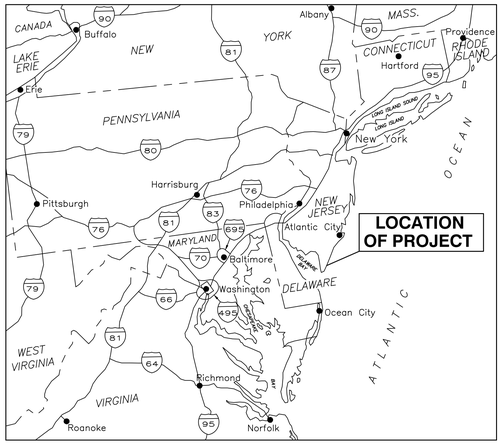
US Army Corps ®
of Engineers
PHILADELPHIA
DISTRICT

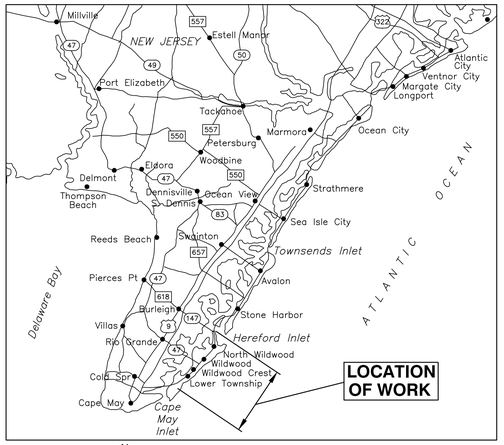
# BEACH NOURISHMENT
# INITIAL CONSTRUCTION
# HEREFORD INLET TO CAPE MAY INLET
# CAPE MAY COUNTY, NEW JERSEY




N

**VICINITY MAP**

10 0 5 10 20 40
SCALE IN MILES




N

**LOCATION MAP**

2.5 0 2.5 5 10
SCALE IN MILES

SOLICITATION NO:-
CONTRACT NO:-
ISSUE/SUBMITTAL DATE:95% - 12 SEPT 2024

THIS PROJECT WAS DESIGNED BY THE PHILADELPHIA DISTRICT OF THE U.S. ARMY CORPS OF ENGINEERS. THE INITIALS OR SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER 1110-1-8152.

SUBMITTED:

TRAVIS T. FATZINGER, P.E.
CHIEF, ENGINEERING BRANCH

APPROVED:

ANDREW J. SCHWAIGER, P.E.
CHIEF, ENGINEERING AND CONSTRUCTION DIVISION

| NO. | DESCRIPTION | DATE | BY |
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MARK ACTION

ISSUE/SUBMITTAL DATE:
95% - 12 SEPT 2024
SOLICITATION NUMBER:
-
CONTRACT NUMBER:
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DWG. SIZE:
ARCH D
FILE NAME
G000 COVER SHEET.DWG

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY
BEACH NOURISHMENT
INITIAL CONSTRUCTION
COVER SHEET
-

SHEET NUMBER
G-001

| DRAWING INDEX | |
|---|---|
| Sheet Number | Sheet Title |
| GENERAL | |
| G-001 | COVER SHEET |
| G-002 | DRAWING INDEX SHEET |
| G-003 | GENERAL INFORMATION SHEET |
| G-101 | GENERAL PLAN |
| G-102 | GEOMETRY - SURVEY AND CONSTRUCTION BASELINE |
| G-103 | CWL AND STAGING AREA COORDINATES |
| CIVIL | |
| C-101 | PLAN - STA -11+93.5 TO STA 25+50.0 |
| C-102 | PLAN - STA 25+50.0 TO STA 58+71.0 |
| C-103 | PLAN - STA 58+71.0 TO STA 92+78.8 |
| C-104 | PLAN - STA 92+78.8 TO STA 126+06.5 |
| C-105 | PLAN - STA 126+06.5 TO STA 159+08.6 |
| C-106 | PLAN - STA 159+08.6 TO STA 192+10.6 |
| C-107 | PLAN - STA 192+10.6 TO STA 225+12.5 |
| C-108 | PLAN - STA 225+12.5 TO STA 258+14.1 |
| C-109 | PLAN - BORROW AREA A |
| C-110 | PLAN - BORROW AREA B |
| C-111 | PLAN - BORROW AREA C |
| C-201 | PROFILE - 3RD AVE OUTFALL PIPE |
| C-301 | TYPICAL SECTIONS - BEACHFILL STA. -5+00 TO STA. 10+80 (NORTH WILDWOOD) |
| C-302 | TYPICAL SECTIONS - BEACHFILL STA. 10+80 TO STA. 68+00 (NORTH WILDWOOD) |
| C-303 | TYPICAL SECTIONS - BEACHFILL STA. 68+00 TO STA. 136+75 (CITY OF WILDWOOD) |
| C-304 | TYPICAL SECTIONS - BEACHFILL STA. 136+75 TO STA. 252+00 (WILDWOOD CREST & LOWER TOWNSHIP) |
| C-305 | TYPICAL SECTIONS - BORROW AREAS |
| C-306 | TYPICAL SECTIONS - BORROW AREAS |
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| C-309 | CROSS SECTIONS - STA. 100+00 TO STA. 129+200 |
| C-310 | CROSS SECTIONS - STA. 136+84 TO STA. 163+00 |
| C-311 | CROSS SECTIONS - STA. 169+88 TO STA. 196+00 |
| C-312 | CROSS SECTIONS - STA. 203+00 TO STA. 228+42 |
| C-313 | CROSS SECTIONS - STA. 235+00 to sta. 252+00 |
| C-401 | DUNE CROSSOVER SCHEDULE |
| C-402 | PLAN - PEDESTRIAN CROSSOVER |
| C-403 | PLAN - VEHICLE CROSSOVER |
| C-404 | PLAN - ADA CROSSOVER |
| C-405 | PLAN - ADA CROSSOVER |
| C-406 | PLAN - COMBINED CROSSOVER |
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| C-408 | TYPICAL SECTION - VEHICLE CROSSOVER |
| C-409 | TYPICAL SECTION - ADA CROSSOVER |
| C-501 | DETAILS - FENCE |
| C-502 | DETAILS - DUNE PLANTING AND SAND FENCE |
| C-503 | DETAILS - OUTFALL |
| C-504 | DETAILS - MISC. |
| C-505 | DETAILS - BORROW AREA DREDGING |

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|---|---|
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| 2.57 | PLAN FOR REPLACEMENT OF 21ST AVENUE OUTFALL |
| E-35-14 | BEACH OUTFALL EXTENSION AND DETAILS |
| 1 | PLAN OF PIER STRUCTURE PERIMETER ASBUILT SEAPORT PIER |
| S-1 | EMERGENCY BULKHEAD - OCEAN OASIS MOREY'S PIER |
| REFERENCE DRAWINGS: WILDWOOD CITY | |
| RSK-1 | 26TH AVE ADA RAMP RELOCATION |
| RSK-2 | 26TH AVE ADA RAMP DETAILS |
| A121 | WWCC FIRST FLOOR PLAN |
| S501 | WWCC BOARDWALK EXTENSION DETAILS |
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| 14 OF 27 | 38994 WASHINGTON AVE OUTFALL EXTENSION |
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| 26 OF 27 | 38994 SEDIMENT CONTROL AND OUTFALL DETAILS |
| COVER SHEET | HEATHER RD PIER - COVER SHEET |
| 1 OF 5 | HEATHER RD PIER - EXISTING CONDITION PLAN |
| 2 OF 5 | HEATHER RD PIER - PROPOSED PLAN |
| 3 OF 5 | HEATHER RD PIER - PROPOSED PLAN |
| 4 OF 5 | HEATHER RD PIER - PLAN AND TYPICAL SECTIONS |
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| 1 OF 3 | SEAPOINT VILLAGE - OUTFALL EXTENSION TAX MAP |
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| 3 OF 3 | SEAPOINT VILLAGE - OUTFALL DETAILS |
| 1 OF 2 | SEAPOINT VILLAGE - STORMWATER SYSTEM IMPROVEMENTS |

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | ACTION | DESCRIPTION | DATE | BY |
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U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

DWN BY: ADD
CKD BY: JAK
DES BY: ADD
REVIEWED BY: GMK
PLOT SCALE: NTS
DWG. SIZE: 22"x34"
ISSUE/SUBMITTAL DATE: 95% - 12 SEP 2024
SOLICITATION NUMBER: -
CONTRACT NUMBER: -
FILE NAME: G002 DRAWING INDEX SHEET.dwg

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

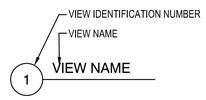
BEACH NOURISHMENT
INITIAL CONSTRUCTION

DRAWING INDEX SHEET
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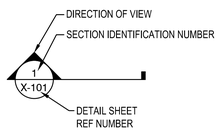
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G-002

# SYMBOLS, ABBREVIATIONS AND GENERAL NOTES

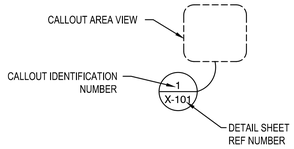
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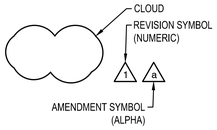

VIEW TITLE SYMBOL



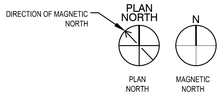

SECTION CUT SYMBOL



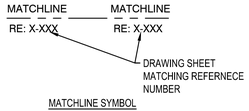

CALLOUT SYMBOL



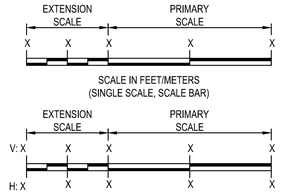

REVISION & AMENDMENT CLOUD AND SYMBOL




NORTH SYMBOLS

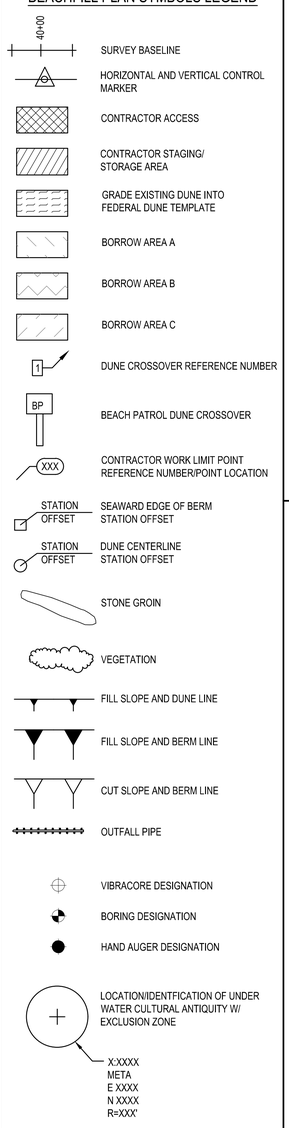



MATCHLINE SYMBOL

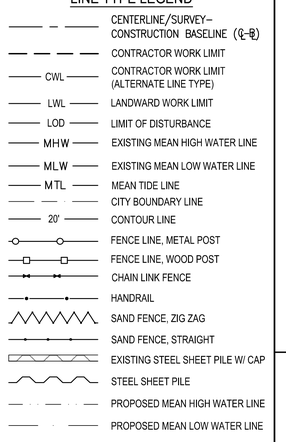



GRAPHIC BAR SCALE SYMBOLS

## BEACHFILL PLAN SYMBOLS LEGEND

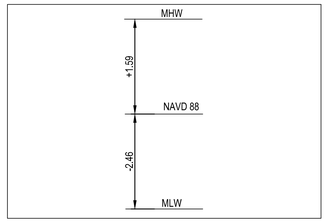



## LINE TYPE LEGEND




## GENERAL NOTES:

1. ELEVATIONS ARE EXPRESSED IN FEET AND TENTHS OF A FOOT AND REFER TO THE NORTH AMERICAN VERTICAL DATUM (NAVD) 1988.
2. HORIZONTAL CONTROL IS REFERENCED TO THE NEW JERSEY STATE PLANE COORDINATE SYSTEM (NAD 1983).
3. THE CONTRACTOR WORK LIMIT IS AS SHOWN ON SHEET C-101 THROUGH C-108.
4. THE CONTRACTOR SHALL STAGE AND ACCESS THE SITE FROM THE LOCATIONS SHOWN ON SHEET G-101.
5. THE SITE CONDITION SURVEYS ARE A RESULT OF LIDAR SURVEY CONDUCTED IN 2016 FOR UPLAND FEATURES, MONITORING AND BORROW AREA SURVEYS DATED MARCH 2024, SITE SURVEYS MAY 2024 AND NORTH WILDWOOD GEOMETRY AS BUILT SURVEYS FROM 2021 AND 2023. THESE PLANS CAN ONLY BE CONSIDERED REPRESENTATIVE OF THE CONDITIONS OCCURRING AT THAT TIME.
6. FEDERAL DUNE TEMPLATE IS NOT SHOWN IN ITS ENTIRETY IN AREAS WHERE DUNE IS GRADED TO TIE INTO EXISTING DUNES. SEE CROSS SECTIONS AND TYPICAL SECTION SHEETS FOR FULL FEDERAL DUNE TEMPLATE LIMITS.
7. THE CONTRACTOR MUST COORDINATE WITH ALL APPROPRIATE UTILITY COMPANIES BY MEANS OF NJ1 ON CALL SERVICES (HTTPS:\\WWW.NJ1-CALL.ORG/) AND THE USACE RESIDENT OFFICE FOR MARK-OUT OF ONSITE UTILITIES PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES.
8. CONTRACTOR MUST MAINTAIN FLOW THROUGH ALL EXISTING OUTFALL STRUCTURES WITHIN PROJECT LIMITS. CONTRACTOR MUST NOT DAMAGE EXISTING OUTFALL DRAINAGE FEATURES SHOWN ON THE DRAWINGS. ANY DAMAGES CAUSED DURING CONSTRUCTION ACTIVITIES MUST BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE GOVERNMENT.
9. AERIAL IMAGE FROM JULY 2024 NEARMAP.




TIDAL REFERENCE - TIDAL EPOCH 1983-2001
(INTERPOLATED BETWEEN TIDAL STATIONS ATLANTIC CITY, NJ AND LEWES, DE)

SCALE=NTS

## ABBREVIATIONS

| ABBRV | DESCRIPTION | ABBRV | DESCRIPTION | ABBRV | DESCRIPTION |
|---|---|---|---|---|---|
| AD | AREA DRAIN | FDN | FOUNDATION | PSI | POUNDS PER SQUARE INCH |
| ADDL | ADDITIONAL | FF | FINISHED FLOOR | PVI | POINT OF VERTICAL INFLECTION |
| AFF | ABOVE FINISHED FLOOR | FIN | FINISH | RAD | RADIUS |
| BD | BOARD | FL | FLOOR | REINF | REINFORCEMENT |
| BIT | BITUMINOUS | FM | FORCE MAIN | REM | REMOVABLE |
| BL or ℄ | BASE LINE | FT | FOOT, FEET | ROW | RIGHT OF WAY |
| BLDG | BUILDING | FTG | FOOTING | S | SOUTH |
| BM | BEAM | G | GROUND | SCH | SCHEDULE |
| BMP | BEST MANAGEMENT PRACTICE | GOVT | GOVERNMENT | SECT | SECTION |
| BOT | BOTTOM | GR | GRADE | SPEC | SPECIFICATION |
| BVCE | BEGINNING OF VERTICAL CURVE ELEVATION | HORIZ | HORIZONTAL | SPRT | SUPPORT |
| BVCS | BEGINNING OF VERTICAL CURVE STATION | HS | HIGH STRENGTH | SQ | SQUARE |
| CL or ℄ | CENTERLINE | HT | HEIGHT | SST | STAINLESS STEEL |
| CMU | CONCRETE MASONRY UNIT | HVY | HEAVY | STA | STATION |
| CO | CLEAN OUT | IN | INCH | STD | STANDARD |
| COL | COLUMN | INSUL | INSULATION, INSULATED | STRUCT | STRUCTURAL |
| CONC | CONCRETE | IINT | INTERIOR | SUSP | SUSPENDED |
| CONSTR | CONSTRUCTION | INV | INVERT | SYS | SYSTEM |
| CONT | CONTINUOUS | LL | LIVE LOAD | TEMP | TEMPORARY |
| CTRL | CONTROL | LP | LOW POINT | TD | TRENCH DRAIN |
| CWL | CONTRACTOR WORK LIMITS | LT | LIGHT | TDO | TRENCH DRAIN OUTLET PIPE |
| DET | DETAIL | LVC | LENGTH OF VERTICAL CURVE | TELE | TELEPHONE |
| DGA | DENSE GRADED AGGREGATE | JCT | JUNCTION | TOPO | TOPOGRAPHY |
| DIA | DIAMETER | MATL | MATERIAL | TYP | TYPICAL |
| DIM | DIMENSION | MAX | MAXIMUM | UD | UNDERDRAIN |
| DL | DEAD LOAD | MIN | MINIMUM | UDO | UNDERDRAIN OUTLET PIPE |
| DWG | DRAWING | MISC | MISCELLANEOUS | UE | UNDERGROUND ELECTRIC |
| E | EAST | N | NORTH | UGND | UNDERGROUND |
| EA | EACH | NLT | NOT LESS THAN | UNO | UNLESS NOTED OTHERWISE |
| ECM | EROSION CONTROL MAT | NTS | NOT TO SCALE | UOP | UNDERDRAIN OUTLET PIPE |
| EJ | EXPANSION JOINT | OC | ORIGINAL CONSTRUCTION | UXO | UNEXPLODED ORDINANCE |
| EL | ELEVATION | OD | OUTSIDE DIAMETER | VB | VINYL BASE |
| ELEC | ELECTRIC | OH | OVERHEAD | VC | VERTICAL CURVE |
| EOP | EDGE OF PAVEMENT | OPG | OPENING | VCT | VINYL COMPOSITION TILE |
| EOS | EDGE OF SHOULDER | OPP | OPPOSITE | VOL | VOLUME |
| EQ | EQUAL | PC | POINT OF CURVE | VERT | VERTICAL |
| EQUIP | EQUIPMENT | PD | PAVEMENT DRAIN | VTR | VENT THROUGH ROOF |
| EXH | EXHAUST | PI | POINT OF INFLECTION | W/ | WITH |
| EXIST or (E) | EXISTING | PIV | POST INDICATOR VALVE | W | WEST |
| EXP | EXPANSION, EXPOSED | POT | POINT OF TANGENT | WL | WATER LEVEL |
| EXP JT | EXPANSION JOINT | PMP | PROBABLE MAXIMUM PRECIPITATION | WS | WATER SURFACE |
| EXT | EXTERIOR | PNL | PANEL | W/O | WITHOUT |
| FIG | FIGURE SINGLE | PSF | POUNDS PER SQUARE FOOT | | |

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | ACTION | DESCRIPTION | DATE | BY |
|---|---|---|---|---|
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U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

DWN BY: ADD
CHK BY: DMA
DES BY: ADD
REVIEWED BY: CMK
ISSUED/SUBMITTAL DATE: 9/5 - 13 SEPT 2024
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CONTRACT NUMBER: -
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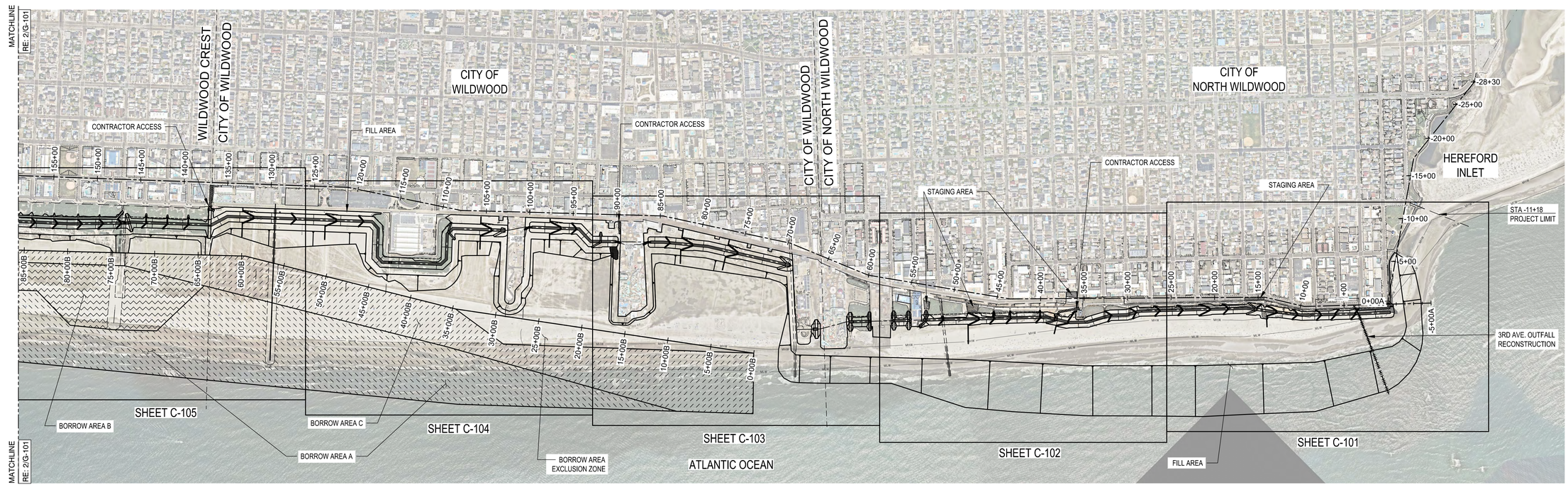
HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

BEACH NOURISHMENT
INITIAL CONSTRUCTION

GENERAL INFORMATION SHEET

SHEET NUMBER

G-003

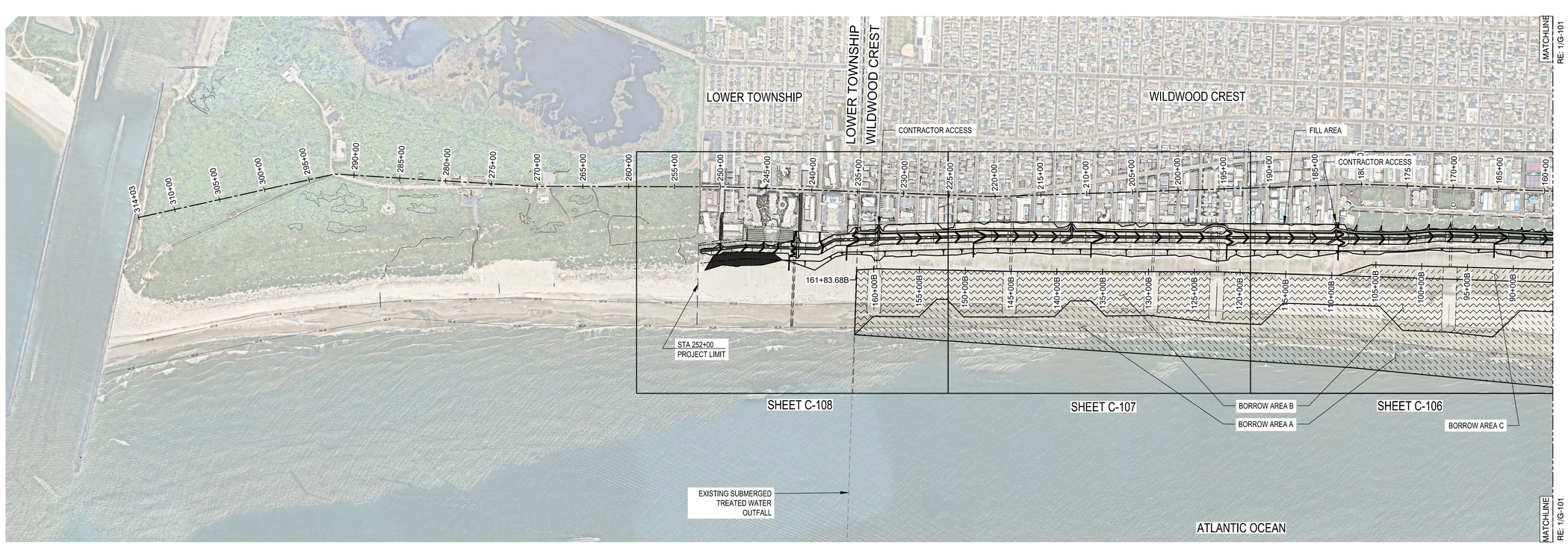



PLAN NORTH

1 GENERAL PLAN

500' 250' 0 500'

SCALE IN FEET




PLAN NORTH

2 GENERAL PLAN

500' 250' 0 500'

SCALE IN FEET

NOTES:

1. FOR GENERAL INFORMATION AND LEGENDS, SEE SHEET G-003.
2. FOR TYPICAL SECTIONS, SEE SHEETS C-301 THROUGH C-306.
3. FOR DUNE CROSSOVER LOCATIONS AND DETAILS, SEE SHEETS C-401 THROUGH C-409.
4. FOR OUTFALL CONSTRUCTION SEE SHEET C-201, C-503 AND C-504.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

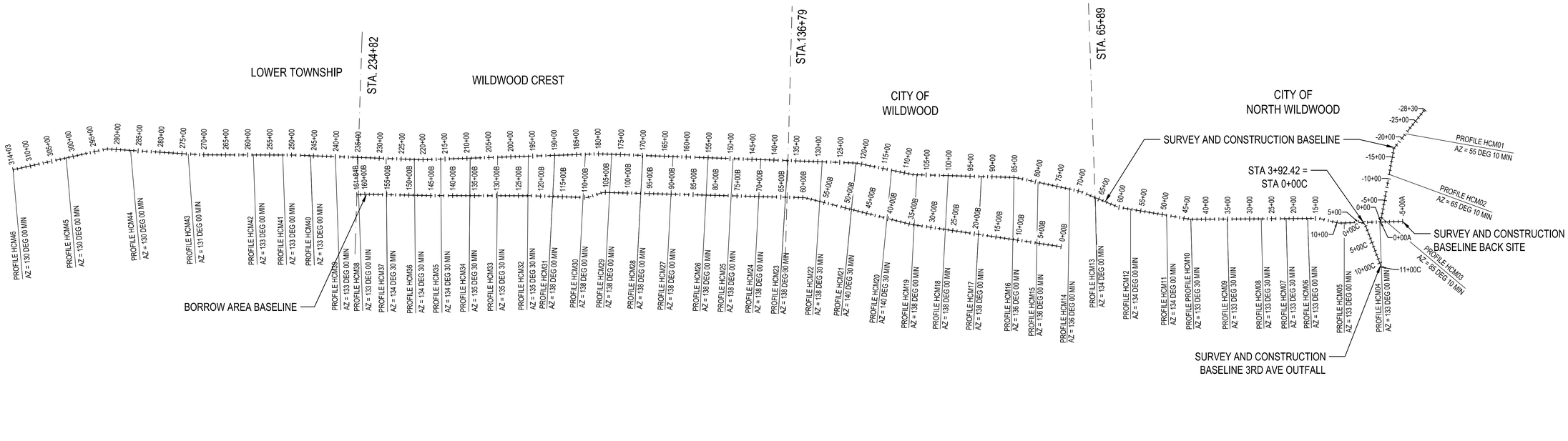
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DRN BY: ASD
CHKD BY: DAK
REVIEWED BY: RKB
ISSUE/SUBMITTAL DATE: 95% - 13 SEP 2024
SOLICITATION NUMBER: -
CONTRACT NUMBER: -
PLOT SCALE: 1"=100'
DWG. SIZE: 22"x34"
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U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY
BEACH NOURISHMENT
INITIAL CONSTRUCTION
GENERAL PLAN

SHEET NUMBER
G-101




PLAN NORTH

1 SURVEY AND CONSTRUCTION BASELINE

1000' 500' 0 1000'

SCALE IN FEET

| SURVEY AND CONSTR. BASELINE BACK SITE POINTS | | |
|---|---|---|
| PI/P.O.T. STA. | NORTHING | EASTING |
| -5+00A | 61816.7928 | 410967.2527 |
| 0+00.00A | 61453.9013 | 410623.2908 |

| SURVEY AND CONSTRUCTION BASELINE POINTS | | |
|---|---|---|
| PI/P.O.T. STA. | NORTHING | EASTING |
| -28+30.36 | 63971.2700 | 409521.4000 |
| -17+06.38 | 62854.5100 | 409648.6000 |
| 0+00.00 | 61453.9013 | 410623.2908 |
| 9+56.56 | 60759.6490 | 409965.2530 |
| 14+23.84 | 60513.3240 | 409568.1680 |
| 43+50.87 | 58429.2420 | 407512.9070 |
| 60+04.47 | 57469.6150 | 406166.2350 |
| 69+72.71 | 57096.1920 | 405272.9060 |
| 84+68.19 | 56283.2450 | 404017.6860 |
| 107+97.33 | 54682.5660 | 402325.7220 |
| 121+17.15 | 53955.4350 | 401224.2660 |
| 179+97.47 | 49948.0030 | 396920.9390 |
| 220+33.58 | 47000.5160 | 394163.6710 |
| 249+76.66 | 44996.9030 | 392007.9300 |
| 270+54.99 | 43531.0070 | 390534.6220 |
| 292+12.09 | 42103.2920 | 388917.6260 |
| 314+03.06 | 40255.0100 | 387741.1000 |

| BORROW AREA BASELINE POINTS | | |
|---|---|---|
| PI/P.O.T. STA. | NORTHING | EASTING |
| 0+00.00B | 55905.564 | 405870.297 |
| 8+19.50B | 55417.237 | 405212.182 |
| 34+66.33B | 53840.029 | 403086.592 |
| 37+52.47B | 53693.183 | 402841.012 |
| 59+56.79B | 52561.916 | 400949.113 |
| 65+40.55B | 52160.164 | 400525.597 |
| 105+49.64B | 49401.029 | 397616.997 |
| 109+33.48B | 49059.588 | 397441.629 |
| 122+23.80B | 578121.840 | 396500.540 |
| 144+75.94B | 46586.570 | 394905.790 |
| 155+08.92B | 45870.676 | 394161.120 |
| 159+61.80B | 45556.600 | 393834.849 |
| 161+83.69B | 45391.428 | 393686.682 |

| SURVEY AND CONSTRUCTION BASELINE GEOMETRY LEGEND - 3RD AVE OUTFALL PIPE | | | | | | | |
|---|---|---|---|---|---|---|---|
| LENGTH (FT) | START STATION | START NORTHING | START EASTING | LINE DIRECTION | END STATION | END NORTHING | END EASTING |
| 74.04 | 0+00.00C | 61169.09 | 410353.33 | S75° 47' 27.88"E | 0+74.04C | 61150.91 | 410425.11 |
| 20.00 | 0+74.04C | 61150.91 | 410425.11 | S73° 17' 27.88"E | 0+94.04C | 61145.16 | 410444.26 |
| 20.00 | 0+94.04C | 61145.16 | 410444.26 | S70° 47' 27.88"E | 1+14.04C | 61138.50 | 410463.15 |
| 20.00 | 1+14.04C | 61138.58 | 410463.15 | S68° 17' 27.88"E | 1+34.04C | 61131.19 | 410481.73 |
| 20.00 | 1+34.04C | 61131.19 | 410481.73 | S66° 47' 27.88"E | 1+54.04C | 61122.86 | 410499.97 |
| 945.86 | 1+54.04C | 61122.98 | 410499.97 | S65° 47' 27.88"E | 11+00.00C | 60735.08 | 411362.74 |

| PROFILE LINE (CROSS SECTION) CONTROL POINTS | | | | | |
|---|---|---|---|---|---|
| PROFILE ID | CONSTRUCTION BASELINE STATION | NORTHING | EASTING | AZIMUTH NORTH (DD.MM) | PRE/POST CONDITION LENGTH |
| HCM01 | -21+31 | 63276.17 | 409600.57 | 55 d 10 m | 2500 |
| HCM02 | -11+00 | 62356.79 | 409994.97 | 65 d 10 m | 2500 |
| HCM03 | -1+00 | 61535.9820 | 410566.17 | 85 d 10 m | 2500 |
| HCM04 | 0+20 | 61,439.60 | 410,609.74 | 133 d 00 m | 2500 |
| HCM05 | 8+32 | 60,850.02 | 410,050.71 | 133 d 00 m | 2500 |
| HCM06 | 16+79 | 60,331.73 | 409,389.08 | 133 d 00 m | 2500 |
| HCM07 | 21+68 | 59,983.76 | 409,045.92 | 133 d 30 m | 2500 |
| HCM08 | 27+36 | 59,579.19 | 408,646.95 | 133 d 30 m | 2500 |
| HCM09 | 35+10 | 59,028.00 | 408,103.39 | 133 d 30 m | 2500 |
| HCM10 | 43+40 | 58,437.17 | 407,520.72 | 133 d 30 m | 2500 |
| HCM11 | 49+00 | 58,110.57 | 407,065.70 | 134 d 00 m | 2500 |
| HCM12 | 57+31 | 57,628.34 | 406,388.97 | 134 d 00 m | 2500 |
| HCM13 | 65+82 | 57,246.81 | 405,633.22 | 134 d 00 m | 3500 |
| HCM14 | 72+00 | 56,972.64 | 405,082.13 | 136 d 00 m | 3500 |
| HCM15 | 79+40 | 56,570.57 | 404,461.33 | 136 d 00 m | 3500 |
| HCM16 | 85+00 | 56,261.38 | 403,994.58 | 136 d 00 m | 3500 |
| HCM17 | 92+41 | 55,752.41 | 403,456.58 | 138 d 00 m | 3500 |
| HCM18 | 100+00 | 55,230.53 | 402,904.93 | 138 d 00 m | 3500 |
| HCM19 | 107+15 | 54,739.20 | 402,385.58 | 138 d 00 m | 3500 |
| HCM20 | 113+00 | 54,405.63 | 401,906.22 | 139 d 30 m | 3500 |
| HCM21 | 121+30 | 53,946.88 | 401,215.08 | 139 d 30 m | 3500 |
| HCM22 | 129+00 | 53,421.92 | 400,651.36 | 139 d 30 m | 3500 |
| HCM23 | 136+84 | 52,887.38 | 400,077.35 | 139 d 30 m | 3500 |
| HCM24 | 143+00 | 52,467.82 | 399,626.82 | 138 d 00 m | 3500 |
| HCM25 | 149+31 | 52,037.99 | 399,165.24 | 138 d 00 m | 3500 |
| HCM26 | 155+00 | 51,650.03 | 398,748.63 | 138 d 00 m | 3500 |
| HCM27 | 163+00 | 51,104.83 | 398,163.18 | 138 d 00 m | 3500 |
| HCM28 | 169+88 | 50,635.86 | 397,659.59 | 138 d 00 m | 3500 |
| HCM29 | 177+00 | 50,150.73 | 397,138.63 | 138 d 00 m | 3500 |
| HCM30 | 183+00 | 49,727.07 | 396,714.27 | 138 d 00 m | 3500 |
| HCM31 | 189+96 | 49,218.95 | 396,238.94 | 138 d 00 m | 3500 |
| HCM32 | 196+00 | 48,777.71 | 395,826.17 | 135 d 30 m | 3500 |
| HCM33 | 203+00 | 48,266.51 | 395,347.97 | 135 d 30 m | 3500 |
| HCM34 | 209+25 | 47,810.09 | 394,921.00 | 135 d 30 m | 3500 |
| HCM35 | 216+00 | 47,317.15 | 394,459.87 | 134 d 30 m | 3500 |
| HCM36 | 222+00 | 46,887.22 | 394,041.77 | 134 d 30 m | 3500 |
| HCM37 | 228+42 | 46,450.07 | 393,571.43 | 134 d 30 m | 3500 |
| HCM38 | 235+00 | 46,002.19 | 393,089.55 | 133 d 00 m | 3500 |
| HCM39 | 240+00 | 45,661.80 | 392,723.31 | 133 d 00 m | 3500 |
| HCM40 | 245+00 | 45,275.17 | 392,307.33 | 133 d 00 m | 2500 |
| HCM41 | 252+00 | 44,839.38 | 391,849.61 | 133 d 00 m | 2500 |
| HCM42 | 258+70 | 44,367.10 | 391,374.95 | 133 d 00 m | 2500 |
| HCM43 | 273+57 | 43,331.09 | 390,308.20 | 131 d 00 m | 2500 |
| HCM44 | 286+72 | 42,460.97 | 389,322.73 | 130 d 00 m | 2500 |
| HCM45 | 301+63 | 41,300.91 | 388,406.87 | 130 d 00 m | 2500 |
| HCM46 | 314+04 | 40,255.00 | 387,741.09 | 130 d 00 m | 2500 |

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | ACTION | DATE | BY |
|---|---|---|---|
| - | - | - | - |
| - | - | - | - |

ISSUE/SUBMITTAL DATE: 95% - 12 SEP 2024
SOLICITATION NUMBER: -
CONTRACT NUMBER: -
DES BY: ADD
DRN BY: ADD
CKD BY: DAA
REVIEWED BY: MAK
PLOT SCALE: 1:1000
DWG. SIZE: 30"x42"
FILE NAME: DEWD GEOMETRY.dwg

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY
BEACH NOURISHMENT
INITIAL CONSTRUCTION

GEOMETRY - SURVEY AND CONSTRUCTION BASELINE

SHEET NUMBER

G-102

| CONTRACTOR WORK LIMIT COORDINATES | | |
|---|---|---|
| POINT NO. | NORTHING | EASTING |
| 1 | 62745.24 | 410649.69 |
| 2 | 62489.32 | 410051.42 |
| 3 | 62461.61 | 409980.91 |
| 4 | 62445.58 | 409997.82 |
| 5 | 62471.37 | 410059.14 |
| 6 | 62404.07 | 410087.47 |
| 7 | 62268.47 | 410132.89 |
| 8 | 62162.99 | 410162.95 |
| 9 | 62060.22 | 410192.95 |
| 10 | 61951.02 | 410227.25 |
| 11 | 61896.59 | 410175.65 |
| 12 | 61438.34 | 410659.02 |
| 13 | 61422.54 | 410644.05 |
| 14 | 61208.65 | 410441.27 |
| 15 | 61158.43 | 410393.66 |
| 16 | 60718.88 | 409976.96 |
| 17 | 60482.13 | 409587.15 |
| 18 | 59314.74 | 408480.43 |
| 19 | 59373.22 | 408418.75 |
| 20 | 58981.33 | 408047.23 |
| 21 | 59029.49 | 407996.43 |
| 22 | 58944.19 | 407915.56 |
| 23 | 58841.07 | 408004.05 |
| 24 | 58777.68 | 407923.06 |
| 25 | 58287.39 | 407458.62 |
| 26 | 58016.81 | 407089.56 |
| 27 | 57702.94 | 406648.63 |
| 28 | 57584.78 | 406482.57 |
| 29 | 57544.97 | 406422.81 |
| 30 | 57505.88 | 406366.36 |
| 31 | 57468.71 | 406308.64 |
| 32 | 57433.49 | 406249.70 |
| 33 | 57401.51 | 406192.51 |
| 34 | 57371.32 | 406134.35 |
| 35 | 57342.97 | 406075.27 |
| 36 | 57316.48 | 406015.34 |
| 37 | 57291.87 | 405954.60 |
| 38 | 57185.99 | 405681.10 |
| 39 | 57185.85 | 405632.68 |
| 40 | 56118.54 | 403924.95 |
| 41 | 56092.79 | 403883.77 |
| 42 | 56075.41 | 403902.72 |
| 43 | 56075.41 | 403902.72 |
| 44 | 54472.82 | 402184.51 |
| 45 | 54455.98 | 402166.41 |
| 46 | 54115.98 | 402482.67 |
| 47 | 53973.66 | 402329.67 |
| 48 | 53919.14 | 402297.41 |
| 49 | 53840.44 | 402212.18 |
| 50 | 53812.84 | 402156.62 |
| 51 | 53747.34 | 402086.22 |
| 52 | 54087.16 | 401769.90 |
| 53 | 52791.41 | 400376.90 |
| 54 | 52643.40 | 400223.91 |
| 55 | 52630.53 | 400218.40 |
| 56 | 52593.49 | 400177.92 |
| 57 | 52579.33 | 400191.97 |
| 58 | 52136.81 | 399714.69 |
| 59 | 51960.57 | 399522.41 |
| 60 | 51183.47 | 398684.94 |
| 61 | 50741.39 | 398208.50 |
| 62 | 50606.55 | 398063.19 |
| 63 | 50421.06 | 397863.30 |
| 64 | 50407.46 | 397848.63 |
| 65 | 49906.93 | 397309.24 |

| CONTRACTOR WORK LIMIT COORDINATES | | |
|---|---|---|
| POINT NO. | NORTHING | EASTING |
| 66 | 49893.33 | 397294.57 |
| 67 | 49731.84 | 397120.54 |
| 68 | 49719.38 | 397107.11 |
| 69 | 49578.94 | 396955.08 |
| 70 | 49467.61 | 397057.80 |
| 71 | 49420.10 | 397007.83 |
| 72 | 49279.21 | 396865.52 |
| 73 | 49244.27 | 396830.24 |
| 74 | 49103.62 | 396688.21 |
| 75 | 49068.64 | 396652.86 |
| 76 | 48929.18 | 396512.05 |
| 77 | 48892.48 | 396474.99 |
| 78 | 48753.37 | 396334.49 |
| 79 | 48715.97 | 396299.14 |
| 80 | 48576.60 | 396157.08 |
| 81 | 48534.58 | 396114.24 |
| 82 | 48407.55 | 395984.77 |
| 83 | 48372.61 | 395949.15 |
| 84 | 48244.36 | 395818.43 |
| 85 | 48210.98 | 395784.40 |
| 86 | 48084.78 | 395655.74 |
| 87 | 48049.75 | 395620.02 |
| 88 | 47922.73 | 395490.55 |
| 89 | 47893.10 | 395451.83 |
| 90 | 47766.26 | 395323.71 |
| 91 | 47732.62 | 395289.71 |
| 92 | 47603.30 | 395159.08 |
| 93 | 47562.33 | 395117.68 |
| 94 | 47434.95 | 394989.02 |
| 95 | 47398.56 | 394952.24 |
| 96 | 47286.80 | 394839.34 |
| 97 | 47251.60 | 394803.80 |
| 98 | 47138.87 | 394689.93 |
| 99 | 47103.69 | 394654.37 |
| 100 | 46991.06 | 394540.59 |
| 101 | 46955.48 | 394505.18 |
| 102 | 46841.53 | 394395.37 |
| 103 | 46805.48 | 394360.62 |
| 104 | 46689.09 | 394248.46 |
| 105 | 46645.82 | 394206.74 |
| 106 | 46529.09 | 394096.71 |
| 107 | 46494.02 | 394061.02 |
| 108 | 46378.17 | 393950.90 |
| 109 | 46341.79 | 393916.34 |
| 110 | 46188.52 | 393770.56 |
| 111 | 46036.25 | 393625.53 |
| 112 | 45884.83 | 393480.37 |
| 113 | 45667.74 | 393272.06 |
| 114 | 45603.80 | 393331.58 |
| 115 | 45372.12 | 393082.73 |
| 116 | 45263.10 | 392965.63 |
| 117 | 45204.19 | 392902.35 |
| 118 | 45132.79 | 392968.79 |
| 119 | 45046.91 | 392914.52 |
| 120 | 44766.74 | 392613.46 |
| 121 | 44766.74 | 392613.46 |
| 122 | 44847.13 | 392478.47 |
| 123 | 44749.56 | 392569.31 |
| 124 | 44586.31 | 392424.13 |
| 125 | 44631.13 | 392382.40 |
| 126 | 44603.88 | 392353.12 |
| 127 | 44556.12 | 392397.59 |
| 128 | 44372.67 | 392264.37 |
| 129 | 44372.67 | 392264.37 |

| STAGING AREA COORDINATES | | |
|---|---|---|
| POINT NO. | NORTHING | EASTING |
| S201 | 60507.80 | 409562.43 |
| S202 | 60347.12 | 409408.70 |
| S203 | 60321.44 | 409434.82 |
| S204 | 58905.19 | 407949.02 |
| S205 | 58062.81 | 407350.42 |
| S206 | 58126.77 | 407303.39 |
| S207 | 58042.66 | 407189.11 |
| S208 | 57986.07 | 407269.18 |
| S209 | 57687.64 | 406934.60 |
| S210 | 57751.60 | 406887.56 |
| S211 | 57714.17 | 406823.62 |
| S212 | 57650.69 | 406898.40 |

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | ACTION | DATE | BY |
|---|---|---|---|
| - | - | - | - |

DESCRIPTION

| DWN BY: | DES BY: | ISSUE/SUBMITTAL DATE: |
|---|---|---|
| ADD | ADD | 95% - 12 SEP 2024 |
| CHD BY: | REVIEWED BY: | SOLICITATION NUMBER: |
| DAK | DAK | - |
| | | CONTRACT NUMBER: |
| | | - |
| | PLOT SCALE | FILE NAME: |
| | - | DWG. SIZE: 30"x42" |
| | | G-103 CWL & STAGING AREA COORDINATES.dgn |

