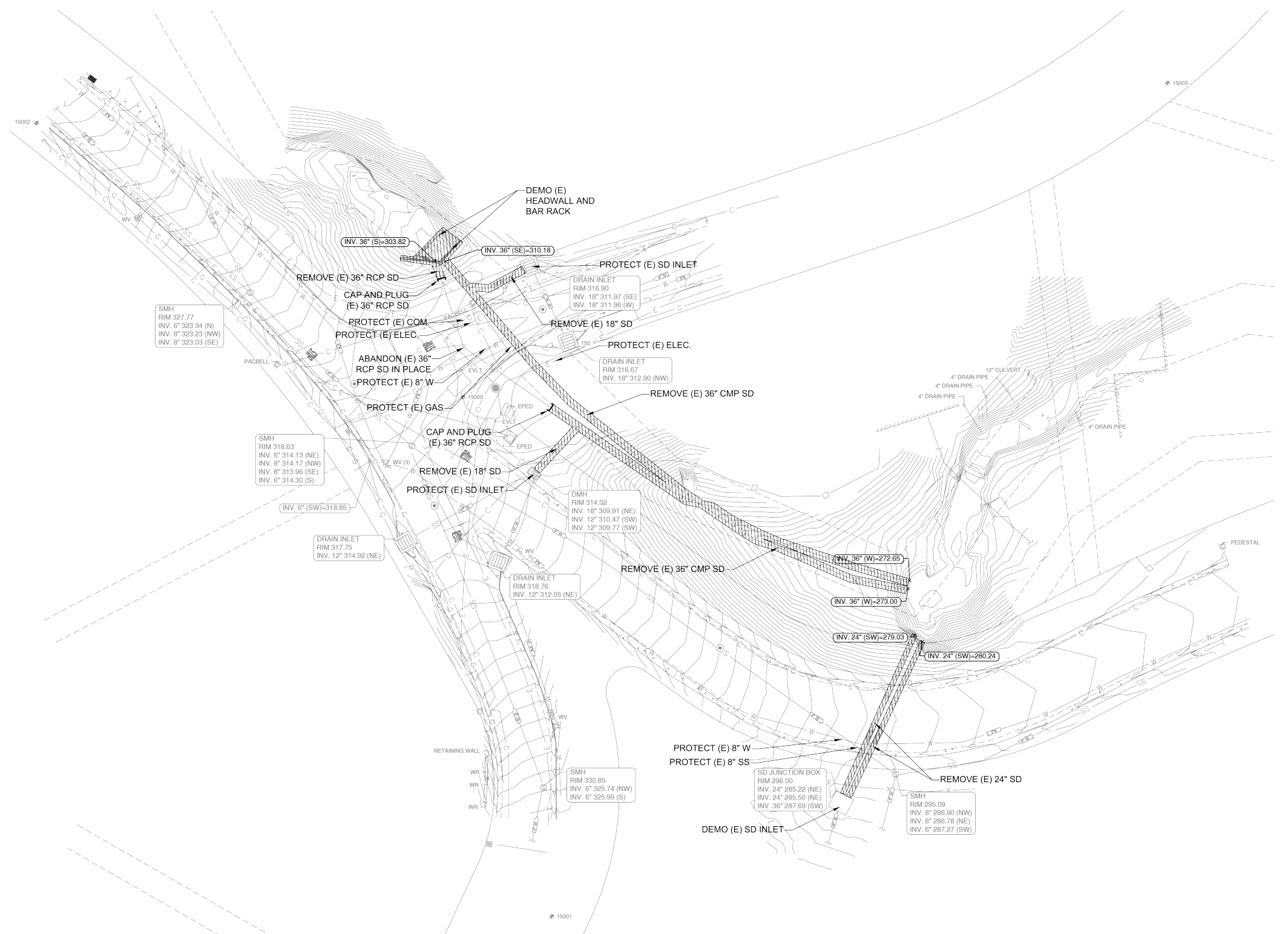
APPENDIX A

SITE PLANS OF REMOVAL ACTIVITIES, IMPROVEMENT ACTIVITIES, AND CREEK DAYLIGHTING

Sandra Hayne Storm Drain Re- placement and Creek Daylighting Project

Town of
Hillsborough

Site Plan of Removal Activities



PLAN

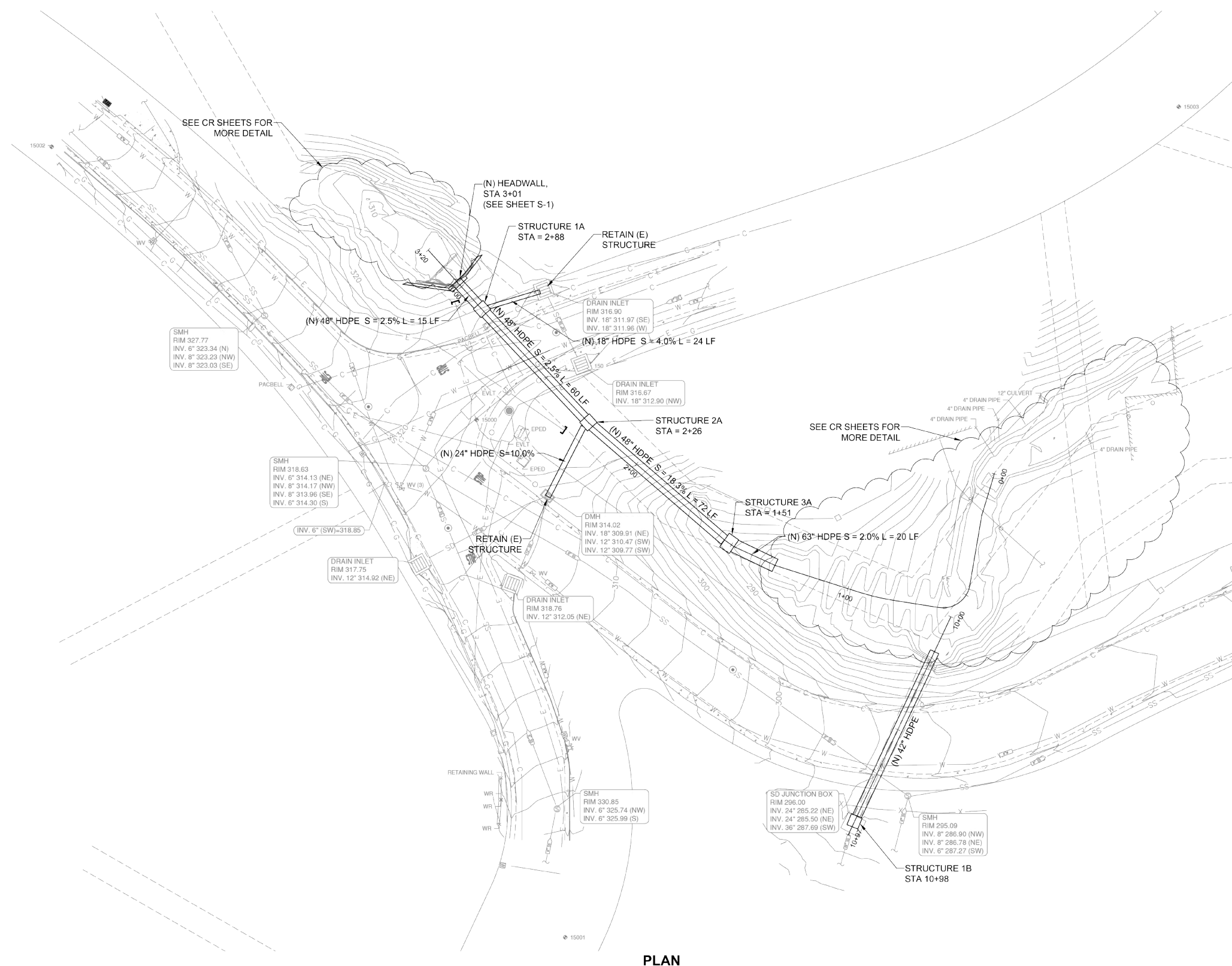
