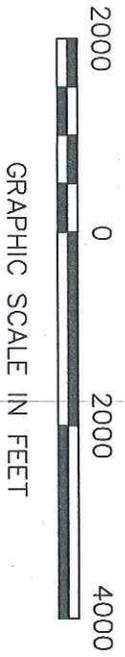


SITE
 N 41°21'47.25"
 W 71°50'19.83"

USGS WATCH HILL QUADRANGLE

LOCATION MAP



REVISED: APRIL 18, 2016

REVISED: FEBRUARY 3, 2016
 REVISED: DECEMBER 28, 2015
 REVISED: OCTOBER 27, 2015

STORMDRAIN OUTFALL IMPROVEMENTS
 POKO THREADMILL
 APPLICATION BY:
 THREADMILL ACQUISITIONS, LLC
 PORTION OF PROPERTY OF
 NORWEST MARINE, INC.
 7 RIVER ROAD
 PAWCATUCK, CONNECTICUT
 NEW LONDON COUNTY, CONNECTICUT

db BENTLEY
 ENGINEERS/SURVEYORS/PLANNERS
 100 FORT HILL ROAD
 GROTON, CONNECTICUT 06340
 (860) 448-0400

DATE: JULY 13, 2015 SCALE: AS SHOWN DWG. NO.: 04-050.05 SHEET 1 OF 10

NOTES

1. EXISTING CONDITIONS BASED ON "EXISTING CONDITIONS SURVEY, PORTION OF PROPERTY OF NORWEST MARINE, INC., 7 RIVER ROAD, PAWCATUCK, CONNECTICUT, SCALE: 1"=5', DATE: JUNE 17, 2015, JOB NO: 04-050, DICESARE-BENTLEY ENGINEERS, INC., GROTON, CONNECTICUT (IDENTIFIED AS SITE LIMIT LINE).
2. TIDAL WETLANDS WERE DELINEATED IN THE FIELD BY JAMES R. COWEN, ENVIRONMENTAL PLANNING SERVICES AND LOCATED BY DICESARE-BENTLEY ENGINEERS, INC., GROTON, CONNECTICUT.
3. ELEVATIONS BASED ON NAVD88 DATUM.
4. SITE: TOWN OF STONINGTON ASSESSOR'S MAP 5, BLOCK 6, LOT 21
7 RIVER ROAD, PAWCATUCK, CT 06379
5. ADJOINERS:
NORTH: CHELSEA MARGARET MORSE
SOUTH: TOWN OF STONINGTON
ACROSS THE STREET: THREADMILL PARTNERS LLC
6. COASTAL RESOURCES: COASTAL FLOOD HAZARD AREA, DEVELOPED SHOREFRONT, FRESHWATER WETLANDS AND UNDESIGNATED TIDAL WETLANDS, AND ESTUARINE EMBAYMENT.
7. PURPOSE: STORMDRAIN OUTFALL IMPROVEMENTS
8. PROPOSED ACTIVITY: REPLACEMENT OF A STORMDRAIN HEADWALL AND NEW OUTLET CHANNEL EROSION PROTECTION USING A PREFORMED SCOUR HOLE, LARGE EMBEDDED ROCKS ALONG THE TOE OF THE CHANNEL SIDEWALLS AND RIPRAP ALONG THE SLOPED CHANNEL BANKS.
9. THESE PLANS ARE PREPARED FOR PERMIT PURPOSED ONLY AND ARE NOT CONTRACT DOCUMENTS.

I HEREBY CERTIFY THAT I HAVE MARKED THE LIMITS OF THE TIDAL WETLANDS AND IDENTIFIED THE TIDAL WETLAND VEGETATION ON THE SITE SHOWN HEREON.

James R. Cowen
CERTIFIED SOILS SCIENTIST

JUNE 30, 2015
DATE

NOTES

LEGEND

- | | |
|--|-----------------------------|
| CB | CATCH BASIN |
| CUL | COASTAL JURISDICTIONAL LINE |
| HTL | HIGH TIDE LINE |
| MHW | MEAN HIGH WATER |
| MLW | MEAN LOW WATER |
| N/F | NOW OR FORMERLY |
| TYP | TYPICAL |
| --- | EXISTING CONTOUR |
| --- | NEW CONTOUR |
| 45 | TIDAL WETLAND FLAG |
| Δ TW# | DECIDUOUS TREE |
|  | CONIFEROUS TREE |

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STORMDRAIN OUTFALL IMPROVEMENTS