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

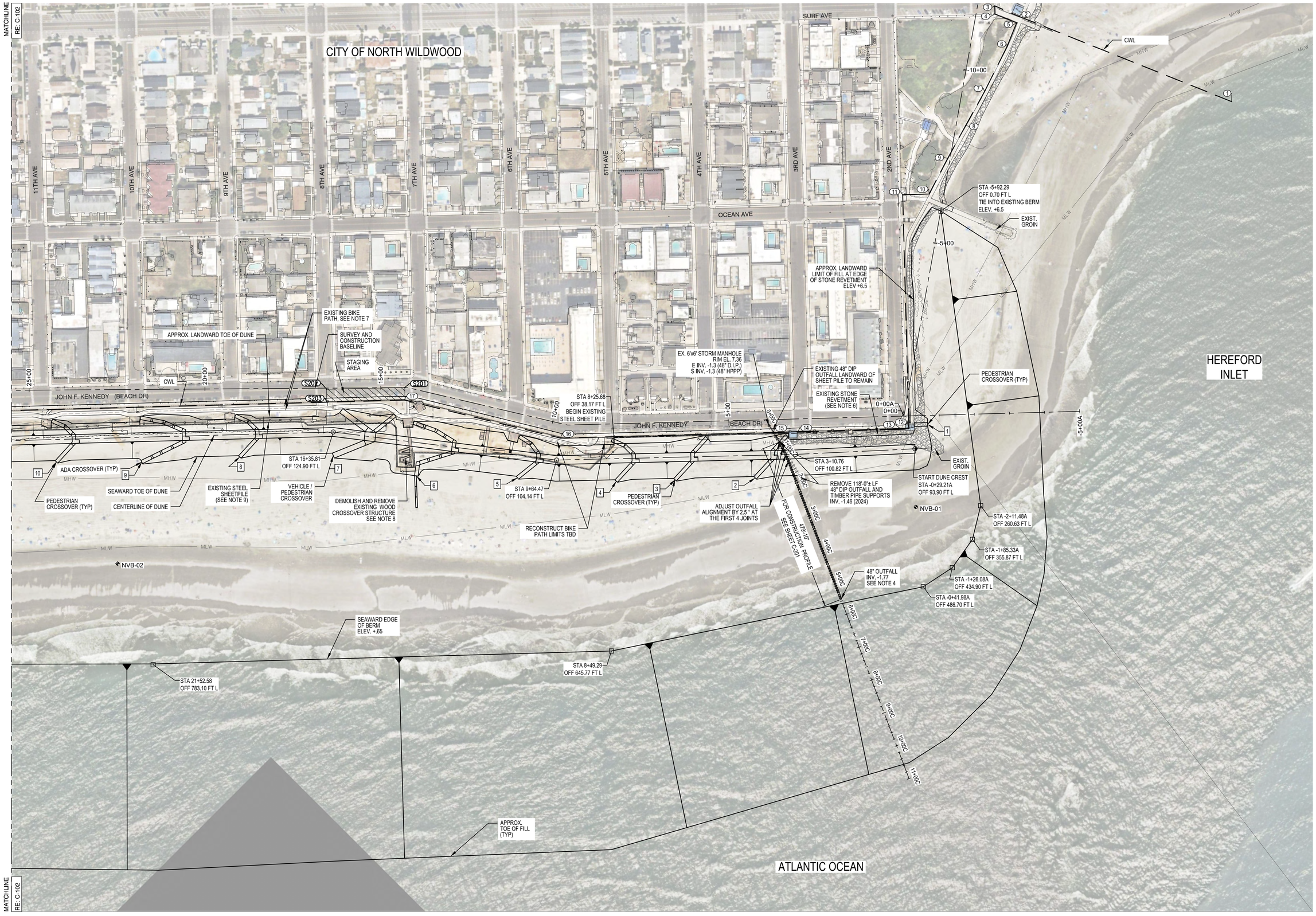
HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

BEACH NOURISHMENT
INITIAL CONSTRUCTION

CWL AND STAGING AREA COORDINATES

SHEET NUMBER

G-103




PLAN NORTH

1 PLAN - STA. -11+93.5 TO STA. 25+50.0

100' 50' 0 100'

SCALE IN FEET

NOTES:

1. SEE SHEET G-003 FOR GENERAL NOTES.
2. SEE SHEET C-301 AND C-302 FOR TYPICAL BEACHFILL SECTIONS.
3. SEE SHEET C-401 FOR DUNE CROSSOVER SCHEDULE.
4. SEE SHEET C-503 FOR OUTFALL PIPE DETAILS.
5. EXISTING VINYL SHEETPILE WALL TO REMAIN. WALL FOLLOWS CWL LINE SHOWN.
6. FILL STONE REVETMENT VOIDS WITH SAND. SEE SPECIFICATIONS FOR REQUIREMENTS.
7. PROTECT EXISTING SIDEWALK, BIKE PATH AND STORM WATER LATERAL WITHIN THE CWL FROM DAMAGE. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING DAMAGE INCURRED DUE TO CONSTRUCTION OPERATIONS AT NO ADDITIONAL COST TO THE GOVERNMENT.
8. FOR BIDDING PURPOSES, ASSUME 169 LF OF EXISTING TIMBER CROSSOVER TO BE REMOVED. SEE SPECIFICATIONS.
9. EXISTING STEEL SHEETPILE WALL TO REMAIN. SEE SHEET C-301 AND C-302.
10. FOR BORING AND HAND AUGER INFORMATION SEE SPECIFICATIONS.
11. SEE SPECIFICATION FOR OUTFALL PROTECTION REQUIREMENTS.
12. PLOVER RESTRICTED ZONE BETWEEN STA. -11+93.5 TO STA. 0+00. SEE SPECIFICATIONS FOR RESTRICTIONS.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | ACTION | DESCRIPTION | DATE | BY |
|---|---|---|---|---|
| | | | | |

| | | | |
|---|---|---|---|
| DWN BY: ADD | DES BY: ADD | ISSUED/SUBMITTAL DATE: 90% - 12 SEPT 2024 | |
| CHK BY: DAA | REVIEWED BY: DWS | SOLICITATION NUMBER: | |
| PLOT SCALE: 1"=100' | DWG. SIZE: 22"x34" | CONTRACT NUMBER: - | FILE NAME: C-101PLAN_STA -11+93.5 TO STA 25+50.0.dwg |

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

BEACH NOURISHMENT
INITIAL CONSTRUCTION

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

PLAN - STA -11+93.5 TO STA 25+50.0

SHEET NUMBER

C-101




PLAN NORTH

1 PLAN - STA. 25+50.0 TO STA. 58+71.0

100' 50' 0 100'

SCALE IN FEET

## NOTES:

1. SEE SHEET G-003 FOR GENERAL NOTES.
2. SEE SHEET C-302 FOR TYPICAL BEACHFILL SECTIONS.
3. SEE SHEET C-401 FOR DUNE CROSSOVER SCHEDULE.
4. TIE DUNE INTO EXISTING GROUND AT PIER BOUNDARY AS SHOWN WITH A 1V:3H SLOPE.
5. FOR BORING AND HAND AUGER INFORMATION SEE SPECIFICATIONS.
6. PROTECT EXISTING SIDEWALK, BIKE PATH AND STORM WATER LATERAL WITHIN THE CWL FROM DAMAGE. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING DAMAGE INCURRED DUE TO CONSTRUCTION OPERATIONS AT NO ADDITIONAL COST TO THE GOVERNMENT.
7. EXISTING MANHOLE TO BE PROTECTED DURING BEACHFILL OPERATIONS.
8. FOR BIDDING PURPOSES, ASSUME 169 LF OF EXISTING TIMBER CROSSOVER TO BE REMOVED. SEE SPECIFICATIONS.
9. EXISTING STEEL SHEET PILE WALL TO REMAIN. SEE SHEET C-302.
10. OUTFALL PROTECTION ZONE IS 10' ON EITHER SIDE ON PIPE IN BEACHFILL PLACEMENT LOCATIONS. SEE SPECIFICATIONS.
11. STAGING AREA TO BE GRADED TO ELEVATION 6.5 AT THE COMPLETION OF THE PROJECT.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

MARK | ACTION | DESCRIPTION | DATE | BY

DWN BY: ADD
CHD BY: DAN
DES BY: ADD
REVIEWED BY: DAN
ISSUE/SUBMITTAL DATE: 90% - 12 SEPT 2024
SOLICITATION NUMBER: -
CONTRACT NUMBER: -
PLOT SCALE: 1"=100'
DWG. SIZE: 22"x34"
FILE NAME: C102 PLAN - STA 25+50.0 TO STA 58+71.0.dwg

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

BEACH NOURISHMENT
INITIAL CONSTRUCTION

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

PLAN - STA 25+50.0 TO STA 58+71.0

SHEET NUMBER
C-102




PLAN NORTH

1 PLAN - STA. 58+71.0 TO STA. 92+78.8

100' 50' 0 100'

SCALE IN FEET

## NOTES:

1. SEE SHEET G-003 FOR GENERAL NOTES.
2. SEE SHEET C-302 TO C-303 FOR TYPICAL BEACHFILL SECTIONS.
3. SEE SHEET C-401 FOR DUNE CROSSOVER SCHEDULE.
4. TIE DUNE INTO EXISTING GROUND AT PIER BOUNDARY AS SHOWN WITH A 1V:3H SLOPE.
5. THE CONTRACTOR SHALL NOT DAMAGE ANY PORTION OF PIERS WHILE PLACING ADJACENT BERM AND DUNE.
6. CONTRACTOR SHALL RAKE AREAS OF EXISTING BEACH DISTURBED DURING CONSTRUCTION, BETWEEN THE LANDWARD LIMIT OF EXCAVATION AND THE TOE OF FILL.
7. SEE C-109 THROUGH C-111 FOR BORROW AREA SEQUENCING REQUIREMENTS. SEE SHEETS C-305 AND C-306 FOR TYPICAL BORROW AREA SECTIONS.
8. FOR BORING AND HAND AUGER INFORMATION SEE SPECIFICATIONS.
9. OUTFALL BUFFER ZONE SHALL HAVE A 10 FT OFFSET FROM PIPE IN UPLAND PLACEMENT AREAS. SEE SPECIFICATIONS.
10. DEPLOYABLE FLOOD BARRIERS TO BE PROVIDED UNDER THIS CONTRACT TO CLOSE CROSSOVERS TO ELEVATION +16.0. (100 LF AT CEDAR AVE, 65 LF AT SCHELLENGER AVE.)

US Army Corps of Engineers
PHILADELPHIA DISTRICT

DESCRIPTION | DATE | BY

ISSUED/SUBMITTAL DATE: 95% - 13 SEP 2024
SOLICITATION NUMBER: -
CONTRACT NUMBER: -
DES BY: ADD
REVIEWED BY: RMK
DWN BY: ADD
CHD BY: DAK
PLOT SCALE: 1"=100'
DWG. SIZE: 30"x42"
FILE NAME: C:\SOLFILES\...\STA 58+71.0 TO STA 92+78.8.dwg

U.S. ARMY CORPS OF ENGINEERS PHILADELPHIA DISTRICT

BEACH NOURISHMENT
INITIAL CONSTRUCTION
HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY
PLAN - STA 58+71.0 TO STA 92+78.8

SHEET NUMBER
C-103

CITY OF WILDWOOD

MATCHLINE RE: C-105

MATCHLINE RE: C-103

OCEAN AVE

RIO GRANDE AV

TAYLOR AV

ANDREWS AV

BURK AVE

MONTGOMERY AVE

BAKER AVE

ROBERTS AVE

YOUNGS AVE

SPENCER AVE

SPICER AVE

GARFIELD AVE

125+00

120+00

115+00

110+00

105+00

100+00

95+00

BOARDWALK

SURVEY AND CONSTRUCTION BASELINE

LANDWARD LIMIT OF FILL COINCIDES WITH THE SEAWARD EDGE OF BOARDWALK ELEV +6.5

CWL

CENTERLINE OF DUNE

LANDWARD LIMIT OF DUNE

FULL FEDERAL DUNE TEMPLATE

VEHICLE CROSSOVER (TYP)

CENTERLINE OF DUNE

ADA CROSSOVER (TYP)

STA 117+68.04 OFF 331.60 FT L

STA 116+81.65 OFF 393.18 FT L

STA 108+93.03 OFF 297.00 FT L

STA 108+40.09 OFF 222.47 FT L

STA 100+49.46 OFF 170.01 FT L

END DUNE CREST STA 102+78.44 OFF 215.54 FT L

STA 102+49.50 OFF 215.72 FT L

SEE NOTE 4

STA 94+30.19 OFF 175.48 FT L

SEAWARD BERM EDGE ELEV. +6.5

STA 118+04.99 OFF 474.66 FT L

START DUNE CREST STA 99+70.97 OFF 170.70 FT L

PEDESTRIAN CROSSOVER (TYP)

DEPLOYABLE FLOOD BARRIER PLACEMENT AREA SEE NOTE 9

VEHICLE CROSSOVER ELEV +6.5

STA 99+76.21 OFF 305.66 FT L

STA 94+87.23 OFF 309.98 FT L

75'-0"

TIE INTO EXISTING DUNES LANDWARD PORTION TO REMAIN

STA 116+27.68 OFF 714.80 FT L

STA 115+58.57 OFF 764.06 FT L

STA 108+44.52 OFF 583.51 FT L

STA 108+08.53 OFF 347.21 FT L (FOWRD STATION)

VEHICLE CROSSOVER (TYP)

STA 103+25.51 OFF 350.24 FT L

APPROX. TOE OF FILL (TYP)

STRUCTURES IN DUNE FOOT PRINT TO BE RELOCATED BY OWNER

STA 117+51.56 OFF 792.29 FT L

APPROX. TOE OF FILL (TYP)

REMOVE FENCE, CLEAR AND GRUB

STA 93+47.90 OFF 451.54 FT L

STA 92+92.30 OFF 315.58 FT L

ABANDONED IRRIGATION PIPE TO BE REMOVED

SEE NOTE 4

SEAWARD TOE OF DUNE (TYP)

STA 108+93.66 OFF 652.57 FT L

STA 108+08.53 OFF 623.33 FT L (FOWRD STATION)

ADVENTURE PIER

SEAWARD BERM EDGE ELEV. +6.5

LANDWARD BORROW AREA LIMIT & CONSTRUCTION ℄

STA 115+91.39 OFF 906.44 FT L

EXISTING WOOD ADA CROSSOVER TO REMAIN

APPROX. LIMIT OF CUT ELEV. +6.5

STA 108+16.12 OFF 776.45 FT L

STA 99+81.20 OFF 753.13 FT L

STA 99+96.41 OFF 840.68 FT L

STA 100+70.46 OFF 929.86 FT L

STA 103+35.86 OFF 1047.44 FT L

STA 100+69.92 OFF 1046.93 FT L

STA 101+18.98 OFF 1115.49 FT L

STA 102+84.96 OFF 1117.21 FT L

STA 102+01.97 OFF 1143.38 FT L

ABANDONED OUTFALL (TO REMAIN) INV. -1.85±

ABANDONED OUTFALL ( TO REMAIN) INV. -2.43±

ABANDONED OUTFALL (OPTION 7: TO BE REMOVED WITHIN BORROW AREA) INV. 0.27±

ABANDONED OUTFALL (OPTION 7: TO BE REMOVED WITHIN BORROW AREA) INV. 0.64±

ABANDONED OUTFALL (OPTION 7: TO BE REMOVED WITHIN BORROW AREA)

128'

112'

16'

50+00B

45+00B

40+00B

35+00B

30+00B

25+00B

20+00B

NVH-7

BORROW AREA C SEE NOTE 7

BORROW AREA A SEE NOTE 7

BORROW AREA EXCLUSION ZONE NOT AVAILABLE FOR THIS CONTRACT

SEAWARD BORROW AREA LIMIT

N: 53840.03 E: 403086.59

N: 53942.83 E: 403762.26

N: 53458.10 E: 403314.97

N: 53082.39 E: 403877.58

MHW

MLW

ATLANTIC OCEAN

NOTES:

1. SEE SHEET G-003 FOR GENERAL NOTES.
2. SEE SHEET C-303 FOR TYPICAL BEACHFILL SECTIONS.
3. SEE SHEET C-401 FOR DUNE CROSSOVER SCHEDULE.
4. TIE DUNE INTO EXISTING GROUND AT PIER BOUNDARY AS SHOWN WITH A 1V:3H SLOPE.
5. THE CONTRACTOR SHALL NOT DAMAGE ANY PORTION OF PIERS WHILE PLACING ADJACENT BERM AND DUNE.
6. CONTRACTOR SHALL RAKE AREAS OF EXISTING BEACH DISTURBED DURING CONSTRUCTION, BETWEEN THE LANDWARD LIMIT OF EXCAVATION AND THE TOE OF FILL.
7. SEE C-109 THROUGH C-111 FOR BORROW AREA SEQUENCING REQUIREMENTS. SEE SHEETS C-305 AND C-306 FOR TYPICAL BORROW AREA SECTIONS.
8. FOR BORING AND HAND AUGER INFORMATION SEE SPECIFICATIONS.
9. DEPLOYABLE FLOOD BARRIERS TO BE PROVIDED UNDER THIS CONTRACT TO CLOSE CROSSOVER TO ELEVATION +16.0. (100 LF AT SPENCER AVE.)

PLAN NORTH

1 PLAN - STA. 92+78.8 TO STA. 126+06.5

100' 50' 0 100'

SCALE IN FEET

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | ACTION | DESCRIPTION | DATE | BY |
|---|---|---|---|---|
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U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

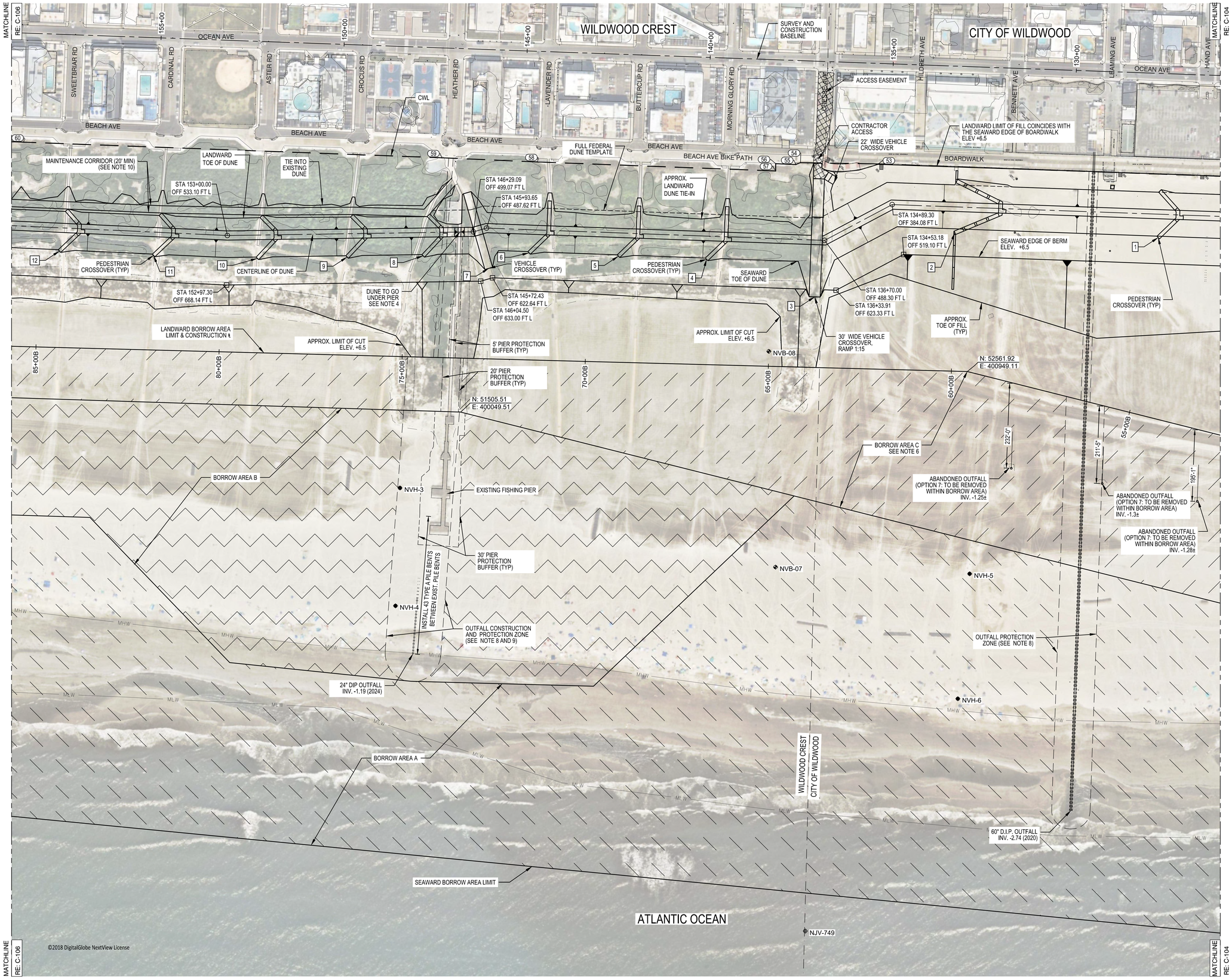
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ISSUE/SUBMITTAL DATE: 35% - 13 SEPT 2024
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CONTRACT NUMBER: -
PLOT SCALE: 1"=100'
DWG. SIZE: 24"x36"
FILE NAME: C:\24\EN\...\STA 92+78.8 TO STA 126+06.5.dgn

BEACH NOURISHMENT
INITIAL CONSTRUCTION

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

PLAN - STA 92+78.8 TO STA 126+06.5

SHEET NUMBER
C-104




PLAN NORTH

1 PLAN - STA. 126+06.5 TO STA. 159+08.6

100' 50' 0 100'
SCALE IN FEET

## NOTES:

1. SEE SHEET G-003 FOR GENERAL NOTES.
2. SEE SHEET C-303 AND C-304 FOR TYPICAL BEACHFILL SECTIONS.
3. SEE SHEET C-401 FOR DUNE CROSSOVER SCHEDULE.
4. TIE DUNE INTO EXISTING GROUND AT PIER BOUNDARY AS SHOWN WITH A 1V:3H SLOPE.
5. CONTRACTOR SHALL RAKE AREAS OF EXISTING BEACH DISTURBED DURING CONSTRUCTION, BETWEEN THE LANDWARD LIMIT OF EXCAVATION AND THE TOE OF FILL.
6. SEE C-109 THOUGH C-111 FOR BORROW AREA SEQUENCING REQUIREMENTS. SEE SHEETS C-305 AND C-306 FOR TYPICAL BORROW AREA SECTIONS.
7. FOR BORING AND HAND AUGER INFORMATION SEE SPECIFICATIONS.
8. FOR OUTFALL PIPE BENT CONSTRUCTION THE OUTFALL CONSTRUCTION ZONE SHALL HAVE A 75 FT OFFSET FROM PIPE. SEE DETAILS ON SHEET C-504.
9. FOR DREDGING/ BORROW OPERATIONS THE OUTFALL PROTECTION ZONE SHALL HAVE A 50 FT OFFSET FROM PIPE IN BORROW AREAS AND A 10 FT OFFSET FROM PIPE IN UPLAND PLACEMENT AREAS. SEE SPECIFICATIONS AND DETAILS ON SHEET C-504.
10. MAINTENANCE CORRIDOR IS TO BE CLEAR OF VEGETATION. ELEVATION VARIES BETWEEN +9.0 TO +10.0, TO BE FIELD ADJUSTED TO MINIMIZE CUT/FILL. MAXIMUM CROSS AND LONGITUDINAL SLOPE TO BE 2%.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

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DES BY: ADD
DWN BY: ADD
CHK BY: MA
REVIEWED BY: BK
ISSUED/SUBMITTAL DATE: 9/5/+ 12 SEPT 2024
SOLICITATION NUMBER: -
CONTRACT NUMBER: -
PLOT SCALE: 1"=100'
DWG. SIZE: 22"x34"
FILE NAME: C-105 PLAN - STA 126+06.5 TO STA 159+08.6.dgn

U.S. ARMY CORPS OF ENGINEERS PHILADELPHIA DISTRICT

BEACH NOURISHMENT
INITIAL CONSTRUCTION
HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY
PLAN - STA 126+06.5 TO STA 159+08.6

SHEET NUMBER
C-105




PLAN NORTH

1 PLAN - STA. 159+08.6 TO STA. 192+10.6

100' 50' 0 100'
SCALE IN FEET

## NOTES:

1. SEE SHEET G-003 FOR GENERAL NOTES.
2. SEE SHEET C-304 FOR TYPICAL BEACHFILL SECTIONS.
3. SEE SHEET C-401 FOR DUNE CROSSOVER SCHEDULE.
4. CONTRACTOR SHALL RAKE AREAS OF EXISTING BEACH DISTURBED DURING CONSTRUCTION, BETWEEN THE LANDWARD LIMIT OF EXCAVATION AND THE TOE OF FILL.
5. SEE C-109 THROUGH C-111 FOR BORROW AREA SEQUENCING REQUIREMENTS. SEE SHEETS C-305 AND C-306 FOR TYPICAL BORROW AREA SECTIONS.
6. FOR BORING AND HAND AUGER INFORMATION SEE SPECIFICATIONS.
7. FOR OUTFALL PIPE BENT CONSTRUCTION THE OUTFALL CONSTRUCTION ZONE SHALL HAVE A 75 FT OFFSET FROM PIPE. SEE DETAILS ON SHEET C-504.
8. FOR DREDGING/ BORROW OPERATIONS THE OUTFALL PROTECTION ZONE SHALL HAVE A 50 FT OFFSET FROM PIPE IN BORROW AREAS AND A 10 FT OFFSET FROM PIPE IN UPLAND PLACEMENT AREAS. SEE SPECIFICATIONS AND DETAILS ON SHEET C-504.
9. MAINTENANCE CORRIDOR IS TO BE CLEAR OF VEGETATION. ELEVATION VARIES BETWEEN +8.0 TO +10.0, TO BE FIELD ADJUSTED TO MINIMIZE CUT/FILL. MAXIMUM CROSS AND LONGITUDINAL SLOPE TO BE 2%.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | ACTION | DESCRIPTION | DATE | BY |
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U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

DWN BY: ADD
CHD BY: DAA
DES BY: ADD
REVIEWED BY: RMK
ISSUE/SUBMITTAL DATE: 95% - 12 SEP 2024
SOLICITATION NUMBER: -
CONTRACT NUMBER: -
PLOT SCALE: 1"=100'
DWG. SIZE: 30"x42"
FILE NAME: C:\SD Cards - 512\ Wildwood\ 100-105.dgn

BEACH NOURISHMENT
INITIAL CONSTRUCTION

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

PLAN - STA 159+08.6 TO STA 192+10.6

SHEET NUMBER
C-106




PLAN NORTH

1 PLAN - STA. 192+10.6 TO STA. 225+12.5

100' 50' 0 100'

SCALE IN FEET

NOTES:

1. SEE SHEET G-003 FOR GENERAL NOTES.
2. SEE SHEET C-304 FOR TYPICAL BEACHFILL SECTIONS.
3. SEE SHEET C-401 FOR DUNE CROSSOVER SCHEDULE.
4. CONTRACTOR SHALL RAKE AREAS OF EXISTING BEACH DISTURBED DURING CONSTRUCTION, BETWEEN THE LANDWARD LIMIT OF EXCAVATION AND THE TOE OF FILL.
5. THE EXISTING COUNTY MUA OUTFALL HAS AN INVERT ELEV. -21.0 AND DEEPER WHEN ADJACENT TO THE BORROW AREA.
6. SEE C-109 THROUGH C-111 FOR BORROW AREA SEQUENCING REQUIREMENTS. SEE SHEETS C-305 AND C-306 FOR TYPICAL BORROW AREA SECTIONS.
7. FOR BORING AND HAND AUGER INFORMATION SEE SPECIFICATIONS.
8. FOR OUTFALL PIPE BENT CONSTRUCTION THE OUTFALL CONSTRUCTION ZONE SHALL HAVE A 75 FT OFFSET FROM PIPE. SEE DETAILS ON SHEET C-504.
9. FOR DREDGING/ BORROW OPERATIONS THE OUTFALL PROTECTION ZONE SHALL HAVE A 50 FT OFFSET FROM PIPE IN BORROW AREAS AND A 10 FT OFFSET FROM PIPE IN UPLAND PLACEMENT AREAS. SEE SPECIFICATIONS AND DETAILS ON SHEET C-504.
10. MAINTENANCE CORRIDOR IS TO BE CLEAR OF VEGETATION. ELEVATION +8.0.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

DATE | BY | DESCRIPTION | MARK | ACTION

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

DWN BY: AGD
CAD BY: MA
DES BY: AGD
REVIEWED BY: BWA
ISSUED/SUBMITTAL DATE: 90% - 12 SEPT 2024
SOLICITATION NUMBER: -
CONTRACT NUMBER: -
PLOT SCALE: 1"=100'
DWG. SIZE: 22"x34"
FILE NAME: C:\SPTA\N_STA 192+10.6 TO STA 225+12.5.dgn

BEACH NOURISHMENT
INITIAL CONSTRUCTION

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

PLAN - STA. 192+10.6 TO STA. 225+12.5

SHEET NUMBER

C-107




PLAN NORTH

1 PLAN - STA. 225+12.5 TO STA. 258+14.1

100' 50' 0 100'
SCALE IN FEET

## NOTES:

1. SEE SHEET G-003 FOR GENERAL NOTES.
2. SEE SHEET C-304 FOR TYPICAL BEACHFILL SECTIONS.
3. SEE SHEET C-401 FOR DUNE CROSSOVER SCHEDULE.
4. CONTRACTOR SHALL RAKE AREAS OF EXISTING BEACH DISTURBED DURING CONSTRUCTION, BETWEEN THE LANDWARD LIMIT OF EXCAVATION AND THE TOE OF FILL.
5. THE EXISTING COUNTY MUA OUTFALL HAS AN INVERT ELEV. -21.0 AND DEEPER WHEN ADJACENT TO THE BORROW AREA.
6. SEE C-109 THROUGH C-111 FOR BORROW AREA SEQUENCING REQUIREMENTS. SEE SHEETS C-305 AND C-306 FOR TYPICAL BORROW AREA SECTIONS.
7. FOR BORING AND HAND AUGER INFORMATION SEE SPECIFICATIONS.
8. FOR OUTFALL PIPE BENT CONSTRUCTION THE OUTFALL CONSTRUCTION ZONE SHALL HAVE A 75 FT OFFSET FROM PIPE. SEE DETAILS ON SHEET C-504.
9. FOR DREDGING/ BORROW OPERATIONS THE OUTFALL PROTECTION ZONE SHALL HAVE A 50 FT OFFSET FROM PIPE IN BORROW AREAS AND A 10 FT OFFSET FROM PIPE IN UPLAND PLACEMENT AREAS. SEE SPECIFICATIONS AND DETAILS ON SHEET C-504.
10. MAINTENANCE CORRIDOR IS TO BE CLEAR OF VEGETATION. ELEVATION +8.0.
11. IN THE DUNES SOUTH OF MEMPHIS THERE ARE EXISTING GAS, WATER AND ELECTRIC UTILITIES TO BE LOCATED AND PROTECTED.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

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DESCRIPTION

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

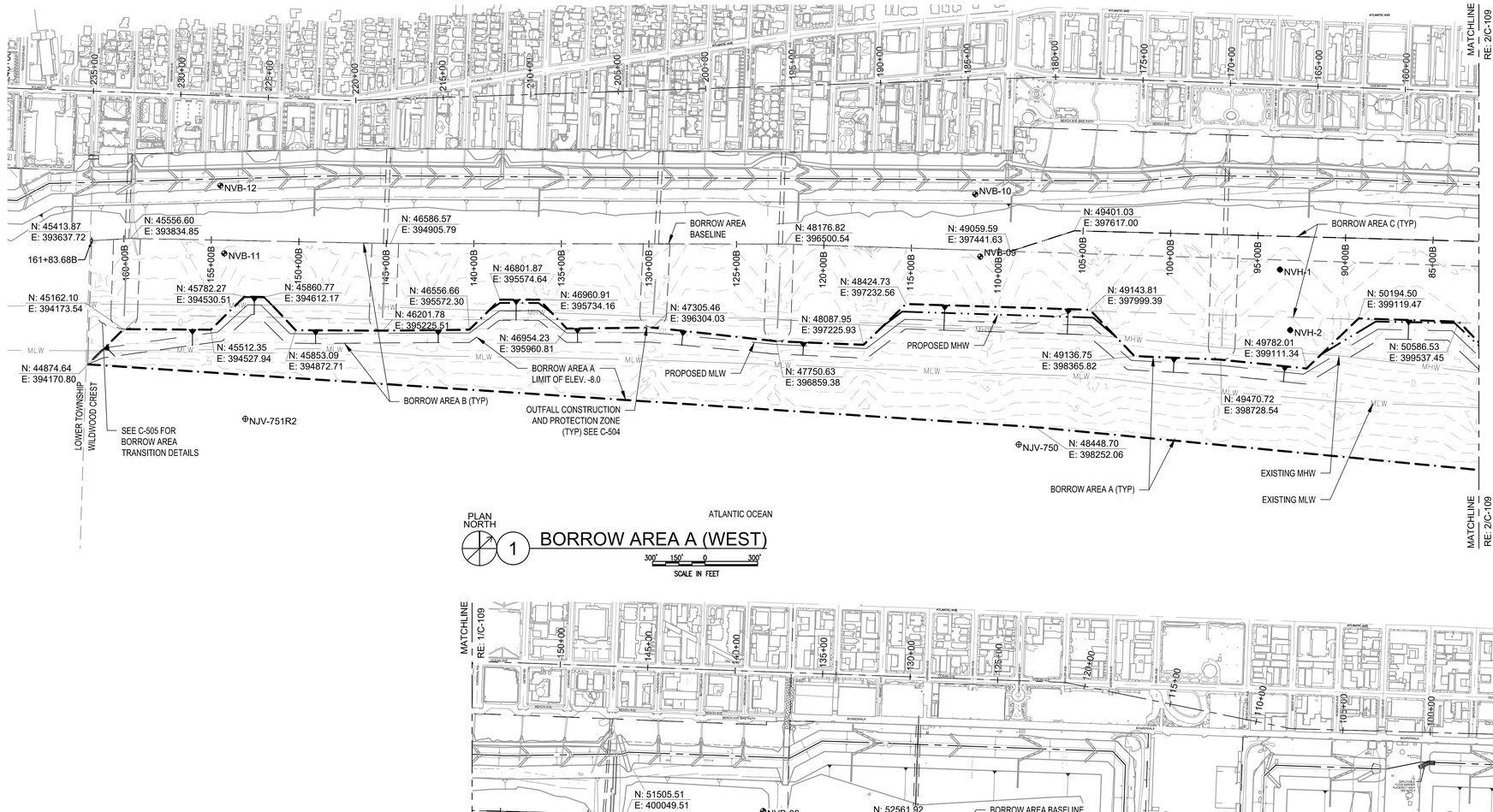
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CONTRACT NUMBER: -
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DWG. SIZE: 24"x36"
FILE NAME: C-108 PLAN - STA 225+12.5 TO STA 258+14.1.dwg

BEACH NOURISHMENT
INITIAL CONSTRUCTION

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

PLAN - STA 225+12.5 TO STA 258+14.1

SHEET NUMBER
C-108

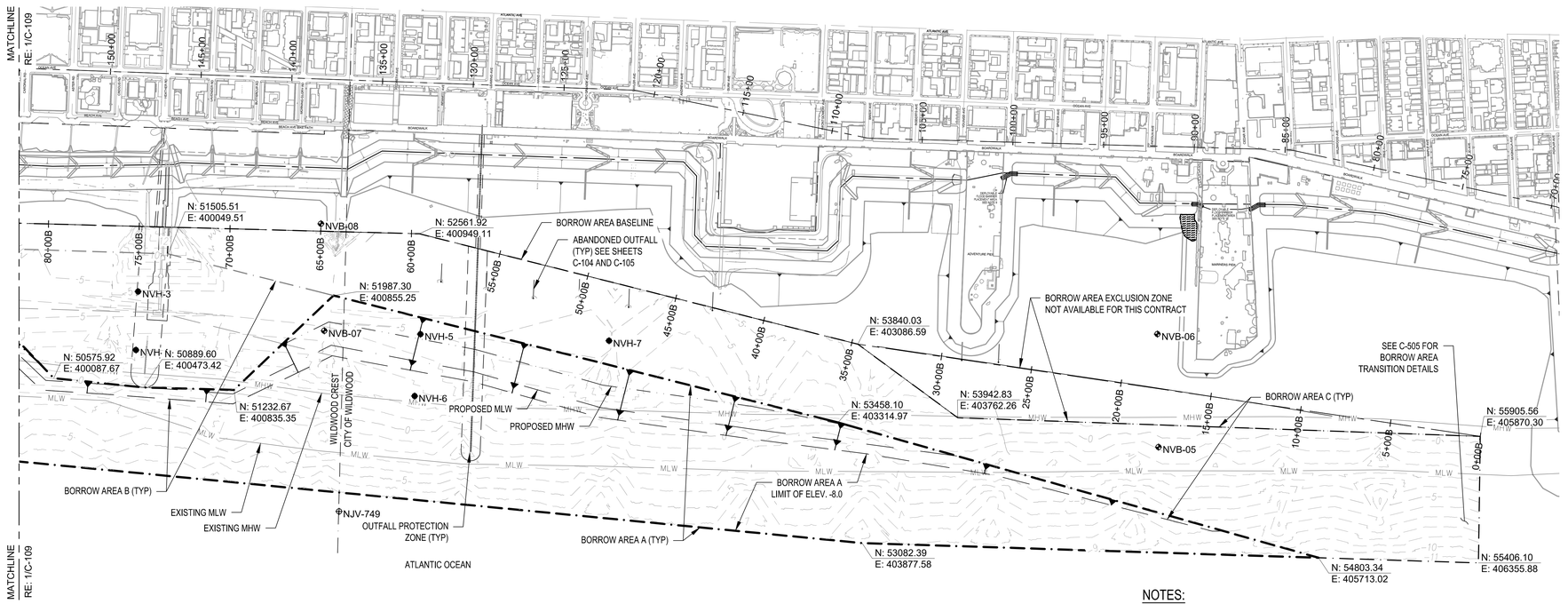



PLAN NORTH

1 BORROW AREA A (WEST)

300' 150' 0 300'

SCALE IN FEET




PLAN NORTH

2 BORROW AREA A (EAST)

300' 150' 0 300'

SCALE IN FEET

## NOTES:

1. CONTRACTOR SHALL BEGIN DREDGING IN WILDWOOD CREST (STA. 63+60B TO STA. 161+83.68) AREA A BEFORE PROCEEDING TO OTHER AREAS.
2. BORROW AREA B WILL BE OPEN FOR USE ONCE PILE BENT CONSTRUCTION HAS BEEN COMPLETED. PHASED OPENING OF BORROW AREA B IS POSSIBLE WHEN BENT CONSTRUCTION HAS BEEN COMPLETED WITHIN 1000LF OF ACTIVE BORROW WORK ZONE, COORDINATION WITH COR REQUIRED.
3. CONTRACTOR SHALL REMOVE AT LEAST 85% OF AVAILABLE MATERIAL FROM THE COMBINED FULL LIMITS OF BORROW AREA A AND B BEFORE PROCEEDING TO BORROW AREA C. THE 85% REQUIREMENT ONLY APPLIES TO LOCATIONS WHERE THE SURVEYS INDICATE THE AVAILABLE CUT IS GREATER THAN 25CY/LF. VOLUME IS TAKEN USING THE SECTION LINES.
4. AT ANY GIVEN TIME, CONTRACTOR MAY CLOSE A 1,000-FOOT-LONG SECTION OF BEACH FOR USE AS AN ACTIVE WORK ZONE. THE ADJACENT 500-FOOT-LONG SECTION OF RECENTLY EXCAVATED BORROW AREA WILL REMAIN TEMPORARILY CLOSED TO THE PUBLIC FOR MONITORING.
5. THE TRANSITION EDGE SHALL BE AT NO MORE THAN A 45-DEGREE ANGLE TO THE BORROW AREA BASELINE, AND SHALL TAPER DOWN TO EXISTING GRADE AT 30H:1V ABOVE MLW AND 10H:1V BELOW MLW. SEE DETAILS ON SHEET C-505.
6. EXCAVATION AND DREDGING ARE AUTHORIZED TO ELEV. -8 WITH ONE FOOT OF OVERDEPTH TO -9. FOR BORROW AREA TYPICAL SECTIONS, SEE SHEETS C-305. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
7. FOR OUTFALL PROTECTION ZONE LIMITS, SEE SHEETS C-101 THROUGH C-108. FOR REQUIREMENTS, SEE SPECIFICATIONS.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

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| DES BY: | ISSUE/SUBMITTAL DATE: |
| ADD | 95% - 12 SEP 2024 |
| REVIEWED BY: | SOLICITATION NUMBER: |
| DMK | - |
| DWN BY: | CONTRACT NUMBER: |
| ADD | - |
| CHKD BY: | |
| DMK | |
| PLOT SCALE | FILE NAME: |
| 1:300 | C-505 FULL BORROW AREA A.dwg |
| DWG. SIZE: | |
| 30"x42" | |

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

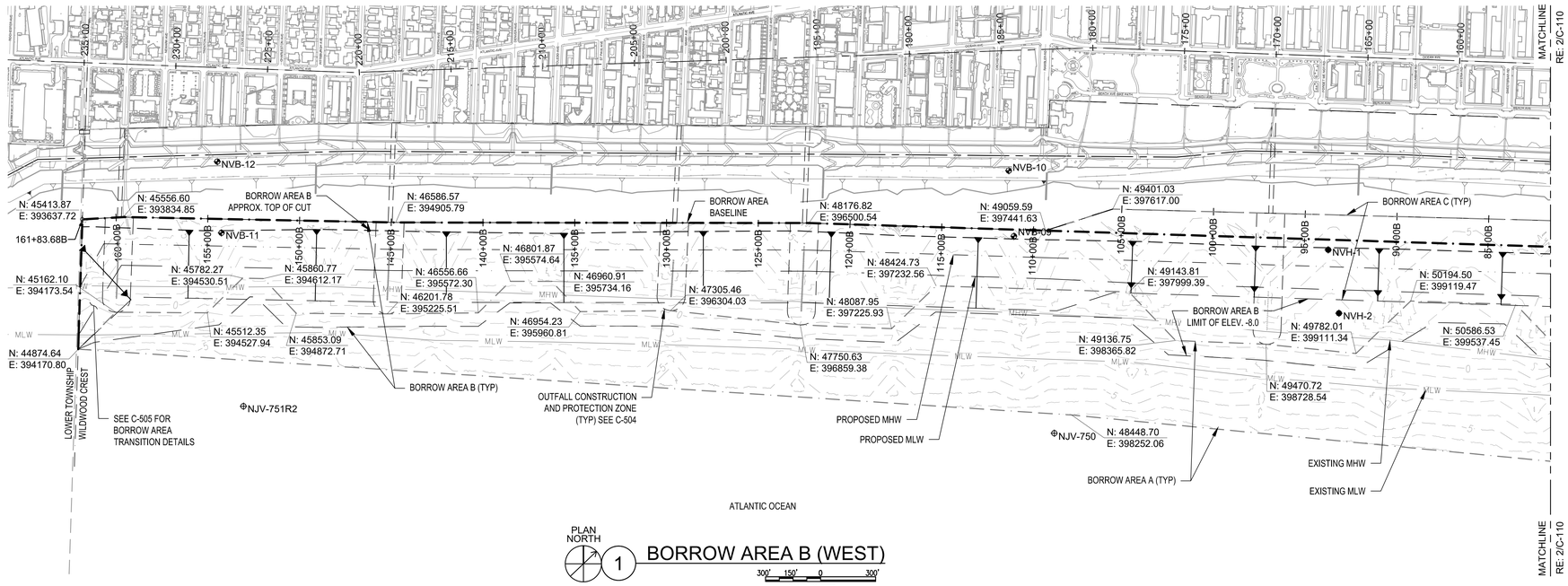
BEACH NOURISHMENT
INITIAL CONSTRUCTION

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

PLAN - BORROW AREA A

SHEET NUMBER

C-109

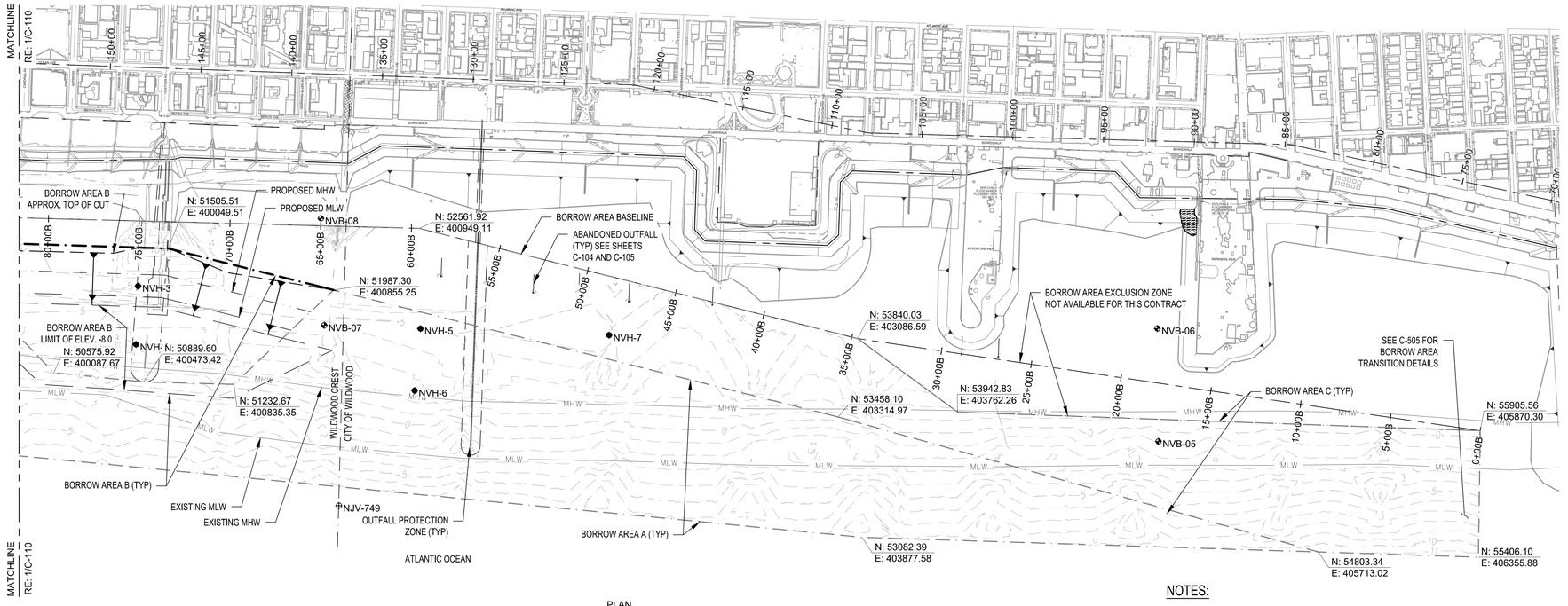



PLAN NORTH

1 BORROW AREA B (WEST)

300' 150' 0 300'