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Date: July 2019
Source: EKI

Sandra Hayne Storm Drain Re- placement and Creek Daylighting Project

Town of
Hillsborough

Site Plan of Improvement Activities

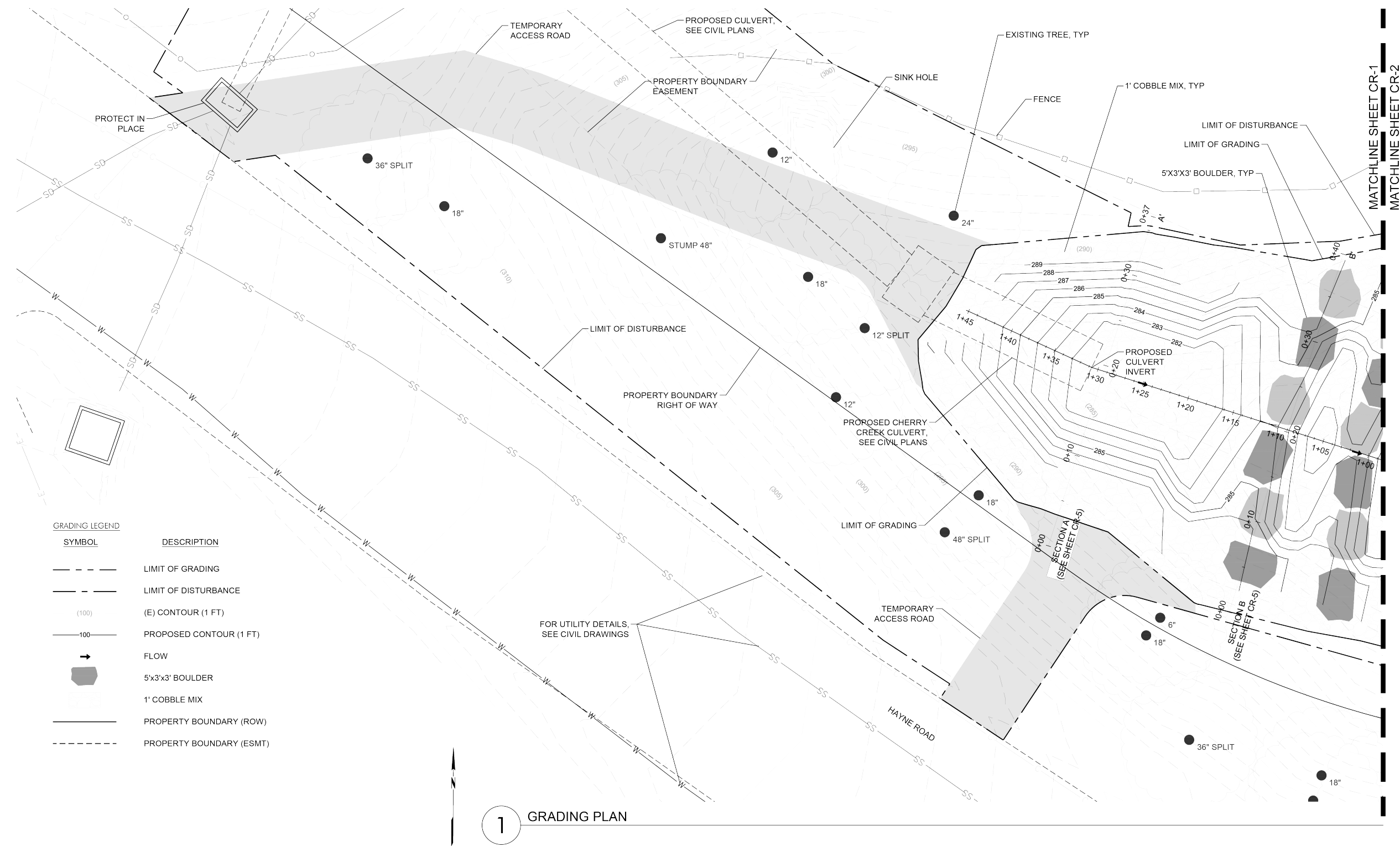


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Creek
Daylighting Site
Plan (Page 1 of 6)