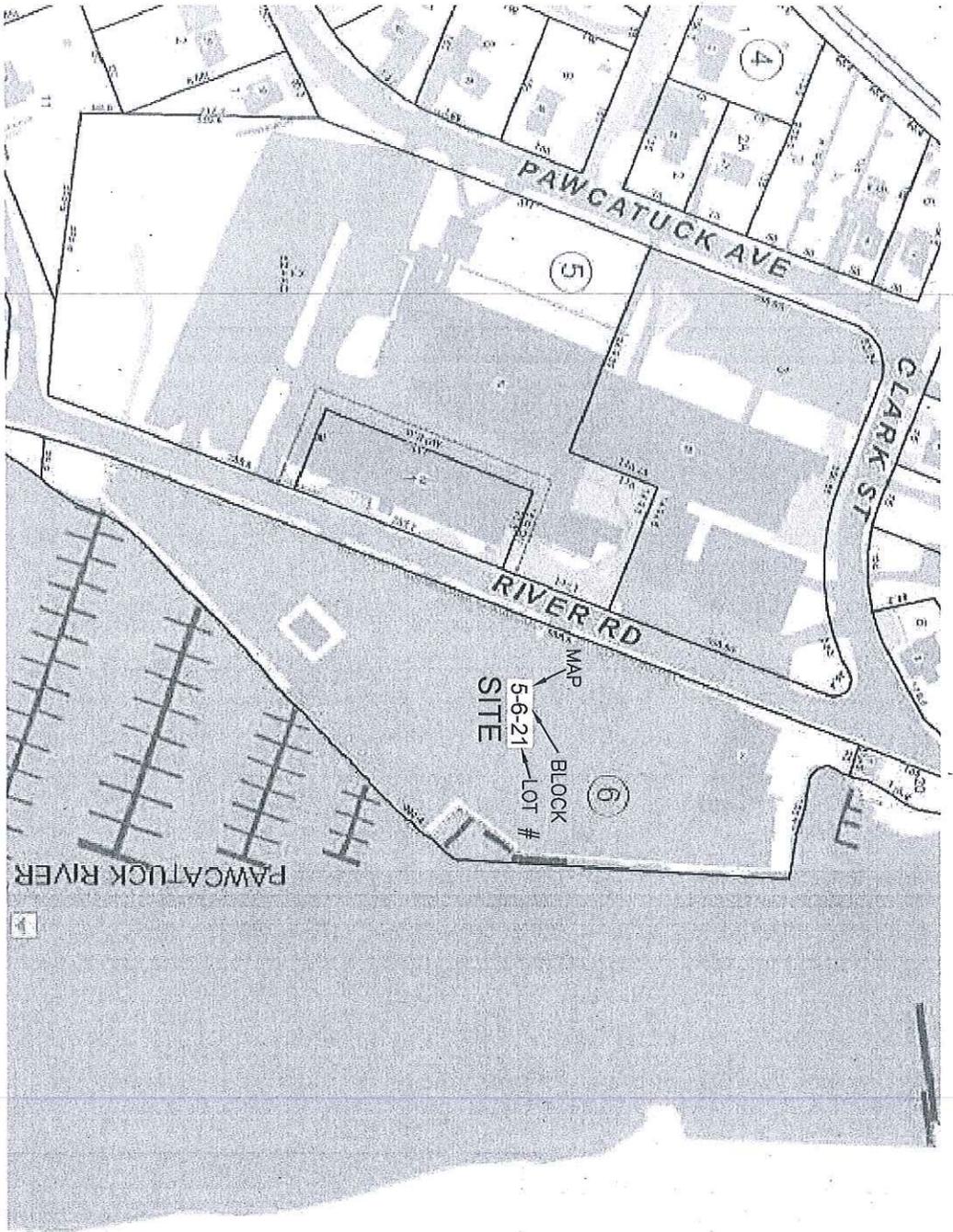
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SCALE: AS SHOWN