SCALE IN FEET




PLAN NORTH

2 BORROW AREA B (EAST)

300' 150' 0 300'

SCALE IN FEET

## NOTES:

1. CONTRACTOR SHALL BEGIN DREDGING IN WILDWOOD CREST (STA. 63+60B TO STA. 161+83.68) AREA A BEFORE PROCEEDING TO OTHER AREAS.
2. BORROW AREA B WILL BE OPEN FOR USE ONCE PILE BENT CONSTRUCTION HAS BEEN COMPLETED. PHASED OPENING OF BORROW AREA B IS POSSIBLE WHEN BENT CONSTRUCTION HAS BEEN COMPLETED WITHIN 1000LF OF ACTIVE BORROW WORK ZONE, COORDINATION WITH COR REQUIRED.
3. CONTRACTOR SHALL REMOVE AT LEAST 85% OF AVAILABLE MATERIAL FROM THE COMBINED FULL LIMITS OF BORROW AREA A AND B BEFORE PROCEEDING TO BORROW AREA C. THE 85% REQUIREMENT ONLY APPLIES TO LOCATIONS WHERE THE SURVEYS INDICATE THE AVAILABLE CUT IS GREATER THAN 25CY/LF. VOLUME IS TAKEN USING THE SECTION LINES.
4. AT ANY GIVEN TIME, CONTRACTOR MAY CLOSE A 1,000-FOOT-LONG SECTION OF BEACH FOR USE AS AN ACTIVE WORK ZONE, THE ADJACENT 500-FOOT-LONG SECTION OF RECENTLY EXCAVATED BORROW AREA WILL REMAIN TEMPORARILY CLOSED TO THE PUBLIC FOR MONITORING.
5. THE TRANSITION EDGE SHALL BE AT NO MORE THAN A 45-DEGREE ANGLE TO THE BORROW AREA BASELINE, AND SHALL TAPER DOWN TO EXISTING GRADE AT 30H:1V ABOVE MLW AND 10H:1V BELOW MLW. SEE DETAILS ON SHEET C-505.
6. EXCAVATION AND DREDGING ARE AUTHORIZED TO ELEV. -8 WITH ONE FOOT OF OVERDEPTH TO -9. FOR BORROW AREA TYPICAL SECTIONS, SEE SHEETS C-305. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
7. FOR OUTFALL PROTECTION ZONE LIMITS, SEE SHEETS C-101 THROUGH C-108. FOR REQUIREMENTS, SEE SPECIFICATIONS.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

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ISSUED/SUBMITTAL DATE:
95% - 13SEP 2024
SOLICITATION NUMBER:
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CONTRACT NUMBER:
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DES BY: ADD
DET BY: ADD
QAQC BY: DAA
DWN BY: ADD
CHK BY: DAA
PLOT SCALE: 1:300
DWG. SIZE: 30"x42"
FILE NAME: C-110 PLAN - BORROW AREA B.dwg

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

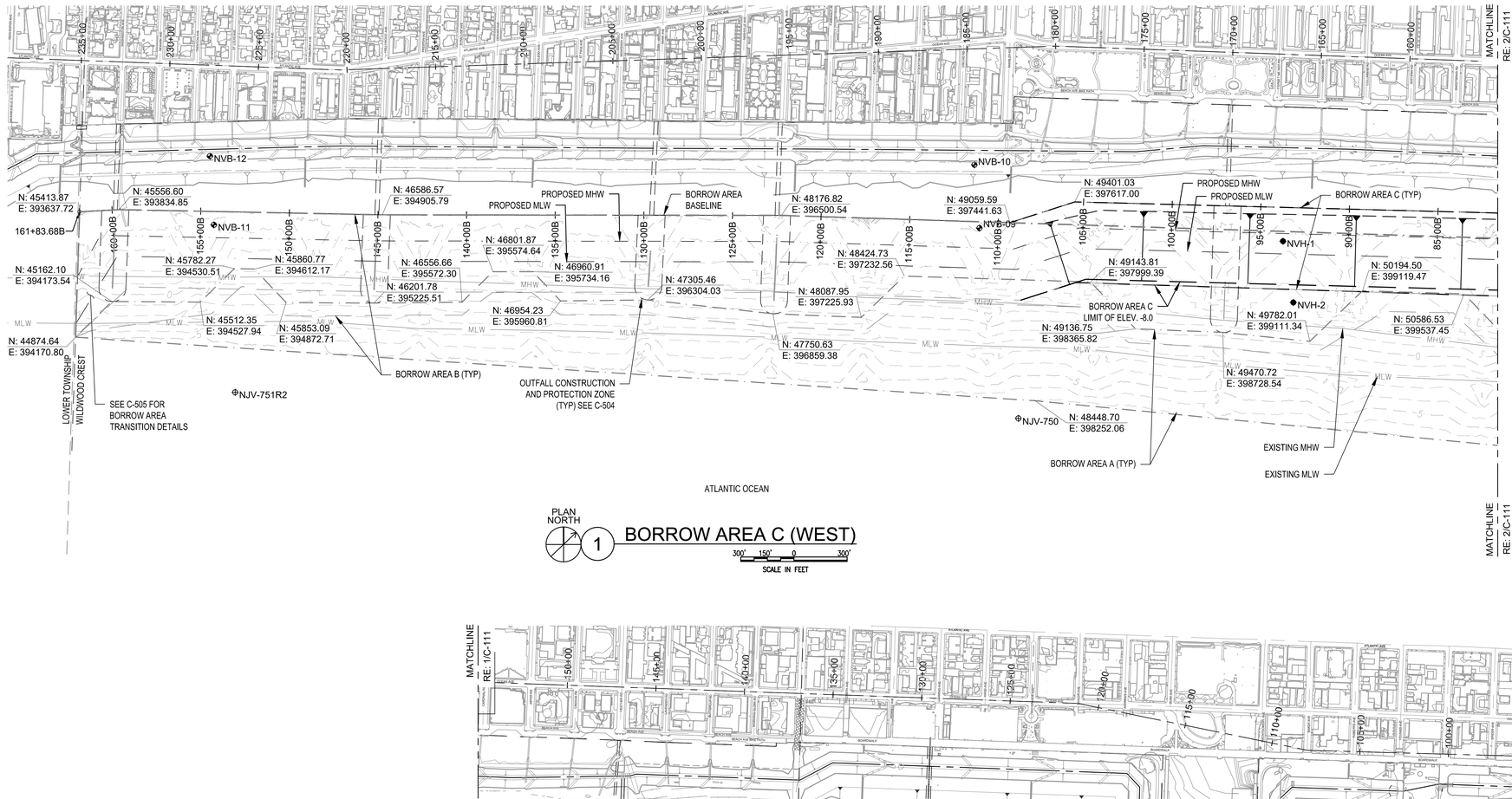
BEACH NOURISHMENT
INITIAL CONSTRUCTION

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

PLAN - BORROW AREA B

SHEET NUMBER

C-110

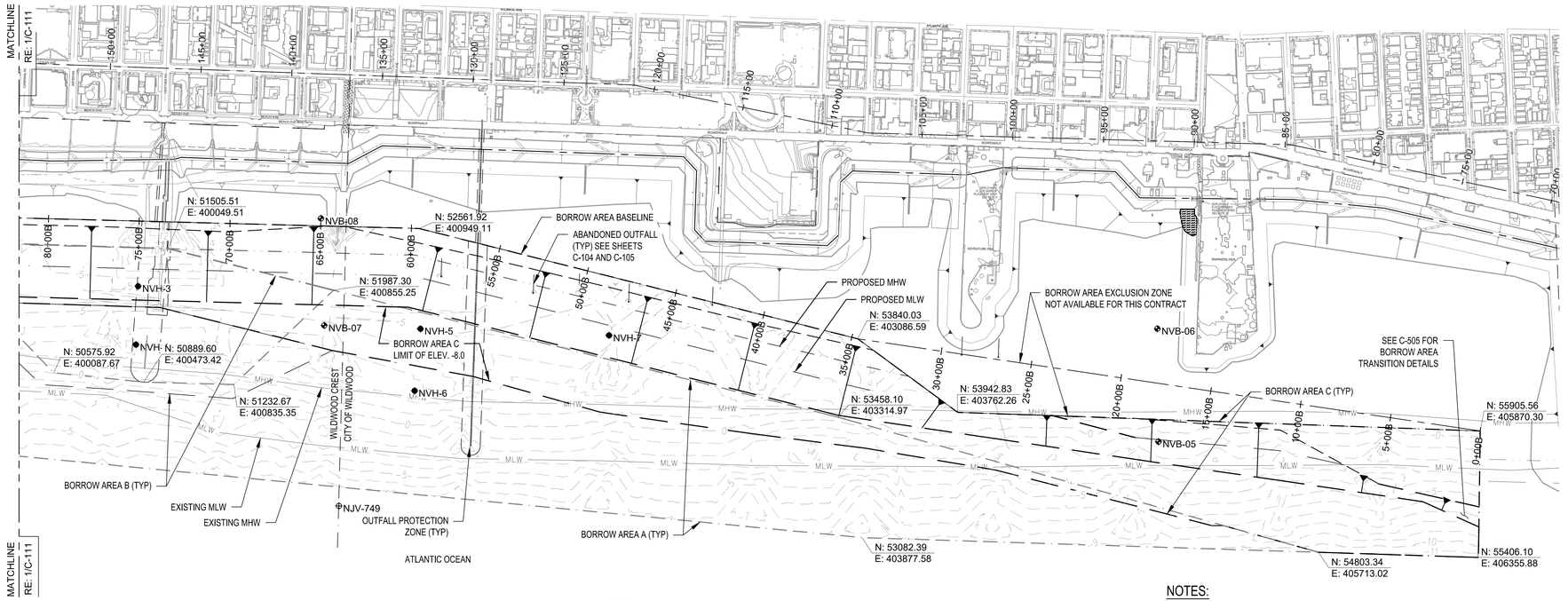



PLAN NORTH

1 BORROW AREA C (WEST)

300' 150' 0 300'

SCALE IN FEET




PLAN NORTH

2 BORROW AREA C (EAST)

300' 150' 0 300'

SCALE IN FEET

## NOTES:

1. CONTRACTOR SHALL BEGIN DREDGING IN WILDWOOD CREST (STA. 63+60B TO STA. 161+83.68) AREA A BEFORE PROCEEDING TO OTHER AREAS.
2. BORROW AREA B WILL BE OPEN FOR USE ONCE PILE BENT CONSTRUCTION HAS BEEN COMPLETED. PHASED OPENING OF BORROW AREA B IS POSSIBLE WHEN BENT CONSTRUCTION HAS BEEN COMPLETED WITHIN 1000LF OF ACTIVE BORROW WORK ZONE, COORDINATION WITH COR REQUIRED.
3. CONTRACTOR SHALL REMOVE AT LEAST 85% OF AVAILABLE MATERIAL FROM THE COMBINED FULL LIMITS OF BORROW AREA A AND B BEFORE PROCEEDING TO BORROW AREA C. THE 85% REQUIREMENT ONLY APPLIES TO LOCATIONS WHERE THE SURVEYS INDICATE THE AVAILABLE CUT IS GREATER THAN 25CY/LF. VOLUME IS TAKEN USING THE SECTION LINES.
4. AT ANY GIVEN TIME, CONTRACTOR MAY CLOSE A 1,000-FOOT-LONG SECTION OF BEACH FOR USE AS AN ACTIVE WORK ZONE, THE ADJACENT 500-FOOT-LONG SECTION OF RECENTLY EXCAVATED BORROW AREA WILL REMAIN TEMPORARILY CLOSED TO THE PUBLIC FOR MONITORING.
5. THE TRANSITION EDGE SHALL BE AT NO MORE THAN A 45-DEGREE ANGLE TO THE BORROW AREA BASELINE, AND SHALL TAPER DOWN TO EXISTING GRADE AT 30H:1V ABOVE MLW AND 10H:1V BELOW MLW. SEE DETAILS ON SHEET C-505.
6. EXCAVATION AND DREDGING ARE AUTHORIZED TO ELEV. -8 WITH ONE FOOT OF OVERDEPTH TO -9. FOR BORROW AREA TYPICAL SECTIONS, SEE SHEETS C-305. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
7. FOR OUTFALL PROTECTION ZONE LIMITS, SEE SHEETS C-101 THROUGH C-108. FOR REQUIREMENTS, SEE SPECIFICATIONS.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

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| DWN BY: ADD | DES BY: ADD | ISSUE/SUBMITTAL DATE: 95% - 13 SEPT 2024 | |
| QC BY: DAK | REVIEWED BY: DAK | SOLICITATION NUMBER: - | CONTRACT NUMBER: - |
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U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

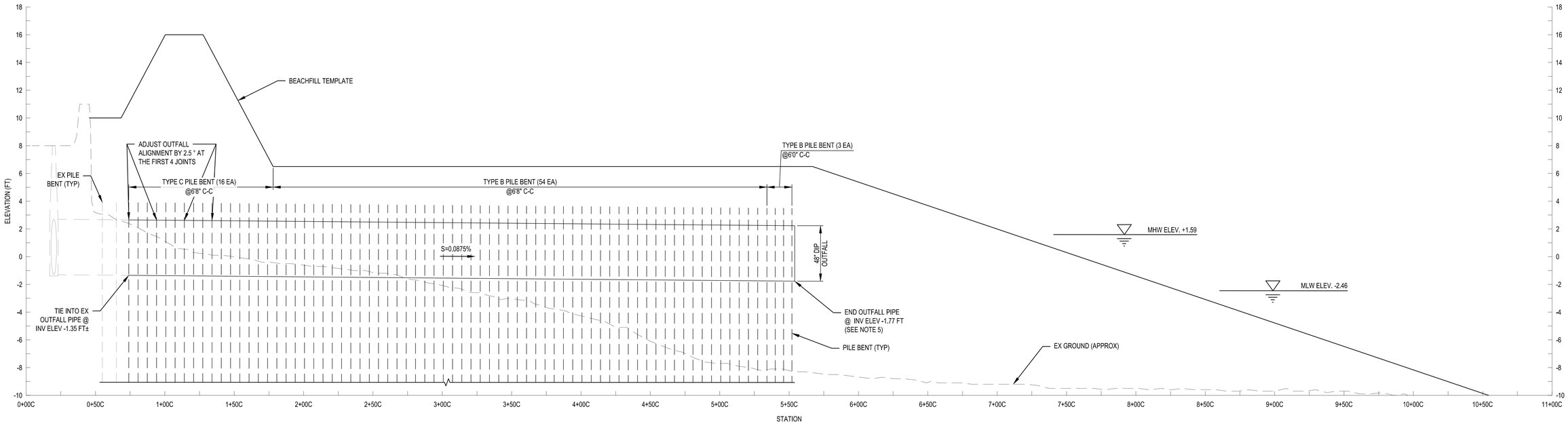
BEACH NOURISHMENT
INITIAL CONSTRUCTION

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

PLAN - BORROW AREA C

SHEET NUMBER

C-111




## 1 PROFILE - 3RD AVE OUTFALL PIPE

H: 0 30 60
V: 0 3 6
SCALE IN FEET

### NOTES:

1. FOR GENERAL INFORMATION AND LEGENDS, SEE SHEET C-001.
2. FOR TYPICAL SECTIONS, SEE SHEET C-301.
3. FOR DUNE CROSSOVER LOCATIONS AND DETAILS, SEE SHEETS C-401 THROUGH C-409.
4. FOR OUTFALL DETAILS, SEE SHEET C-503.
5. CENTER OF SEAWARD-MOST PILE BENT TO BE LOCATED 2 FEET FROM THE END OF THE OUTFALL PIPE.
6. SEE SHEET G-102 FOR PIPE ALIGNMENT GEOMETRY.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

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U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

DWN BY: ADD
CHD BY: DAA
DES BY: ADD
REVIEWED BY: DAA
ISSUE/SUBMITTAL DATE: 95% - 12 SEP 2024
SOLICITATION NUMBER: -
CONTRACT NUMBER: -
PLOT SCALE: -
DWG. SIZE: 30"x42"
FILE NAME: C201 PROFILE - 3RD AVE OUTFALL PIPE.dwg

BEACH NOURISHMENT
INITIAL CONSTRUCTION

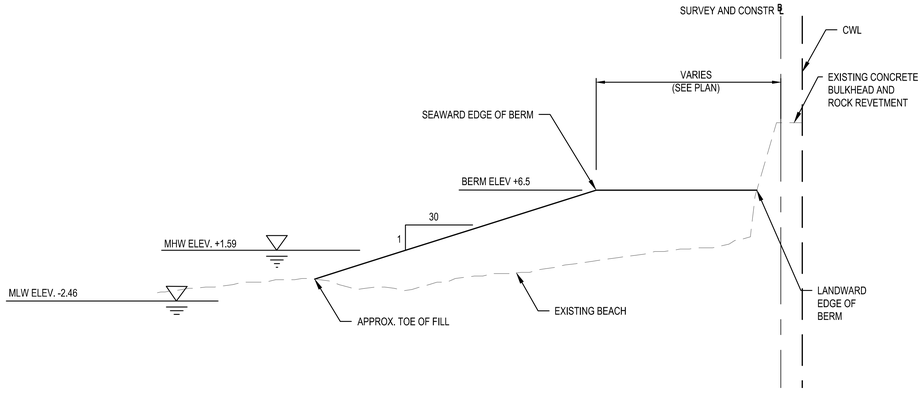
HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

PROFILE - 3RD AVE OUTFALL PIPE

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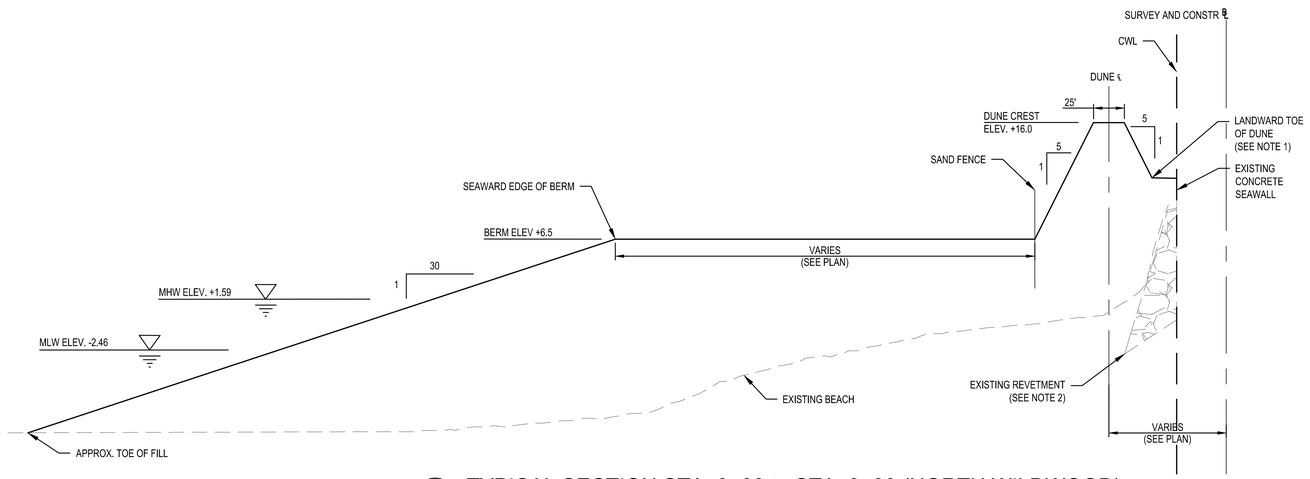
SHEET NUMBER

C-201



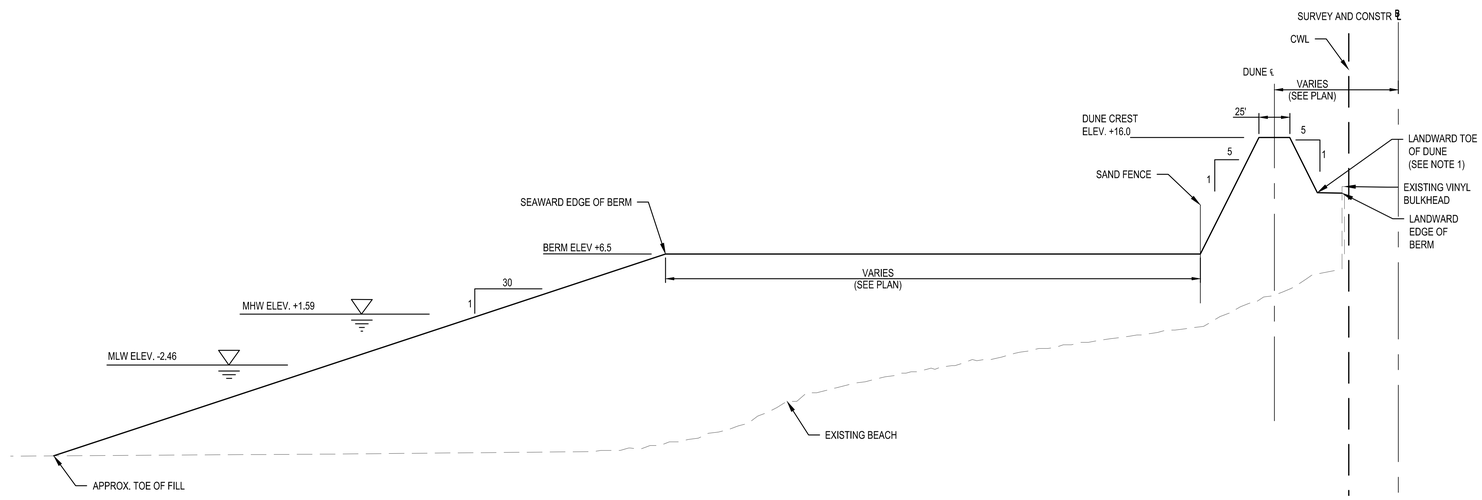

## 1 TYPICAL SECTION - STA. -5+00 TO STA. 0+00 (NORTH WILDWOOD)

H: 0 50 100
V: 0 5 10
SCALE IN FEET



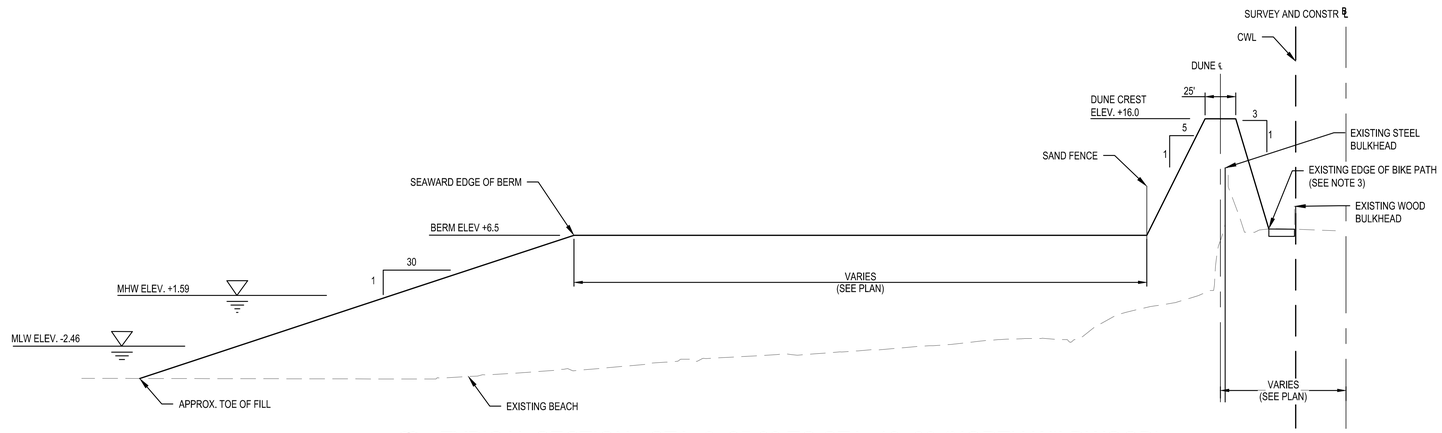

## 2 TYPICAL SECTION STA. 0+00 to STA. 3+30 (NORTH WILDWOOD)

H: 0 50 100
V: 0 5 10
SCALE IN FEET




## 3 TYPICAL SECTION - STA. 3+30 TO STA. 8+25.68 (NORTH WILDWOOD)

H: 0 50 100
V: 0 5 10
SCALE IN FEET




## 4 TYPICAL SECTION - STA. 8+25.68 TO STA. 10+80 (NORTH WILDWOOD)

H: 0 50 100
V: 0 5 10
SCALE IN FEET

### NOTES:

1. PLACE FILL MATERIAL TO ELEVATION +11.5 BETWEEN EXISTING BULKHEAD/REVETMENT AND THE LANDWARD TOE OF DUNE.
2. FILL REVETMENT VOIDS WITH SAND, SEE SPECIFICATIONS.
3. EXISTING BIKE PATH TO BE RELOCATED BY OTHERS.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | ACTION | DESCRIPTION | DATE | BY |
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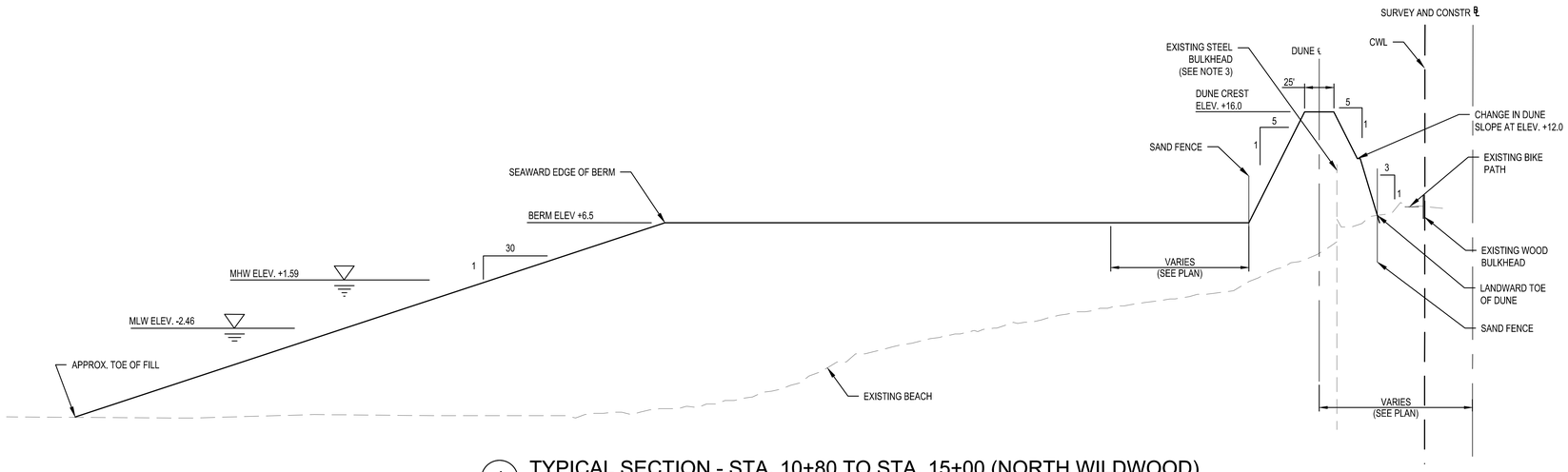
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REVIEWED BY: GMK
ISSUED/SUBMITTAL DATE: 95% - 12 SEPT 2024
SOLICITATION NUMBER: -
CONTRACT NUMBER: -
DWN BY: ADD
CKD BY: DAK
PLOT SCALE: AS SHOWN
DWG. SIZE: 22"x34"
FILE NAME: C301 TYPICAL SECTIONS - BEACHFILL.dwg

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

BEACH NOURISHMENT
INITIAL CONSTRUCTION

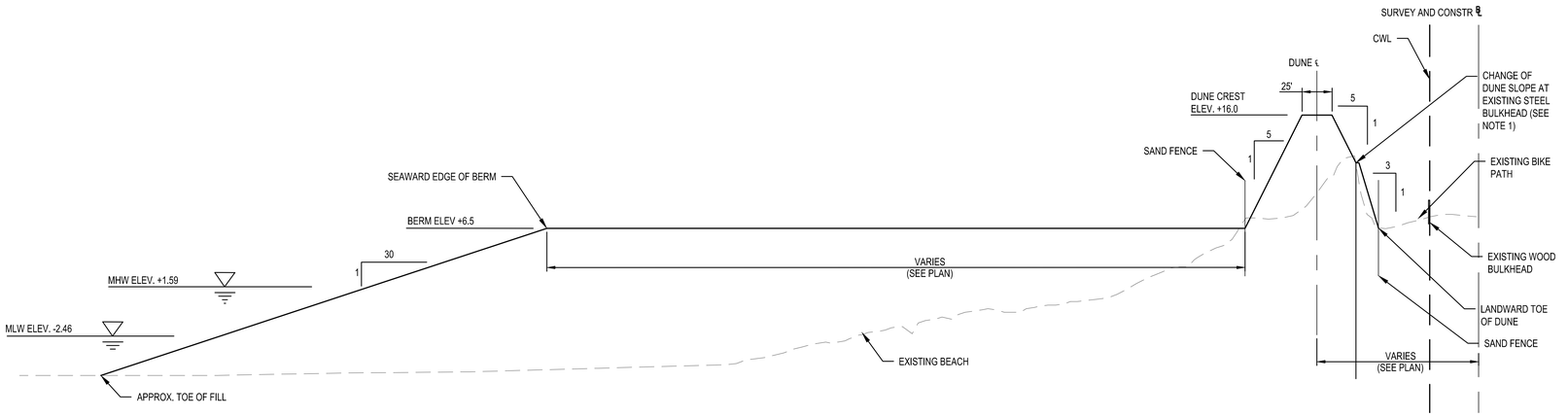
HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY
TYPICAL SECTIONS - BEACHFILL STA. -5+00 TO STA. 10+80
(NORTH WILDWOOD)

SHEET NUMBER
C-301



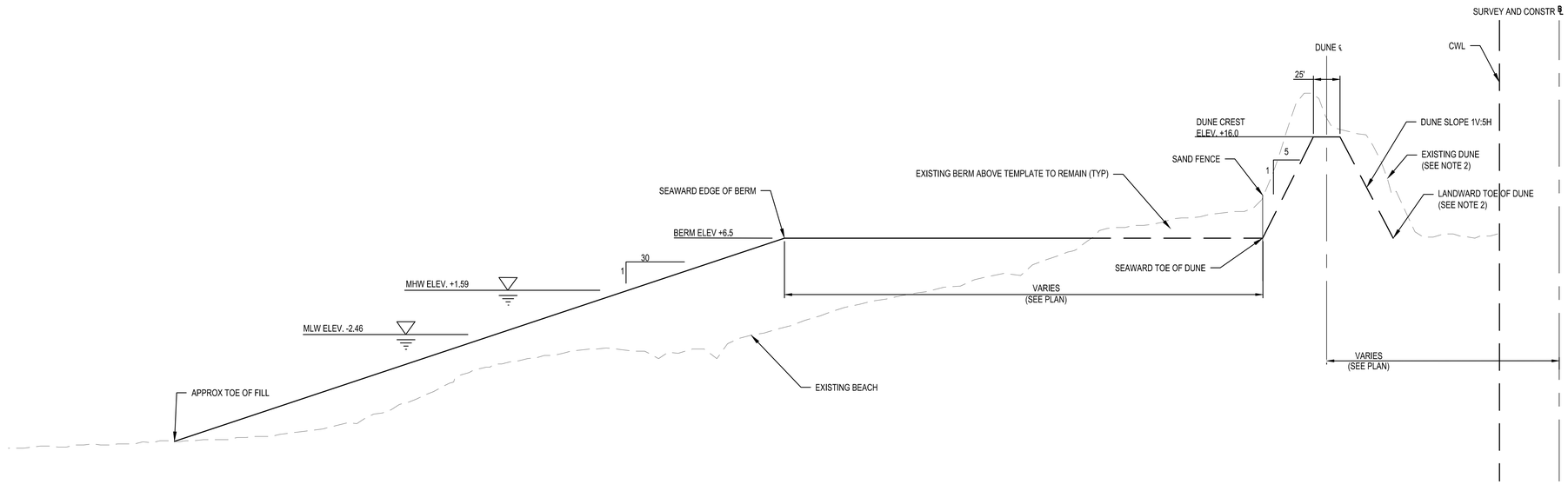

## 1 TYPICAL SECTION - STA. 10+80 TO STA. 15+00 (NORTH WILDWOOD)

H: 0 50 100
V: 0 5 10
SCALE IN FEET




## 2 TYPICAL SECTION - STA. 15+00 TO STA. 28+66 AND STA. 35+00 TO STA. 36+00 (NORTH WILDWOOD)

H: 0 50 100
V: 0 5 10
SCALE IN FEET




## 3 TYPICAL SECTION STA. 28+66 TO STA. 35+00 AND STA. 36+00 TO STA. 68+00 (NORTH WILDWOOD)

H: 0 50 100
V: 0 5 10
SCALE IN FEET

NOTES:

1. DUNE FILL TO BE PLACED TO THE TOP OF THE BULKHEAD.
2. MINIMIZE DISTURBANCE TO VEGETATION ON EXISTING DUNE. DO NOT EXCAVATE DUNE TO MATCH TEMPLATE.
3. DUNE WILL NOT BE CONSTRUCTED UNDER PIERS. BERM IS TO BE CONSTRUCTED AROUND EDGE OF PIERS AT ELEVATION +6.5 FOR A MINIMUM WIDTH OF 75 FEET AS SHOWN ON PLANS AT STA. 53+14 TO STA. 54+27 AND STA. 56+62 TO STA. 58+74 AND STA. 60+32 TO STA. 62+78 AND STA. 63+72 TO STA. 68+00.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

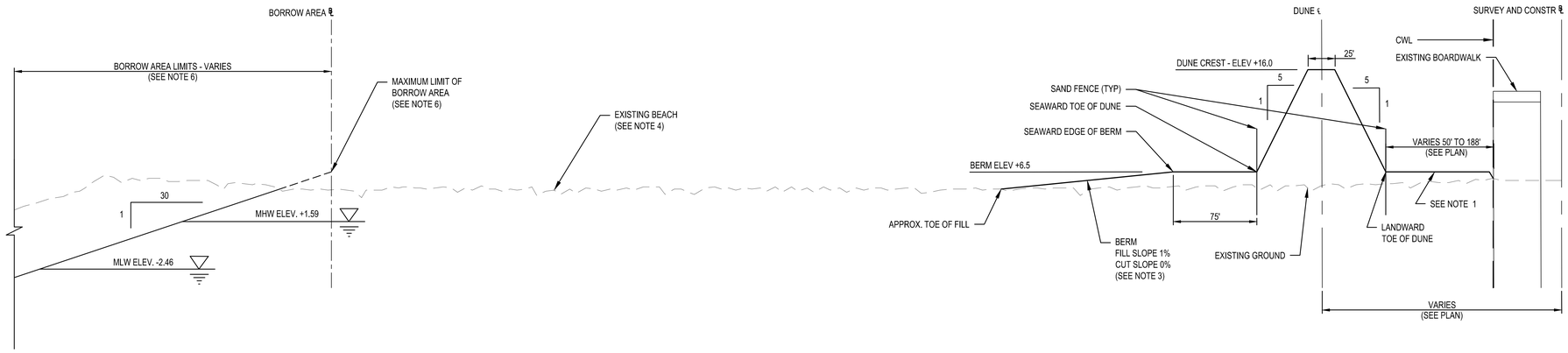
| MARK | DESCRIPTION | DATE | BY |
|---|---|---|---|
| | | | |

ISSUED/SUBMITTAL DATE: 95% - 12 SEPT 2024
SOLICITATION NUMBER:
CONTRACT NUMBER: -
DES BY: ADD
REVIEWED BY: DWS
DWN BY: ADD
CAD BY: MAA
PLOT SCALE: AS SHOWN
DWG. SIZE: 22"x17"
FILE NAME: C302 TYPICAL SECTIONS - BEACHFILL.dwg

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

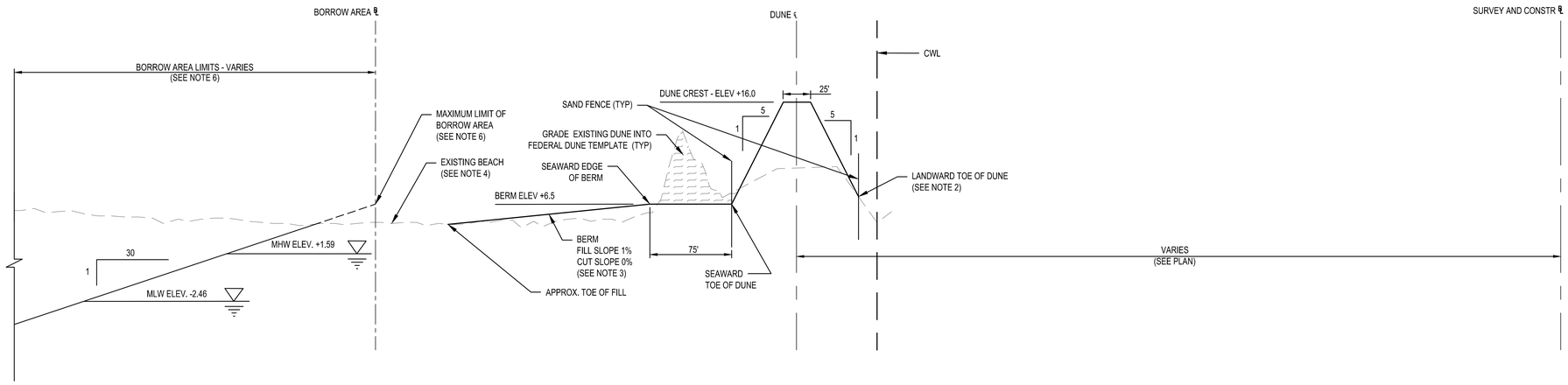
BEACH NOURISHMENT
INITIAL CONSTRUCTION
HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY
TYPICAL SECTIONS - BEACHFILL STA. 10+80 TO STA. 68+00
(NORTH WILDWOOD)

SHEET NUMBER
C-302



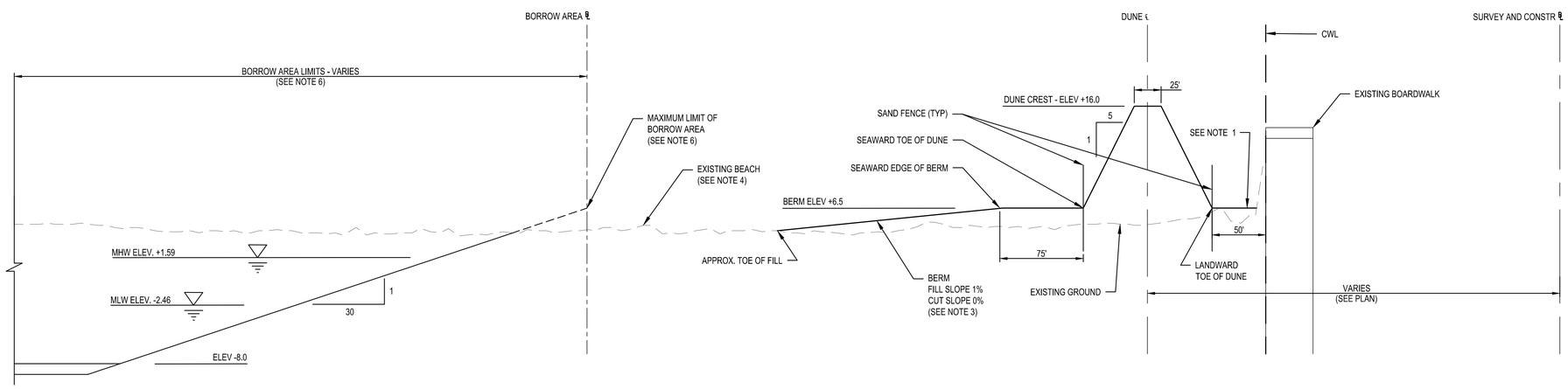

## 1 TYPICAL SECTION - STA. 68+00 TO STA. 86+30 AND 89+76 TO STA. 99+99 AND STA. 102+78 TO STA. 108+40 (WILDWOOD)

H: 0 50 100
V: 0 5 10
SCALE IN FEET




## 2 TYPICAL SECTION - STA. 108+40 TO STA. 117+50 (WILDWOOD)

H: 0 50 100
V: 0 5 10
SCALE IN FEET




## 3 TYPICAL SECTION - STA. 117+50 TO STA. 136+70 (WILDWOOD)

H: 0 50 100
V: 0 5 10
SCALE IN FEET

## NOTES:

1. GRADE FILL MATERIAL TO ELEV. +6.5 BETWEEN THE SEAWARD EDGE OF THE BOARDWALK AND THE LANDWARD TOE OF DUNE.
2. MINIMIZE DISTURBANCE TO EXISTING VEGETATION ON LANDWARD SIDE OF DUNE.
3. SLOPE TO BE FIELD ADJUSTED AT DIRECTION OF COR.
4. CONTRACTOR SHALL RAKE AREAS OF EXISTING BEACH DISTURBED BY CONSTRUCTION OPERATIONS BETWEEN THE LIMITS OF BERM PLACEMENT AND THE BORROW AREA.
5. BERM IS TO BE CONSTRUCTED AROUND EDGE OF PIERS AT ELEVATION +6.5 FOR A MINIMUM WIDTH OF 75 FEET AS SHOWN ON PLANS AT STA. 86+50 TO STA. 89+73 AND STA. 100+25 TO STA. 102+54.
6. FOR BORROW AREA SECTIONS, SEE SHEETS C-305 AND C-306.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | ACTION | DESCRIPTION | DATE | BY |
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|---|---|---|---|
| DES BY: ADD | DRAWN BY: ADD | ISSUED/SUBMITTAL DATE: 90% - 12 SEPT 2024 | |
| REVIEWED BY: DMK | QA BY: DMK | SOLICITATION NUMBER: - | CONTRACT NUMBER: - |
| PLOT SCALE: AS SHOWN | | FILE NAME: C303 TYPICAL SECTIONS - BEACHFILL.dwg | |
| DWG. SIZE: 22"x17" | | | |

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

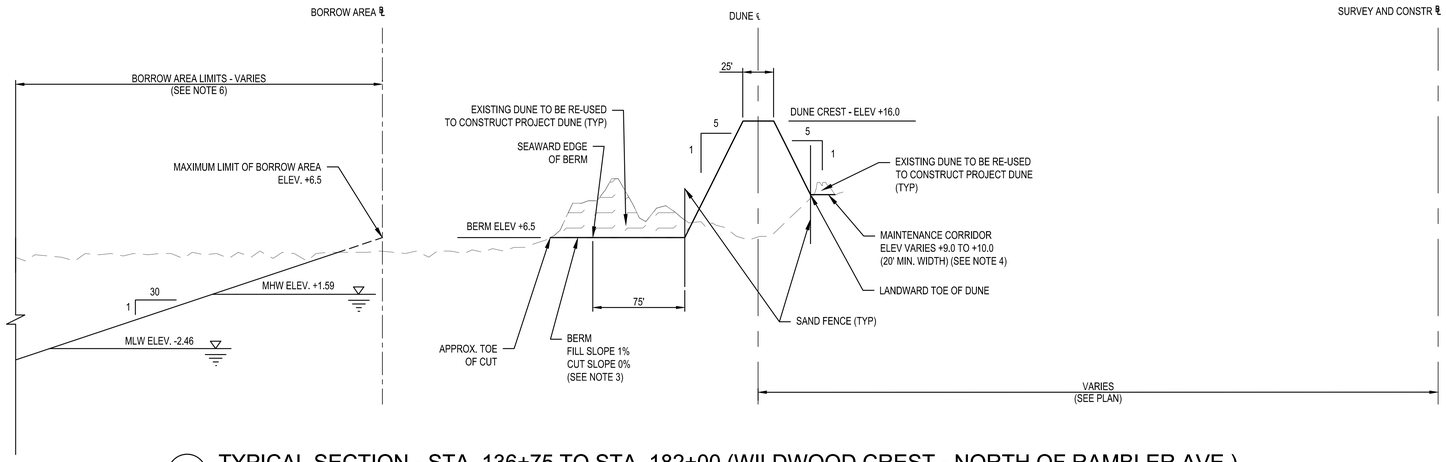
BEACH NOURISHMENT
INITIAL CONSTRUCTION

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

TYPICAL SECTIONS - BEACHFILL STA. 68+00 TO STA. 136+75
(CITY OF WILDWOOD)