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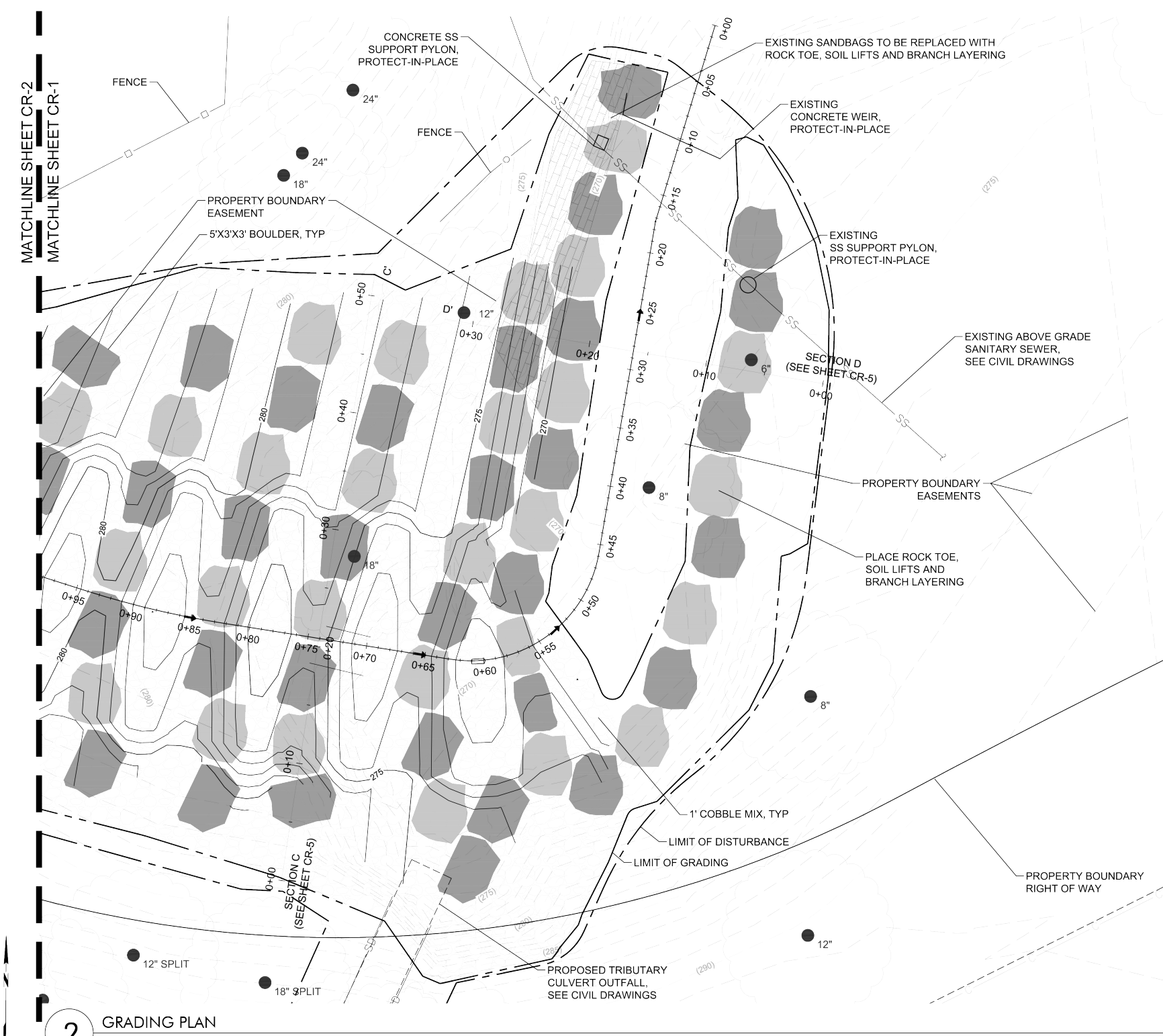
Sandra Hayne Storm Drain Re- placement and Creek Daylighting Project

Town of
Hillsborough

Creek
Daylighting Site
Plan (Page 2 of 6)

GRADING LEGEND

SYMBOL	DESCRIPTION
---	LIMIT OF GRADING
---	LIMIT OF DISTURBANCE
(100)	(E) CONTOUR (1 FT)
100	PROPOSED CONTOUR (1 FT)
→	FLOW
5'x3'x3' BOULDER	5'x3'x3' BOULDER
1' COBBLE MIX	1' COBBLE MIX
---	PROPERTY BOUNDARY (ROW)
---	PROPERTY BOUNDARY (ESMT)