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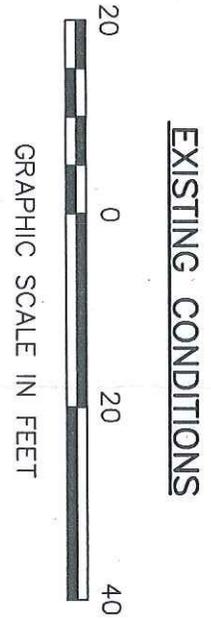
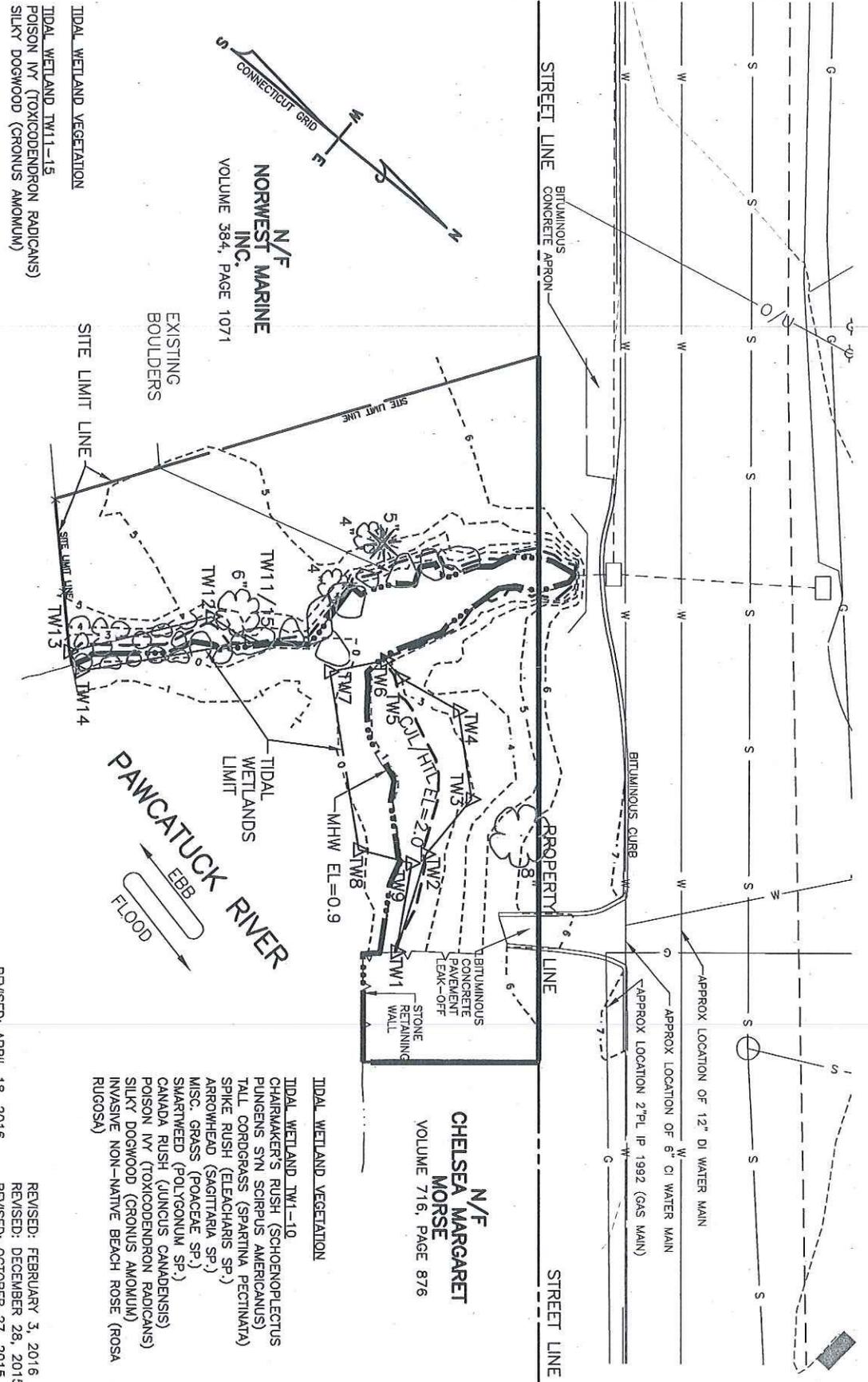
**TAX ASSESSOR
 MAP**

STORMDRAIN OUTFALL IMPROVEMENTS
 POKO THREADMILL
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DWG. NO.: 04-050.05 SHEET 3 OF 10