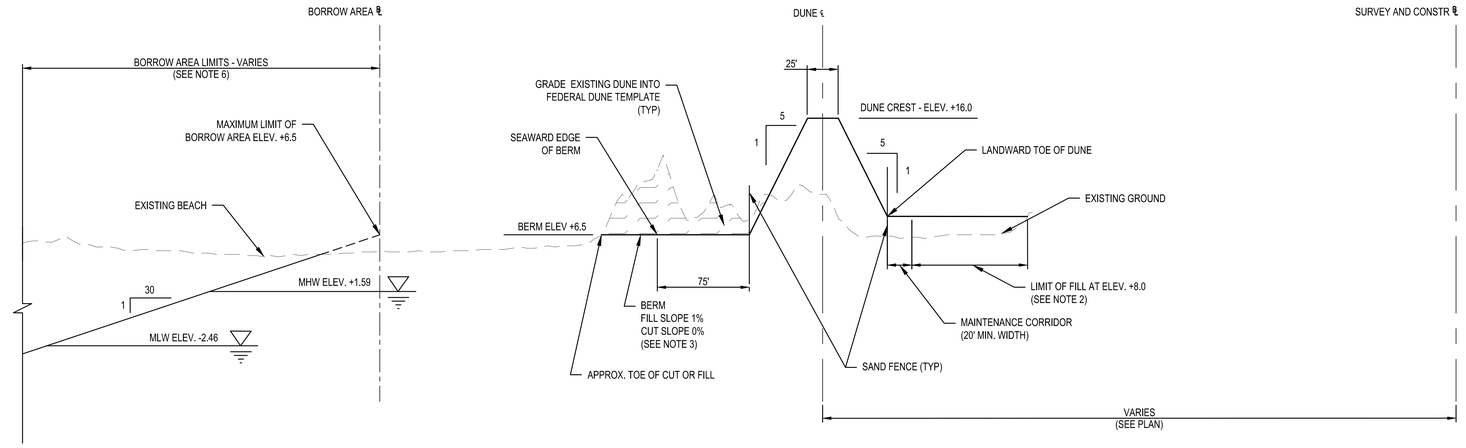
SHEET NUMBER

C-303



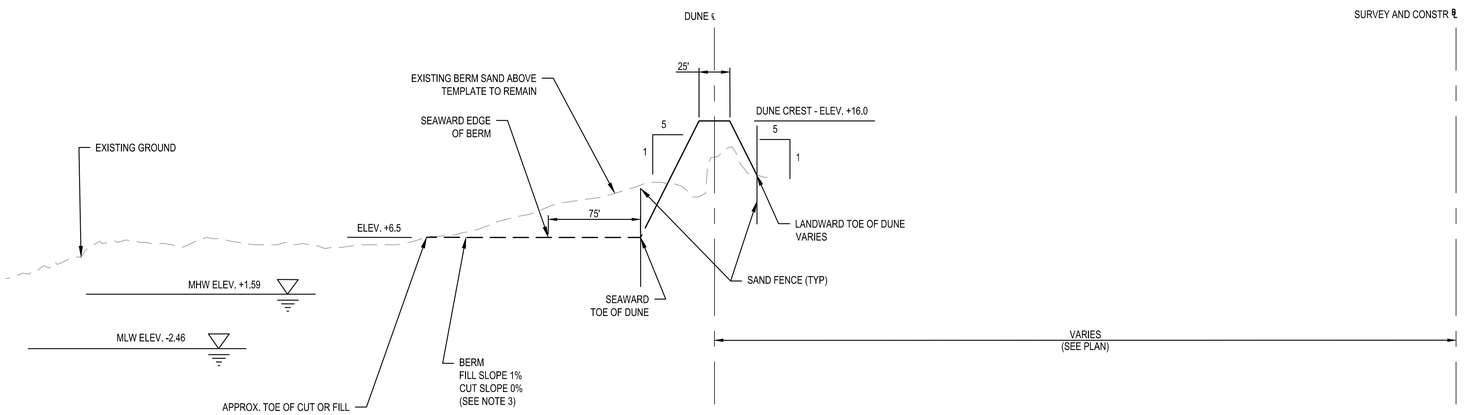

## 1 TYPICAL SECTION - STA. 136+75 TO STA. 182+00 (WILDWOOD CREST - NORTH OF RAMBLER AVE.)

H: 0 50 100
V: 0 5 10
SCALE IN FEET




## 2 TYPICAL SECTION - STA. 182+00 TO STA. 235+00 (WILDWOOD CREST - SOUTH OF RAMBLER AVE.)

H: 0 50 100
V: 0 5 10
SCALE IN FEET




## 3 TYPICAL SECTION - STA. 235+00 TO STA. 252+00 (LOWER TOWNSHIP)

H: 0 50 100
V: 0 5 10
SCALE IN FEET

NOTES:

1. SEE SHEET C-305 FOR BORROW AREA SECTIONS.
2. GRADE FILL MATERIAL AS SHOWN AT ELEV. +8.0 FROM LANDWARD TOE OF DUNE TO EXISTING BULKHEAD. MATERIAL ABOVE +8.0 WILL REMAIN AT DIRECTION OF COR.
3. MINIMIZE DISTURBANCE TO EXISTING VEGETATION ON LANDWARD SIDE OF DUNE.
4. BETWEEN STA. 136+80 TO STA. 147+00, 20 FT MAINTENANCE CORRIDOR AREA IS NOT REQUIRED.
5. DUNE CLEARING AND GRUBBING IS REQUIRED SEAWARD OF FEDERAL DUNE.
6. FOR BORROW AREA SECTIONS, SEE SHEETS C-305 AND C-306.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | ACTION | DESCRIPTION | DATE | BY |
|---|---|---|---|---|
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DES BY: ADD
DWN BY: ADD
CKD BY: DAA
REVIEWED BY: KMS
ISSUE/SUBMITTAL DATE: 35% - 13 SEPT 2024
SOLICITATION NUMBER: -
CONTRACT NUMBER: -
PLOT SCALE: AS SHOWN
DWG. SIZE: 22"x34"
FILE NAME: C304 TYPICAL SECTIONS - BEACHFILL.dwg

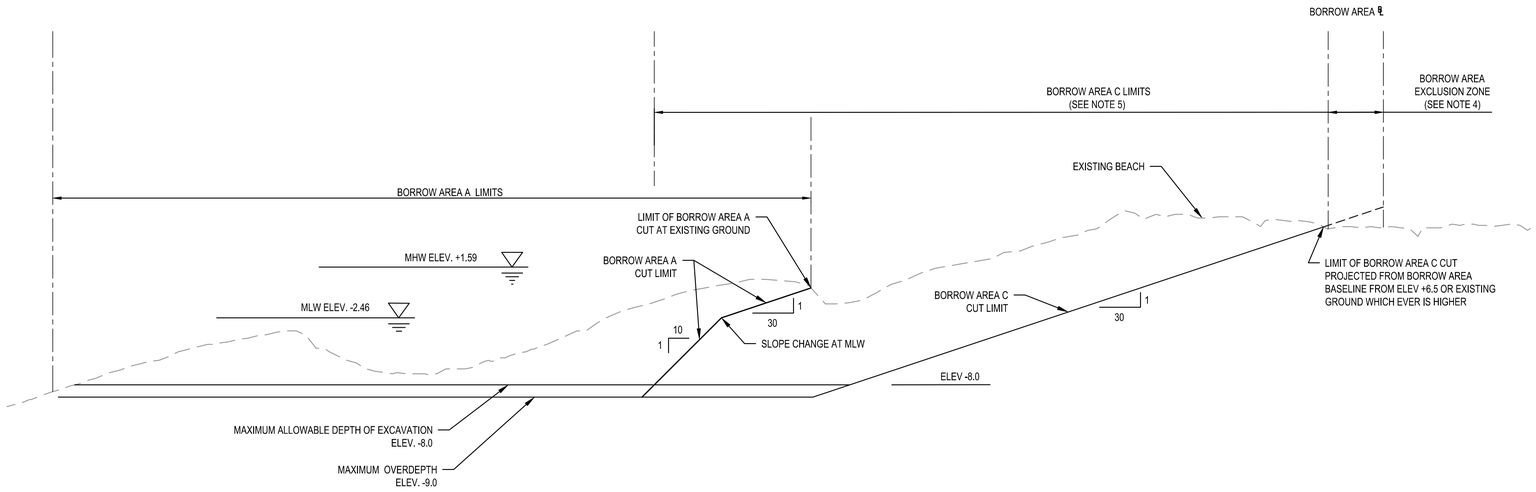
U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

BEACH NOURISHMENT
INITIAL CONSTRUCTION

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

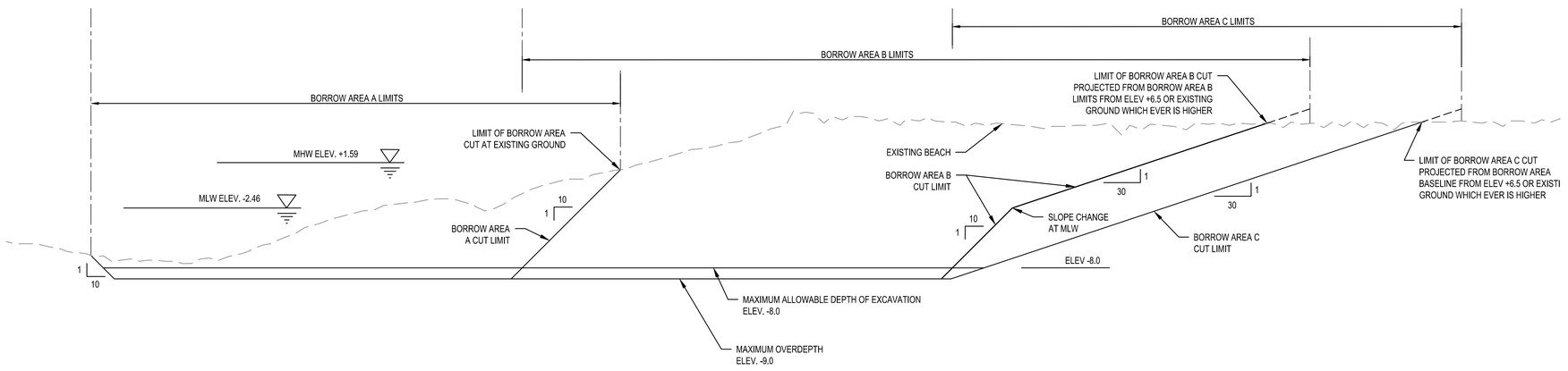
TYPICAL SECTIONS - BEACHFILL STA. 136+75 TO STA. 252+00
(WILDWOOD CREST & LOWER TOWNSHIP)

SHEET NUMBER
C-304




## 1 TYPICAL SECTION - BORROW AREAS (STA. 0+00B TO STA. 64+20.35B)

H: 0 50 100
V: 0 5 10
SCALE IN FEET




## 2 TYPICAL SECTION - BORROW AREAS (STA. 64+20.35B TO STA. 109+33.48B)

H: 0 50 100
V: 0 5 10
SCALE IN FEET

NOTES:

1. FOR TYPICAL SECTIONS OF DUNE AND BERM LANDWARD OF BORROW AREA SEE SHEETS C-303 AND C-304.
2. FOR BORROW AREA BUFFERS AT OUTFALL PIPES AND FISHING PIER, SEE SHEETS C-109 AND C-110.
3. SEE C-109 THROUGH C-111 FOR BORROW AREA SEQUENCING REQUIREMENTS.
4. EXCLUSION ZONE LIMITS ARE BETWEEN STA. 0+00B TO STA. 34+61.33B.
5. BORROW AREA C LIMITS ARE BETWEEN STA. 0+00B TO STA. 109+33.48B.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | ACTION | DATE | BY |
|---|---|---|---|
| . | . | . | . |

ISSUE/SUBMITTAL DATE:
95% - 12 SEP 2024
SOLICITATION NUMBER:
-
CONTRACT NUMBER:
-
DES BY:
ADD
REVIEWED BY:
RHK
DWN BY:
ADD
CHD BY:
DAA
PLOT SCALE
AS SHOWN
DWG. SIZE:
22"x17"
FILE NAME:
C305 TYPICAL SECTIONS - BORROW AREA.dgn

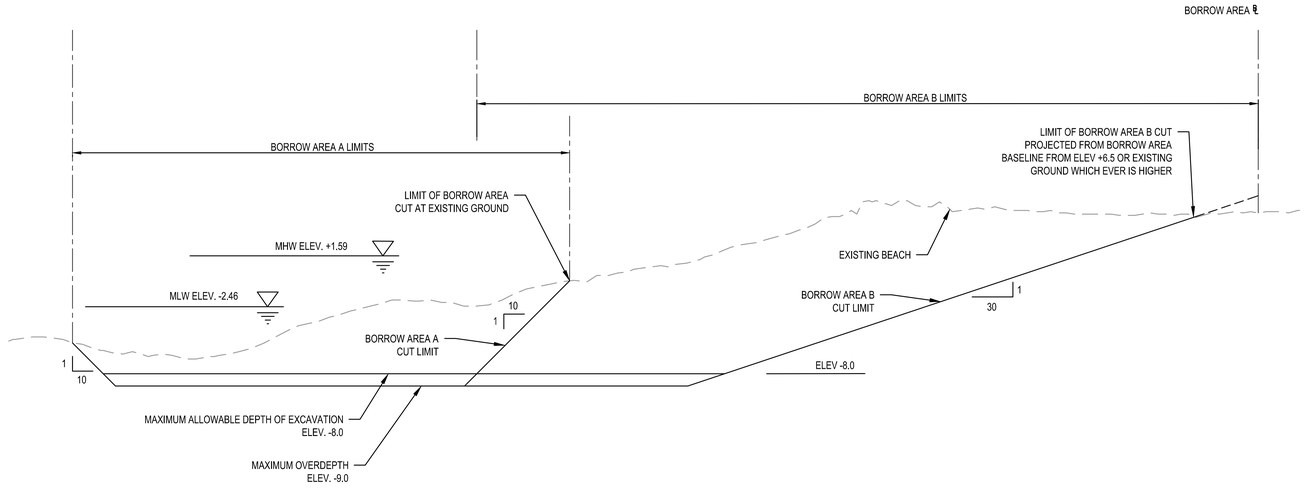
U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

BEACH NOURISHMENT
INITIAL CONSTRUCTION

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

TYPICAL SECTIONS - BORROW AREAS

SHEET NUMBER
C-305




## 1 TYPICAL SECTION - BORROW AREAS (STA. 109+33.48B TO STA. 161+83.68B)

H: 0 50 100
V: 0 5 10
SCALE IN FEET

NOTES:

1. FOR TYPICAL SECTIONS OF DUNE AND BERM LANDWARD OF BORROW AREA SEE SHEETS C-303 AND C-304.
2. FOR BORROW AREA BUFFERS AT OUTFALL PIPES AND FISHING PIER, SEE SHEETS C-109 AND C-110.
3. SEE C-109 THROUGH C-111 FOR BORROW AREA SEQUENCING REQUIREMENTS.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | ACTION | DATE | BY |
|---|---|---|---|
| - | - | - | - |
| - | - | - | - |
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| - | - | - | - |

DESCRIPTION

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

DWN BY: ADD
CHD BY: JMA
DES BY: ADD
REVIEWED BY: RMK
ISSUE/SUBMITTAL DATE: 95% - 12 SEP 2024
SOLICITATION NUMBER: -
CONTRACT NUMBER: -
PLOT SCALE: -
DWG. SIZE: 30"x42"
FILE NAME: C-306 TYPICAL SECTIONS - BORROW AREA.dgn

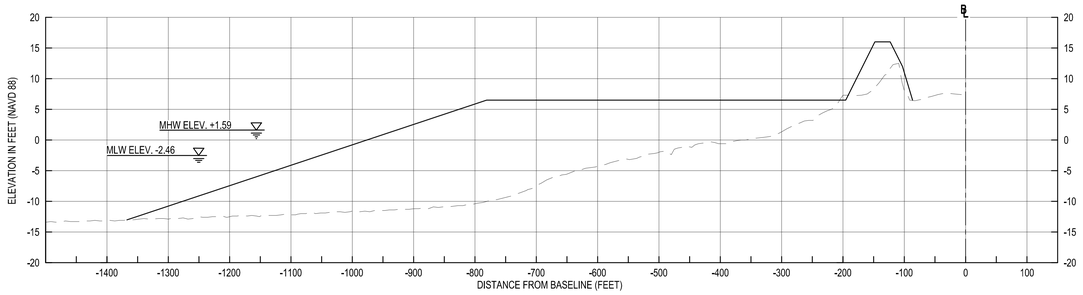
BEACH NOURISHMENT
INITIAL CONSTRUCTION

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

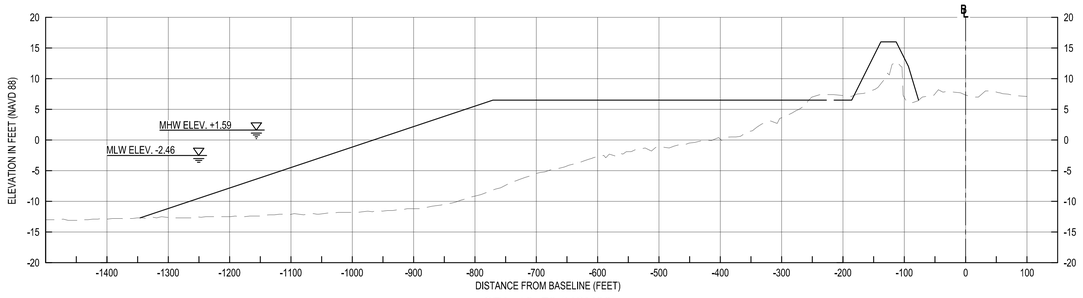
TYPICAL SECTIONS - BORROW AREAS
-

SHEET NUMBER

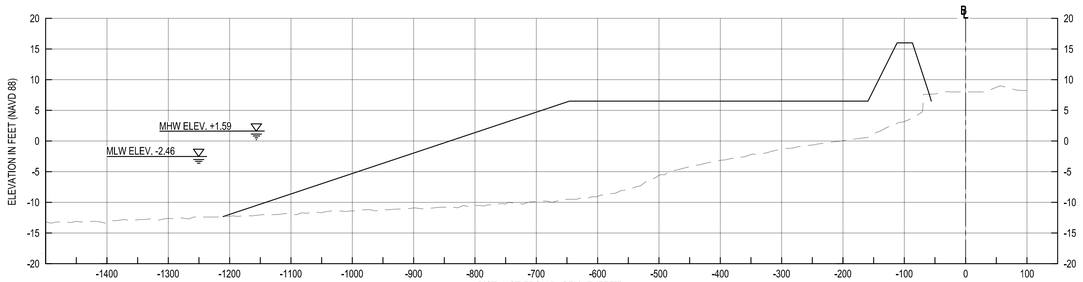
C-306



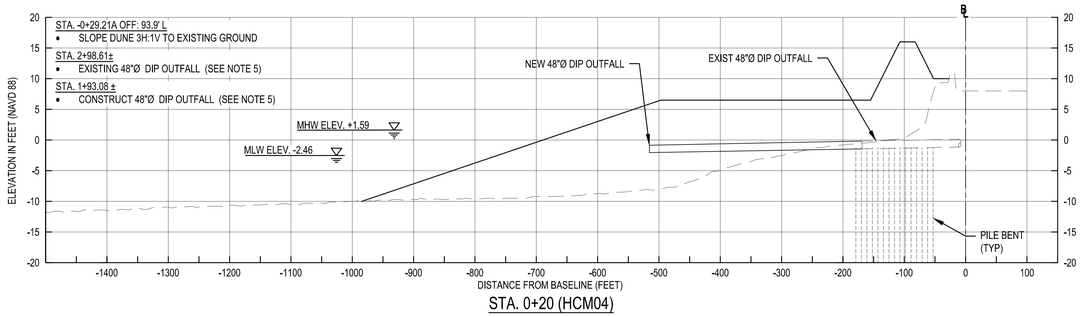

STA. 21+68 (HCM07)



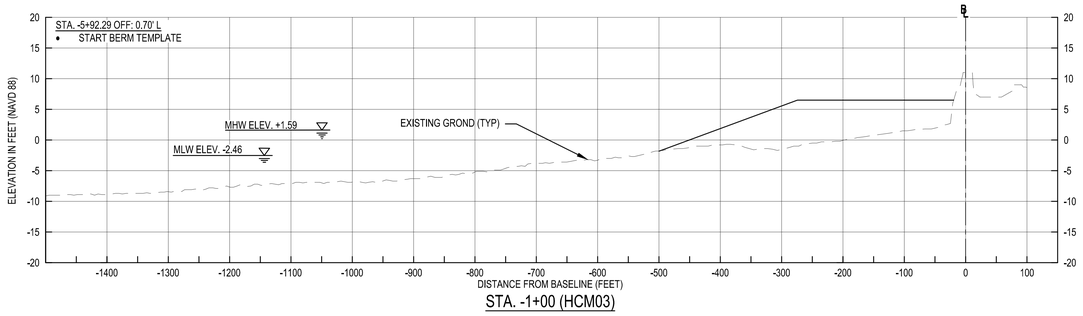

STA. 16+79 (HCM06)



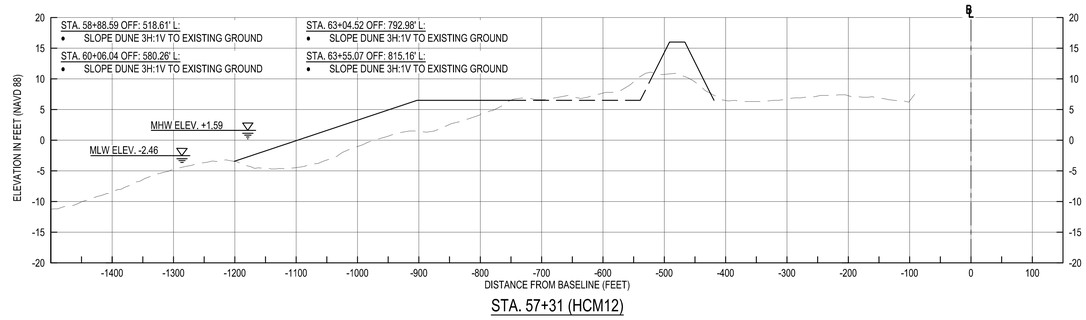

STA. 8+32 (HCM05)



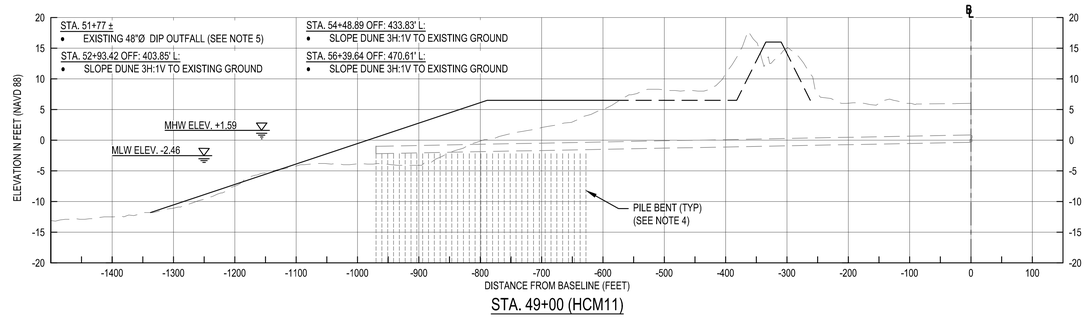

STA. 0+20 (HCM04)



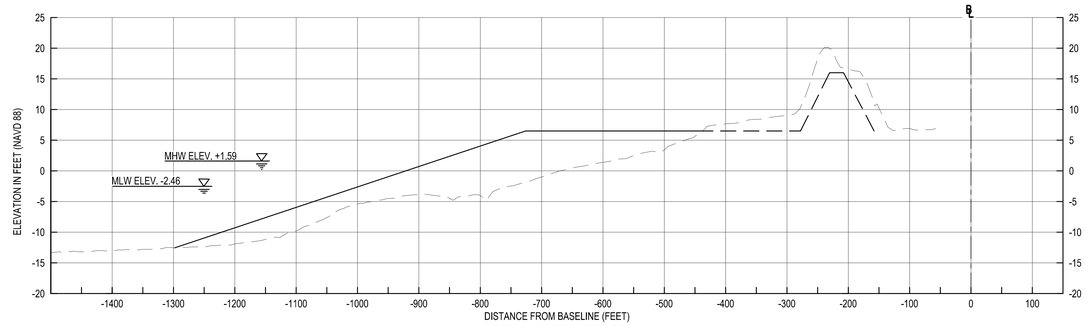

STA. -1+00 (HCM03)



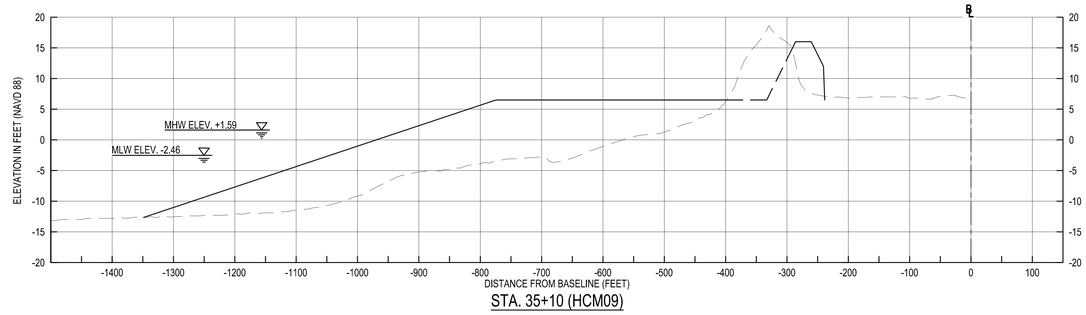

STA. 57+31 (HCM12)



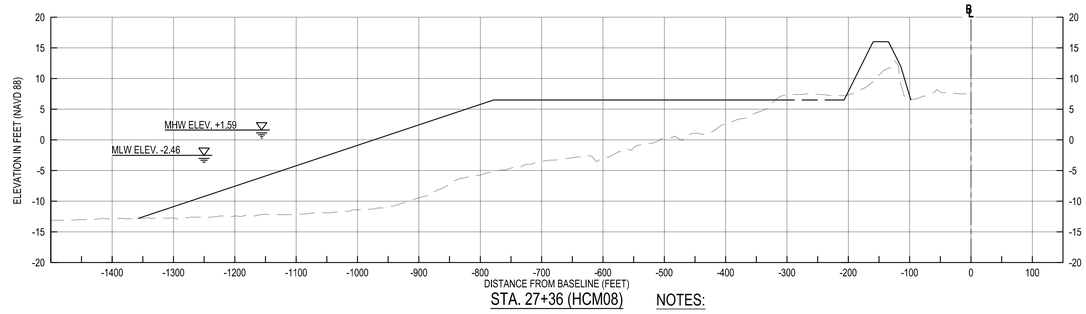

STA. 49+00 (HCM11)




STA. 43+40 (HCM10)




STA. 35+10 (HCM09)




STA. 27+36 (HCM08)

H: 0 100 200
V: 0 10 20
SCALE IN FEET

NOTES:

1. SEE SHEET G-003 FOR GENERAL NOTES AND LEGEND.
2. SEE SHEET G-102 FOR PROFILE LINE INFORMATION.
3. SEE SHEET C-302 FOR TYPICAL BEACHFILL CROSS SECTIONS.
4. PILE SPACING IS UNKNOWN PAST THE PILES SHOWN ON PLANS.
5. FOR BORROW AREA BUFFERS AT OUTFALL PIPES AND FISHING PIER, SEE PLAN SHEETS C-101 THROUGH C-108 FOR DETAILS, SEE SHEET C-504.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

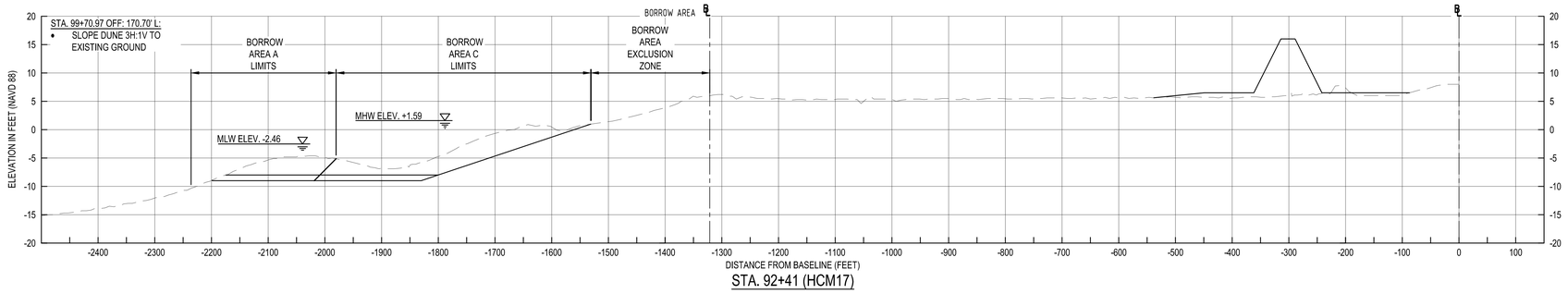
| MARK | ACTION | DESCRIPTION | DATE | BY |
|---|---|---|---|---|
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DES BY: ADD
DWN BY: ADD
CHK BY: DAA
REVIEWED BY: DAA
ISSUE/SUBMITTAL DATE: 95% - 13SEPT 2024
SOLICITATION NUMBER: -
CONTRACT NUMBER: -
PLOT SCALE: 1:200
DWG. SIZE: 30"x42"
FILE NAME: C308 CROSS SECTIONS.dwg

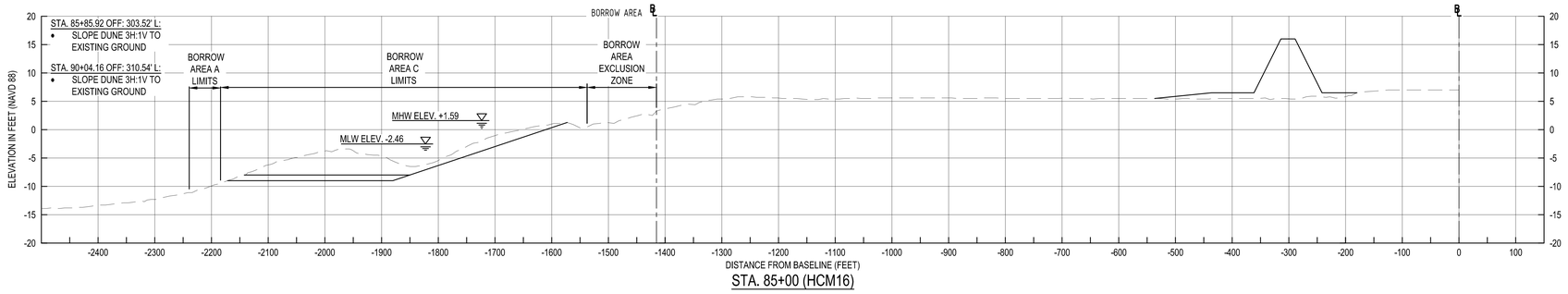
U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

BEACH NOURISHMENT
INITIAL CONSTRUCTION
HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY
CROSS SECTIONS - STA. -1+00 TO STA. 57+31

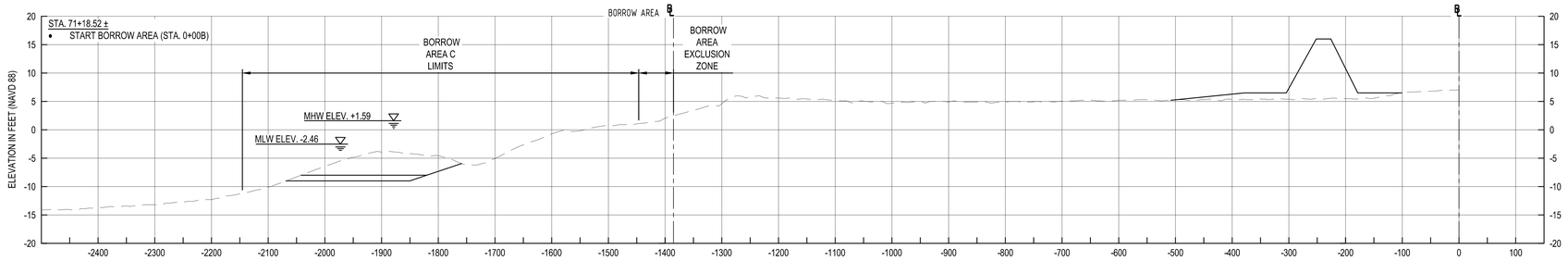
SHEET NUMBER
C-307



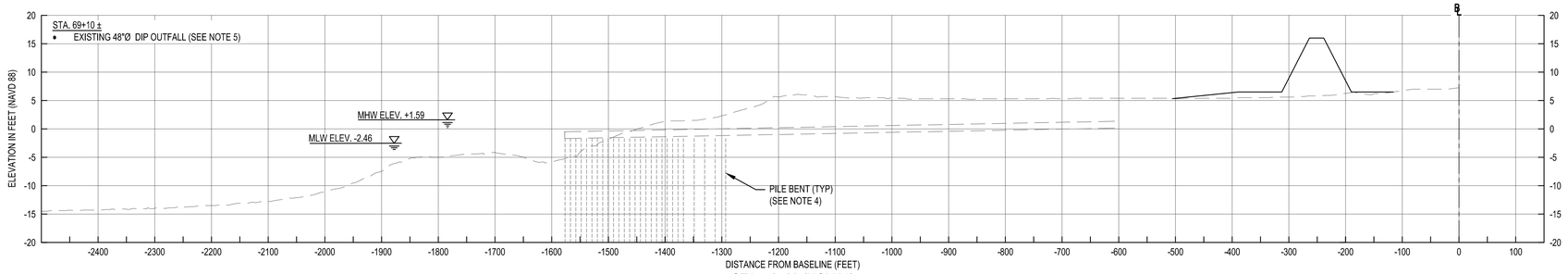

STA. 92+41 (HCM17)



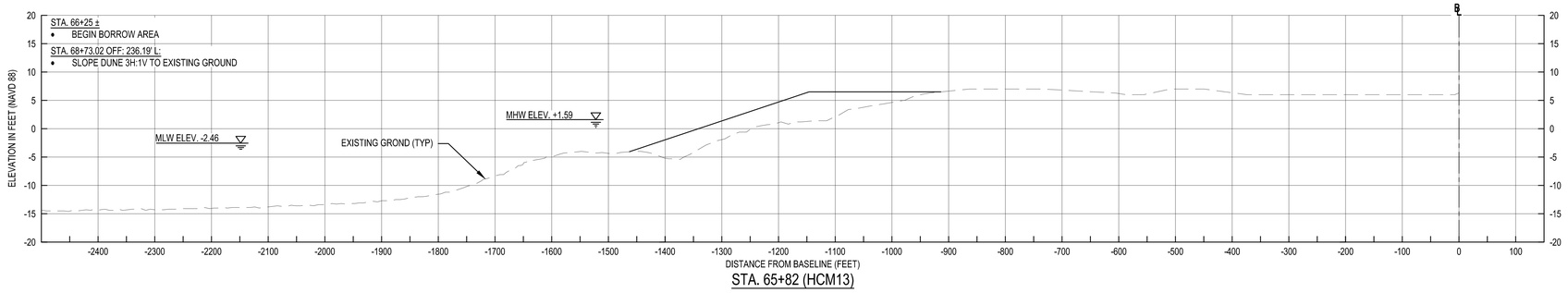

STA. 85+00 (HCM16)




STA. 79+40 (HCM15)




STA. 72+00 (HCM14)




STA. 65+82 (HCM13)

H: 0 100 200
V: 0 10 20
SCALE IN FEET

## NOTES:

1. SEE SHEET G-003 FOR GENERAL NOTES AND LEGEND.
2. SEE SHEET G-102 FOR PROFILE LINE INFORMATION.
3. SEE SHEETS C-302 AND C-303 FOR TYPICAL BEACHFILL CROSS SECTIONS.
4. PILE SPACING IS UNKNOWN PAST THE PILES SHOWN ON PLANS.
5. FOR BORROW AREA BUFFERS AT OUTFALL PIPES AND FISHING PIER, SEE PLAN SHEETS C-101 THROUGH C-108 FOR DETAILS, SEE SHEET C-504.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | ACTION | DESCRIPTION | DATE | BY |
|---|---|---|---|---|
| | | | | |

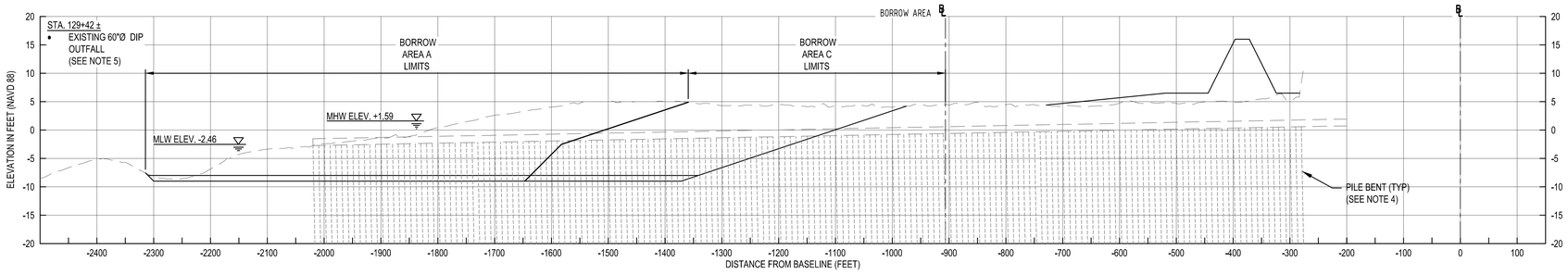
ISSUE/SUBMITTAL DATE: 95% - 12 SEPT 2024
SOLICITATION NUMBER: -
CONTRACT NUMBER: -
DES BY: ADD
REVIEWED BY: CWO
DWN BY: ADD
CAD BY: DAK
PLOT SCALE: -
DWG. SIZE: 22"x34"
FILE NAME: C-308 CROSS SECTIONS.dwg

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

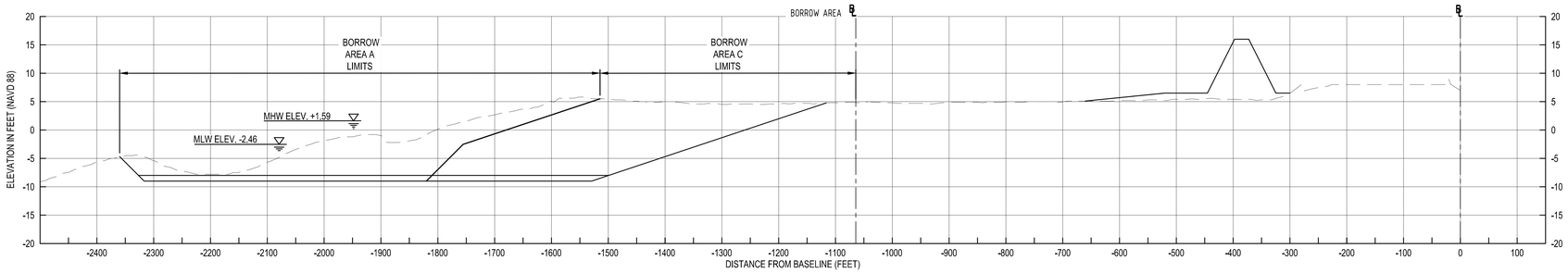
BEACH NOURISHMENT
INITIAL CONSTRUCTION

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY
CROSS SECTIONS - STA. 65+82 TO STA. 92+41

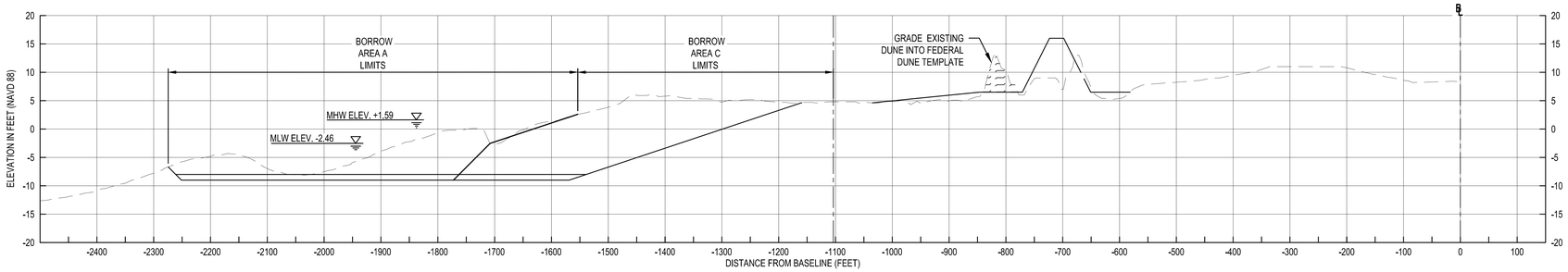
SHEET NUMBER
C-308



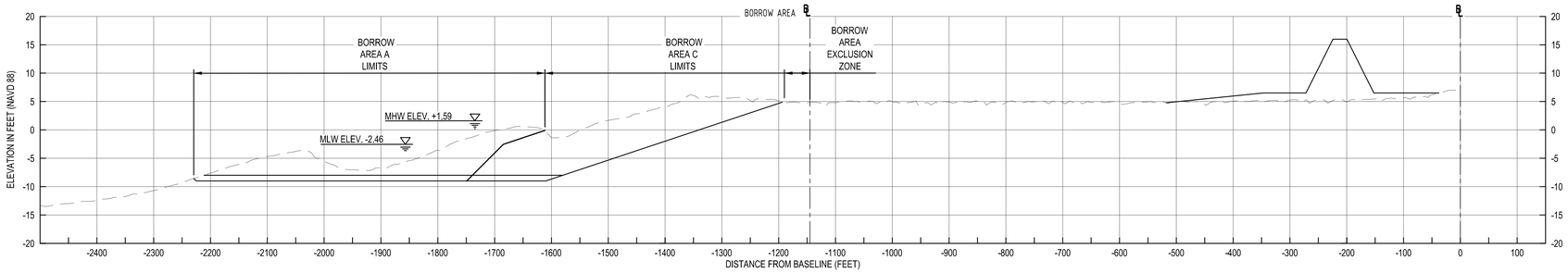

STA. 129+00 (HCM22)



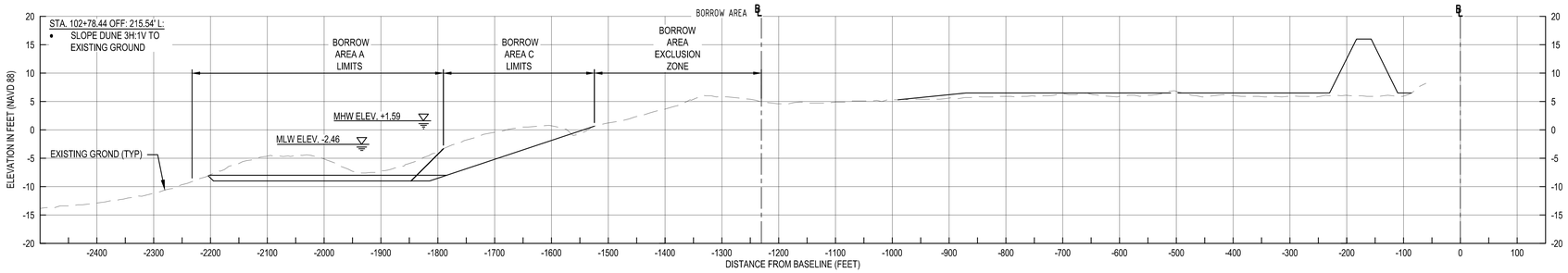

STA. 120+30 (HCM21)




STA. 113+00 (HCM20)




STA. 107+15 (HCM19)




STA. 100+00 (HCM18)