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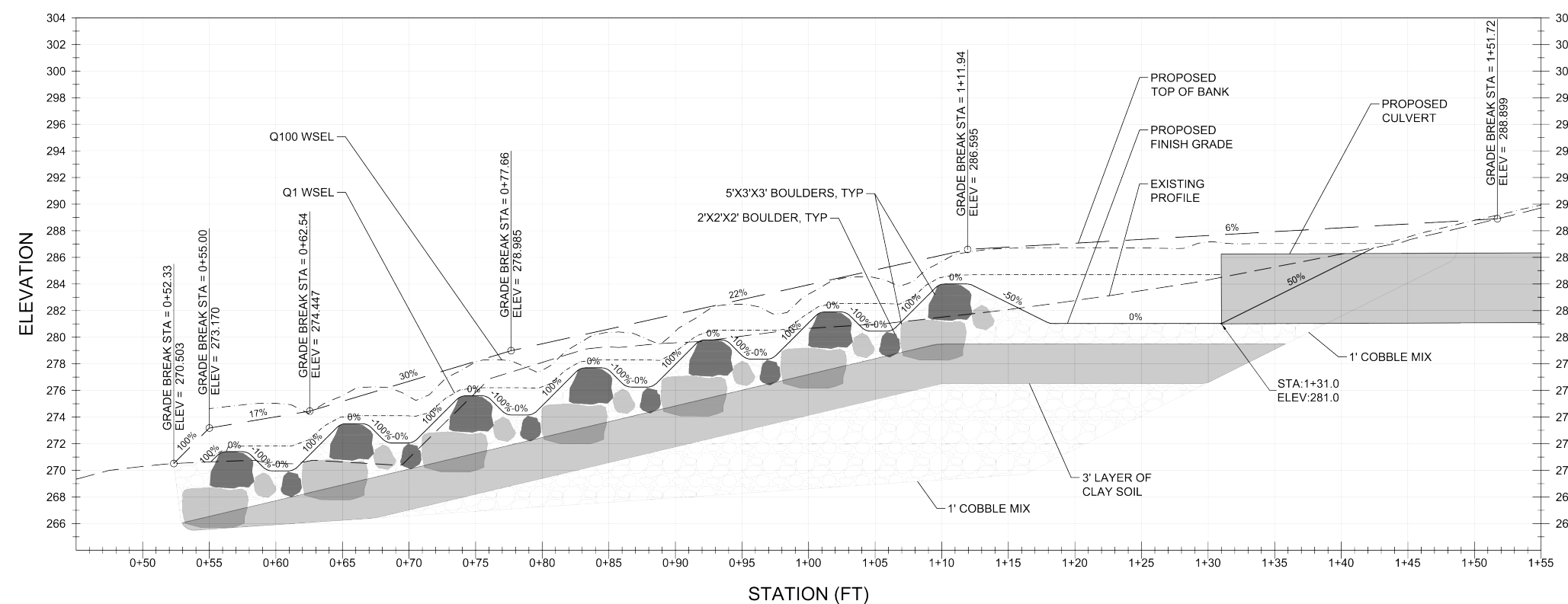
Creek
Daylighting Site
Plan (Page 3 of 6)

NOTE: 2'X2'X2' BOULDERS NOT SHOWN IN PLAN VIEW

EARTHWORK QUANTITIES

THE PROJECT INVOLVES THE EXCAVATION OF APPROXIMATELY 890 CU. YDS. OF SOIL INSIDE THE LIMIT OF GRADE. THIS AREA WILL BE BACKFILLED WITH COARSE ALLUVIUM IMPORTED FROM A QUARRY. A TWO FOOT LAYER OF CLAY SOIL WILL ALSO BE IMPORTED AND INSTALLED IN ORDER TO PROMOTE SURFACE FLOW AND PREVENT SUB-SURFACE EROSION AND SETTLING.

- CUT = 890 CU. YDS. (EXISTING SOIL)
- FILL = 648 CU. YDS. (IMPORTED COARSE ALLUVIUM)
- FILL = 222 CU. YDS. (IMPORTED CLAY SOIL)



1 CREEK CHANNEL CENTERLINE PROFILE

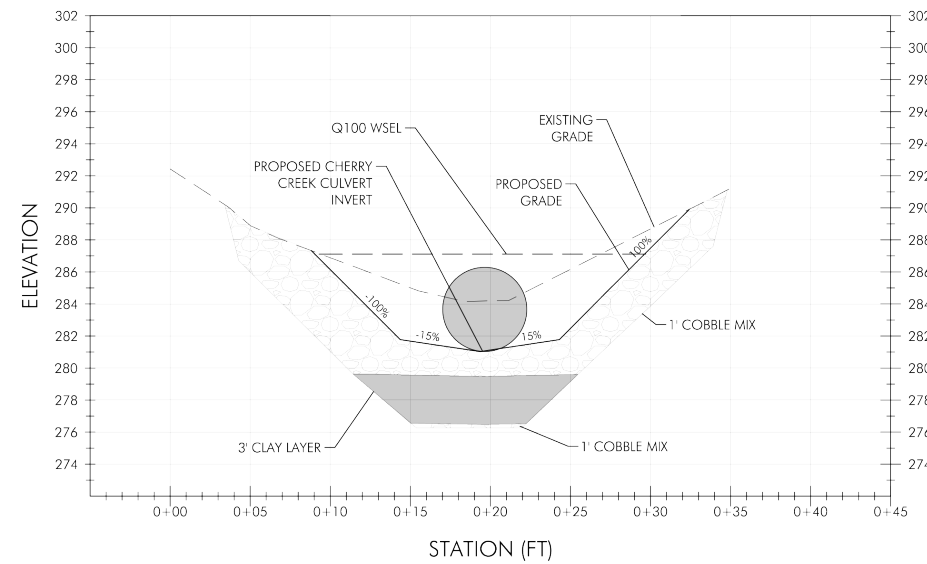
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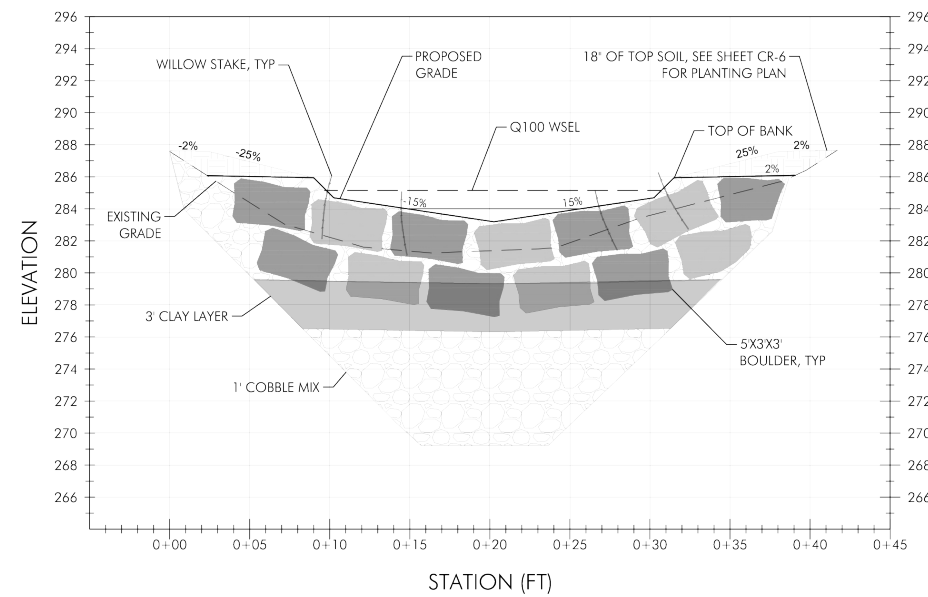
Sandra Hayne Storm Drain Re- placement and Creek Daylighting Project