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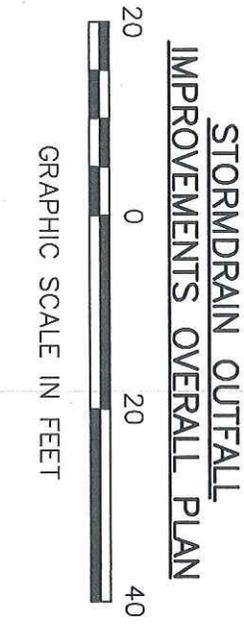
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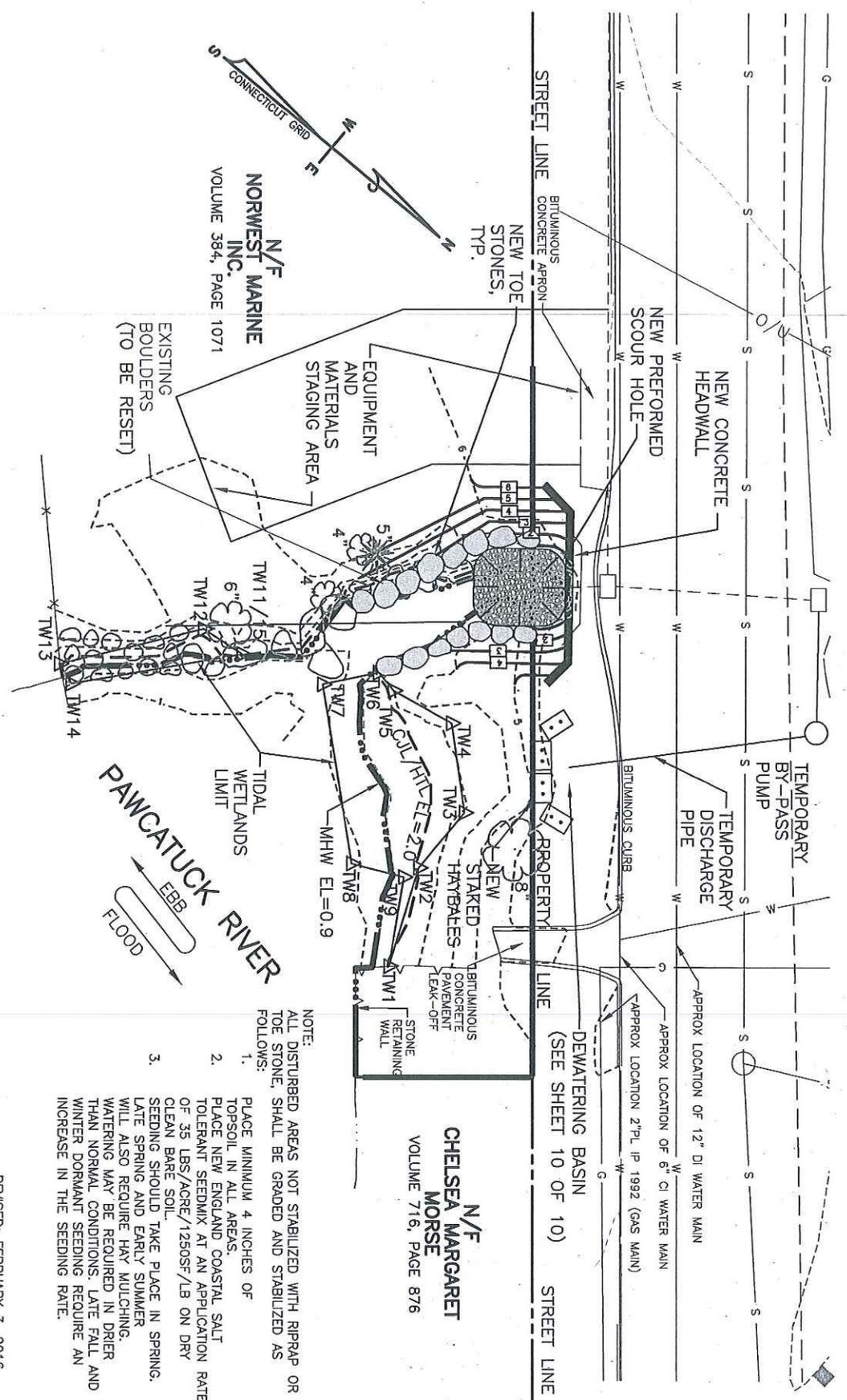
DATE: JULY 13, 2015 **SCALE: 1" = 20'** **DWG. NO.: 04-050.05 SHEET 4 OF 10**