H: 0 100 200
V: 0 10 20
SCALE IN FEET

## NOTES:

1. SEE SHEET G-003 FOR GENERAL NOTES AND LEGEND.
2. SEE SHEET G-102 FOR PROFILE LINE INFORMATION.
3. SEE SHEET C-303 FOR TYPICAL BEACHFILL CROSS SECTIONS.
4. PILE SPACING IS UNKNOWN PAST THE PILES SHOWN ON PLANS.
5. FOR BORROW AREA BUFFERS AT OUTFALL PIPES AND FISHING PIER, SEE PLAN SHEETS C-101 THROUGH C-108 FOR DETAILS. SEE SHEET C-504.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | ACTION | DESCRIPTION | DATE | BY |
|---|---|---|---|---|

DWN BY: ADD
CHD BY: DAA
DES BY: ADD
REVIEWED BY: RAA
ISSUE/SUBMITTAL DATE: 95% - 12 SEP 2024
SOLICITATION NUMBER: -
CONTRACT NUMBER: -
PLOT SCALE: -
DWG. SIZE: 30"x42"
FILE NAME: C309 CROSS SECTIONS.dwg

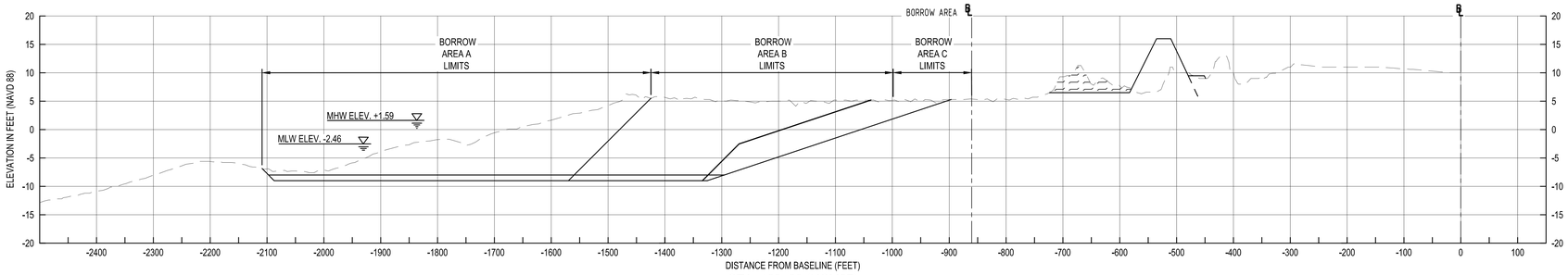
U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

BEACH NOURISHMENT
INITIAL CONSTRUCTION

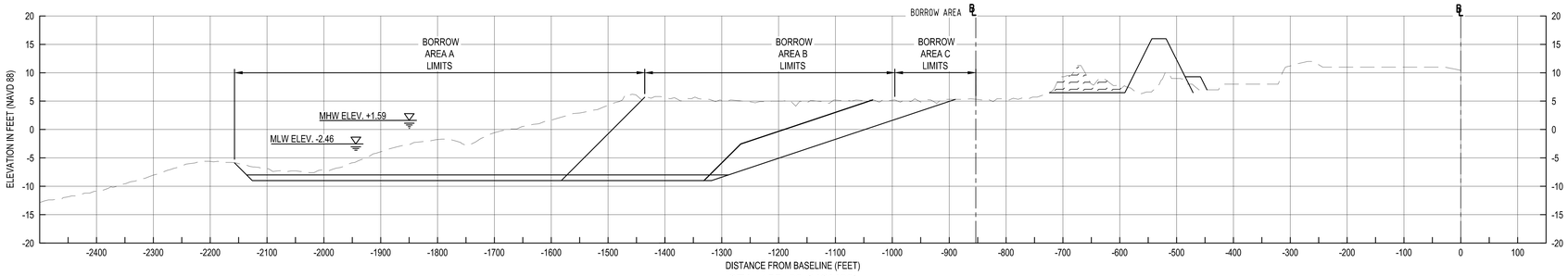
HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

CROSS SECTIONS - STA. 100+00 TO STA. 129+200

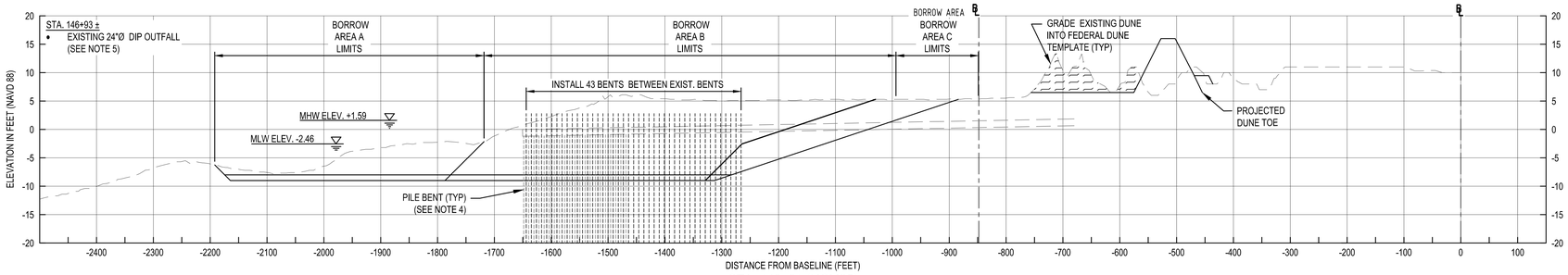
SHEET NUMBER
C-309



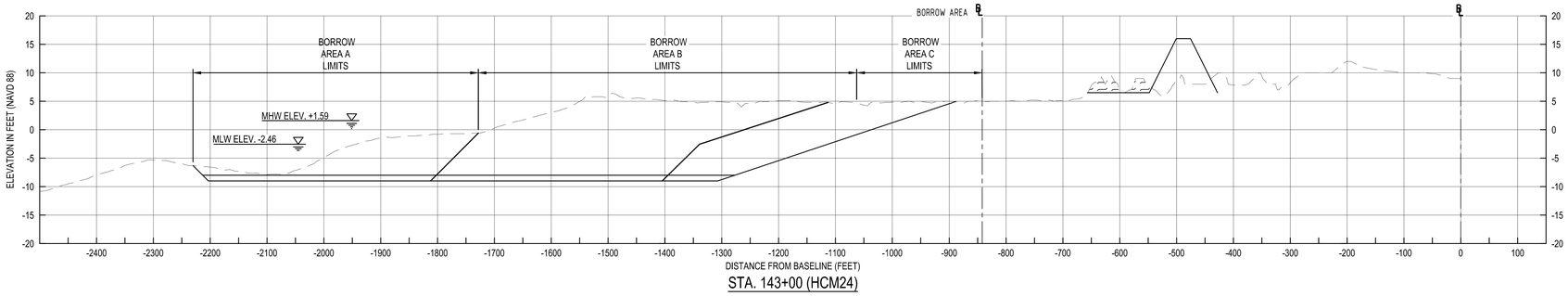

STA. 163+00 (HCM27)



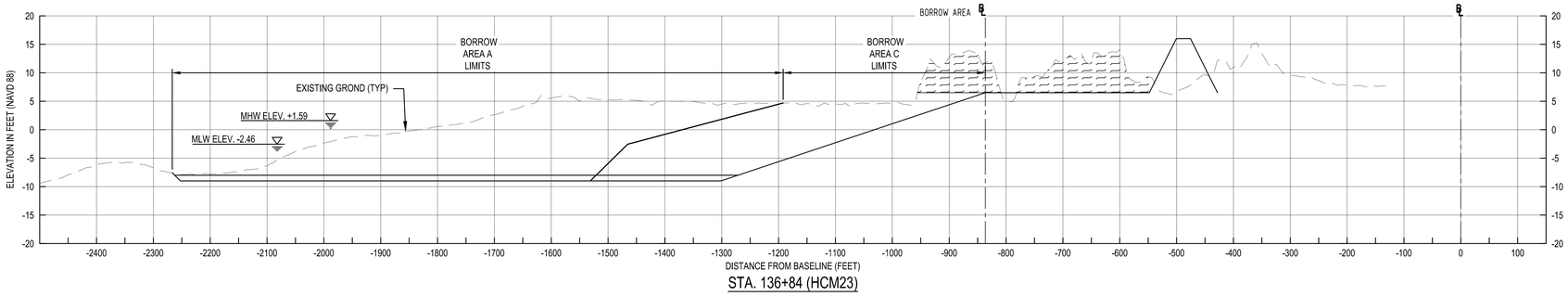

STA. 155+00 (HCM26)




STA. 149+31 (HCM25)




STA. 143+00 (HCM24)




STA. 136+84 (HCM23)

H: 0 100 200
V: 0 10 20
SCALE IN FEET

## NOTES:

1. SEE SHEET G-003 FOR GENERAL NOTES AND LEGEND.
2. SEE SHEET G-102 FOR PROFILE LINE INFORMATION.
3. SEE SHEET C-304 FOR TYPICAL BEACHFILL CROSS SECTIONS.
4. PILE SPACING IS UNKNOWN PAST THE PILES SHOWN ON PLANS.
5. FOR BORROW AREA BUFFERS AT OUTFALL PIPES AND FISHING PIER, SEE PLAN SHEETS C-101 THROUGH C-108 FOR DETAILS, SEE SHEET C-504.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | ACTION | DATE | BY |
|---|---|---|---|
| | | | |

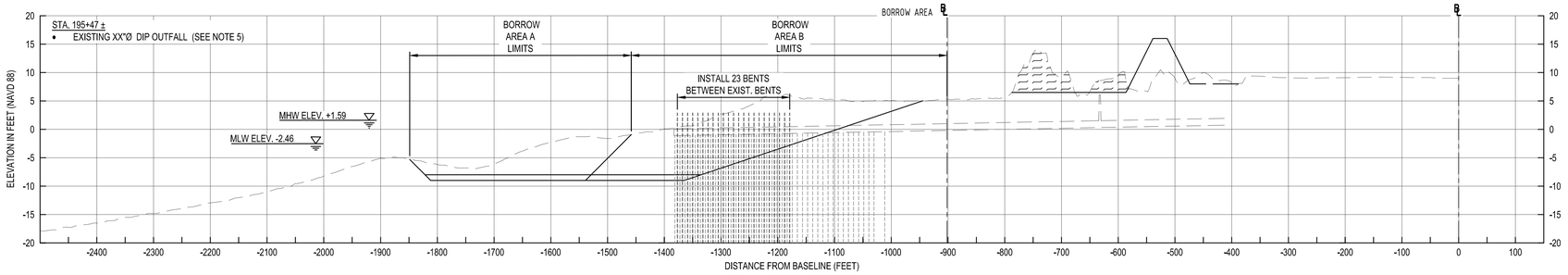
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DWN BY: ADD
CHK BY: DMK
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DWG. SIZE: 22"x34"
FILE NAME: C310 CROSS SECTIONS.dwg

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

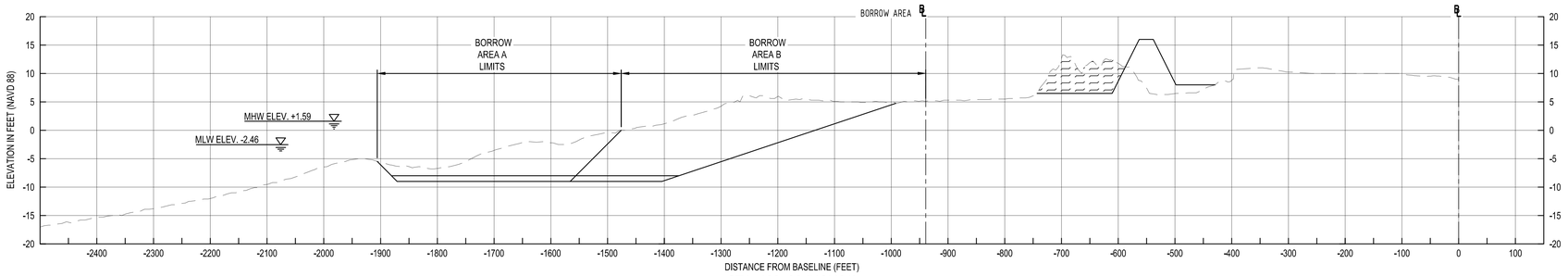
BEACH NOURISHMENT
INITIAL CONSTRUCTION

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY
CROSS SECTIONS - STA. 136+84 TO STA. 163+00

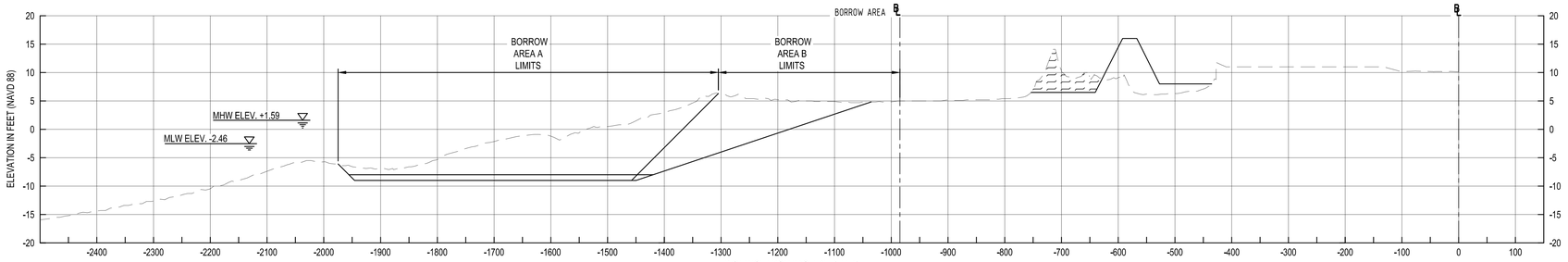
SHEET NUMBER
C-310



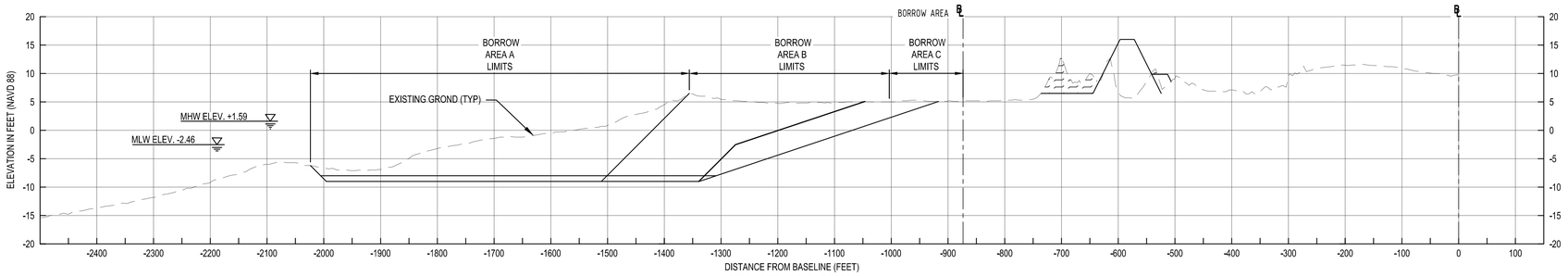

STA. 196+00 (HCM32)



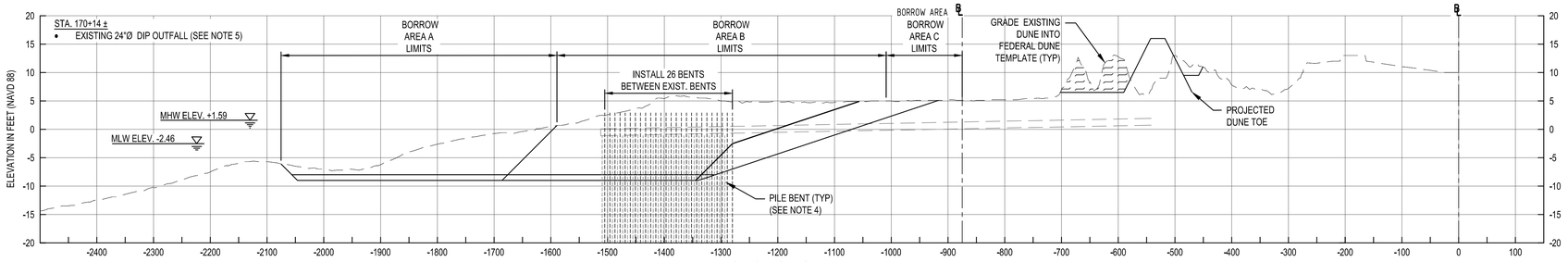

STA. 189+96 (HCM31)




STA. 183+00 (HCM30)




STA. 177+00 (HCM29)




STA. 169+88 (HCM28)

H: 0 100 200
V: 0 10 20
SCALE IN FEET

## NOTES:

1. SEE SHEET G-003 FOR GENERAL NOTES AND LEGEND.
2. SEE SHEET G-102 FOR PROFILE LINE INFORMATION.
3. SEE SHEET C-304 FOR TYPICAL BEACHFILL CROSS SECTIONS.
4. PILE SPACING IS UNKNOWN PAST THE PILES SHOWN ON PLANS.
5. FOR BORROW AREA BUFFERS AT OUTFALL PIPES AND FISHING PIER, SEE PLAN SHEETS C-101 THROUGH C-108 FOR DETAILS, SEE SHEET C-504.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

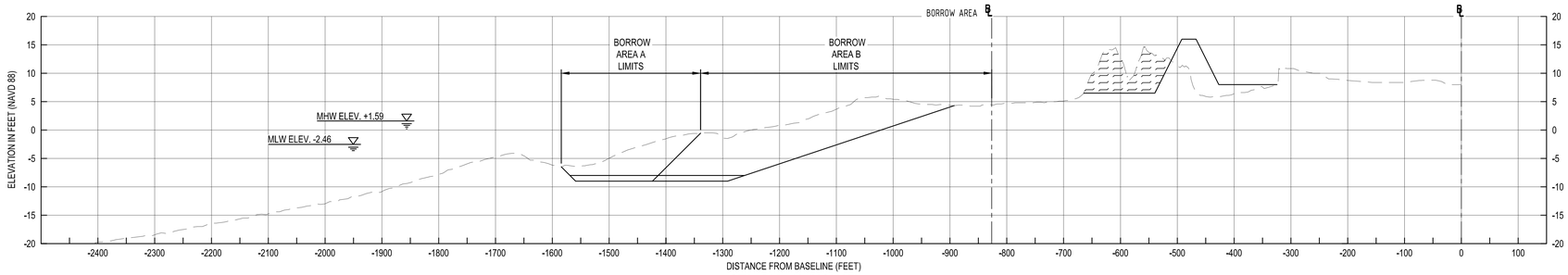
| MARK | ACTION | DESCRIPTION | DATE | BY |
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U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

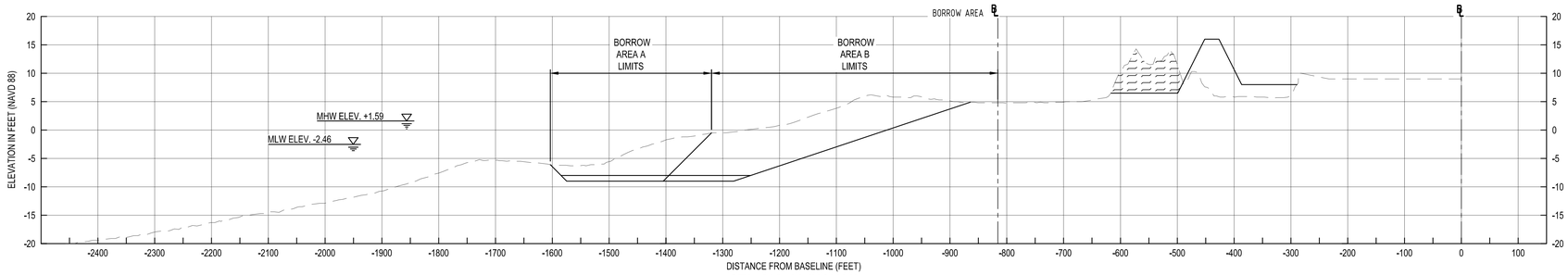
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ISSUED/SUBMITTAL DATE: 95% - 12 SEPT 2024
SOLICITATION NUMBER: -
CONTRACT NUMBER: -
PLOT SCALE: -
DWG. SIZE: 22"x34"
FILE NAME: C311 CROSS SECTIONS.dwg

BEACH NOURISHMENT
INITIAL CONSTRUCTION
HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY
CROSS SECTIONS - STA. 169+88 TO STA. 196+00

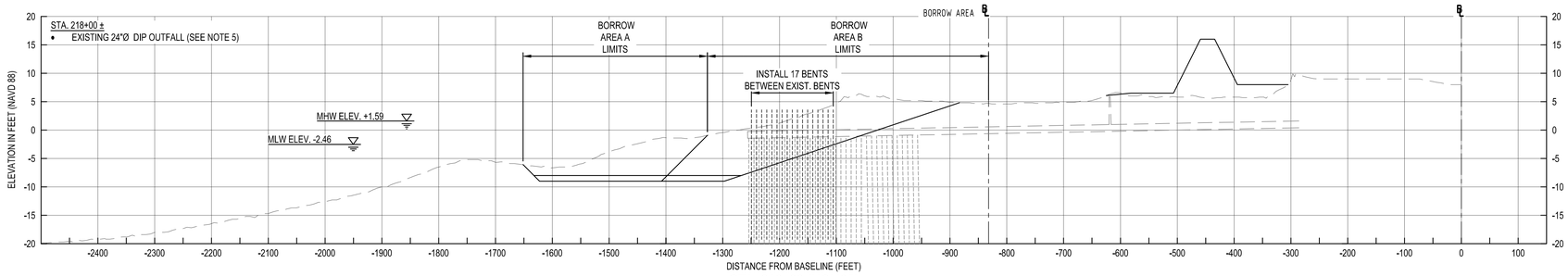
SHEET NUMBER
C-311



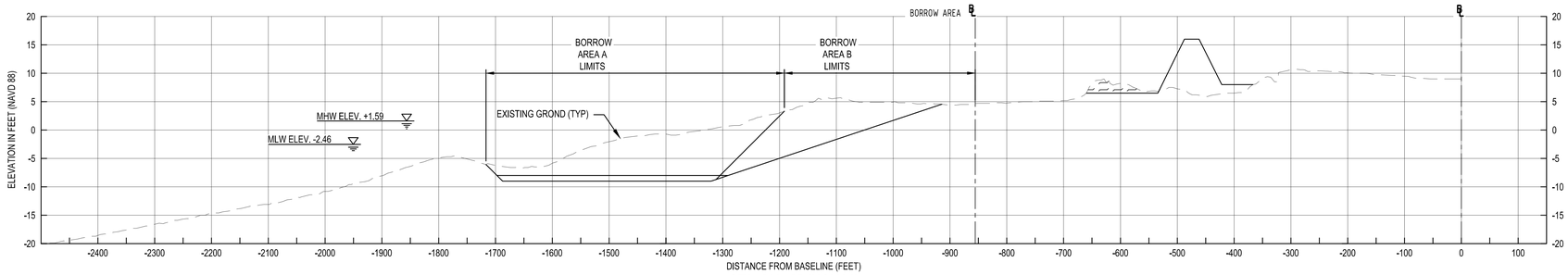

STA. 228+42 (HCM37)



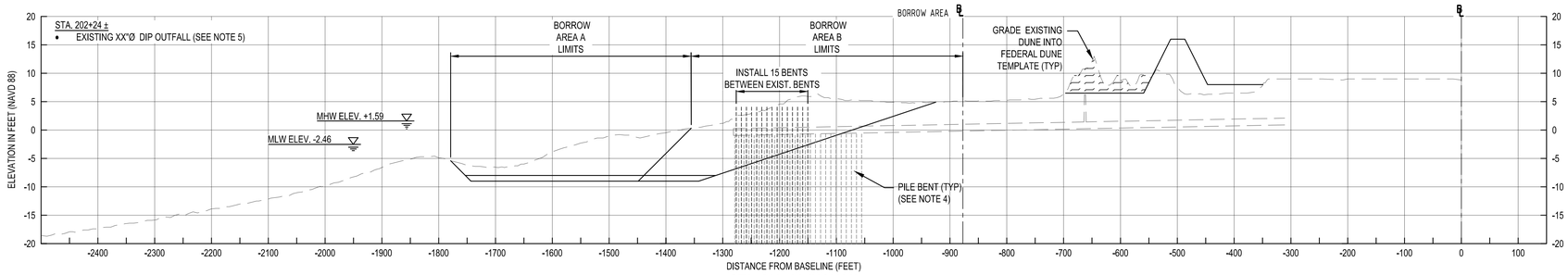

STA. 222+00 (HCM36)




STA. 216+00 (HCM35)




STA. 209+25 (HCM34)




STA. 203+00 (HCM33)

H: 0 100 200
V: 0 10 20
SCALE IN FEET

## NOTES:

1. SEE SHEET G-003 FOR GENERAL NOTES AND LEGEND.
2. SEE SHEET G-102 FOR PROFILE LINE INFORMATION.
3. SEE SHEET C-304 FOR TYPICAL BEACHFILL CROSS SECTIONS.
4. PILE SPACING IS UNKNOWN PAST THE PILES SHOWN ON PLANS.
5. FOR BORROW AREA BUFFERS AT OUTFALL PIPES AND FISHING PIER, SEE PLAN SHEETS C-101 THROUGH C-108 FOR DETAILS, SEE SHEET C-504.
6.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | ACTION | DATE | BY |
|---|---|---|---|
| | | | |

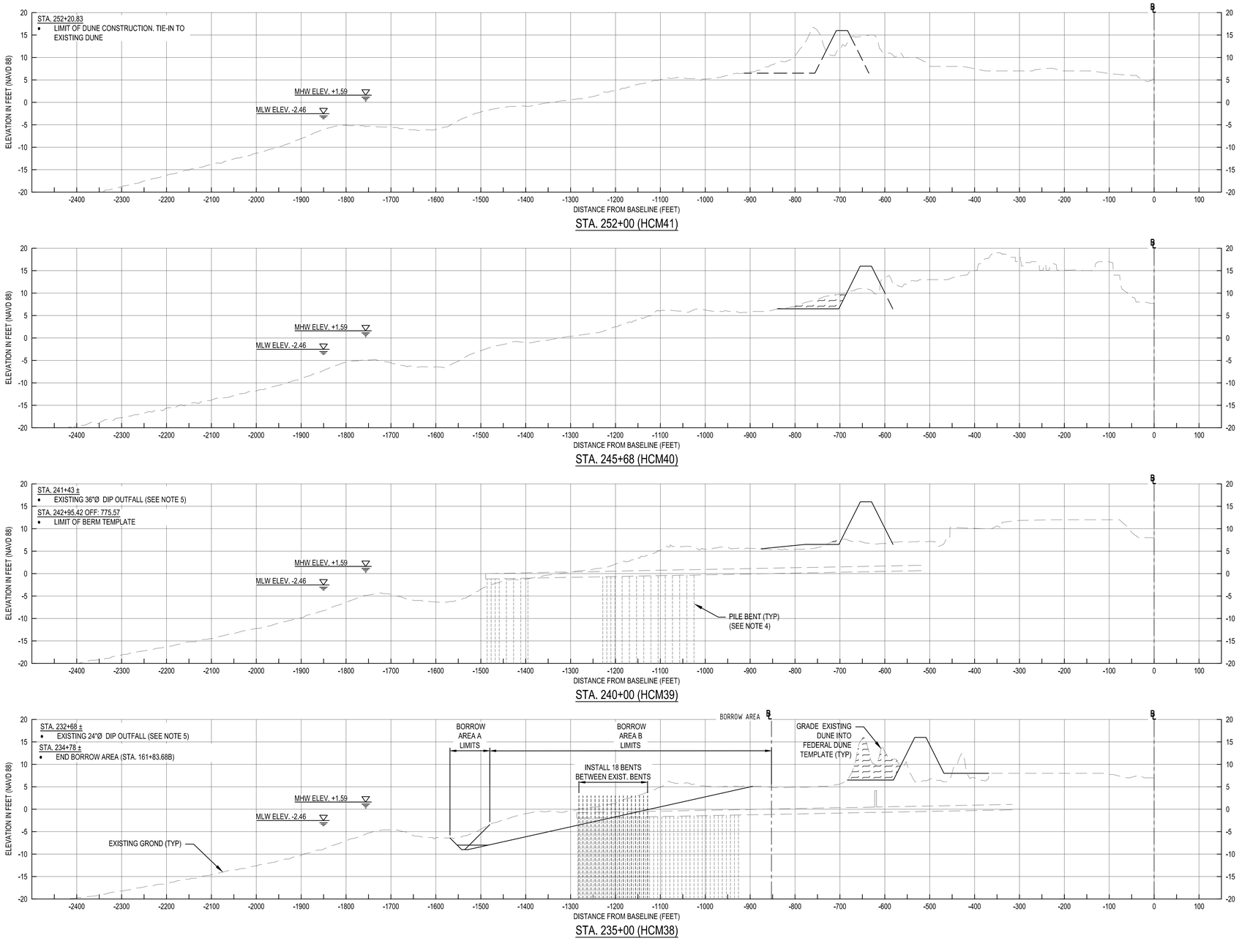
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REVIEWED BY: RMK
ISSUE/SUBMITTAL DATE: 95% - 12 SEP 2024
SOLICITATION NUMBER: -
CONTRACT NUMBER: -
PLOT SCALE: -
DWG. SIZE: 30"x42"
FILE NAME: C-312 CROSS SECTIONS.dwg

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

BEACH NOURISHMENT
INITIAL CONSTRUCTION

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY
CROSS SECTIONS - STA. 203+00 TO STA. 228+42

SHEET NUMBER
C-312




## NOTES:

1. SEE SHEET G-003 FOR GENERAL NOTES AND LEGEND.
2. SEE SHEET G-102 FOR PROFILE LINE INFORMATION.
3. SEE SHEET C-304 FOR TYPICAL BEACHFILL CROSS SECTIONS.
4. PILE SPACING IS UNKNOWN PAST THE PILES SHOWN ON PLANS.
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US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | ACTION | DESCRIPTION | DATE | BY |
|---|---|---|---|---|
| | | | | |

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

DWN BY: ADD
CHD BY: DIA
DES BY: ADD
REVIEWED BY: RHS
PLOT SCALE: -
DWG. SIZE: 30"x42"
ISSUED/SUBMITTAL DATE: 95% - 12 SEPT 2024
SOLICITATION NUMBER: -
CONTRACT NUMBER: -
FILE NAME: C313 CROSS SECTIONS.dwg

BEACH NOURISHMENT
INITIAL CONSTRUCTION

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

CROSS SECTIONS - STA. 235+00 TO STA. 252+00

SHEET NUMBER
C-313

## DUNE CROSSOVER SCHEDULE

| MUNICIPALITY | CLOSEST STREET END | CROSSOVER #/PAGE | SURVEY & CONSTR. BASELINE STATION | OFFSET (FT) | CROSSOVER TYPE | WIDTH (FT) | AREA (SF) | BERM STABILIZATION MAT (LF) | SPLIT RAIL FENCE (LF) | POST AND RAIL FENCE (LF) | DETAIL #/PAGE | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NORTH WILDWOOD | 2ND AVENUE | 1/C-102 | A-0+28.4 | 0+25 | PEDESTRIAN | 10 | 385 | 0 | 77 | 0 | 1/C-402 | |
| | 3RD AVENUE | 2/C-102 | 3+76 | 1+01 | PEDESTRIAN | 10 | 1655 | 0 | 330 | 0 | 2/C-402 | |
| | 4TH AVENUE | 3/C-102 | 6+05 | 1+00 | PEDESTRIAN | 10 | 1653 | 0 | 330 | 0 | 2/C-402 | |
| | 5TH AVENUE | 4/C-102 | 9+10 | 0+99 | PEDESTRIAN | 10 | 1811 | 0 | 362 | 0 | 3/C-402 | |
| | 6TH AVENUE | 5/C-102 | 10+23 | 1+10 | PEDESTRIAN | 10 | 1811 | 0 | 362 | 0 | 3/C-402 | REMOVE EXISTING CROSSOVER WITHIN DUNE FOOTPRINT; TIE INTO EXISTING |
| | 7TH AVENUE | 6/C-102 | 12+58 | 1+35 | ADA | 10 | 3099 | 75 | 0 | 620 | 1/C-404 | REMOVE EXISTING CROSSOVER WITHIN DUNE FOOTPRINT; TIE INTO EXISTING |
| | 8TH AVENUE | 7/C-102 | 15+24 | 1+40 | VEHICLE | 15 | 3993 | 0 | 471 | 0 | 1/C-406 | REMOVE EXISTING CROSSOVER WITHIN DUNE FOOTPRINT; TIE INTO EXISTING |
| | 8TH AVENUE | 7/C-102 | 15+24 | 1+40 | PEDESTRIAN | 10 | 800 | 0 | 160 | 0 | 1/C-406 | REMOVE EXISTING CROSSOVER WITHIN DUNE FOOTPRINT; TIE INTO EXISTING |
| | 9TH AVENUE | 8/C-102 | 18+52 | 1+29 | PEDESTRIAN | 10 | 1811 | 0 | 362 | 0 | 3/C-402 | REMOVE EXISTING CROSSOVER WITHIN DUNE FOOTPRINT; TIE INTO EXISTING |
| | 10TH AVENUE | 9/C-102 | 20+61 | 1+33 | ADA | 10 | 3032 | 75 | 0 | 606 | 1/C-404 | REMOVE EXISTING CROSSOVER WITHIN DUNE FOOTPRINT; TIE INTO EXISTING |
| | 11TH AVENUE | 10/C-102 | 18+11 | 1+40 | PEDESTRIAN | 10 | 1811 | 0 | 362 | 0 | 3/C-402 | REMOVE EXISTING CROSSOVER WITHIN DUNE FOOTPRINT; TIE INTO EXISTING |
| | 12TH AVENUE | 11/C-102 | 26+39 | 1+45 | PEDESTRIAN | 10 | 1811 | 0 | 362 | 0 | 3/C-402 | REMOVE EXISTING CROSSOVER WITHIN DUNE FOOTPRINT; TIE INTO EXISTING |
| | 13TH AVENUE | 1/C-103 | 29+63 | 2+48 | PEDESTRIAN | 10 | 1793 | 0 | 358 | 0 | 5/C-402 | REMOVE EXISTING CROSSOVER WITHIN DUNE FOOTPRINT; TIE INTO EXISTING |
| | 14TH AVENUE | 2/C-103 | 32+63 | 2+80 | PEDESTRIAN | 10 | 1793 | 0 | 358 | 0 | 5/C-402 | REMOVE EXISTING CROSSOVER WITHIN DUNE FOOTPRINT; TIE INTO EXISTING |
| | 15TH AVENUE | 3/C-103 | 36+88 | 2+71 | ADA | 10 | 3023 | 75 | 0 | 606 | 2/C-404 | |
| | 16TH AVENUE | 4/C-103 | 38+20 | 2+39 | VEHICLE | 15 | 3263 | 0 | 478 | 0 | 2/C-406 | REMOVE EXISTING CROSSOVER WITHIN DUNE FOOTPRINT; TIE INTO EXISTING |
| | 16TH AVENUE | 4/C-103 | 38+20 | 2+39 | PEDESTRIAN | 10 | 460 | 0 | 92 | 0 | 2/C-406 | REMOVE EXISTING CROSSOVER WITHIN DUNE FOOTPRINT; TIE INTO EXISTING |
| | 17TH AVENUE | 5/C-103 | 40+17 | 2+12 | PEDESTRIAN | 10 | 1732 | 0 | 348 | 0 | 4/C-402 | REMOVE EXISTING CROSSOVER WITHIN DUNE FOOTPRINT; TIE INTO EXISTING |
| | 18TH AVENUE | 6/C-103 | 44+51 | 2+18 | PEDESTRIAN | 10 | 1732 | 0 | 348 | 0 | 4/C-402 | REMOVE EXISTING CROSSOVER WITHIN DUNE FOOTPRINT; TIE INTO EXISTING |
| | 19TH AVENUE | 7/C-103 | 44+97 | 2+50 | PEDESTRIAN | 10 | 1732 | 0 | 348 | 0 | 4/C-402 | REMOVE EXISTING CROSSOVER WITHIN DUNE FOOTPRINT; TIE INTO EXISTING |
| | 20TH AVENUE | 8/C-103 | 46+70 | 2+63 | ADA | 10 | 3082 | 75 | 0 | 616 | 3/C-404 | REMOVE EXISTING CROSSOVER WITHIN DUNE FOOTPRINT; TIE INTO EXISTING |
| | 21ST AVENUE | 9/C-103 | 50+75 | 3+61 | PEDESTRIAN | 10 | 1387 | 0 | 278 | 0 | 4/C-402 | REMOVE EXISTING WOODEN CROSSOVER WITHIN DUNE; TIE INTO EXISTING |
| | MID-BLOCK | 10/C-103 | 52+62 | 3+97 | VEHICLE | 15 | 3456 | 0 | 454 | 0 | 1/C-403 | REMOVE EXIST. CROSSOVER, TIE INTO EXISTING; MOD. CROSSOVER ANGLE 44.98 DEG |
| | 22ND AVENUE | 11/C-103 | 54+62 | 4+36 | VEHICLE | 22 | 4730 | 0 | 430 | 0 | 2/C-403 | REMOVE EXISTING CROSSOVER WITHIN DUNE FOOTPRINT; TIE INTO EXISTING |
| | 23RD AVENUE | 12/C-103 | 56+29 | 4+68 | VEHICLE | 22 | 4840 | 0 | 440 | 0 | 2/C-403 | REMOVE EXISTING CROSSOVER WITHIN DUNE FOOTPRINT; TIE INTO EXISTING |
| | 24TH AVENUE | 1/C-104 | 59+06 | 5+22 | VEHICLE | 22 | 4730 | 0 | 430 | 0 | 2/C-403 | REMOVE EXISTING CROSSOVER WITHIN DUNE FOOTPRINT; TIE INTO EXISTING |
| | 25TH AVENUE | 2/C-104 | 60+05 | 5+78 | VEHICLE | 30 | 6450 | 0 | 430 | 0 | 4/C-403 | CONSTRUCT EXTENDED CREST AREA TO NORTH; REMOVE EXISTING CROSSOVER |
| | 26TH/JUNIPER AVENUE | 3/C-104 | 63+25 | 7+99 | VEHICLE | 30 | 6450 | 0 | 430 | 0 | 4/C-403 | CONSTRUCT EXTEND CREST AREA TO SOUTH |
| | | | | | | | | | | | | |
| WILDWOOD CITY | POPLAR AVENUE | 4/C-104 | 69+18 | 2+42 | VEHICLE | 20 | 6231 | 0 | 528 | 0 | 3/C-403 | |
| | MAPLE AVENUE | 5/C-104 | 75+48 | 2+40 | ADA | 10 | 3081 | 140 | 0 | 616 | 3/C-404 | LANDWARD PLACEMENT OF MOBY MAT REQUIRED |
| | WILDWOOD AVENUE | 6/C-104 | 80+70 | 2+43 | ADA | 10 | 3081 | 168 | 0 | 616 | 3/C-404 | LANDWARD PLACEMENT OF MOBY MAT REQUIRED |
| | OAK AVENUE | 7/C-104 | 83+60 | 2+94 | PEDESTRIAN | 10 | 1786 | 0 | 358 | 0 | 5/C-402 | |
| | CEDAR AVENUE | 8/C-104 | 86+87 | 3+06 | VEHICLE | 50 | 0 | 0 | 120 | 0 | N/A | VEHICLE CROSSOVER AT GRADE |
| | SCHELLENGER AVENUE | 9/C-104 | 89+62 | 3+04 | VEHICLE | 25 | 0 | 0 | 120 | 0 | N/A | EXISTING CONCRETE |
| | LINCOLN AVENUE | 10/C-104 | 91+91 | 3+02 | VEHICLE | 15 | 3656 | 0 | 470 | 0 | 1/C-403 | |
| | GARFIELD AVENUE | 1/C-105 | 94+66 | 1+11 | PEDESTRIAN | 10 | 1786 | 0 | 358 | 0 | 5/C-402 | |
| | SPICER AVENUE | 2/C-105 | 96+46 | 1+74 | ADA | 10 | 3081 | 104 | 0 | 616 | 3/C-404 | LANDWARD PLACEMENT OF MOBY MAT REQUIRED |
| | SPENCER AVENUE | 3/C-105 | 98+66 | 1+74 | VEHICLE | 50 | 0 | 0 | 120 | 0 | N/A | VEHICLE CROSSOVER AT GRADE |
| | YOUNGS AVENUE | 4/C-105 | 103+03 | 2+15 | VEHICLE | 20 | 4321 | 0 | 338 | 0 | 3/C-403 | DO NOT CONSTRUCT LANDWARD LEG |
| | ROBERTS AVENUE | 5/C-105 | 104+39 | 2+15 | ADA | 10 | 3081 | 152 | 0 | 616 | 3/C-404 | LANDWARD PLACEMENT OF MOBY MAT REQUIRED |
| | BAKER AVENUE | 6/C-105 | 108+80 | 2+78 | VEHICLE | 15 | 3616 | 0 | 466 | 0 | 1/C-403 | NONSTANDARD CROSSOVER DETAIL, SWING LANDWARD LEG TO THE RIGHT |
| | BURK AVENUE | 7/C-105 | 114+68 | 7+48 | ADA | 15 | 0 | 75 | 0 | 0 | N/A | EXISTING CROSSOVER TO REMAIN, SEE REFRENCE DRAWINGS |
| | ANDREWS AVENUE | 8/C-105 | 118+72 | 3+49 | PEDESTRIAN | 10 | 1719 | 0 | 344 | 0 | 5/C-402 | |
| | RIO GRAND AVENUE | 9/C-105 | 122+42 | 3+85 | ADA | 10 | 3081 | 75 | 0 | 616 | 3/C-404 | |
| | HAND/LEAMING AVENUE | 1/C-106 | 127+11 | 3+84 | PEDESTRIAN | 10 | 1788 | 0 | 358 | 0 | 5/C-402 | |
| | HILDRETH AVENUE | 2/C-106 | 131+93 | 3+84 | ADA | 10 | 3081 | 104 | 0 | 616 | 3/C-404 | LANDWARD PLACEMENT OF MOBY MAT REQUIRED |
| | CRESSE AVENUE | 3/C-106 | 136+79 | 4+88 | VEHICLE | 30 | 11107 | 0 | 762 | 0 | 4/C-403 | WIDE CONTRACTOR ACCESS |