Town of
Hillsborough

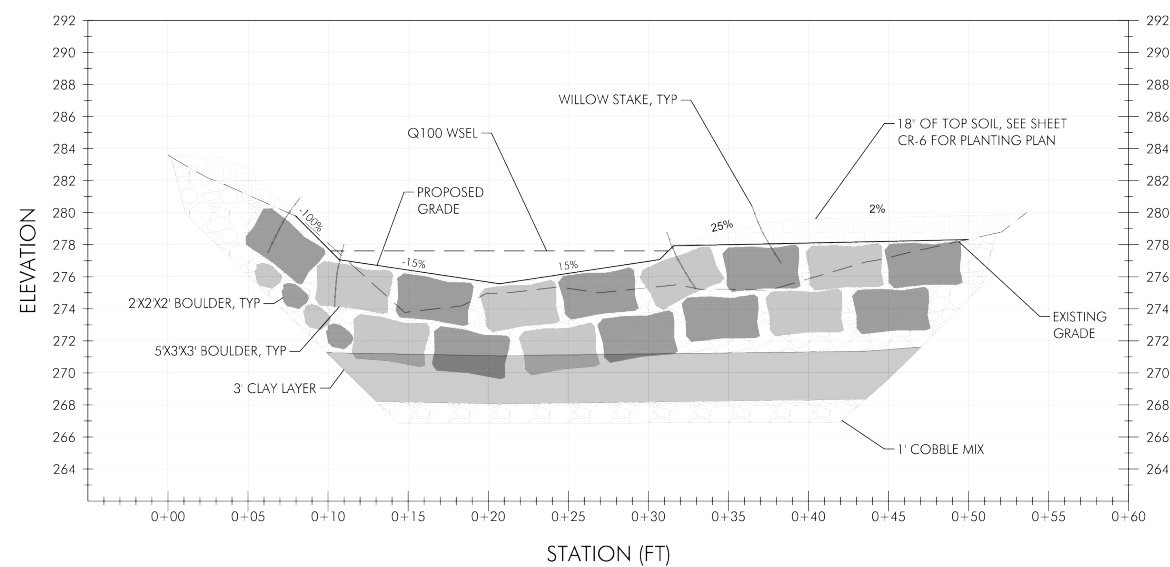
Creek Daylighting Site Plan (Page 4 of 6)



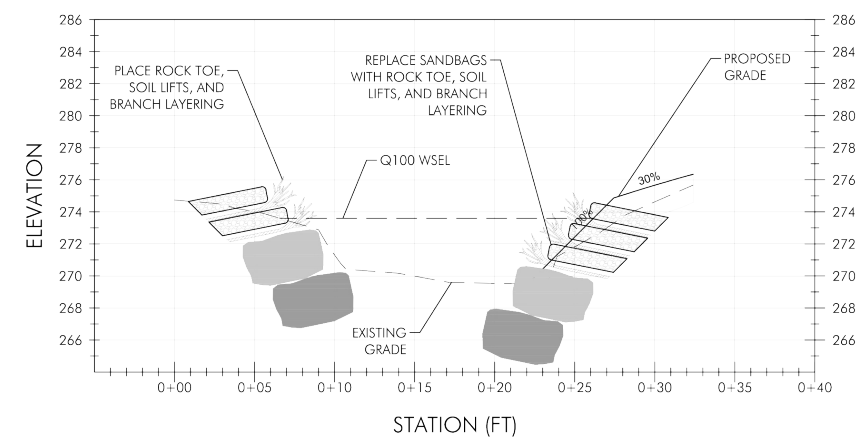
A SECTION A-A'



B SECTION B-B'



C SECTION C-C'



D SECTION D-D'

NOTE: 2'X2'X2' BOULDERS NOT
SHOWN IN PLAN VIEW

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Sandra Hayne
Storm Drain Re-
placement and
Creek Daylighting
Project

Town of
Hillsborough

Creek
Daylighting Site
Plan (Page 5 of 6)

SITE PREPARATION NOTES

1. SITE PREPARATION, INCLUDING WEED CONTROL, WILL BE REQUIRED WITHIN SEEDING AND PLANTING AREAS WHERE NO GRADING WILL OCCUR. PRIOR TO SEEDING OR PLANTING, WEEDS WILL BE REMOVED BY MECHANICAL CUTTING OF ANNUAL GRASSES AND OTHER HERBACEOUS PLANTS; HAND PULLING OF SEEDLINGS AND SAPPLINGS WHERE FEASIBLE; AND SPECIFIC HERBICIDE APPLICATION FOR TARGET WEEDS.

2. THE OWNER'S REPRESENTATIVE WILL IDENTIFY AND FLAG ANY NATURALLY RECRUITING NATIVE OAK SEEDLINGS OR OTHER DESIRABLE EXISTING NATIVE PLANTS AT THE SITE TO BE AVOIDED DURING WEED CONTROL ACTIVITIES.