REVISED: FEBRUARY 3, 2016
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- TIDAL WETLAND TW1-10**
- CHARMAKER'S RUSH (SCHOENOPLECTUS PUNGENS SYN SCIRPUS AMERICANUS)
 - TALL COROPORASS (SPARTINA PECTINATA)
 - SPIKE RUSH (ELEOCHARIS SP.)
 - ARROWHEAD (SAGITTARIA SP.)
 - MISC. GRASS (POACEAE SP.)
 - SMARTWEED (POLYGONUM SP.)
 - CANADA RUSH (JUNCUS CANADENSIS)
 - POISON IVY (TOXICODENDRON RADICANS)
 - SILKY DOGWOOD (GRONUS AMOMUM)
 - INVASIVE NON-NATIVE BEACH ROSE (ROSA RUGOSA)



**STORMDRAIN OUTFALL
IMPROVEMENTS OVERALL PLAN**

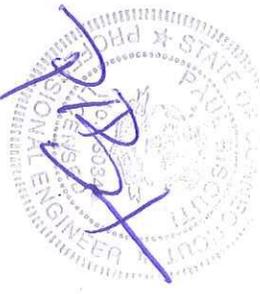


NOTE:
ALL DISTURBED AREAS NOT STABILIZED WITH RIPRAP OR TOE STONE, SHALL BE GRADED AND STABILIZED AS FOLLOWS:

1. PLACE MINIMUM 4 INCHES OF TOPSOIL IN ALL AREAS.
2. PLACE NEW ENGLAND COASTAL SALT TOLERANT SEEDMIX AT AN APPLICATION RATE OF 35 LBS./ACRE/1250SF/LB ON DRY CLEAN BARE SOIL.
3. SEEDING SHOULD TAKE PLACE IN SPRING, LATE SPRING AND EARLY SUMMER. WILL ALSO REQUIRE HAY MULCHING. WATERING MAY BE REQUIRED IN DRIER THAN NORMAL CONDITIONS. LATE FALL AND WINTER DORMANT SEEDING REQUIRE AN INCREASE IN THE SEEDING RATE.

REVISED: APRIL 18, 2016

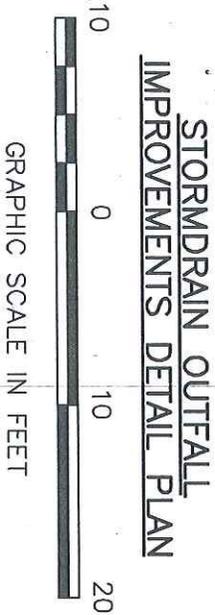
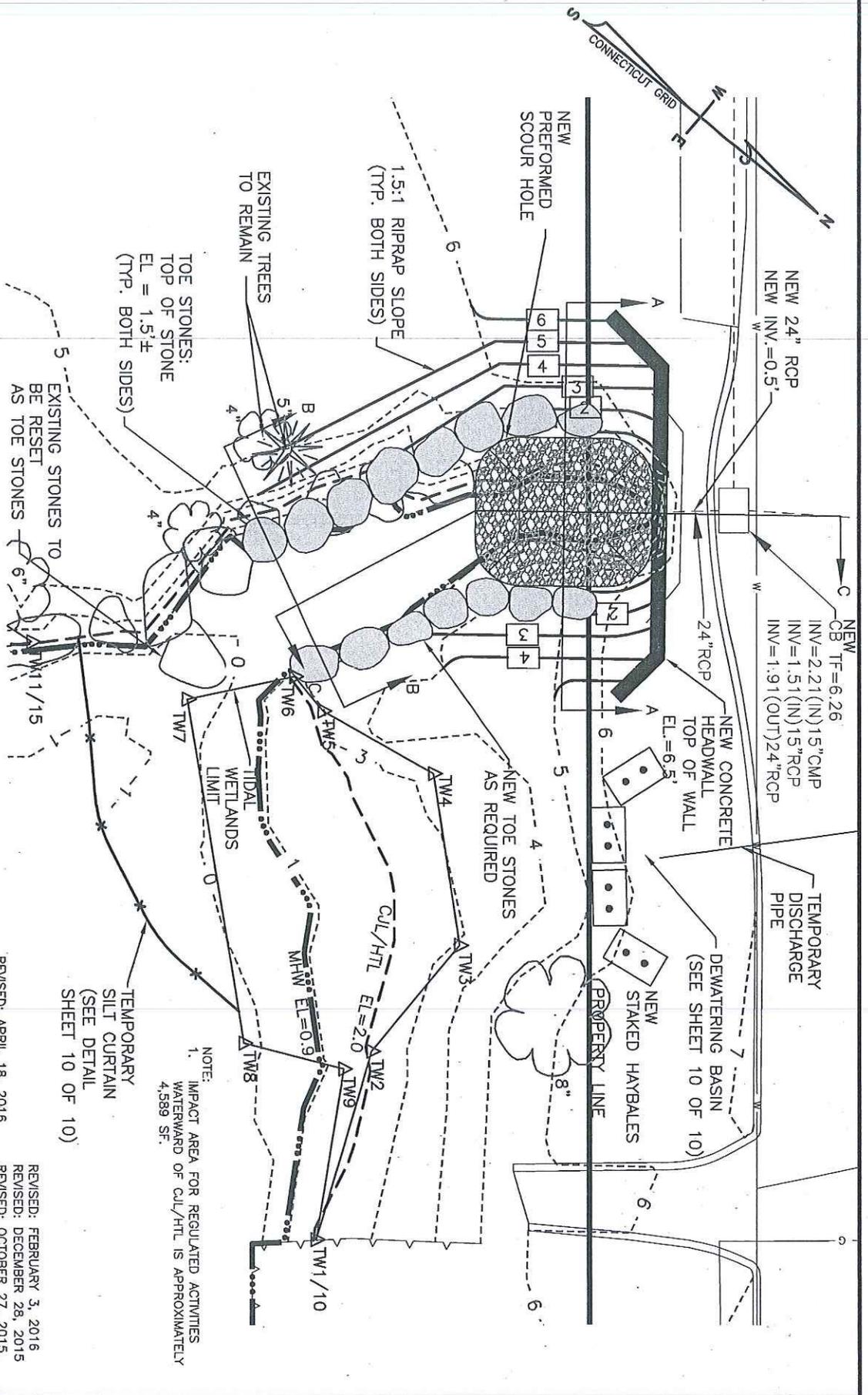
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DWG. NO.: 04-050.05 SHEET 5 OF 10