## DUNE CROSSOVER SCHEDULE

| MUNICIPALITY | CLOSEST STREET END | CROSSOVER #/PAGE | SURVEY & CONSTR. BASELINE STATION | OFFSET (FT) | CROSSOVER TYPE | WIDTH (FT) | AREA (SF) | BERM STABILIZATION MAT (LF) | SPLIT RAIL FENCE (LF) | POST AND RAIL FENCE (LF) | DETAIL #/PAGE | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WILDWOOD CREST | MORNING GLORY ROAD | 4/C-106 | 139+39 | 4+88 | PEDESTRIAN | 10 | 1767 | 0 | 354 | 0 | 4/C-402 | |
| | BUTTERCUP ROAD | 5/C-106 | 141+80 | 4+88 | PEDESTRIAN | 10 | 1697 | 0 | 340 | 0 | 4/C-402 | |
| | LAVANDER ROAD | 6/C-106 | 144+24 | 4+88 | PEDESTRIAN | 10 | 1747 | 0 | 350 | 0 | 4/C-402 | |
| | HEATHER ROAD | 7/C-106 | 146+17 | 4+95 | VEHICLE | 22 | 4730 | 0 | 430 | 0 | 2/C-403 | |
| | HEATHER ROAD | 8/C-106 | 147+16 | 5+03 | PEDESTRIAN | 10 | 1555 | 0 | 312 | 0 | 5/C-402 | |
| | CROCUS ROAD | 9/C-106 | 149+23 | 5+14 | PEDESTRIAN | 10 | 1581 | 0 | 316 | 0 | 5/C-402 | |
| | ASTER ROAD | 10/C-106 | 152+67 | 5+26 | PEDESTRIAN | 10 | 1610 | 0 | 322 | 0 | 5/C-402 | |
| | CARDINAL ROAD | 11/C-106 | 154+47 | 5+32 | PEDESTRIAN | 10 | 1591 | 0 | 318 | 0 | 5/C-402 | |
| | SWEETBRIAR ROAD | 12/C-106 | 157+04 | 5+29 | PEDESTRIAN | 10 | 1578 | 0 | 316 | 0 | 5/C-402 | |
| | WEISTERIA ROAD | 1/C-107 | 159+56 | 5+26 | PEDESTRIAN | 10 | 1565 | 0 | 314 | 0 | 5/C-402 | |
| | COLUMBINE ROAD | 2/C-107 | 162+96 | 5+24 | PEDESTRIAN | 10 | 1553 | 0 | 310 | 0 | 5/C-402 | |
| | ROSEMARY ROAD | 3/C-107 | 164+05 | 5+24 | ADA | 10 | 2610 | 75 | 0 | 522 | 3/C-404 | TIE INTO ELEVATION +10.0 |
| | FORGET ME NOT ROAD | 4/C-107 | 167+15 | 5+27 | PEDESTRIAN | 10 | 1558 | 0 | 312 | 0 | 5/C-402 | |
| | FERN ROAD | 5/C-107 | 169+87 | 5+30 | PEDESTRIAN | 10 | 1578 | 0 | 316 | 0 | 5/C-402 | |
| | PALM ROAD | 6/C-107 | 172+06 | 5+39 | PEDESTRIAN | 10 | 1592 | 0 | 318 | 0 | 5/C-402 | |
| | LOTUS ROAD | 7/C-107 | 174+39 | 5+69 | PEDESTRIAN | 10 | 1577 | 0 | 316 | 0 | 5/C-402 | |
| | MYRTLE ROAD | 8/C-107 | 177+36 | 5+85 | PEDESTRIAN | 10 | 1548 | 0 | 310 | 0 | 5/C-402 | |
| | PRIMROSE ROAD | 9/C-107 | 180+50 | 5+90 | PEDESTRIAN | 10 | 1626 | 0 | 326 | 0 | 5/C-402 | |
| | RAMBLER ROAD | 10/C-107 | 182+74 | 5+81 | ADA | 10 | 3283 | 118 | 0 | 658 | 1/C-405 | ADJACENT TO VEHICLE RAMP AT STA. 182+96; LANDWARD MOBY MAT REQUIRED |
| | RAMBLER ROAD | 11/C-107 | 182+96 | 5+80 | VEHICLE | 15 | 3435 | 0 | 442 | 0 | 1/C-403 | ADJACENT TO ADA RAMP AT STA. 182+74 |
| | ORCHID ROAD | 12/C-107 | 185+12 | 5+71 | PEDESTRIAN | 10 | 1682 | 0 | 336 | 0 | 5/C-402 | |
| | STOCKTON ROAD | 13/C-107 | 187+65 | 5+60 | PEDESTRIAN | 10 | 1682 | 0 | 336 | 0 | 5/C-402 | |
| | STANTON ROAD | 14/C-107 | 190+14 | 5+50 | PEDESTRIAN | 10 | 1682 | 0 | 336 | 0 | 5/C-402 | |
| | FARRAGUT ROAD | 1/C-108 | 192+61 | 5+40 | PEDESTRIAN | 10 | 1682 | 0 | 336 | 0 | 5/C-402 | |
| | ATLANTA AVENUE | 2/C-108 | 194+89 | 5+31 | ADA | 10 | 3286 | 75 | 0 | 638 | 1/C-405 | |
| | NASHVILLE AVENUE | 3/C-108 | 197+46 | 5+21 | PEDESTRIAN | 10 | 1690 | 0 | 338 | 0 | 5/C-402 | |
| | LOUISVILLE AVENUE | 4/C-108 | 199+78 | 5+12 | PEDESTRIAN | 10 | 1690 | 0 | 338 | 0 | 5/C-402 | |
| | MIAMI AVENUE | 5/C-108 | 202+11 | 5+03 | PEDESTRIAN | 10 | 1690 | 0 | 338 | 0 | 5/C-402 | |
| | MONTEREY AVENUE | 6/C-108 | 204+42 | 4+94 | PEDESTRIAN | 10 | 1690 | 0 | 338 | 0 | 5/C-402 | |
| | ST PAUL AVENUE | 7/C-108 | 206+73 | 4+85 | PEDESTRIAN | 10 | 1690 | 0 | 338 | 0 | 5/C-402 | |
| | TOLEDO AVENUE | 8/C-108 | 208+42 | 4+78 | ADA | 10 | 2903 | 75 | 0 | 580 | 3/C-404 | TIE INTO ELEVATION +8.0 |
| | DENVER AVENUE | 9/C-108 | 211+78 | 4+64 | VEHICLE | 15 | 4373 | 0 | 566 | 0 | 1/C-403 | |
| | SYRACUSE AVENUE | 10/C-108 | 213+52 | 4+57 | PEDESTRIAN | 10 | 1694 | 0 | 338 | 0 | 5/C-402 | |
| | PRESTON AVENUE | 11/C-108 | 215+59 | 4+48 | PEDESTRIAN | 10 | 1694 | 0 | 338 | 0 | 5/C-402 | |
| | HOLLYWOOD AVENUE | 12/C-108 | 217+67 | 4+40 | PEDESTRIAN | 10 | 1694 | 0 | 338 | 0 | 5/C-402 | |
| | TOPEKA AVENUE | 13/C-108 | 219+83 | 4+31 | PEDESTRIAN | 10 | 1694 | 0 | 338 | 0 | 5/C-402 | |
| | PITTSBURGH AVENUE | 14/C-108 | 220+99 | 4+33 | ADA | 10 | 2903 | 75 | 0 | 580 | 3/C-404 | |
| | CHARLESTON AVENUE | 15/C-108 | 223+74 | 4+51 | PEDESTRIAN | 10 | 1694 | 0 | 338 | 0 | 5/C-402 | |
| | ST LOUIS AVENUE | 1/C-109 | 225+84 | 4+64 | PEDESTRIAN | 10 | 1694 | 0 | 338 | 0 | 5/C-402 | |
| | TRENTON AVENUE | 2/C-109 | 227+97 | 4+47 | PEDESTRIAN | 10 | 1694 | 0 | 338 | 0 | 5/C-402 | |
| | NEWARK AVENUE | 3/C-109 | 230+04 | 4+90 | PEDESTRIAN | 10 | 1694 | 0 | 338 | 0 | 5/C-402 | |
| | WASHINGTON AVENUE | 4/C-109 | 232+51 | 5+06 | VEHICLE | 15 | 3412 | 0 | 442 | 0 | 1/C-403 | |
| | JEFFERSON AVENUE | 5/C-109 | 234+77 | 5+20 | ADA | 10 | 3055 | 75 | 0 | 610 | 2/C-405 | |
| | | | | | | | | | | | | |
| LOWER TOWNSHIP | DIAMOND SAND DRIVE | 6/C-109 | 238+58 | 6+09 | PEDESTRIAN | 10 | 1662 | 0 | 334 | 0 | 4/C-402 | |
| | MEMPHIS AVENUE | 7/C-109 | 241+37 | 6+41 | ADA | 22 | 4730 | 0 | 430 | 0 | 2/C-403 | ADJACENT TO VEHICLE CROSSOVER |
| | MEMPHIS AVENUE | 8/C-109 | 241+63 | 6+41 | VEHICLE | 10 | 3389 | 75 | 0 | 679 | 3/C-405 | ADJACENT TO ADA CROSSOVER |
| | SEAPOINT VILLAGE N | 9/C-109 | 243+46 | 6+41 | PEDESTRIAN | 85 | 1417 | 0 | 284 | 0 | 4/C-402 | PRIVATE CROSSOVER; REMOVE EXISTING CROSSOVER WITHIN DUNE |
| | SEAPOINT VILLAGE S | 10/C-109 | 245+05 | 6+41 | PEDESTRIAN | 10 | 1451 | 0 | 290 | 0 | 4/C-402 | PRIVATE CROSSOVER; REMOVE EXISTING CROSSOVER WITHIN DUNE |
| | IBIS LANE | 11/C-109 | 246+98 | 6+41 | PEDESTRIAN | 10 | 1172 | 0 | 234 | 0 | 4/C-402 | RAMP SHORTER ON LANDWARD SIDE; REMOVE EXIST CROSSOVER WITHIN DUNE |
| | RALEIGH AVENUE | 12/C-109 | 249+77 | 6+76 | PEDESTRIAN | 10 | 1557 | 0 | 312 | 0 | 4/C-402 | REMOVE EXISTING CROSSOVER WITHIN DUNE FOOTPRINT; TIE INTO EXISTING |

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | ACTION | DATE | BY | DESCRIPTION |
|---|---|---|---|---|
| | | | | |

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

DWN BY: LNM
CKD BY: DAL
DES BY: ADD
REVIEWED BY: ANM
ISSUE/SUBMITTAL DATE: 95% - 12 SEPT 2024
CONTRACT NUMBER: -
SOLICITATION NUMBER: -
PLOT SCALE: NTS
DWG. SIZE: 22"x34"
FILE NAME: C-401 DUNE CROSSOVER SCHEDULE.dwg

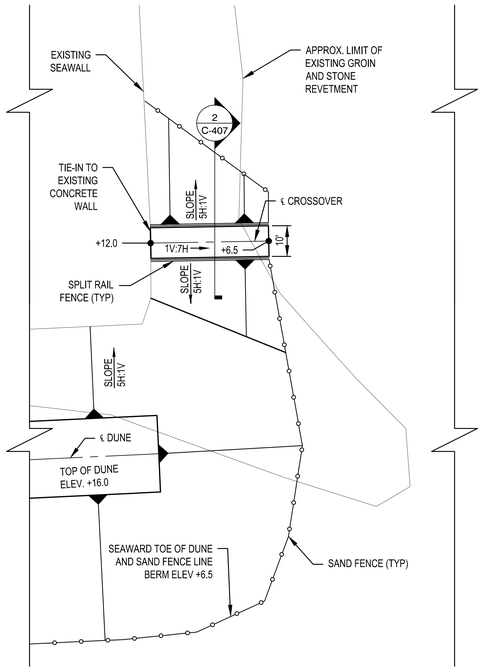
BEACH NOURISHMENT
INITIAL CONSTRUCTION

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

DUNE CROSSOVER SCHEDULE

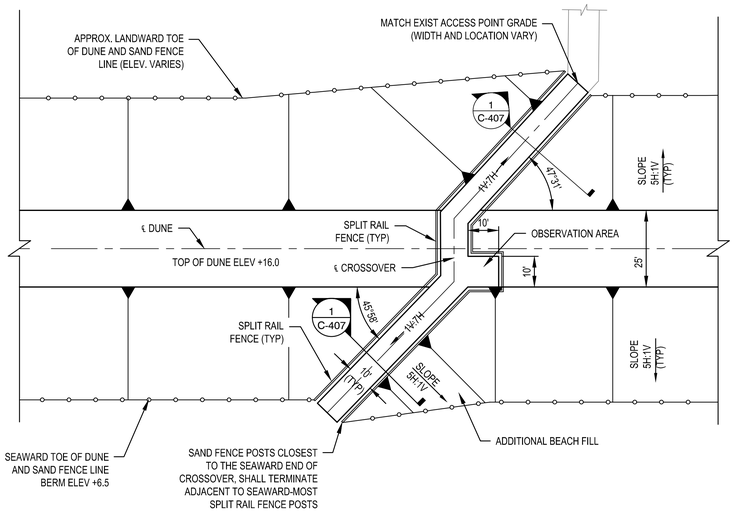
SHEET NUMBER

C-401



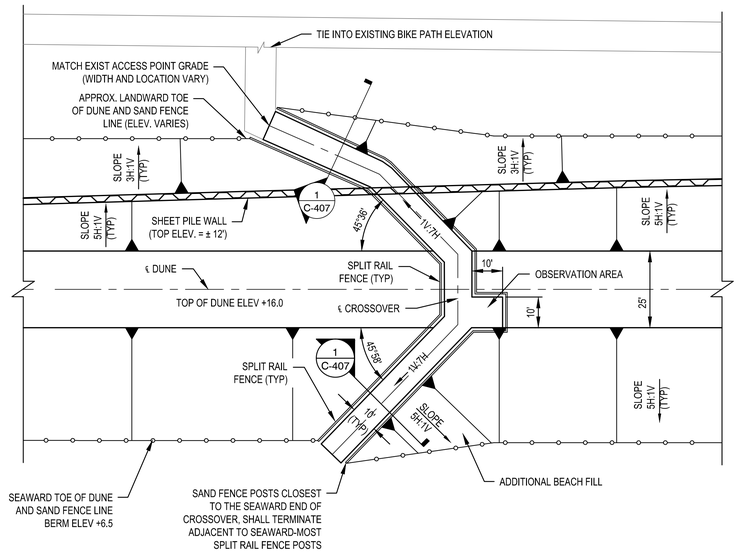

1 PLAN - PEDESTRIAN CROSSOVER (2ND AVE)

20' 10' 0 20'
SCALE IN FEET



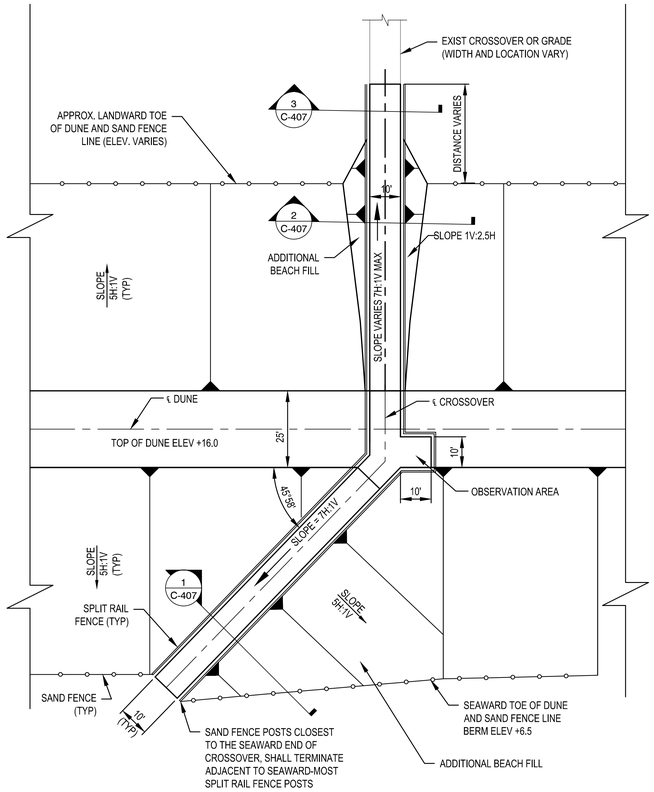

2 PLAN - PEDESTRIAN CROSSOVER (NORTH WILDWOOD)

20' 10' 0 20'
SCALE IN FEET



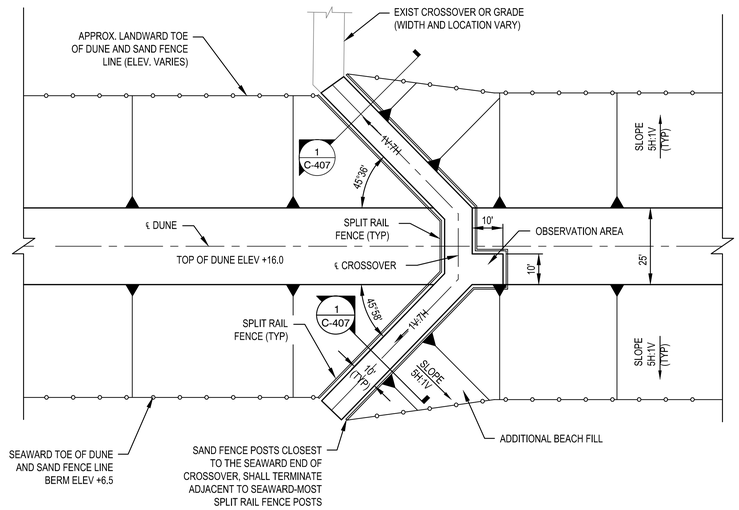

3 PLAN - PEDESTRIAN CROSSOVER (NORTH WILDWOOD)

20' 10' 0 20'
SCALE IN FEET




4 PLAN - PEDESTRIAN CROSSOVER (NORTH WILDWOOD & LOWER TOWNSHIP)

20' 10' 0 20'
SCALE IN FEET




5 PLAN - PEDESTRIAN CROSSOVER (NORTH WILDWOOD WILDWOOD CITY & WILDWOOD CREST)

20' 10' 0 20'
SCALE IN FEET

NOTES:

1. SPLIT RAIL FENCE POSTS ARE NOT SHOWN FOR CLARITY. FOR DETAILS OF SPLIT RAIL FENCE, SEE SHEET C-501.
2. LANDWARD LIMIT OF SPLIT RAIL FENCE TO BE COORDINATED WITH THE COR. SEE SHEET C-401 FOR QUANTITIES.
3. FOR SAND FENCE AND DUNE PLANTING DETAILS, SEE SHEET C-502.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | ACTION | DESCRIPTION | BY | DATE |
|---|---|---|---|---|
| - | - | - | - | - |

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

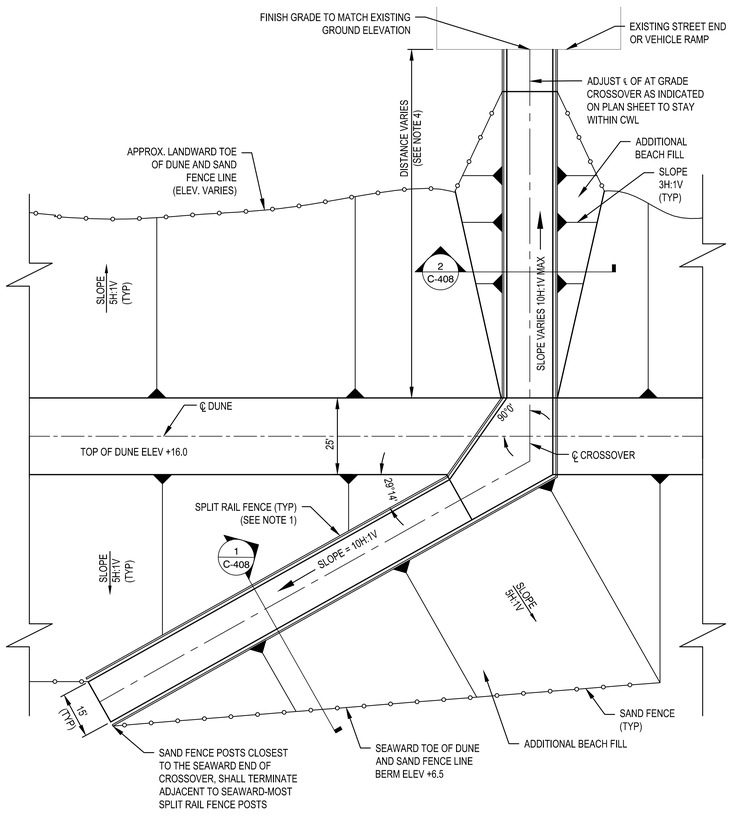
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CHK BY: DAK
DES BY: ADD
REVIEWED BY: DAK
ISSUE/SUBMITTAL DATE: 85% - 13 SEPT 2024
SOLICITATION NUMBER: -
CONTRACT NUMBER: -
PLOT SCALE: AS SHOWN
DWG. SIZE: 22"x34"
FILE NAME: C-402 PLN - PEDESTRIAN CROSSOVER.dwg

BEACH NOURISHMENT
INITIAL CONSTRUCTION

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

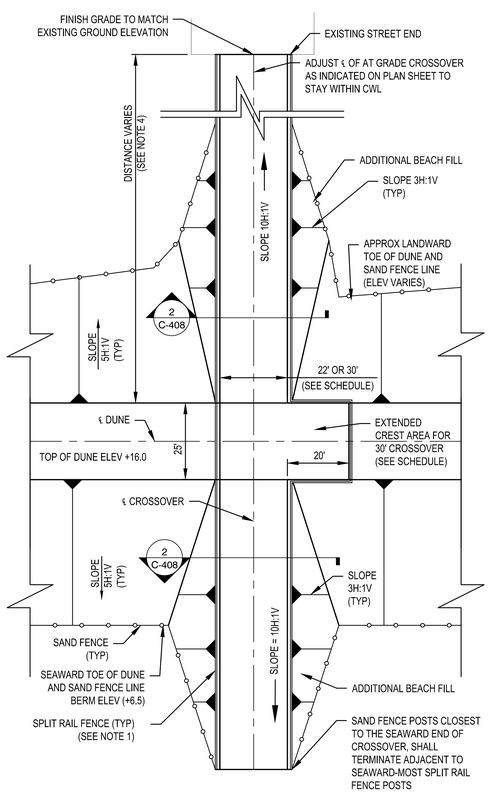
PLAN - PEDESTRIAN CROSSOVER

SHEET NUMBER
C-402



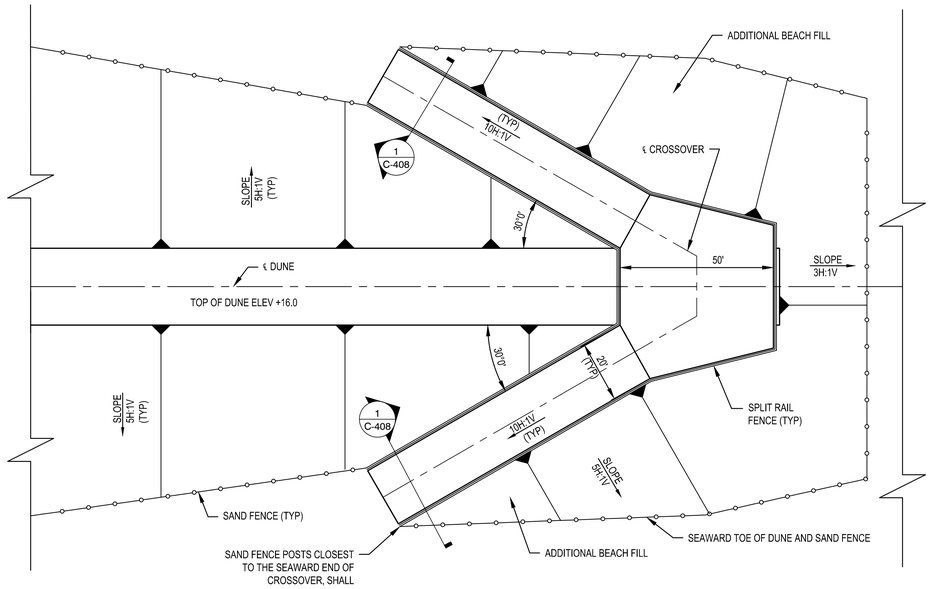

1 PLAN - TYPICAL VEHICLE CROSSOVER

20' 10' 0 20'
SCALE IN FEET



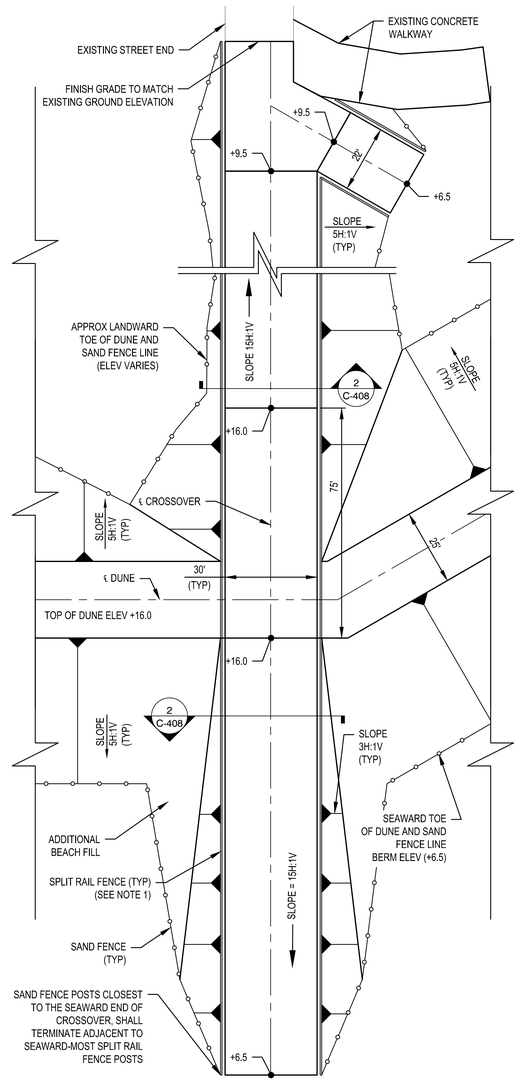

2 PLAN - STRAIGHT VEHICLE CROSSOVER

20' 10' 0 20'
SCALE IN FEET




3 PLAN - VEHICLE CROSSOVER (CRANE)

20' 10' 0 20'
SCALE IN FEET




4 PLAN - VEHICLE CROSSOVER (CRESSE AVE)

20' 10' 0 20'
SCALE IN FEET

NOTES:

1. SPLIT RAIL FENCE POSTS ARE NOT SHOWN FOR CLARITY. FOR DETAILS OF SPLIT RAIL FENCE, SEE SHEET C-501.
2. LANDWARD LIMIT OF SPLIT RAIL FENCE TO BE COORDINATED WITH THE COR. SEE SHEET C-401 FOR QUANTITIES.
3. FOR SAND FENCE AND DUNE PLANTING DETAILS, SEE SHEET C-502.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | ADDITION | DESCRIPTION | DATE | BY |
|---|---|---|---|---|
| | | | | |

DES BY: ADD
DWN BY: ADD
CHK BY: MAA
REVIEWED BY: BMS
ISSUED/SUBMITTAL DATE: 90% - 12 SEPT 2024
SOLICITATION NUMBER: -
CONTRACT NUMBER: -
PLOT SCALE: AS SHOWN
DWG. SIZE: 22"x17"
FILE NAME: C407 PLAN - VEHICLE CROSSOVER.dgn

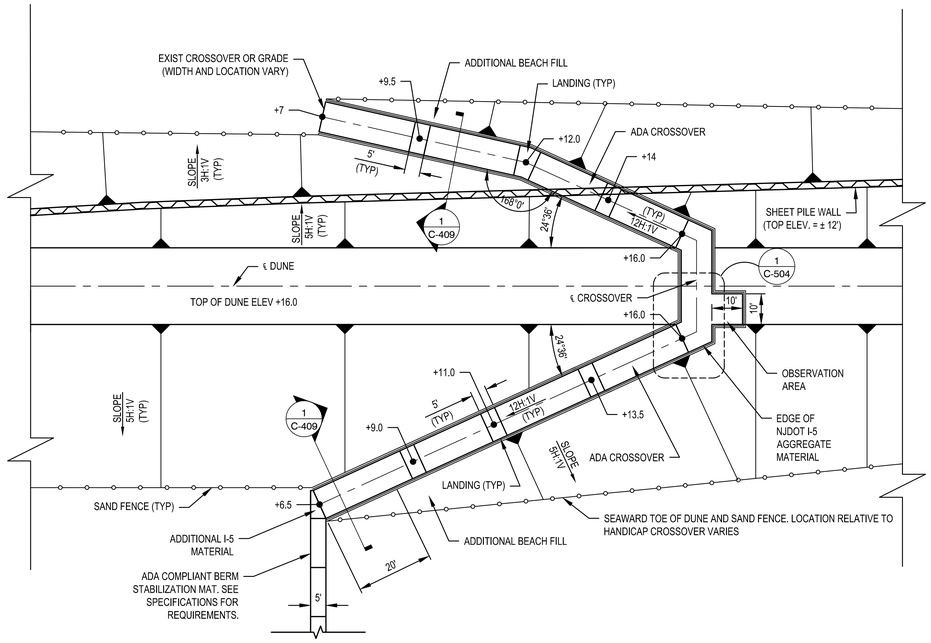
U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

BEACH NOURISHMENT
INITIAL CONSTRUCTION

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

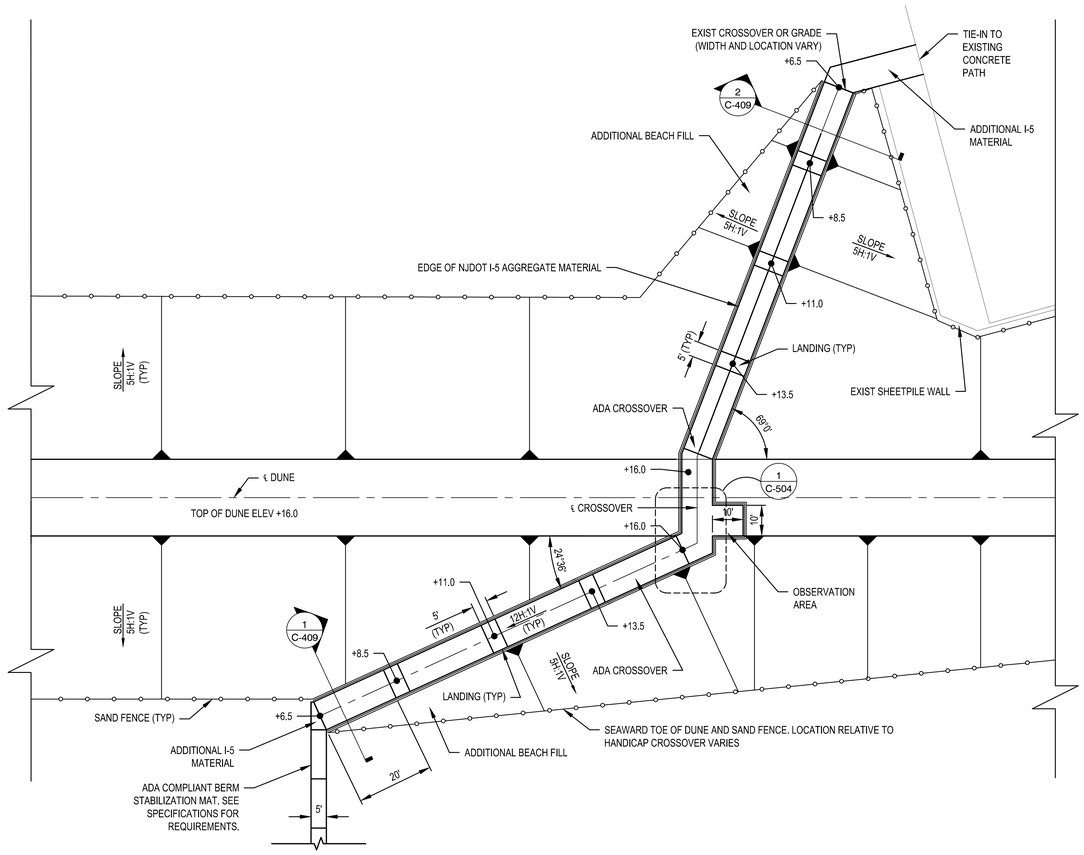
PLAN - VEHICLE CROSSOVER

SHEET NUMBER
C-403



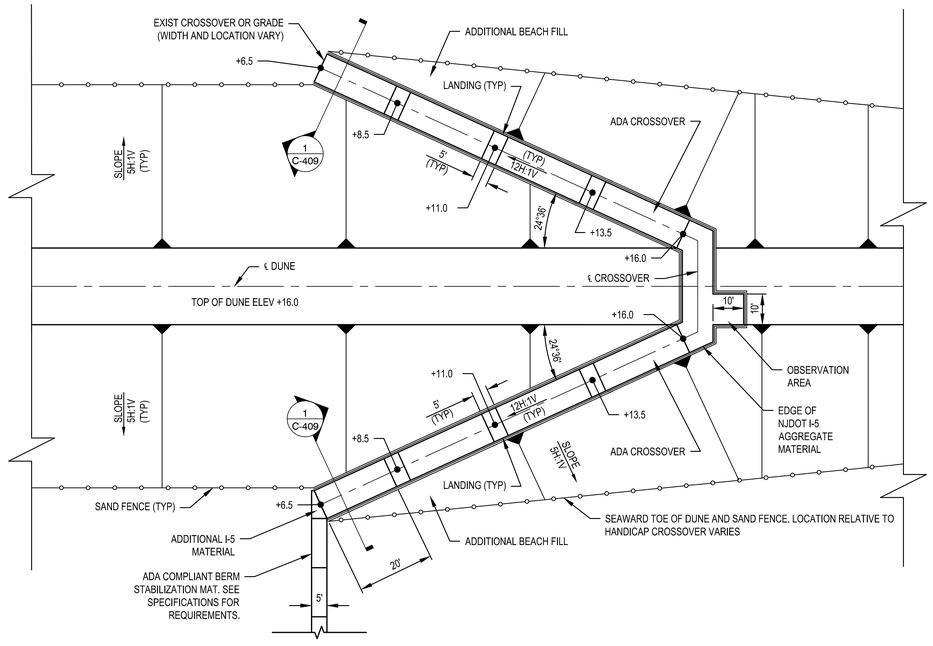

## 1 PLAN - ADA CROSSOVER (NORTH WILDWOOD)

20' 10' 0 20'
SCALE IN FEET




## 2 PLAN - ADA CROSSOVER (15TH AVE)

NTS




## 3 PLAN - ADA CROSSOVER (TYP)

20' 10' 0 20'
SCALE IN FEET

NOTES:

1. POST AND RAIL FENCE POSTS NOT SHOWN FOR CLARITY. FOR DETAILS OF POST AND RAIL FENCE, SEE SHEET C-501.
2. FOR SAND FENCE AND DUNE PLANTING DETAILS, SEE SHEET C-502.
3. THE LENGTH OF HANDICAP CROSSOVERS MAY VARY WITH LOCATION AND FINISHED GRADE OR EXISTING GROUND ELEVATIONS. THE RISE ON CROSSOVERS SHALL BE NO MORE THAN 2.5' OVER A RUN OF 30' (12H:1V). LANDING SHALL BE CONSTRUCTED AT A MAXIMUM SPACING OF 30' AND SHALL BE LEVEL FOR A MINIMUM LENGTH OF 5'.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | ACTION | DATE | BY |
|---|---|---|---|
| | | | |

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

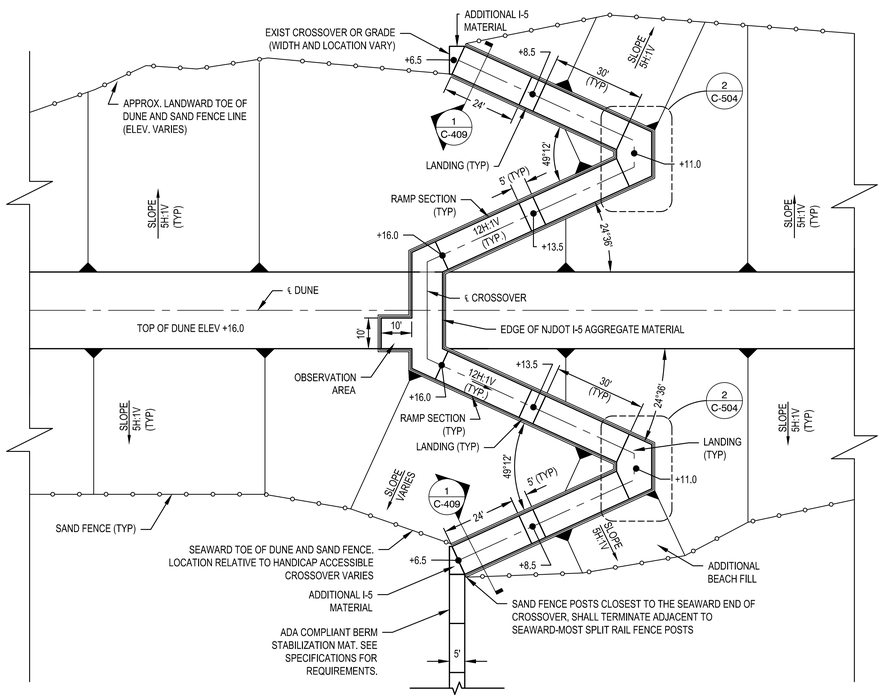
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CHD BY: DAA
DES BY: ADD
REVIEWED BY: RAK
PLOT SCALE AS SHOWN
DWG. SIZE 22"x2"
ISSUE/SUBMITTAL DATE: 9/5 - 13 SEP 2024
SOLICITATION NUMBER: -
CONTRACT NUMBER: -
FILE NAME: C-404 PLAN - ADA CROSSOVER.dwg

BEACH NOURISHMENT
INITIAL CONSTRUCTION

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

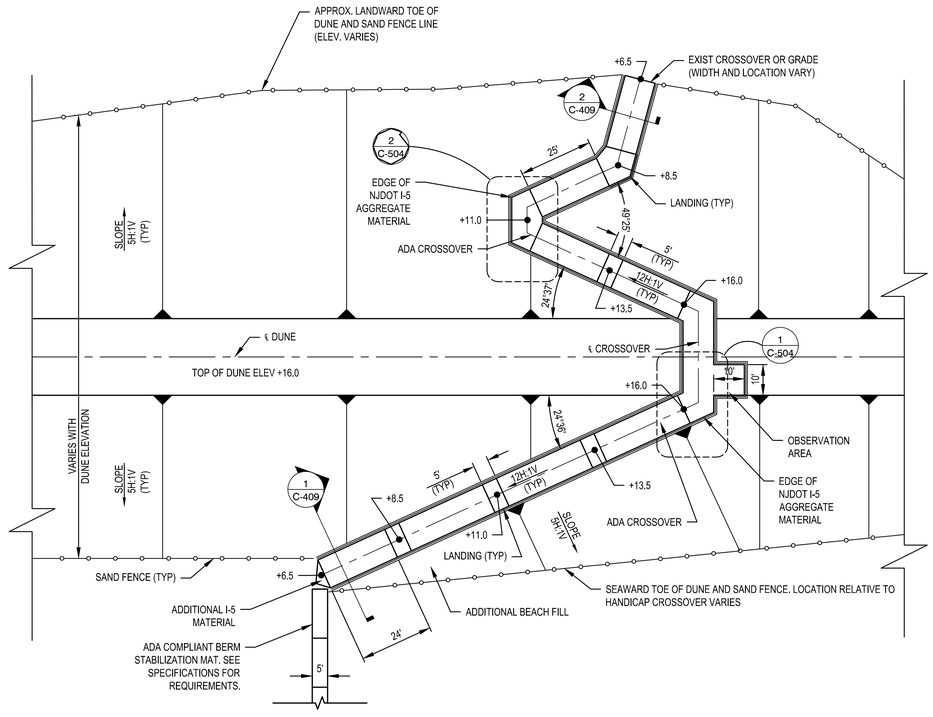
PLAN - ADA CROSSOVER
-

SHEET NUMBER
C-404



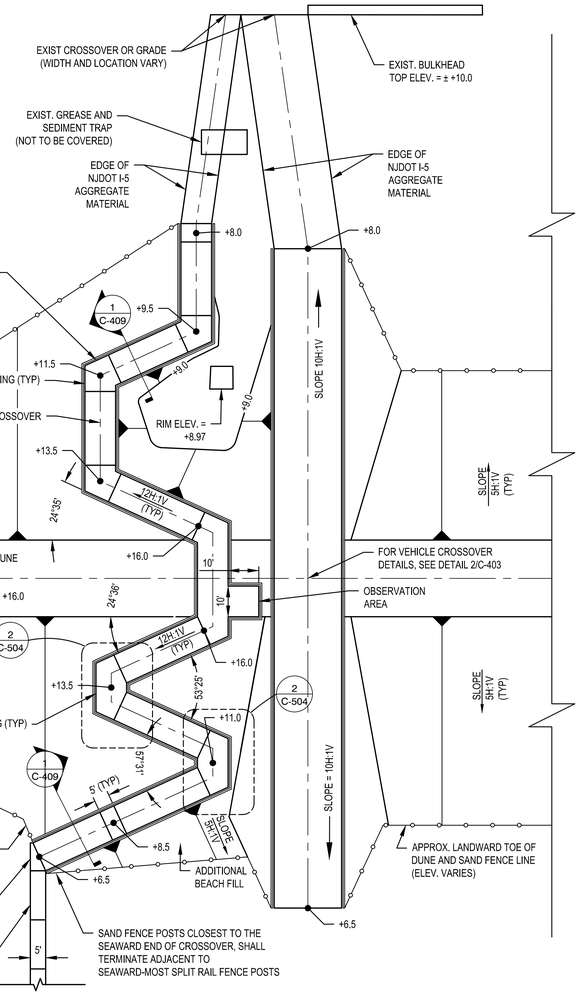

1 PLAN - ADA CROSSOVER (WILDWOOD CREST)

20' 10' 0 20'
SCALE IN FEET




2 PLAN - ADA CROSSOVER (JEFFERSON AVE. WILDWOOD CREST)

20' 10' 0 20'
SCALE IN FEET




3 PLAN - ADA CROSSOVER (MEMPHIS AVE. LOWER TOWNSHIP)

20' 10' 0 20'
SCALE IN FEET

NOTES:

1. POST AND RAIL FENCE POSTS NOT SHOWN FOR CLARITY. FOR DETAILS OF POST AND RAIL FENCE, SEE SHEET C-501.
2. FOR SAND FENCE AND DUNE PLANTING DETAILS, SEE SHEET C-502.
3. THE LENGTH OF HANDICAP CROSSOVERS MAY VARY WITH LOCATION AND FINISHED GRADE OR EXISTING GROUND ELEVATIONS. THE RISE ON CROSSOVERS SHALL BE NO MORE THAN 2.5' OVER A RUN OF 30' (12H:1V). LANDING SHALL BE CONSTRUCTED AT A MAXIMUM SPACING OF 30' AND SHALL BE LEVEL FOR A MINIMUM LENGTH OF 5'.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| NO. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| | | | |

DWN BY: LMI
CHD BY: DAL
DES BY: ADO
REVIEWED BY: GWS
ISSUED/SUBMITTAL DATE: 95% - 12 SEPT 2024
SOLICITATION NUMBER: -
CONTRACT NUMBER: -
PLOT SCALE: AS SHOWN
DWG. SIZE: 22"x34"
FILE NAME: C-405 PLAN - ADA CROSSOVER.dwg

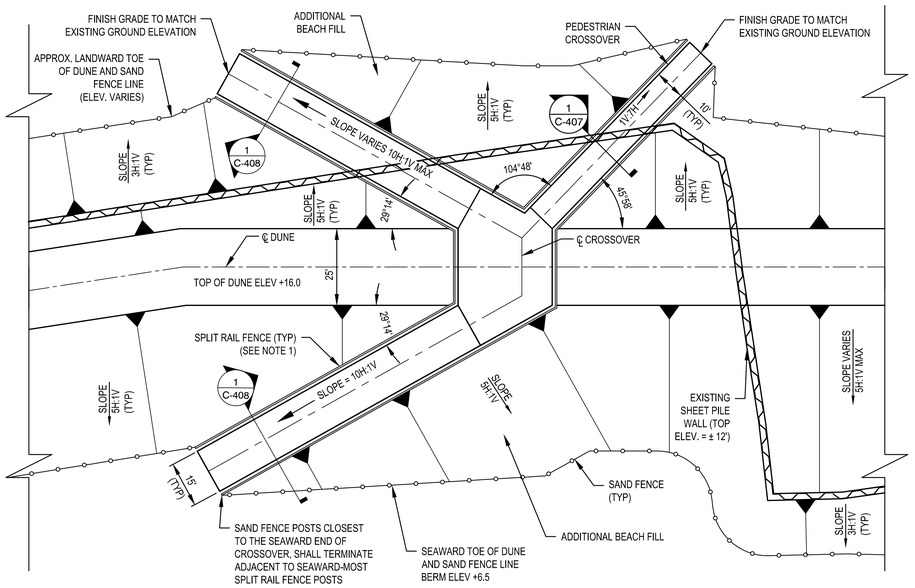
U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

BEACH NOURISHMENT
INITIAL CONSTRUCTION

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

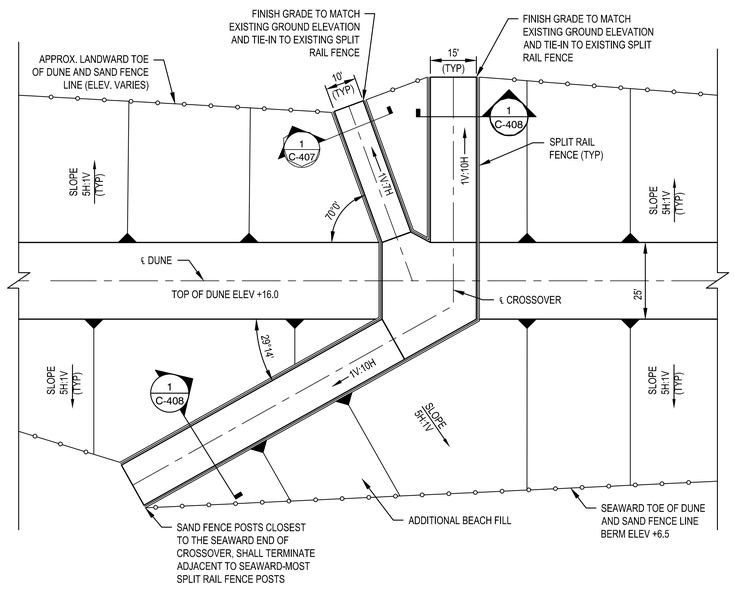
PLAN - ADA CROSSOVER

SHEET NUMBER
C-405



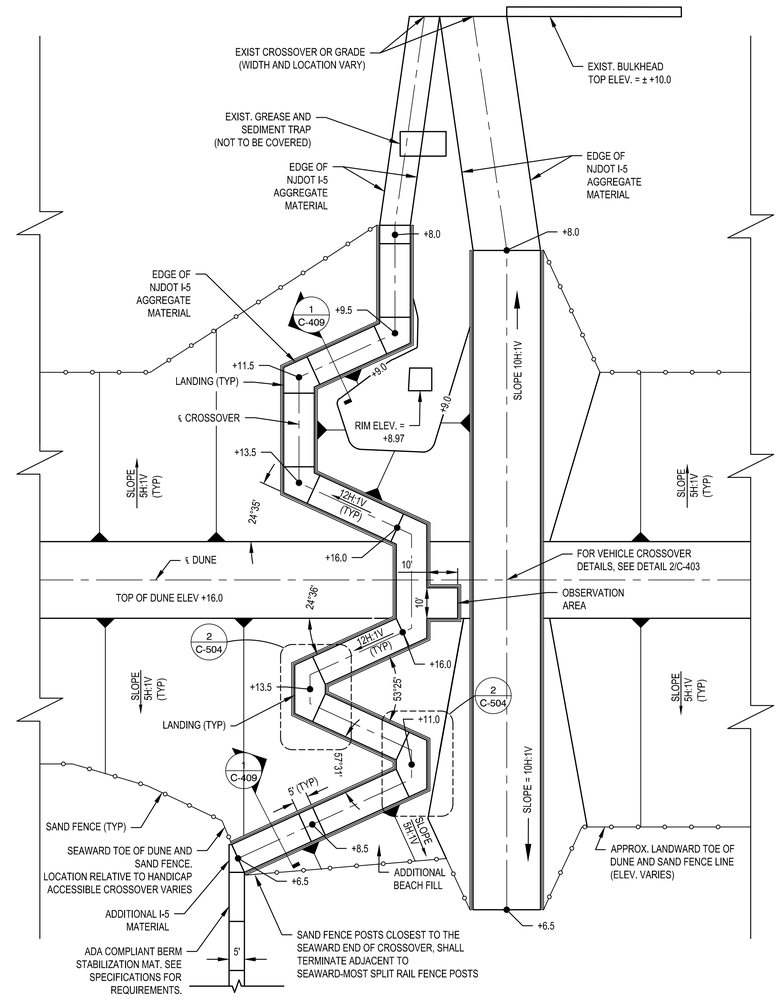

## 1 PLAN - VEHICLE CROSSOVER (7TH & 8TH AVENUE)

20' 10' 0 20'
SCALE IN FEET




## 2 PLAN - VEHICLE CROSSOVER (16TH AVE)

20' 10' 0 20'
SCALE IN FEET




## 3 PLAN - ADA CROSSOVER (MEMPHIS AVE)

20' 10' 0 20'
SCALE IN FEET

NOTES:

1. POST AND RAIL FENCE POSTS NOT SHOWN FOR CLARITY. FOR DETAILS OF POST AND RAIL FENCE, SEE SHEET C-501.
2. FOR SAND FENCE AND DUNE PLANTING DETAILS, SEE SHEET C-502.
3. THE LENGTH OF HANDICAP CROSSOVERS MAY VARY WITH LOCATION AND FINISHED GRADE OR EXISTING GROUND ELEVATIONS. THE RISE ON CROSSOVERS SHALL BE NO MORE THAN 2.5' OVER A RUN OF 30' (12H:1V). LANDING SHALL BE CONSTRUCTED AT A MAXIMUM SPACING OF 30' AND SHALL BE LEVEL FOR A MINIMUM LENGTH OF 5'.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

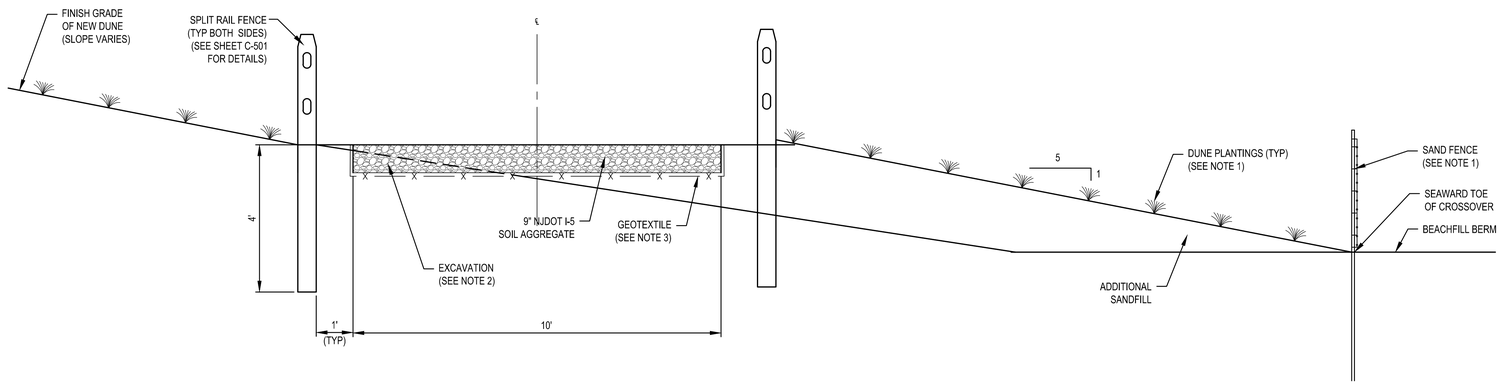
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REVIEWED BY: RMK
ISSUE/SUBMITTAL DATE: 95% - 12 SEP 2024
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CONTRACT NUMBER: -
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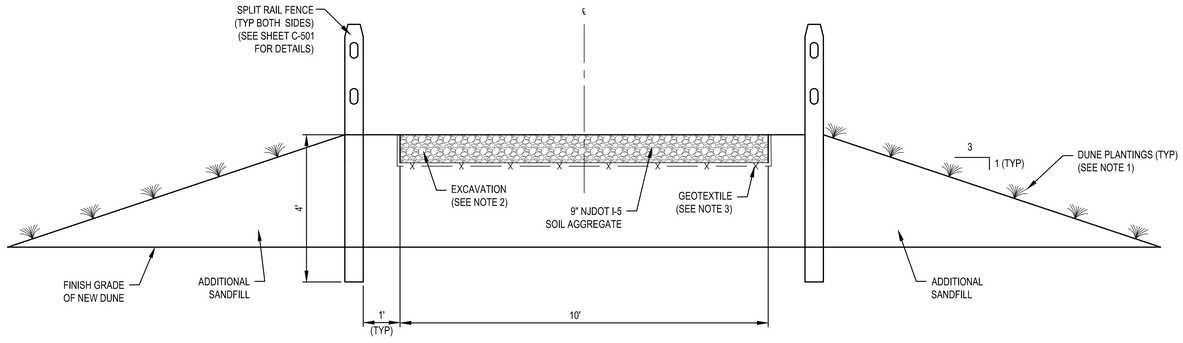
U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY
BEACH NOURISHMENT
INITIAL CONSTRUCTION
PLAN - COMBINED CROSSOVER

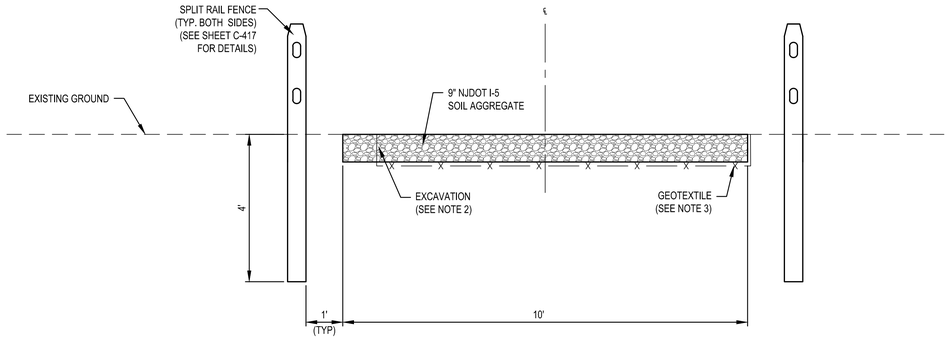
SHEET NUMBER
C-406




## 1 TYPICAL SECTION - PEDESTRIAN CROSSOVER
NTS




## 2 TYPICAL SECTION - PEDESTRIAN CROSSOVER
NTS




## 3 TYPICAL SECTION - PEDESTRIAN CROSSOVER
NTS

NOTES:

1. FOR DUNE PLANTING AND SAND FENCE DETAILS, SEE SHEET C-502.
2. EXCAVATED MATERIAL SHALL BE USED AS ADDITIONAL SAND FILL.
3. GEOTEXTILE IS TO BE INSTALLED 7" UP THE SIDES OF THE I-5 MATERIAL.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | ACTION | DESCRIPTION | DATE | BY |
|---|---|---|---|---|
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|---|---|---|---|
| DWN BY: ADD | DES BY: ADD | ISSUED/SUBMITTAL DATE: 95% - 12 SEPT 2024 | |
| CK BY: DAA | REVIEWED BY: DMB | SOLICITATION NUMBER: - | CONTRACT NUMBER: - |
| | PLOT SCALE: NTS | DWG. SIZE: 22"x17" | FILE NAME: C-407 TYPICAL SECTION.dwg |

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

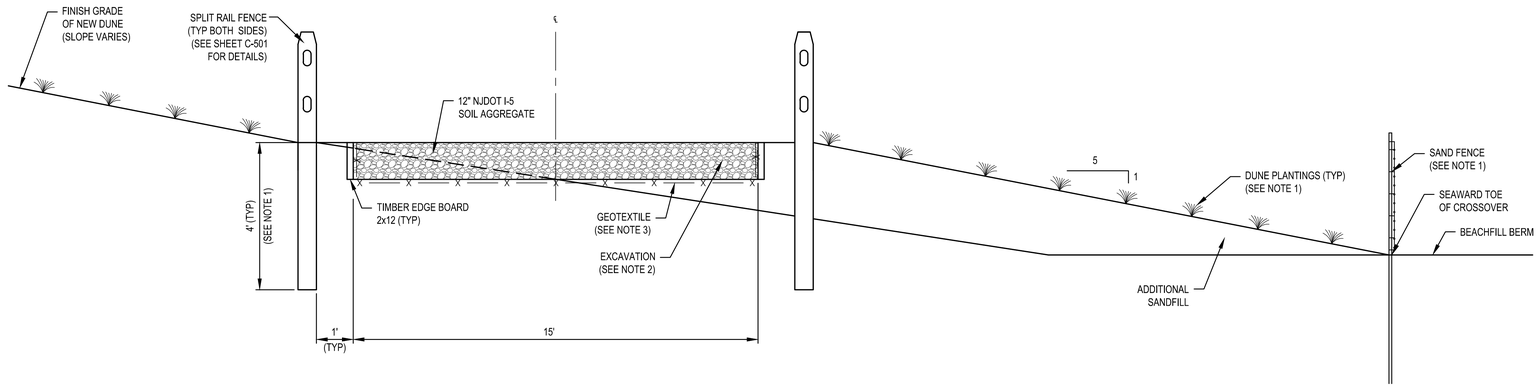
BEACH NOURISHMENT
INITIAL CONSTRUCTION

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

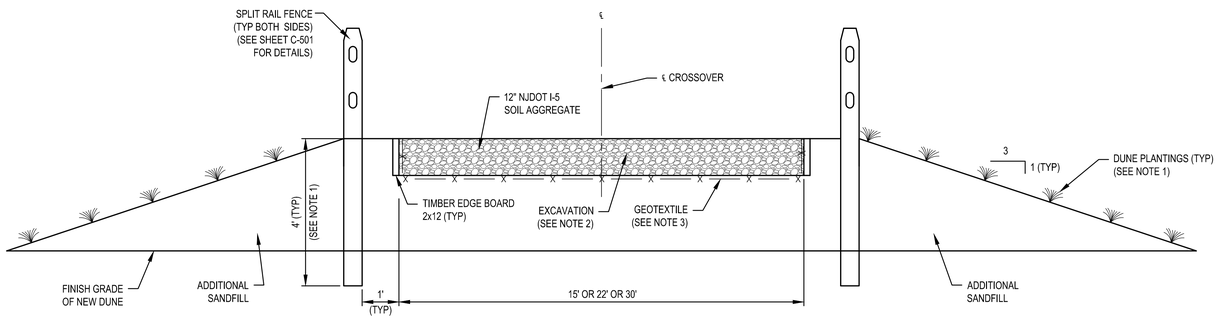
TYPICAL SECTION - PEDESTRIAN CROSSOVER

SHEET NUMBER

C-407




1 TYPICAL SECTION - VEHICLE CROSSOVER
NTS




2 TYPICAL SECTION - VEHICLE CROSSOVER
NTS

NOTES:

1. FOR DUNE PLANTING AND SAND FENCE DETAILS, SEE SHEET C-502.
2. EXCAVATED MATERIAL SHALL BE USED AS ADDITIONAL SAND FILL.
3. GEOTEXTILE IS TO BE INSTALLED 9" UP THE SIDES OF THE I-5 MATERIAL.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | SECTION | DESCRIPTION | DATE | BY |
|---|---|---|---|---|
| . | . | . | . | . |
| . | . | . | . | . |
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U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

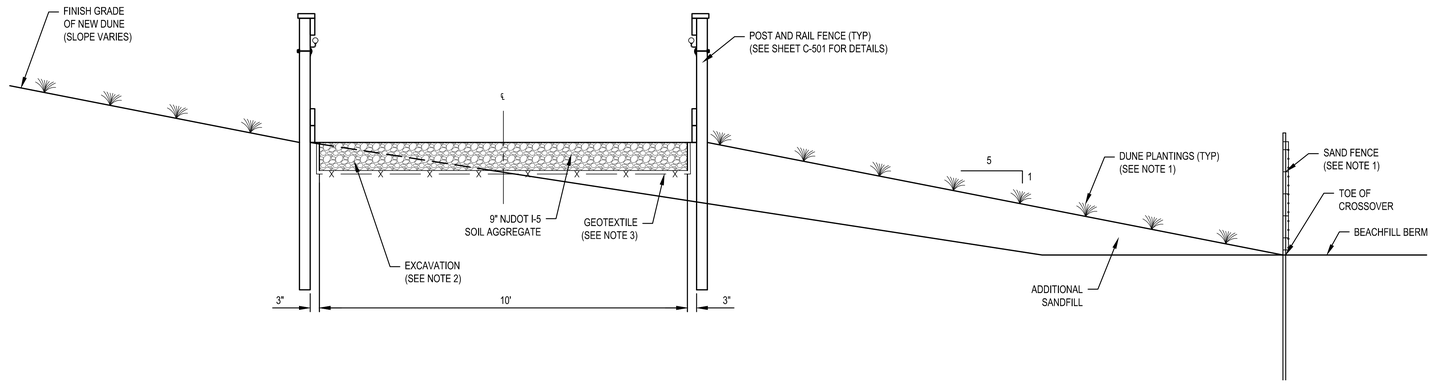
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CHD BY: DAN
DES BY: ADD
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ISSUE/SUBMITTAL DATE: 95% - 12 SEP 2024
SOLICITATION NUMBER: -
CONTRACT NUMBER: -
PLOT SCALE: NTS
DWG. SIZE: 22"x34"
FILE NAME: C-408 TYPICAL SECTION.dwg

BEACH NOURISHMENT
INITIAL CONSTRUCTION

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

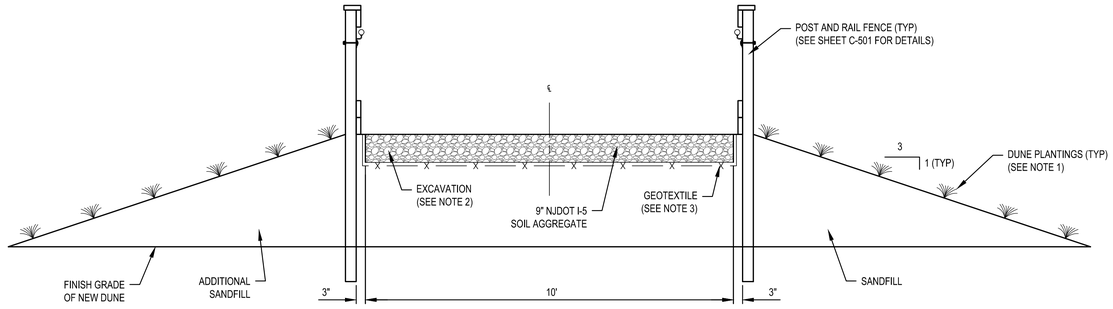
TYPICAL SECTION - VEHICLE CROSSOVER

SHEET NUMBER
C-408




## 1 TYPICAL SECTION - ADA ACCESSIBLE CROSSOVER

NTS




## 2 TYPICAL SECTION - ADA ACCESSIBLE CROSSOVER

NTS

NOTES:

1. FOR DUNE PLANTING AND SAND FENCE DETAILS, SEE SHEET C-502.
2. SEE CONTRACTOR SPECIFICATIONS FOR REQUIREMENTS.
3. GEOTEXTILE IS TO BE INSTALLED 7" UP THE SIDES OF THE I-5 MATERIAL.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | ACTION | DESCRIPTION | DATE | BY |
|---|---|---|---|---|
| . | . | . | . | . |

DES'D BY: ADD
DWN BY: ADD
CHK'D BY: DAA
ISSUE/SUBMITTAL DATE: 95% - 12 SEP 2024
REVIEWED BY: -
SOLICITATION NUMBER: -
CONTRACT NUMBER: -
PLOT SCALE: NTS
DWG. SIZE: 22"x34"
FILE NAME: C-409 TYPICAL SECTION - ADA CROSSOVER.dgn

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

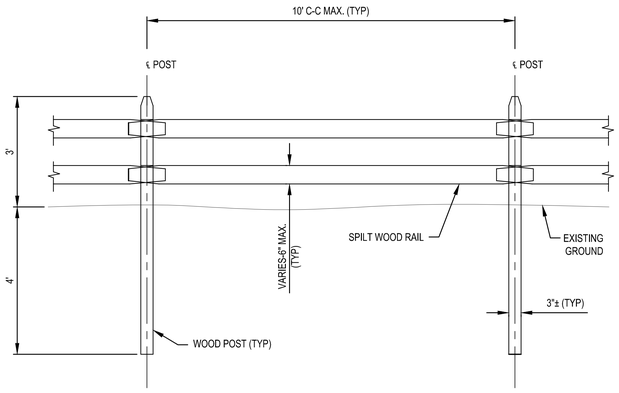
BEACH NOURISHMENT
INITIAL CONSTRUCTION

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

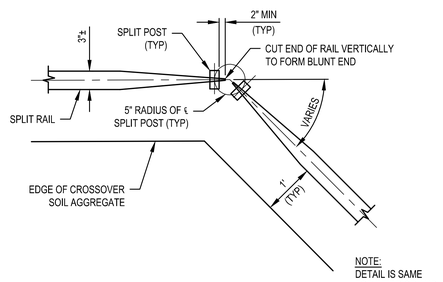
TYPICAL SECTION - ADA CROSSOVER

SHEET NUMBER

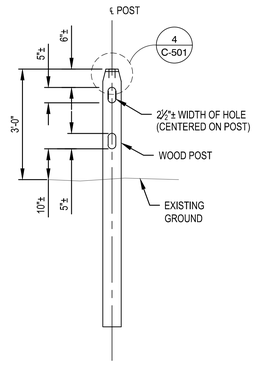
C-409



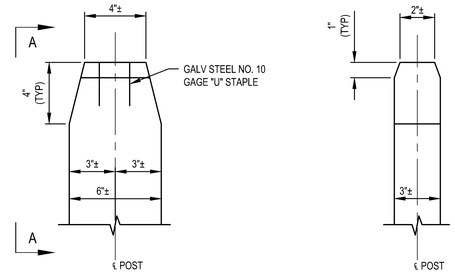

1 DETAIL - SPLIT RAIL FENCE
NTS



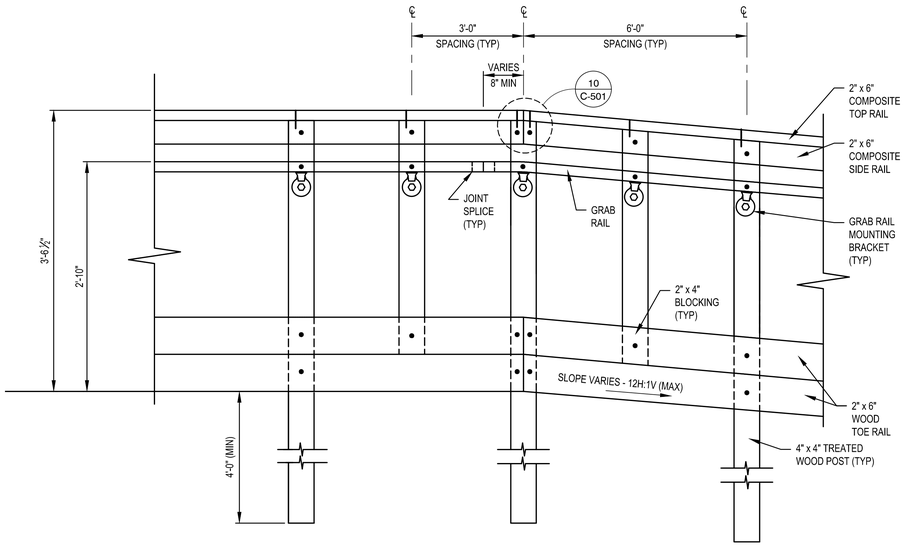

2 DETAIL - SPLIT RAIL FENCE POST AT ANGLE POINT
NTS



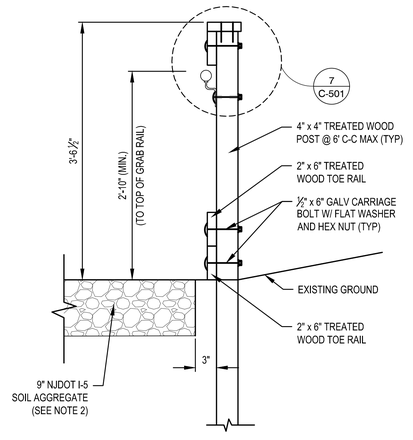

3 ELEVATION - SPLIT RAIL FENCE
NTS



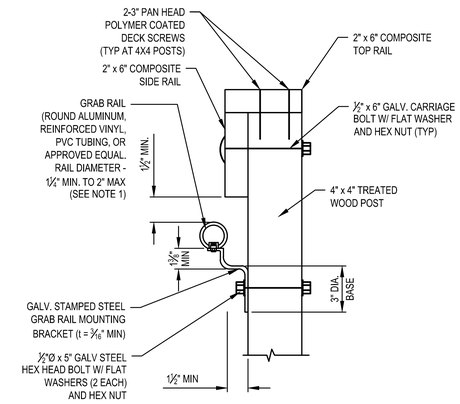

4 DETAIL - TOP OF SPLIT RAIL FENCE POST TAPER
NTS



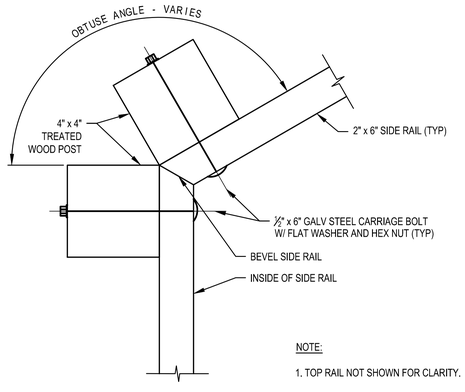

5 ELEVATION - POST AND RAIL FENCE
NTS



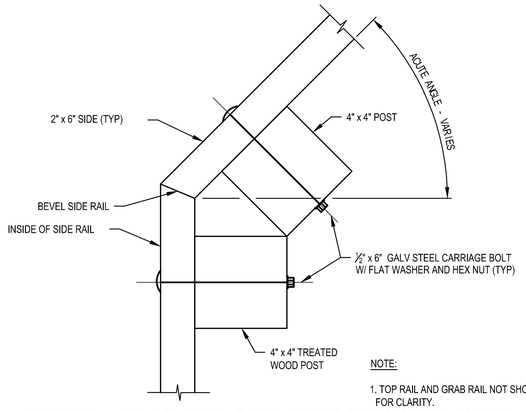

6 DETAIL - POST AND RAIL FENCE
NTS



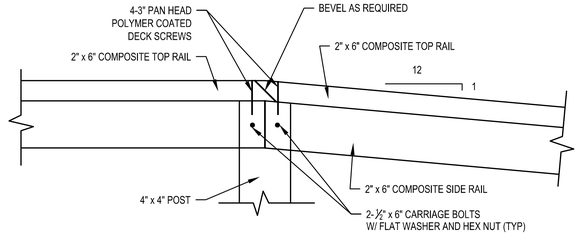

7 DETAIL - GRAB RAIL MOUNTING BRACKET TO POST
NTS




8 DETAIL - POST AND RAIL FENCE RAILING WITH OBTUSE ANGLE
NTS




9 DETAIL - POST AND RAIL FENCE RAILING WITH ACUTE ANGLE
NTS




10 DETAIL - POST AND RAIL FENCE RAIL SPLICE
NTS

NOTES:

1. THE DIMENSION MAY VARY, BUT 1½" MINIMUM CLEAR IS REQUIRED BETWEEN THE O.D. OF THE GRAB RAIL AND FACE OF POST TO MEET ADA REQUIREMENTS.
2. CROSSOVER SURFACE MAY BE I-5 SOIL AGGREGATE OR STABILIZATION MAT. SEE CROSSOVER SCHEDULE ON SHEET C-401.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | ACTION | DESCRIPTION | DATE | BY |
|---|---|---|---|---|
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ISSUE/SUBMITTAL DATE: 95% - 13 SEPT 2024
SOLICITATION NUMBER: -
CONTRACT NUMBER: -
DES BY: ADD
REVIEWED BY: MB
DWN BY: ADD
CHKD BY: DM
PLOT SCALE: NTS
DWG. SIZE: 30"x42"
FILE NAME: C501 DETAILS - FENCE.dwg

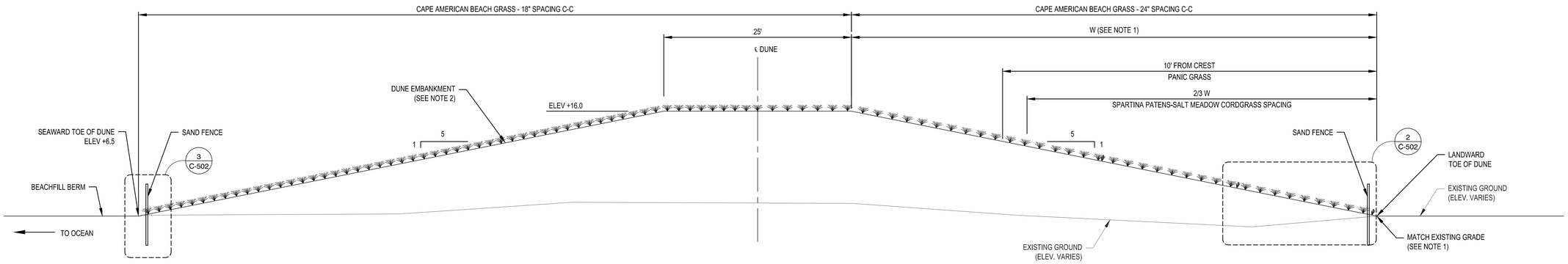
U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

BEACH NOURISHMENT
INITIAL CONSTRUCTION

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

DETAILS - FENCE

SHEET NUMBER
C-501

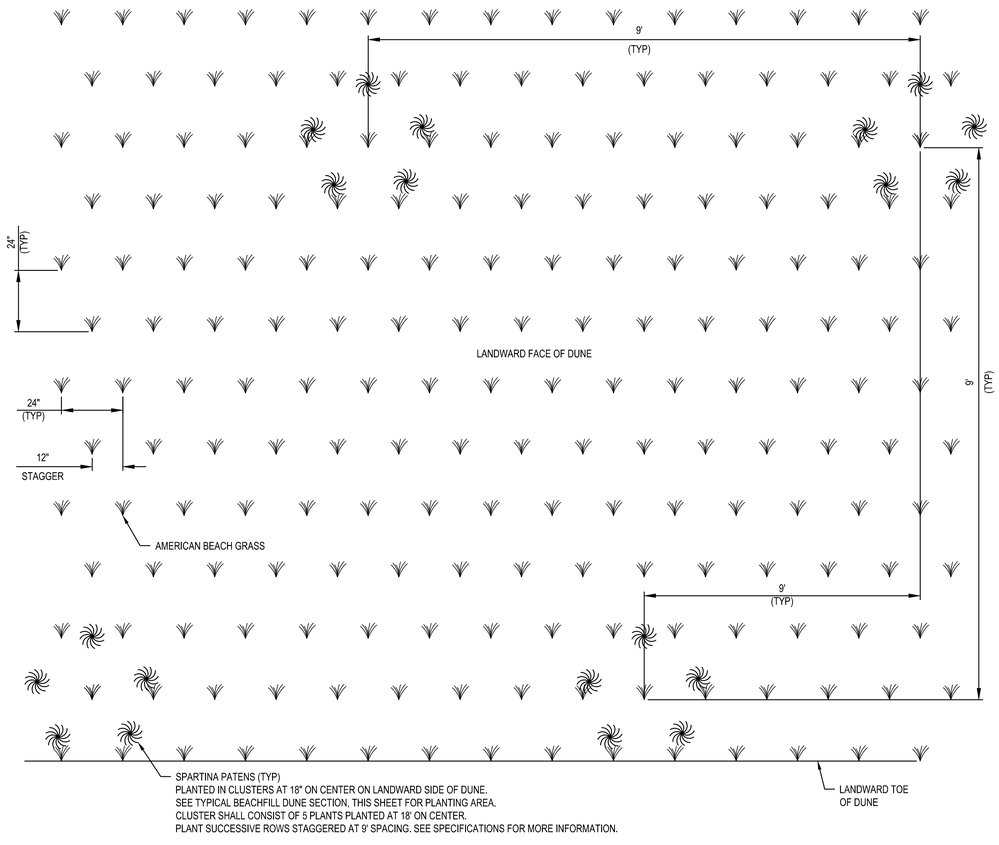



NOTE:

1. IN AREAS OF EXISTING DUNES, FULL DUNE CONSTRUCTION SHOWN HERE MAY NOT BE REQUIRED. SEE BEACHFILL CROSS SECTION SHEETS. PLANTING IS REQUIRED ON EXISTING DUNES TO REACH A SPACING OF 24" C-C.

2. DUNE EMBANKMENT WIDTH VARIES TOE-TO-TOE.

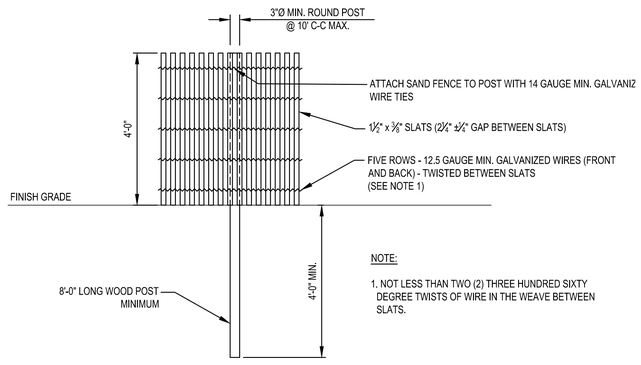
## 1 DETAIL - DUNE PLANTING
NTS




## 2 DETAIL - LANDWARD FACE OF DUNE GRASS PLANTING LAYOUT
NTS

5 0 5 10

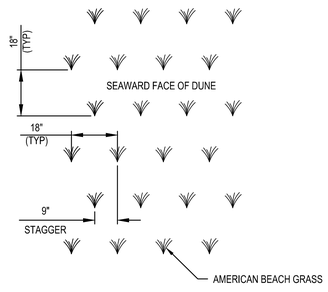
SCALE IN FEET



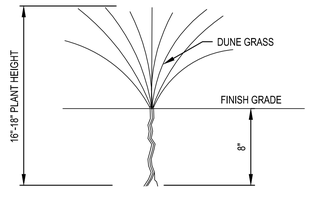

NOTE:

1. NOT LESS THAN TWO (2) THREE HUNDRED SIXTY DEGREE TWISTS OF WIRE IN THE WEAVE BETWEEN SLATS.

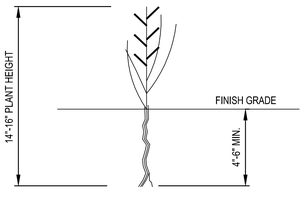
## 3 DETAIL - SAND FENCE WITH POST
NTS




## 4 DETAIL - SEAWARD FACE OF DUNE PLANTING LAYOUT
NTS




## 5 DETAIL - CAPE AMERICAN BEACH GRASS
NTS




## 6 DETAIL - SPARTINA PATENS-SALT MEADOW CORDGRASS
NTS

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | ACTION | DATE | BY |
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| | | | |

ISSUE/SUBMITTAL DATE: 95% - 12 SEP 2024
SOLICITATION NUMBER: -
CONTRACT NUMBER: -
DES BY: ADD
REVIEWED BY: RMK
DWN BY: ADD
CHD BY: DAA
PLOT SCALE: AS SHOWN
DWG. SIZE: 30"x42"
FILE NAME: C502-DETAILS.dgn

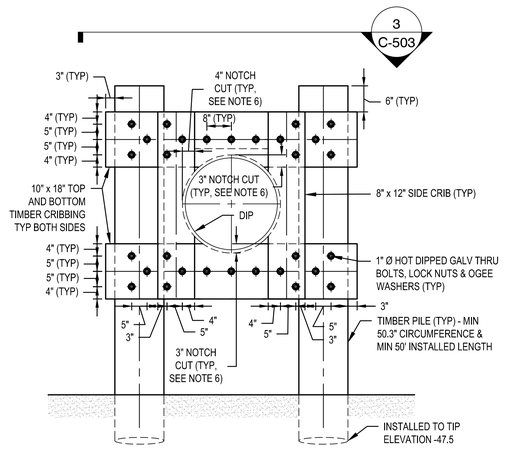
U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

BEACH NOURISHMENT
INITIAL CONSTRUCTION

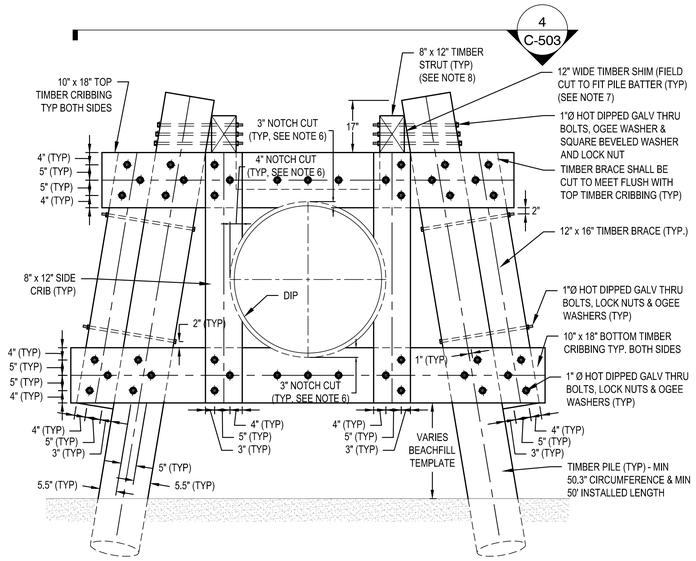
HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

DETAILS - DUNE PLANTING AND SAND FENCE

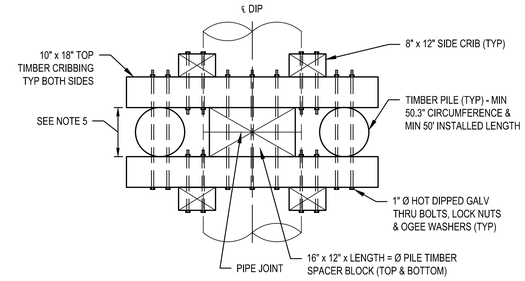
SHEET NUMBER
C-502




1 DETAIL - 24 INCH DIA. PIPE SUPPORT SYSTEM (TYPE A)
NTS



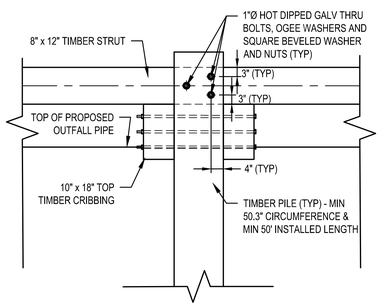

2 DETAIL - 48 INCH DIA. PIPE SUPPORT SYSTEM (TYPE B)
NTS



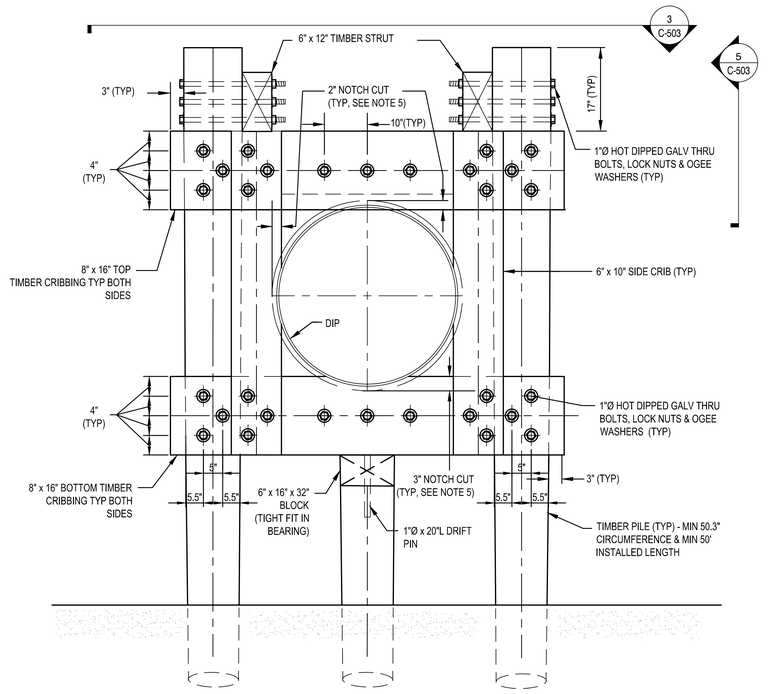

3 SECTION - 24 INCH
NTS




4 SECTION - 48 INCH
NTS




5 SECTION - 48 INCHES
NTS




6 DETAIL - 48 INCHES DIA. PIPE SUPPORT SYSTEM UNDER DUNE (TYPE C)
NTS

## NOTES:

1. FOR GENERAL NOTES AND LEGEND, SEE SHEET G-001.
2. ALL NEW PILES SHALL BE MIN CIRCUMFERENCE OF 50.3" AND MIN 50' INSTALLED LENGTH.
3. ALL DIP PIPE DIAMETERS REFER TO INNER PIPE DIMENSIONS.
4. LENGTH OF ALL BOLTS SHALL BE SIZED SUCH THAT NO MORE THAN 1" OF BOLT PROTRUDES BEYOND NUTS. SEE SPECIFICATIONS FOR ADDITIONAL DETAILS.
5. THE NEW PILES SHALL BE SPACED TO ENSURE THAT THE PIPE JOINTS ARE LOCATED WITHIN THE PILE BENT SYSTEM. THE O.D. OF THE PIPE BELL SHALL BE PLACED IN CONTACT WITH THE SEAWARD MOST TIMBER CRIBBING MEMBERS OF EACH PILE BENT.
6. CUT NOTCH TO FIT EXACT CIRCUMFERENCE OF PIPE (SEE CONTRACT SPECIFICATIONS).
7. THE THICKNESS OF THE SHIM AT THE THINNEST END SHALL NOT BE LESS THAN 1".
8. THE TIMBER STRUTS SHALL BE SPLICED BETWEEN PILE BENTS. THE MINIMUM DISTANCE OF SPLICE SHALL BE 2.5' FROM THE O.D. OF THE PILE. SEE SPECIFICATIONS FOR STRUT SPLICE REQUIREMENTS.
9. ALL THE TIMBER DIMENSIONS SHOWN ARE ROUGH CUT AND TIMBERS SHALL BE PROVIDED TO MATCH THE ROUGH CUT DIMENSIONS.
10. ALL BOLTS SHALL HAVE LOCK NUTS INSTALLED.
11. MAINTAIN FLOW THROUGH ALL MODIFIED OUTFALL STRUCTURES WITHIN PROJECT LIMITS FOR THE ENTIRE CONTRACT DURATION. THIS INCLUDES, BUT IS NOT LIMITED TO, PERIODICALLY EXCAVATING OUTFALL DISCHARGES THAT BECOME COVERED WITH FILL. DO NOT DAMAGE EXISTING OUTFALL DRAINAGE FEATURES SHOWN ON THE DRAWINGS. DAMAGES CAUSED DURING CONSTRUCTION ACTIVITIES SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE GOVERNMENT.
12. THE DIP MECHANICAL JOINT RESTRAINT (WEDGE TYPE) SHALL BE INSTALLED ON THE LANDWARD SIDE OF BOTH THE SEAWARD MOST PIPE SUPPORT STRUCTURE AND LANDWARD MOST PIPE SUPPORT STRUCTURE CONSTRUCTED FOR EACH OUTFALL.
13. REMOVE EXISTING PILE BENTS AS SHOWN ON SHEET C-101 AND BEGIN NEW PIPE SUPPORT SYSTEM AT THIS LOCATION, UNLESS OTHERWISE DIRECTED BY THE COR.
14. THE SEAWARD MOST PILES SHALL EXTEND VERTICALLY A MINIMUM OF TWO (2) FEET ABOVE MEAN HIGH WATER.
15. BOLT HOLES SHALL BE A MAXIMUM OF 1/16" LARGER THAN THE BOLT DIAMETER. OVER-SIZING/OVER-DRILLING FOR JOINT FITMENT IS NOT PERMITTED.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

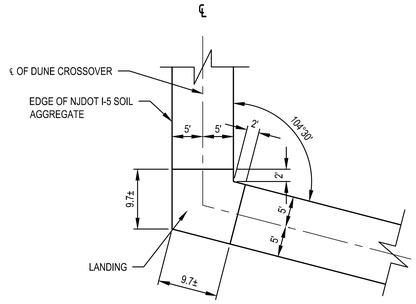
| MARK | ACTION | DESCRIPTION | DATE | BY |
|---|---|---|---|---|
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DES BY: ADD
DRN BY: ADD
CKD BY: DAA
REVIEWED BY: REVIEWED BY
PLOT SCALE: -
ISSUE/SUBMITTAL DATE: 35% - 12 SEPT 2024
SOLICITATION NUMBER: -
CONTRACT NUMBER: -
DWG. SIZE: 22"x34"
FILE NAME: C-503_DETAILS_OUTFALL.dwg

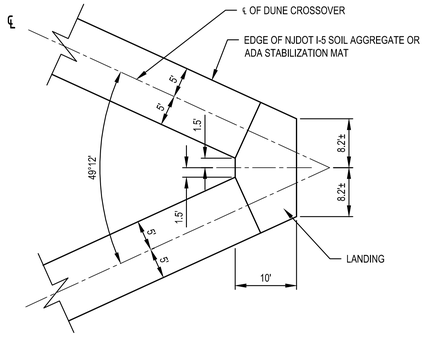
U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