RIPARIAN SHRUBS AND TREE PLANTINGS PALETTE

BOTANICAL NAME	COMMON NAME	CONTAINER SIZE	ON-CENTER SPACING (FEET)
AESCULUS CALIFORNICA	CALIFORNIA BUCKEYE	5 GAL	12
BACCHARIS PILULARIS	COYOTE BRUSH	1 GAL	6
HETEROMELES ARBUTIFOLIA	TOYON	1 GAL	8
QUERCUS AGRIFOLIA	COAST LIVE OAK	5 GAL	12

RIPARIAN UNDERSTORY PLANTING AREA PALETTE

BOTANICAL NAME	COMMON NAME	CONTAINER SIZE	ON-CENTER SPACING (FEET)
ACHELLIA MILLEFOLIUM	YARROW	SEED	
BACCHARIS PILULARIS	COYOTE BRUSH	1 GAL	6
BROMUS CARINATUS	CALIFORNIA BROME	SEED	
ELYMUS GLAUCUS	BLUE WILD RYE	SEED	
FESTUCA CALIFORNICA	CALIFORNIA FESCUE	SEED	
FRANGULA CALIFORNICA	CALIFORNIA COFFEEBERRY	1 GAL	6
HETEROMELES ARBUTIFOLIA	TOYON	1 GAL	8
HORDEUM BRACHYANTHERUM	MEADOW BARLEY	SEED	
LEYMUS TRITICOIDES	CREeping WILD RYE	SEED	
LONICERA HISPIDULA	PINK HONEYSUCKLE	1 GAL	6
POA SECUNDA	NATIVE PINE BLUEGRASS	SEED	
SYMPHIOCARPUS ALBUS	SNOWBERRY	1 GAL	6

WILLOW PLANTING AREA PALETTE

BOTANICAL NAME	COMMON NAME	CONTAINER SIZE	ON-CENTER SPACING (FEET)
SALIX LAEVIGATA	POLISHED WILLOW	STAKE	SEE DETAILS
SALIX LASIOLEPIS	ARROYO WILLOW	STAKE	SEE DETAILS

PLANTING NOTES

- GENERAL:

1. SOIL AMENDMENTS AND/OR FERTILIZER TABLETS SHALL BE USED AS NEEDED TO ACHIEVE ADEQUATE SOIL NUTRIENT LEVELS IN PLANTING AREAS.

2. SOIL TESTS SHALL BE CONDUCTED PRIOR TO PLANTING TO DETERMINE NUTRIENT AVAILABILITY PRIOR TO PLANTING.

3. FOLIAGE PROTECTION CAGES SHALL BE INSTALLED AS REQUIRED TO PROTECT PLANTINGS FROM WILDLIFE BROWSING.

- RIPARIAN PLANTING AREAS:

1. PLANT INSTALLATION SHALL OCCUR BETWEEN OCTOBER 15TH AND DECEMBER 31ST OR AS APPROVED BY THE OWNER'S REPRESENTATIVE. THE DRIP IRRIGATION SYSTEM SHALL BE OPERATIONAL PRIOR TO PLANTING.

2. THE CONTRACTOR SHALL PREPARE A TYPICAL LAYOUT OF THE RIPARIAN PLANTS FOR APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION. THE CONTRACTOR SHALL ENSURE THAT THE RIPARIAN PLANTINGS ARE INSTALLED IN THE APPROPRIATE ELEVATION RANGES.

3. WILLOW POLE CUTTINGS:

A. WILLOW POLE CUTTING INSTALLATION SHALL OCCUR BETWEEN DECEMBER 1ST AND DECEMBER 31ST OR AS APPROVED BY THE OWNER'S REPRESENTATIVE.

B. WILLOW POLE CUTTINGS WILL BE HARVESTED ON-SITE AS APPROVED BY THE OWNER'S REPRESENTATIVE.

- IRRIGATION NOTES:

1. A TEMPORARY DRIP IRRIGATION SYSTEM SHALL BE USED FOR THE RIPARIAN PLANTING AREAS. WILLOW POLE CUTTINGS SHALL NOT BE IRRIGATED.

2. THE IRRIGATION SYSTEMS SHALL BE INSTALLED PRIOR TO PLANT INSTALLATION UNLESS OTHERWISE APPROVED BY THE OWNER'S REPRESENTATIVE.

3. THE IRRIGATION SCHEDULES WILL BE DETERMINED BASED ON LOCAL RAINFALL AND EVAPOTRANSPIRATION DATA. THE INTENT OF THE IRRIGATION SYSTEMS IS TO PROVIDE THE MINIMUM AMOUNT OF WATER TO SUSTAIN GOOD PLANT HEALTH.

SEEDING NOTES

1. SEED SHALL BE SUPPLIED ON THE BASIS OF PURE LIVE SEED (PLS).

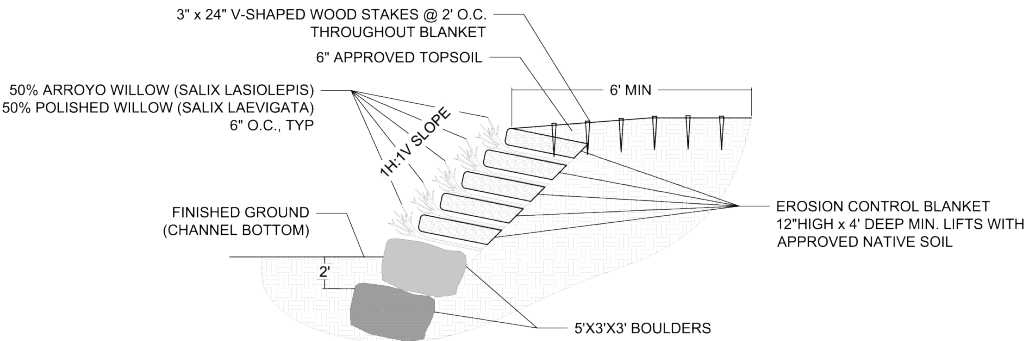
2. SEEDING AREAS SHALL BE MARKED PRIOR TO SEED APPLICATION AND APPROVED BY THE OWNER'S REPRESENTATIVE.

3. SOIL WILL BE PREPARED FOR SEED INSTALLATION BY HAND RAKING OR DISKING.

4. SEED APPLICATION METHODS SHALL BE AS FOLLOWS:

A. THE UPPER RIPARIAN SEED MIXES SHALL BE APPLIED WITH A DRILL SEEDER AND/OR BE MANUALLY BROADCASTED. DRILL SEEDING SHALL NOT OCCUR ON 3:1 SLOPES OR STEEPER.