STORMDRAIN OUTFALL IMPROVEMENTS
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DATE: JULY 13, 2015 SCALE: 1" = 10'

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NOTE:
 1. IMPACT AREA FOR REGULATED ACTIVITIES WATERWARD OF CUL/HTL IS APPROXIMATELY 4,589 SF.

TEMPORARY SILT CURTAIN (SEE DETAIL SHEET 10 OF 10)

EXISTING TREES TO REMAIN

TOE STONES: TOP OF STONE EL = 1.5'± (TYP. BOTH SIDES)

EXISTING STONES TO BE RESET AS TOE STONES

1.5:1 RIPRAP SLOPE (TYP. BOTH SIDES)

NEW PERFORMED SCOUR HOLE

NEW 24" RCP NEW INV.=0.5'

NEW CB TF=6.26 INV=2.21(N)15" CMP INV=1.51(N)15" RCP INV=1.91(OUT)24" RCP

NEW CONCRETE HEADWALL TOP OF WALL EL.=6.5'

DEWATERING BASIN (SEE SHEET 10 OF 10)

TEMPORARY DISCHARGE PIPE

NEW STAKED HAYBALES

PROPERTY LINE

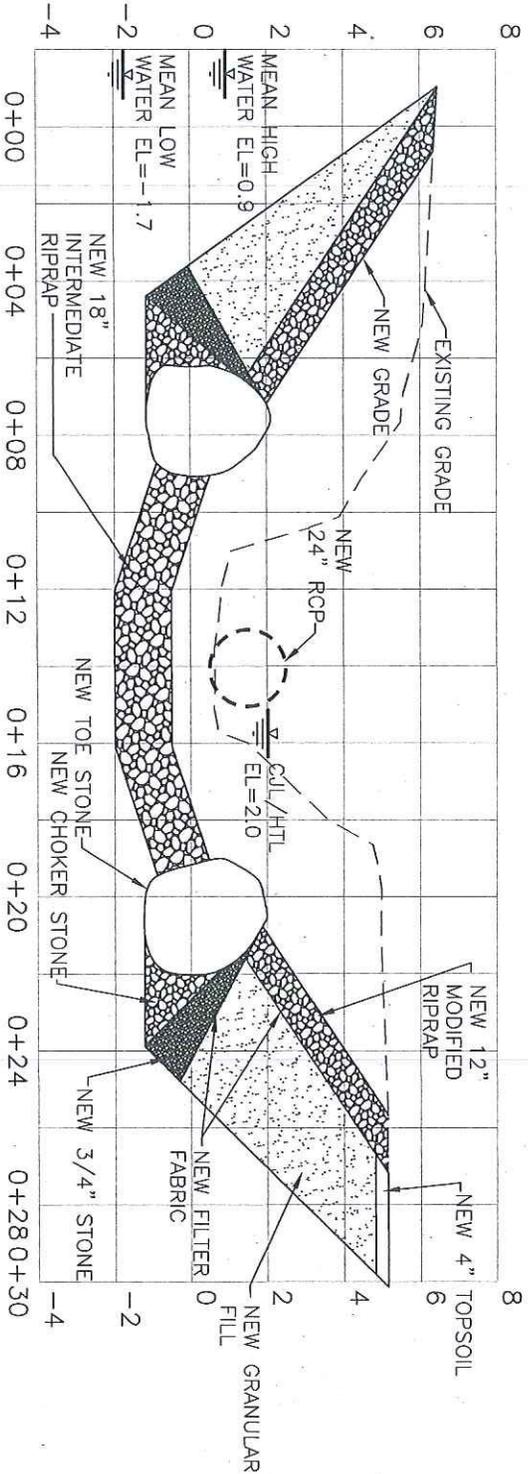
NEW TOE STONES AS REQUIRED

TW1/10 TW2 TW3 TW4 TW5 TW6 TW7 TW8 TW9

CUL/HTL EL=2.0 MHW EL=0.9

TIDAL WETLANDS LIMIT

CONNECTICUT GRID



SECTION A-A
SCALE: 1" = 5'

NOTE: THE INSTALLATION OF THE SCOUR HOLE AND TOE STONES WILL REQUIRE THE EXCAVATION OF APPROXIMATELY 50 CY OF SOIL AND RIPRAP AND THE PLACEMENT OF APPROXIMATELY AN EQUAL VOLUME OF BEDDING STONE, CHOKER STONE AND RIPRAP FILL BELOW THE COASTAL JURISDICTION LINE.

LEGEND
CUL COASTAL JURISDICTION LINE
HTL HIGH TIDE LINE

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SECTIONS

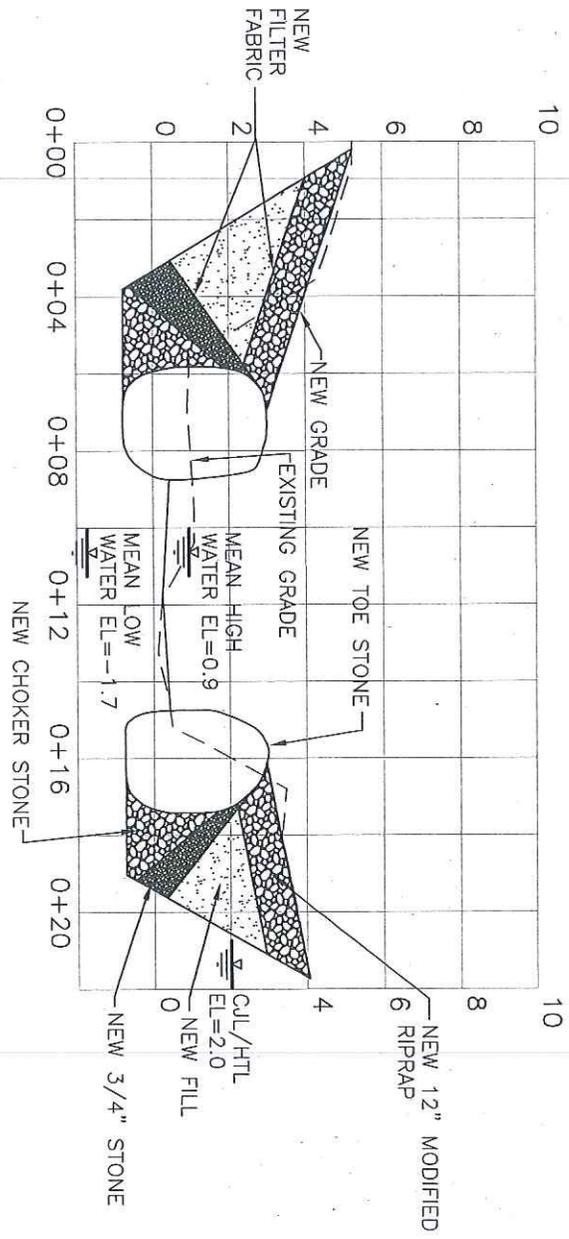


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DWG. NO.: 04-050.05 SHEET 7 OF 10



SECTION B-B
SCALE: 1" = 5'

LEGEND
 CJL COASTAL JURISDICTIONAL LINE
 HTL HIGH TIDE LINE

SECTIONS



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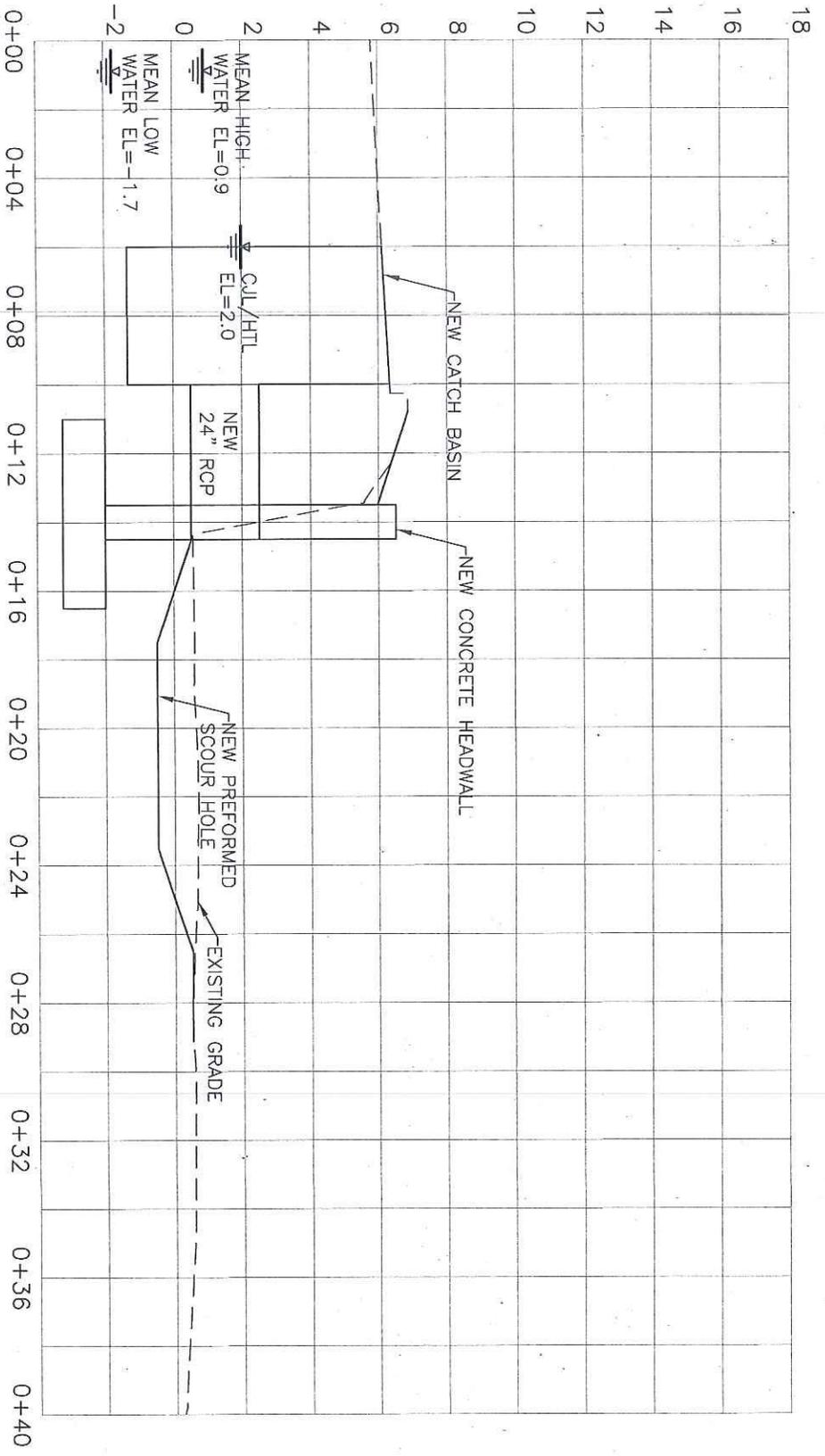
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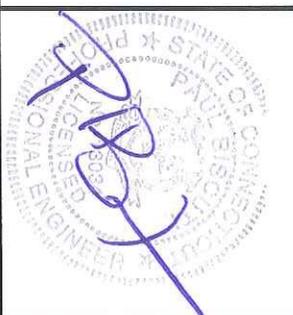


CUL COASTAL JURISDICTIONAL LINE
HTL HIGH TIDE LINE

SECTION C-C

SCALE: 1" = 5'

SECTIONS



STORMDRAIN OUTFALL IMPROVEMENTS

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