B. THE FLOODPLAIN SEED MIX SHALL BE MANUALLY BROADCASTED.



1SOIL LIFT TYPICAL DETAIL

WILLOW POLE CUTTINGS

1. WILLOW (SALIX LASIOLEPIS AND SALIX LASIOLEPIS) POLES SHALL BE CUT FROM LIVE PLANTS LOCATED ON-SITE BETWEEN NOVEMBER 1ST AND FEBRUARY 28TH.

2. IN AN ATTEMPT TO INCREASE THE POSSIBILITY THAT WILLOW POLES ARE COLLECTED FROM BOTH MALE AND FEMALE PLANTS, WILLOW POLES SHALL BE COLLECTED FROM A MINIMUM OF 5 INDIVIDUAL TREES.

3. WILLOW POLES SHALL BE CUT FROM MINIMUM ONE-YEAR-OLD BRANCHES. WILLOW POLES SHALL HAVE A MINIMUM LENGTH OF FOUR (4) FEET LONG AND A MAXIMUM LENGTH OF FIVE (5) FEET. WILLOW POLES SHALL HAVE A MINIMUM CUT-END DISTAL DIAMETER OF ¼" AND A MAXIMUM CUT-END BASAL DIAMETER OF 1 1/2". WILLOW POLES SHALL HAVE CONTINUOUS BARK AND STEMS THAT ARE NOT SPLIT.

4. REMOVE ALL BRANCHES FLUSH WITH POLE.

5. WILLOW POLES SHALL BE PLANTED AT AN ELEVATION AT WHICH THE BASAL END OF THE CUTTING WILL BE IN CONTACT WITH THE WATER TABLE UNTIL ROOTING HAS ESTABLISHED.

6. THE DIMENSION OF THE PLANTING HOLES SHALL BE A MINIMUM DIAMETER OF 3-INCHES AND A MINIMUM DEPTH OF 36-INCHES.

7. CREATE A WATERING BASIN AND INSTALL 4-INCHES OF MULCH AROUND INSTALLED WILLOW POLE CUTTING.

WILLOW POLE CUTTINGS:
PLANT WILLOWS SUCH THAT
BASE OF CUTTING EXTENDS
A MINIMUM OF 3' BELOW THE
FINISH GRADE.

SECTION

WILLOW POLE CUTTING DETAIL
NOT TO SCALE

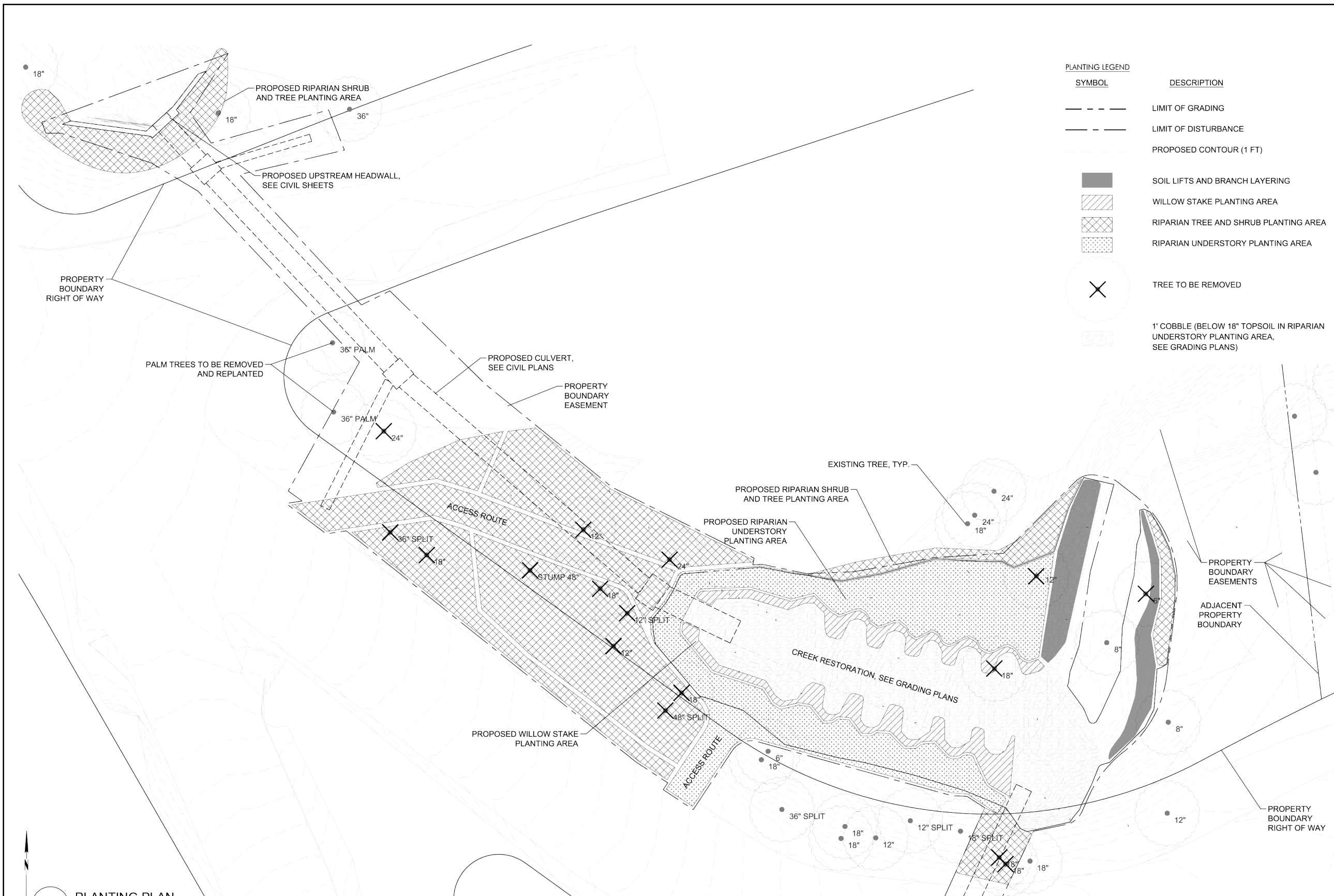
2WILLOW POLE CUTTING DETAIL

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Town of
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Creek Daylighting Site Plan (Page 6 of 6)

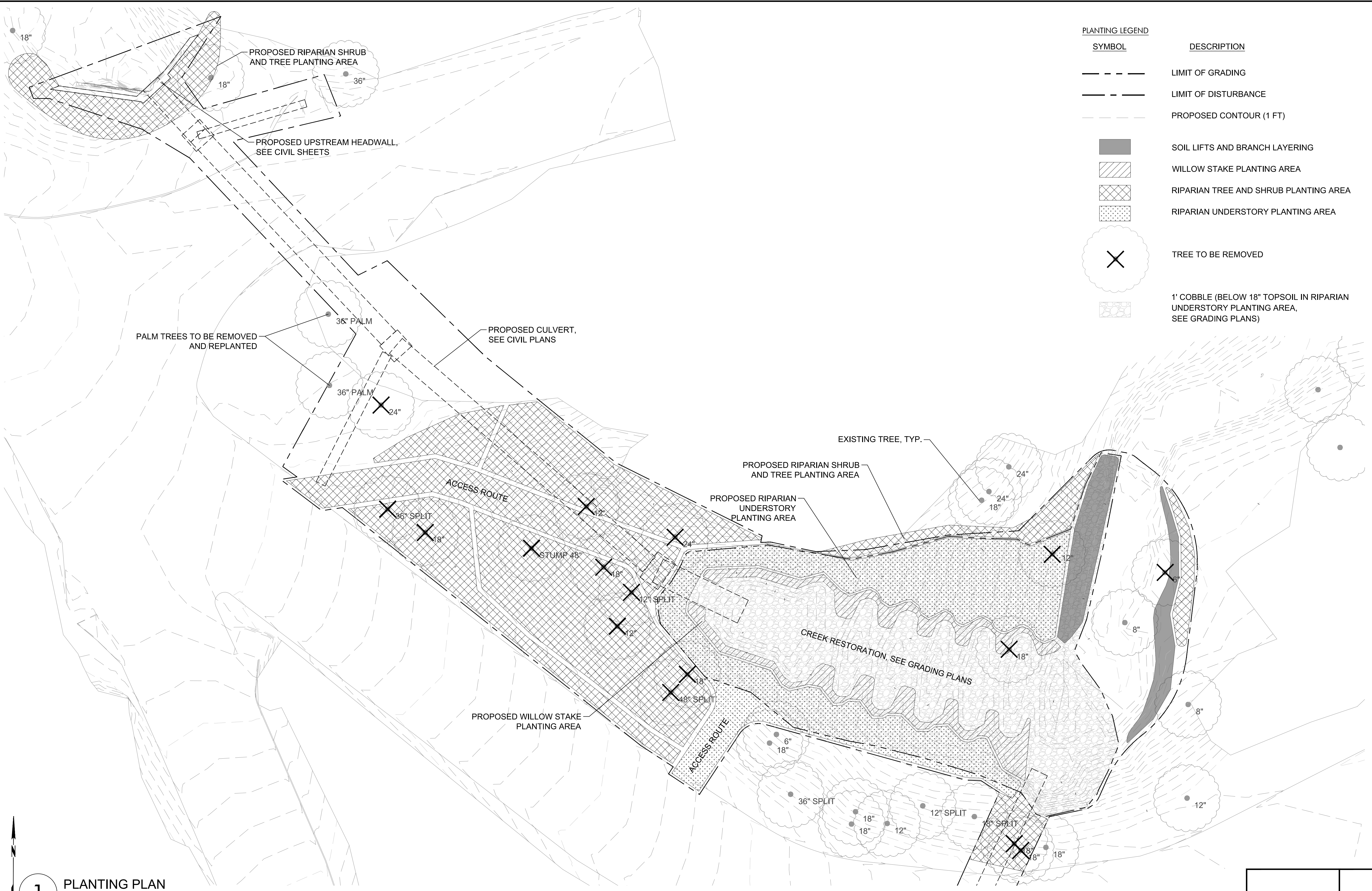


1 PLANTING PLAN
10 0 10 20
(SCALE: 1" = 10')

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Date: July 2019
Source: EKI

L:\Acad 2000 Files\27000\27171\dwg\CR-6 Creek Restoration Planting Plan View.dwg 6-07-19



PLANTING LEGEND

SYMBOL	DESCRIPTION
---	LIMIT OF GRADING
- - -	LIMIT OF DISTURBANCE
---	PROPOSED CONTOUR (1 FT)
[Solid Grey Box]	SOIL LIFTS AND BRANCH LAYERING
[Diagonal Lines Box]	WILLOW STAKE PLANTING AREA
[Cross-hatch Box]	RIPARIAN TREE AND SHRUB PLANTING AREA
[Dotted Box]	RIPARIAN UNDERSTORY PLANTING AREA
[Circle with X]	TREE TO BE REMOVED
[Cobble Pattern Box]	1' COBBLE (BELOW 18" TOPSOIL IN RIPARIAN UNDERSTORY PLANTING AREA, SEE GRADING PLANS)

1

PLANTING PLAN

100

0

10

20

(SCALE: 1" = 10')

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Sandra Hayne Storm Drain Replacement and Creek Daylighting Project

Town of Hillsborough, San Mateo County

Tree Removal Plan

30% DESIGN SUBMITTAL	30% DESIGN SUBMITTAL
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VERIFY SCALE	DATE: APRIL 2019	SCALE: AS SHOWN	DRAWN: RP	DESIGNED: BS AS RP	APPROVED: BS	JOB NO.:	REV	DESCRIPTION	APPROD	DATE
BAR IS ONE INCH ON ORIGINAL DRAWING.								30% DESIGN SUBMITTAL	BS	APR 2019
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY										
SHEET NUMBER										
CR-6										
X OF X										



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BURLINGAME, CALIFORNIA 94010-5906
(650) 232-9100 • FAX (650) 552-9012

SANDRA/HAYNE STORM DRAIN REPLACEMENT PROJECT - FINAL DESIGN

TOWN OF HILLSBOROUGH

CREEK RESTORATION PLANTING PLAN VIEW