BEACH NOURISHMENT
INITIAL CONSTRUCTION
HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY
DETAILS - OUTFALL

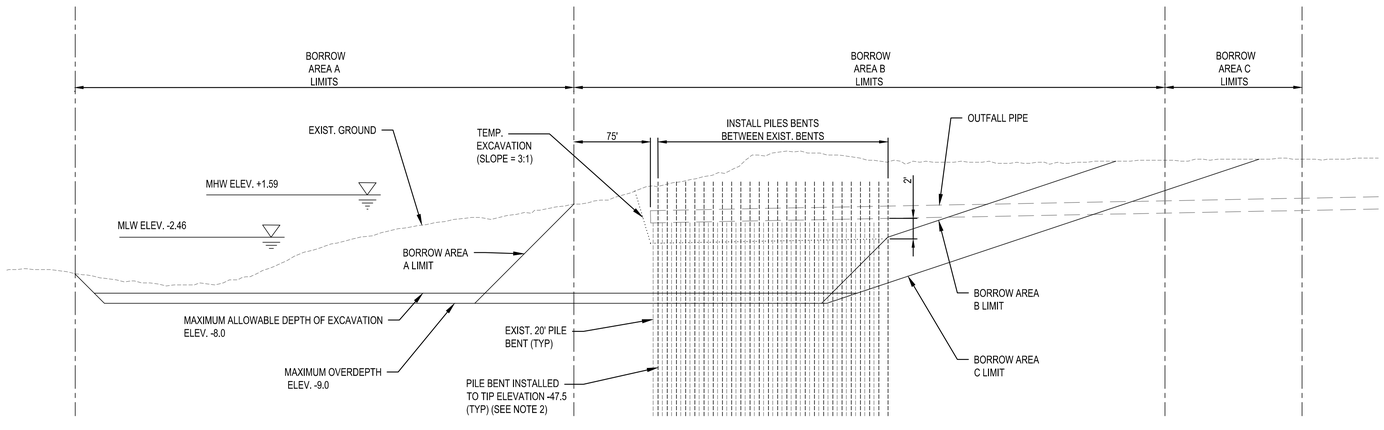
SHEET NUMBER
C-503



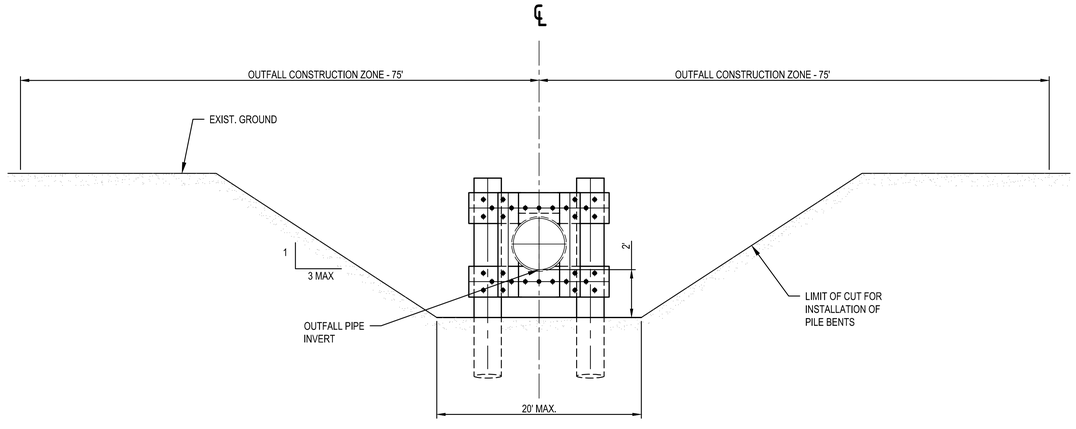

1 DETAIL - ADA CROSSOVER ANGLED CORNER
NTS



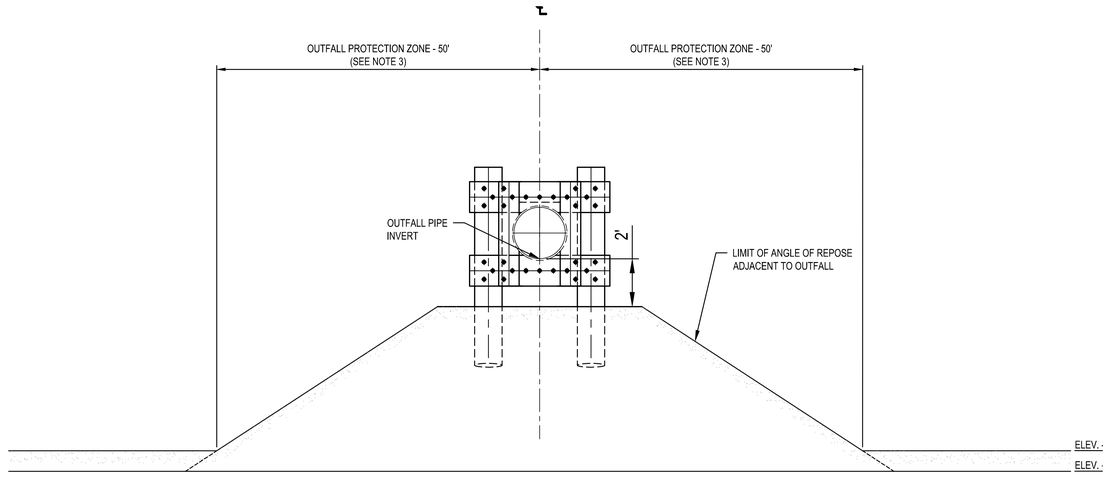

2 DETAIL - ADA CROSSOVER SWITCHBACK
NTS




3 PROFILE - OUTFALL CONSTRUCTION AND PROTECTION
H: 0 60 120
V: 0 6 12
SCALE IN FEET




4 DETAIL - OUTFALL CONSTRUCTION
NTS




5 DETAIL - OUTFALL PROTECTION
NTS

NOTES:

1. FOR GENERAL NOTES AND LEGEND, SEE SHEET G-003.
2. FOR PILE BENT QUANTITIES OF EACH OUTFALL, SEE SHEETS C-105 TO C-108 AND SHEETS C-310 TO C-313.
3. NO MECHANICAL EQUIPMENT TO BE USED ADJACENT TO OUTFALL PIPE STRUCTURE.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | ACTION | DESCRIPTION | DATE | BY |
|---|---|---|---|---|
| | | | | |

| | | | |
|---|---|---|---|
| DWN BY: ADD | DES BY: ADD | ISSUE/SUBMITTAL DATE: 95% - 13 SEPT 2024 | |
| CHK BY: JAA | REVIEWED BY: BMB | SOLICITATION NUMBER: - | CONTRACT NUMBER: - |
| | PLOT SCALE: | DWG. SIZE: 30"x42" | FILE NAME: C504 DETAILS_MISC..dwg |

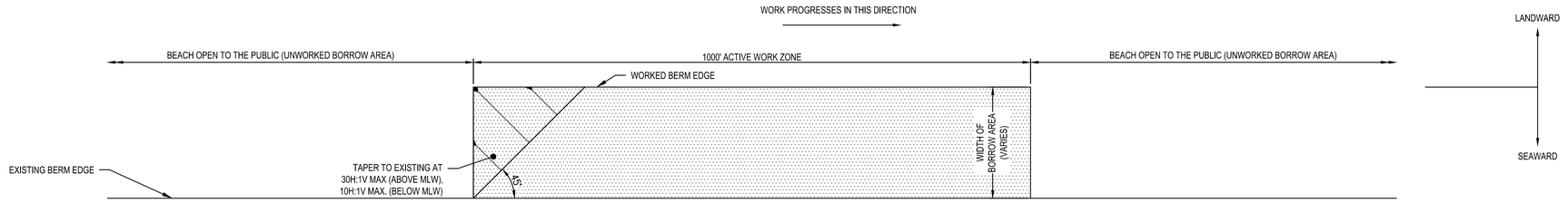
U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

BEACH NOURISHMENT
INITIAL CONSTRUCTION

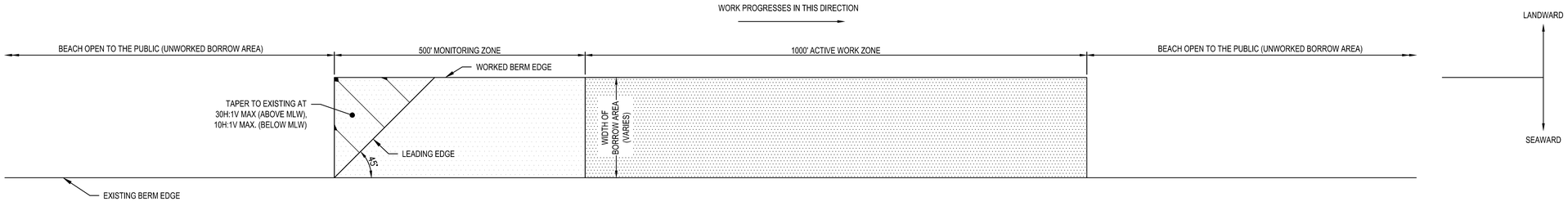
HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY

DETAILS - MISC.
-

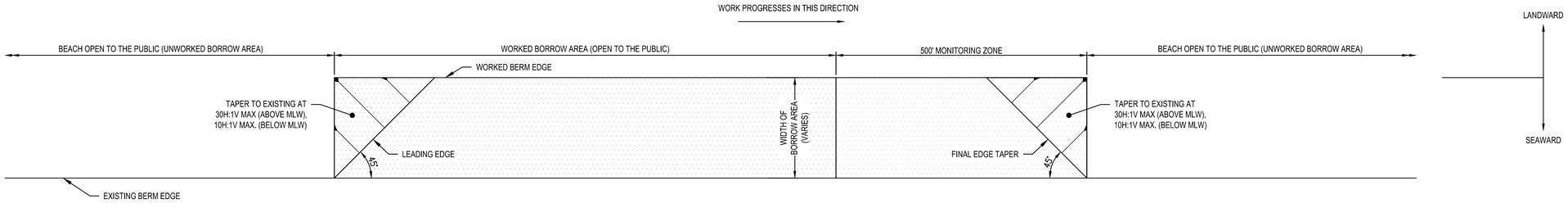
SHEET NUMBER
C-504




1 PLAN - BORROW AREA (INITIAL 1000-FOOT ZONE)
NTS




2 PLAN - BORROW AREA WITH MONITORING ZONE
NTS




3 PLAN - BORROW AREA RETURNED TO PUBLIC USE
NTS

NOTES:

1. FOR GENERAL NOTES AND LEGEND, SEE SHEET C-001.
2. DIRECTION OF WORK AS SHOWN IS INTENDED TO CONVEY RELATIONSHIP BETWEEN ACTIVE WORK ZONE, MONITORING ZONE, AND NON-WORK ZONES. IF WORK PROCEEDS IN OTHER DIRECTION, ZONES WILL ALSO BE ORDERED IN OTHER DIRECTION.
3. DETAIL 3 SHALL BE USED AT END OF WORK OR ANYWHERE THAT WORK WILL NO LONGER PROCEED IN A GIVEN DIRECTION, E.G. IF CONTRACTOR CHANGES DIRECTION OF BORROW.

US Army Corps of Engineers
PHILADELPHIA DISTRICT

| MARK | ACTION | DESCRIPTION | DATE | BY |
|---|---|---|---|---|
| - | - | - | - | - |

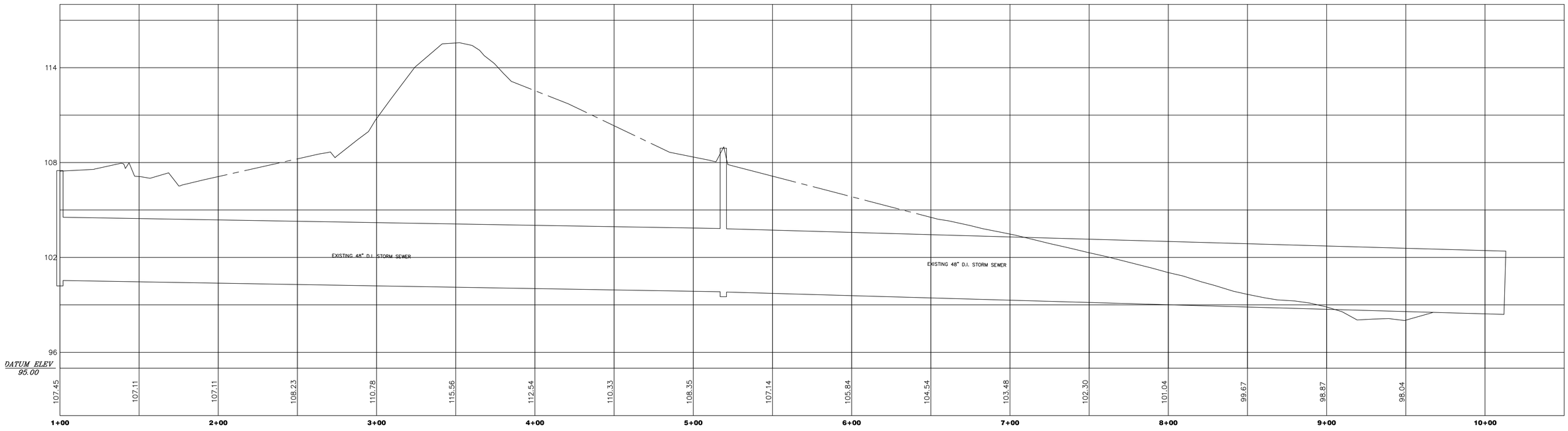
| | | | |
|---|---|---|---|
| DWN BY: ADD | DES BY: ADD | ISSUE/SUBMITTAL DATE: 95% - 12 SEP 2024 | |
| CHD BY: DAA | REVIEWED BY: RMK | SOLICITATION NUMBER: - | CONTRACT NUMBER: - |
| DWG. SIZE: 30"x42" | PLOT SCALE: - | FILE NAME: C505 DETAILS - BORROW AREA DREDGING.dgn | |

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA
DISTRICT

HEREFORD INLET TO CAPE MAY INLET
CAPE MAY COUNTY, NEW JERSEY
BEACH NOURISHMENT
INITIAL CONSTRUCTION
DETAILS - BORROW AREA DREDGING

SHEET NUMBER
C-505




**NOTES:** (SEE COVER SHEET FOR COMPLETE PROJECT NOTES)

LOCATION OF UTILITIES IS BASED UPON BEST AVAILABLE INFORMATION AND PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY THE ACTUAL LOCATIONS IN THE FIELD. THE LEAST OF WHICH SHALL BE BY TELEPHONING GARDEN STATE UNDERGROUND PLANT LOCATION SERVICE AT 1-800-272-1000.

DATUM: NATIONAL GEODETIC VERTICAL DATUM ADJUSTMENT OF 1929. +100

**LEGEND**

- CONCRETE
- LANDSCAPE STONE
- PAVEMENT SEAM
- SANITARY LINE
- GAS LINE
- WATER LINE
- FENCE
- FIRE HYDRANT
- TREE
- SANITARY MANHOLE
- STORM MANHOLE
- BUSH/SHRUB
- R.O.W. LINE
- REGULATORY/ STREET SIGN
- UTILITY POLE
- WATER VALVE
- GAS VALVE
- WATER METER
- SEWER CLEAN OUT
- GAS SERVICE
- SEWER VENT
- STORM INLET
- UTILITY POLE w/STREET LIGHT
- GUY WIRE

| REV. | DESCRIPTION | DATE | APP. BY |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Ralph Petrella, Jr. 3/03/16
DATE

**RALPH PETRELLA, JR.**
N.J. PROFESSIONAL ENGINEER & LAND SURVEYOR LIC. #23226

van note-harvey associates
consulting engineers, planners, & land surveyors
777 Alexander Road • Princeton, N.J. 08540
(609) 987-2323 Voice (609) 987-0005 Fax
211 Bayberry Drive • Cape May Courthouse, N.J. 08210
(609) 465-2600 Voice (609) 465-8028 Fax

PLAN OF EXISTING CONDITIONS FOR:

# 21ST AVENUE OUTFALL

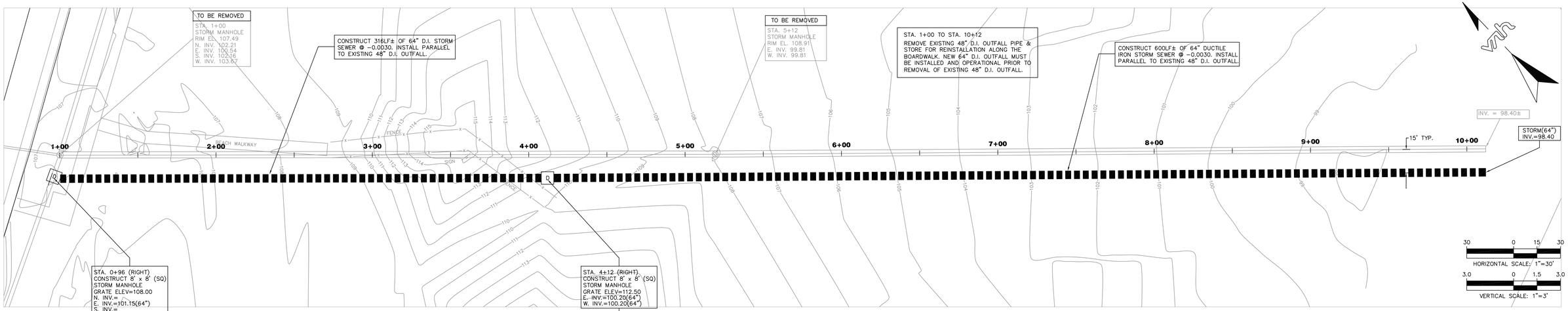
STATION 1+0 TO STATION 10+12

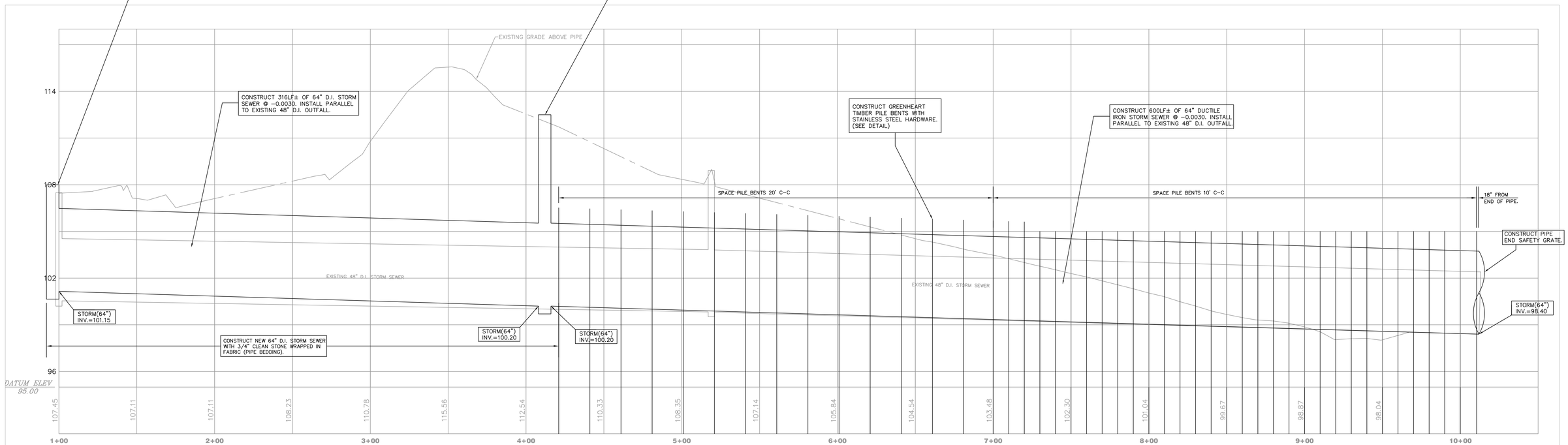
## CITY OF NORTH WILDWOOD

CAPE MAY COUNTY, N.J.

| DRAWN BY: | FIELD BOOK | ORDER NO. | FILE NO. | SHEET NO. |
|---|---|---|---|---|
| BMP | | 42793 | | 1.53 |
| CHECKED BY: | PAGE | 400-21 | | |

REFERENCE DRWAING NOT FOR CONSTRUCTION




STATION 0+96± TO STATION 10+12±
CONSTRUCT:

| QTY. | UNIT | DESCRIPTION |
|---|---|---|
| 916 | L.F. | 64" DUCTILE IRON STORM SEWER |
| 84 | L.F. | 64" DUCTILE IRON STORM SEWER (I/W DIRECTED) |
| 2 | EA. | 8' x 8'(SQ.) STORM MANHOLE W/ LOCKING FRAME& COVER |
| 46 | EA. | PILE BENTS |
| 4 | EA. | PILE BENTS (I/W DIRECTED) |
| 1 | EA. | PIPE END SAFETY GRATE |

**NOTES:** (SEE COVER SHEET FOR COMPLETE PROJECT NOTES)

LOCATION OF UTILITIES IS BASED UPON BEST AVAILABLE INFORMATION AND PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY THE ACTUAL LOCATIONS IN THE FIELD. THE LEAST OF WHICH SHALL BE BY TELEPHONING GARDEN STATE UNDERGROUND PLANT LOCATION SERVICE AT 1-800-272-1000.

DATUM: NATIONAL GEODETIC VERTICAL DATUM ADJUSTMENT OF 1929. +100

**LEGEND**

- CONCRETE
- LANDSCAPE STONE
- PROPOSED CONCRETE, 4" THICK
- PROPOSED REINFORCED CONCRETE, 6" THICK
- PROPOSED REINFORCED CONCRETE, 8" THICK
- PROPOSED REINFORCED STAMPED CONCRETE 8" THICK
- PROPOSED TIMBER/ COMPOSITE WALKWAY
- PROPOSED PAVERS
- PAVEMENT SEAM
- SANITARY LINE
- GAS LINE
- WATER LINE
- FENCE
- FIRE HYDRANT
- TREE
- BUSH/SHRUB
- R.O.W. LINE
- REGULATORY/ STREET SIGN
- UTILITY POLE
- WATER VALVE
- GAS VALVE
- WATER METER
- SEWER CLEAN OUT
- GAS SERVICE
- SEWER VENT
- STORM INLET
- UTILITY POLE w/STREET LIGHT
- GUY WIRE
- STORM MANHOLE
- SANITARY MANHOLE

| REV. | DESCRIPTION | DATE | APP. BY |
|---|---|---|---|
| | | | |
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van note-harvey associates
consulting engineers, planners, & land surveyors
777 Alexander Road • Princeton, N.J. 08540
(609) 987-2323 Voice • (609) 987-0005 Fax
211 Bayberry Drive • Cape May Courthouse, N.J. 08210
(609) 465-2600 Voice • (609) 465-8028 Fax

PLAN FOR REPLACEMENT OF:

# 21ST AVENUE OUTFALL

STATION 1+0 TO STATION 10+12

## CITY OF NORTH WILDWOOD

CAPE MAY COUNTY, N.J.

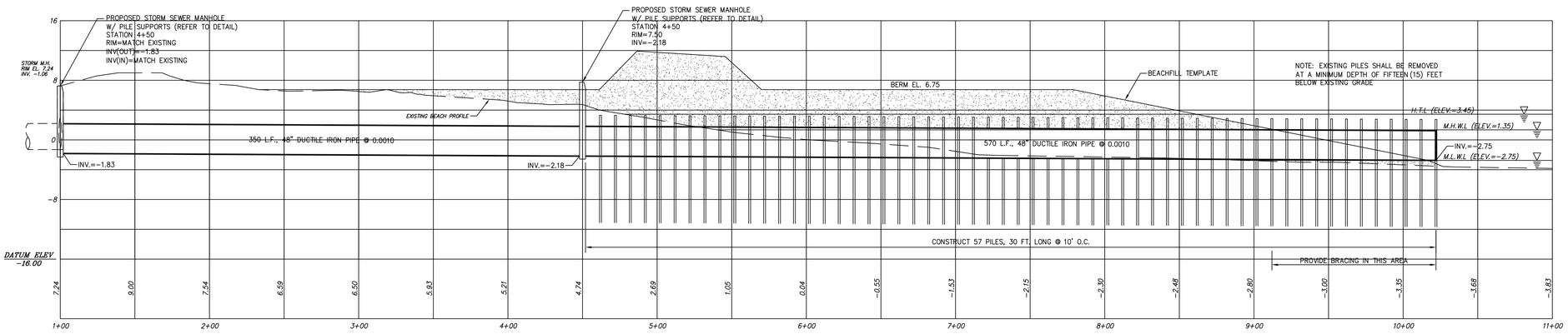
3/03/16
DATE

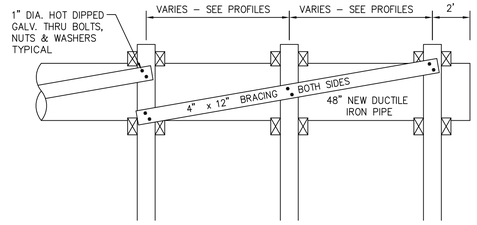
**RALPH PETRELLA, JR.**
N.J. PROFESSIONAL ENGINEER & LAND SURVEYOR LIC. #23226

| DRAWN BY: | FIELD BOOK | ORDER NO. | FILE NO. | SHEET NO. |
|---|---|---|---|---|
| BMP | | 42793 | | 2.57 |
| CHECKED BY: | PAGE | 400-21 | | |

REFERENCE DRWAING NOT FOR CONSTRUCTION

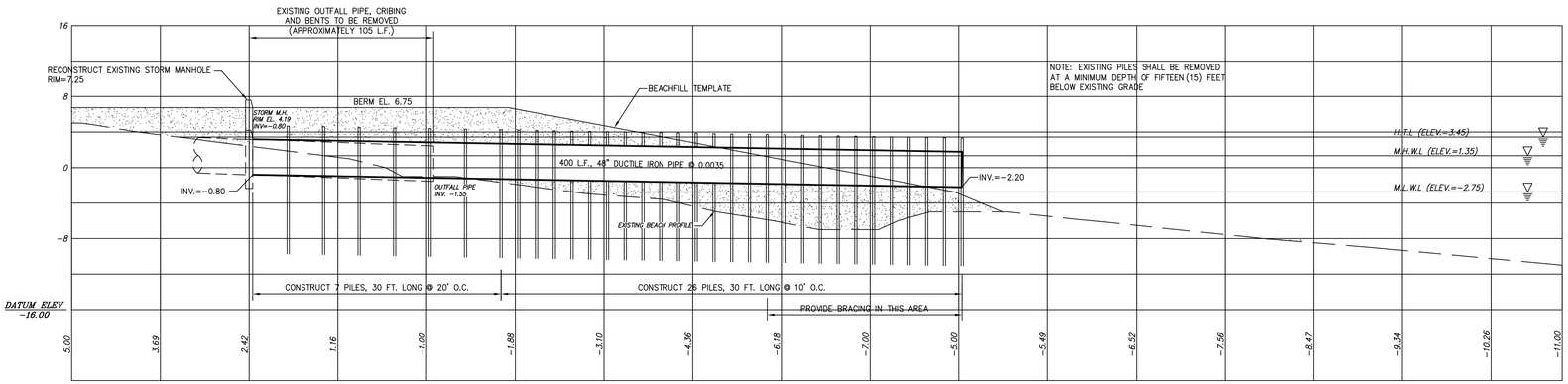
## 2ND AVENUE OUTFALL

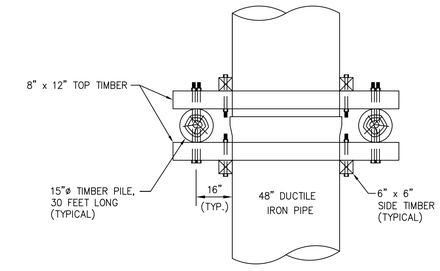



PIPE BENT BRACING DETAIL

N.T.S.

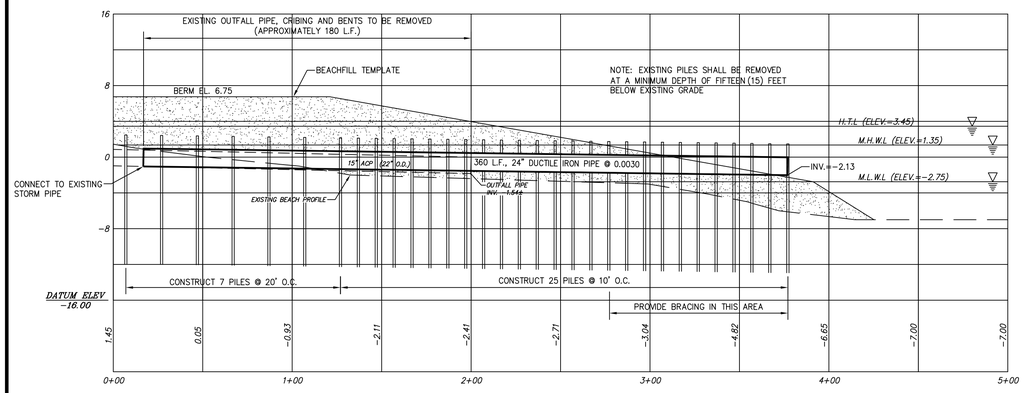


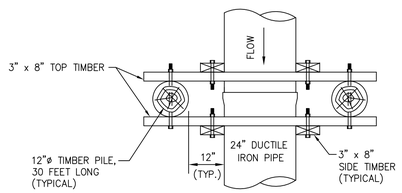




SECTION

N.T.S.

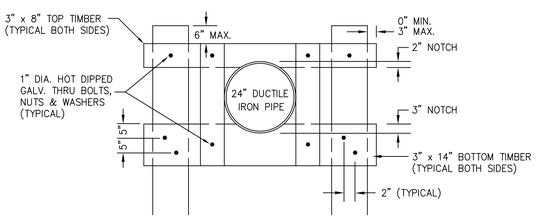
## 21ST AVENUE OUTFALL




SECTION

N.T.S.

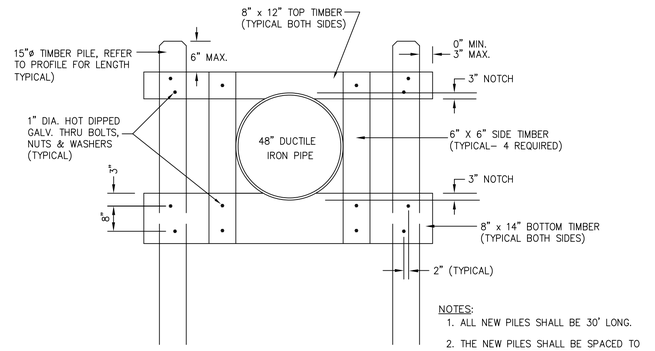



NOTES:

1. ALL NEW PILES SHALL BE 30' LONG.
2. THE NEW PILES SHALL BE SPACED TO ENSURE THAT THE PIPE JOINTS ARE LOCATED WITHIN THE PIPE SUPPORT SYSTEMS.

24" DIA. PIPE SUPPORT SYSTEM DETAIL

N.T.S.




NOTES:

1. ALL NEW PILES SHALL BE 30' LONG.
2. THE NEW PILES SHALL BE SPACED TO ENSURE THAT THE PIPE JOINTS ARE LOCATED WITHIN THE PIPE SUPPORT SYSTEMS.

48" DIA. PIPE SUPPORT SYSTEM DETAIL

N.T.S.

## OPLAR AVENUE OUTFALL

VERTICAL GRAPHIC SCALE

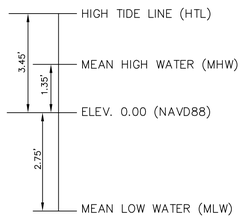
8 0 4 8 16 32

( IN FEET )
1 inch = 8 ft.

HORIZONTAL GRAPHIC SCALE

40 0 20 40 80 160

( IN FEET )
1 inch = 40 ft.




RANGE OF TIDES HEREFORD INLET (NAVD 1988)

REMINGTON, VERNICK & WALBERG ENGINEERS
4907 NEW JERSEY AVENUE
WILDWOOD, NJ 08260
(609) 522-5150, FAX (609) 522-5313
WEB SITE ADDRESS : WWW.RVE.COM
~ENGINEERING EXCELLENCE SINCE 1901~

MARC A. DEBLASIO
NJ PROFESSIONAL ENGINEER LIC. No. 41599
DATE

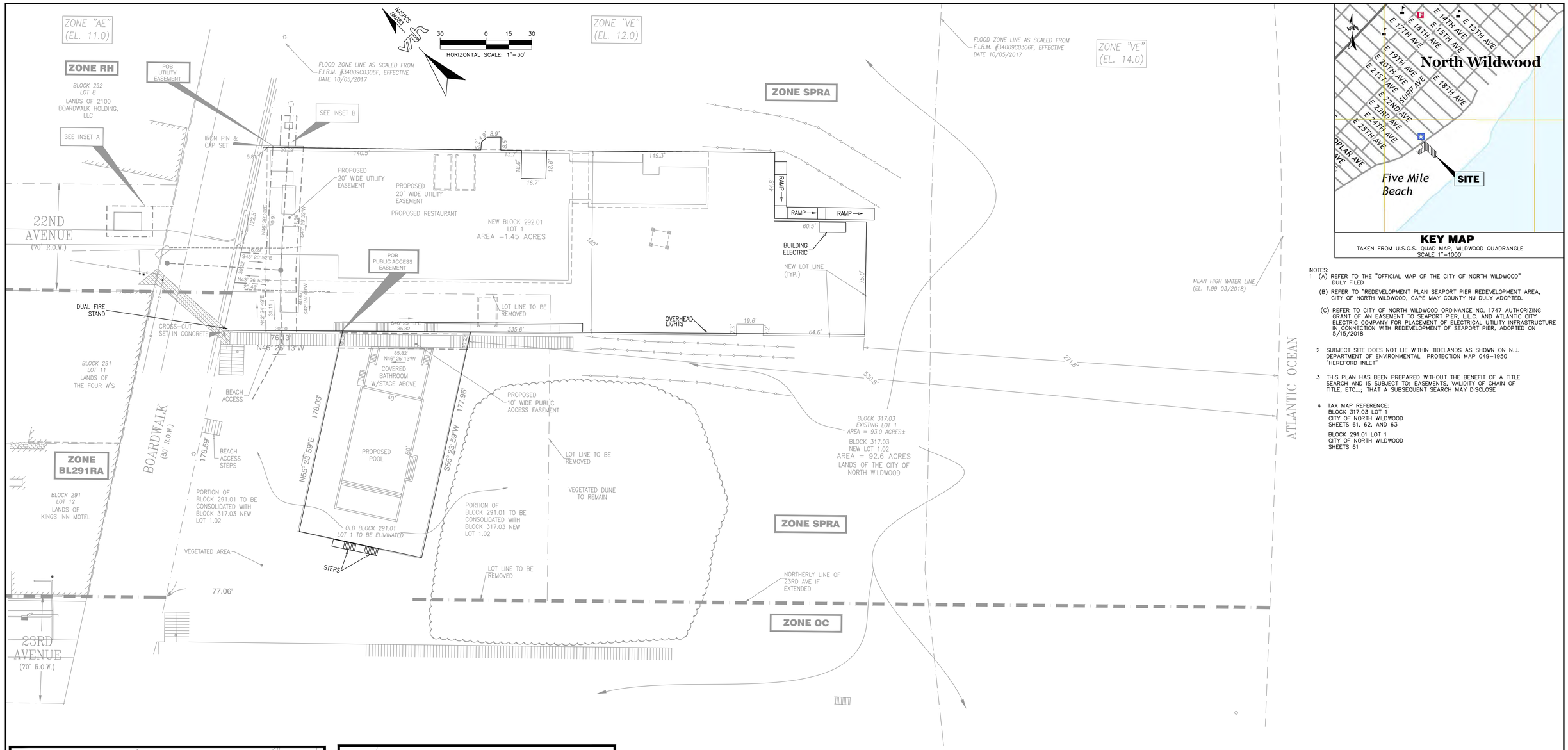
| REV. | DATE: | DESCRIPTION | BY | APPR. |
|---|---|---|---|---|
| 1 | 12/10/07 | REVISED TO ADD HTL LINE | MWA | MAD |
| 2 | 6/26/08 | REVISED TO ADD SOUTHERN 2ND AVE. OUTFALL | MWA | MAD |
| 3 | 10/23/08 | BCE/LARP DUNE REVISIONS | MWA | MAD |

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF ENGINEERING & CONSTRUCTION
BUREAU OF COASTAL ENGINEERING

# BEACH OUTFALL EXTENSION AND DETAILS
## NORTH WILDWOOD BEACH REPLENISHMENT PROJECT
## CITY OF NORTH WILDWOOD
## CAPE MAY COUNTY, NEW JERSEY

| DRAWN BY: MWA | APPROVALS | | | PROJECT NO. | 4174-04 |
|---|---|---|---|---|---|
| CHECKED BY: MAD | APPROVED BY | TITLE | DATE | | |
| SCALE: NOTED | | | | SHEET 10 OF 14 | |
| DATE: 7/11/07 | | | | DWG. NO. E-35-14 | |

REFERENCE DRWAING NOT FOR CONSTRUCTION







**KEY MAP**
TAKEN FROM U.S.G.S. QUAD MAP, WILDWOOD QUADRANGLE
SCALE 1"=1000'

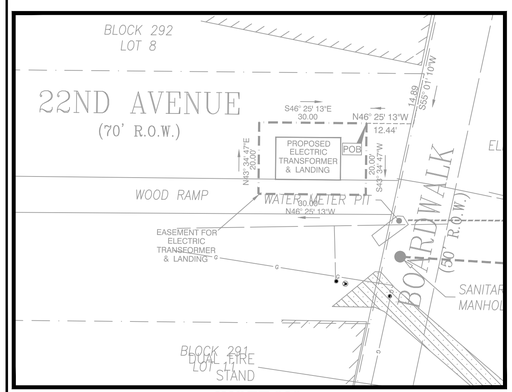
NOTES:
1 (A) REFER TO THE "OFFICIAL MAP OF THE CITY OF NORTH WILDWOOD" DULY FILED
(B) REFER TO "REDEVELOPMENT PLAN SEAPORT PIER REDEVELOPMENT AREA, CITY OF NORTH WILDWOOD, CAPE MAY COUNTY NJ DULY ADOPTED.
(C) REFER TO CITY OF NORTH WILDWOOD ORDINANCE NO. 1747 AUTHORIZING GRANT OF AN EASEMENT TO SEAPORT PIER, L.L.C. AND ATLANTIC CITY ELECTRIC COMPANY FOR PLACEMENT OF ELECTRICAL UTILITY INFRASTRUCTURE IN CONNECTION WITH REDEVELOPMENT OF SEAPORT PIER, ADOPTED ON 5/15/2018

2 SUBJECT SITE DOES NOT LIE WITHIN TIDELANDS AS SHOWN ON N.J. DEPARTMENT OF ENVIRONMENTAL PROTECTION MAP 049-1950 "HEREFORD INLET"

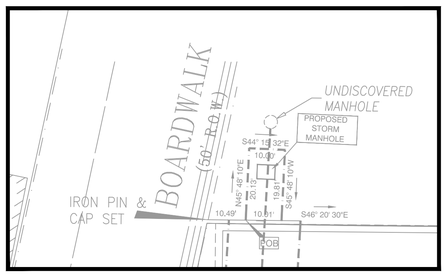
3 THIS PLAN HAS BEEN PREPARED WITHOUT THE BENEFIT OF A TITLE SEARCH AND IS SUBJECT TO: EASEMENTS, VALIDITY OF CHAIN OF TITLE, ETC...; THAT A SUBSEQUENT SEARCH MAY DISCLOSE

4 TAX MAP REFERENCE:
BLOCK 317.03 LOT 1
CITY OF NORTH WILDWOOD
SHEETS 61, 62, AND 63

BLOCK 291.01 LOT 1
CITY OF NORTH WILDWOOD
SHEETS 61




**INSET "A"**
SCALE 1"=20'
SEE NOTE 1 (C)




**INSET "B"**
SCALE 1"=20'

## LEGEND

ZONE "VE" (EL. 12.0) — *FLOOD ZONE DESIGNATION TAKEN FROM FLOOD INSURANCE RATE MAP (F.I.R.M.) MAP NUMBER #34009C0306F, EFFECTIVE DATE 10/05/2017*

ZONE OC — *ZONING DISTRICT DESIGNATIONS TAKEN FROM CITY OF NORTH WILDWOOD ZONING MAP DATED 12/2015*

*ZONING DISTRICT LIMIT LINE*

*EXISTING PROPERTY LINE / BLOCK LIMIT LINE*

| DESCRIPTION | DATE | DFT.BY | CKD.BY |
|---|---|---|---|
| | | | |

7/02/18
DATE

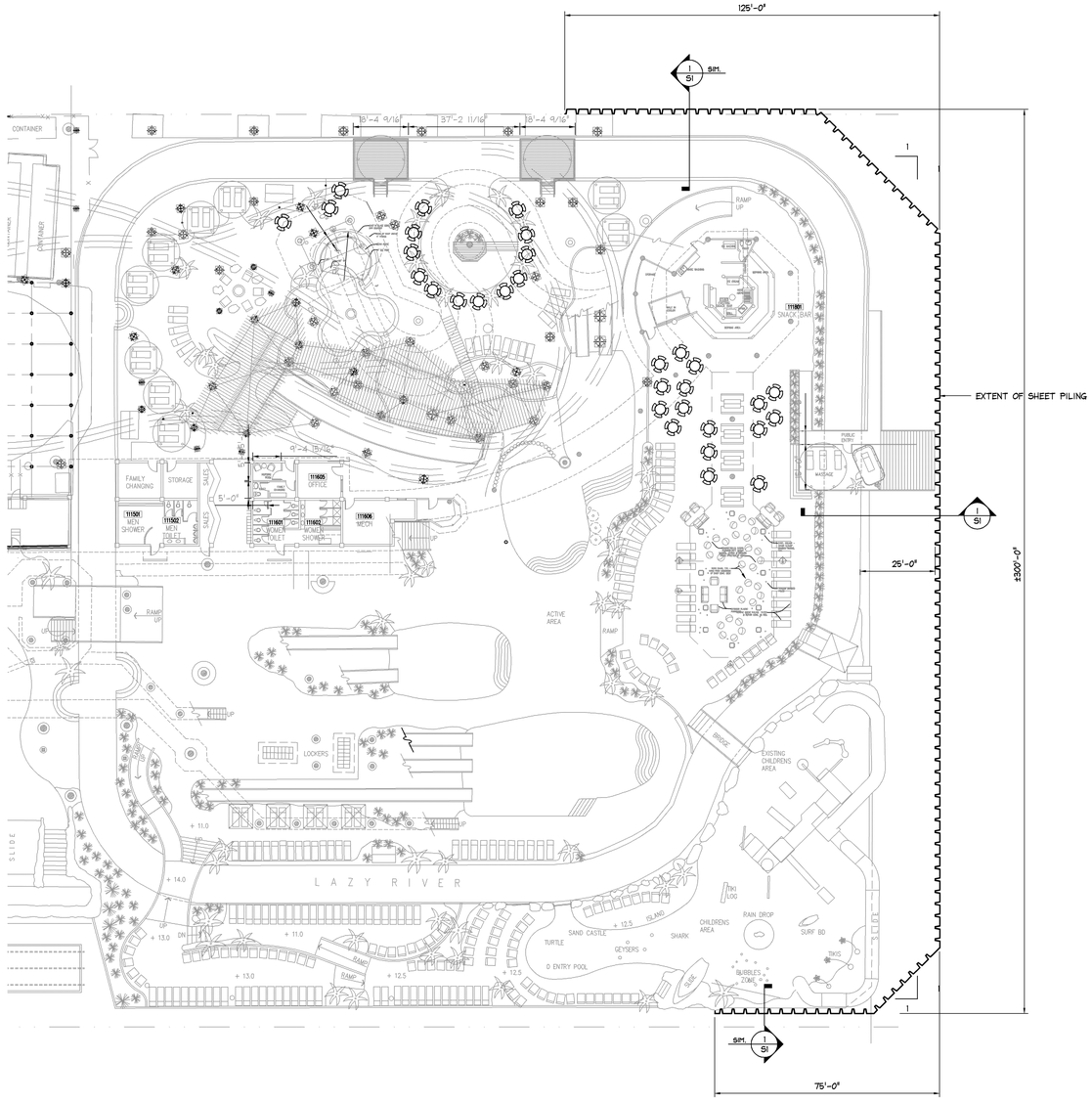
**RALPH PETRELLA, JR.**
**N.J. PROFESSIONAL ENGINEER & LAND SURVEYOR**
**LIC. NO. GB 23226**

**van note-harvey associates, inc.**
**consulting engineers, planners & land surveyors**
103 College Road East • Princeton, NJ 08540 • 609-987-2323
211 Bayberry Drive • Cape May Court House, NJ 08210 • 609-465-2600
**www.vannoteharvey.com** **Certificate of Authorization** No. 24GA28271300
- Since 1894 -

PLAN OF PIER STRUCTURE PERIMETER ASBUILT:
**SEAPORT PIER**
BLOCK 291.01 LOT 1 AND
AND A PORTION OF BLOCK 317.03 LOT 1
**CITY OF NORTH WILDWOOD**
CAPE MAY COUNTY, N.J.

| DRAWN BY / DATE | FIELD BK | ORDER No. | FILE No. | SHEET No. |
|---|---|---|---|---|
| BMP | | 43721-400-21 | | 1 |
| CHECKED BY / DATE | PAGE | | | |

REFERENCE DRWAING NOT FOR CONSTRUCTION

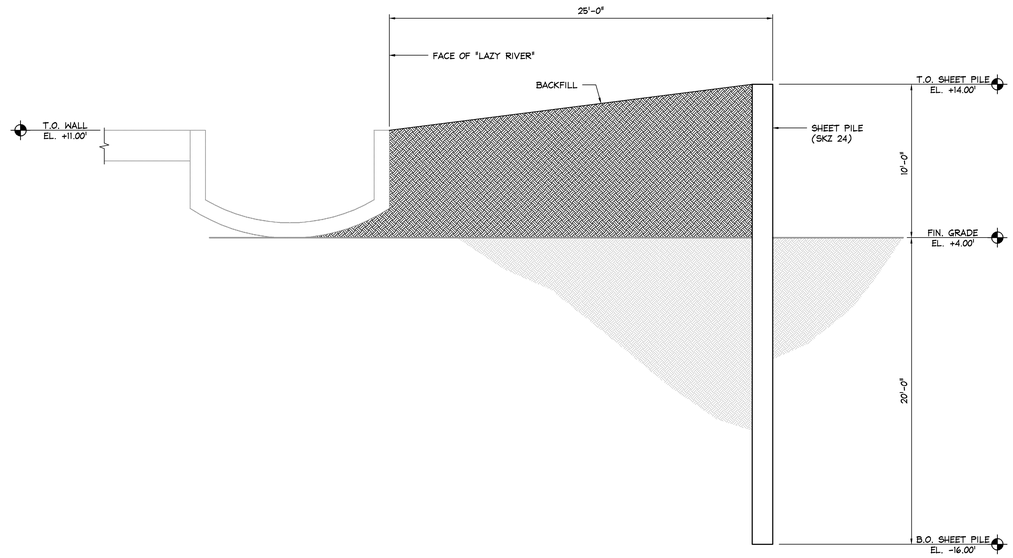



## PLAN OF SHEET PILING

SCALE : 1/4" = 1'-0"

NOTES:

1) STEEL SHEET PILING SHALL BE TYPE "SKZ 24" AS MANUFACTURED BY "SKYLINESTEEL". SEE ATTACHED SPEC SHEET FOR PROPERTIES & DIMENSIONS.



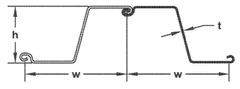

Section 1 / S1

skylinesteel

**Technical Hotline: 1-866-875-9546**
engineering@skylinesteel.com
www.skylinesteel.com
03/08

# SKZ/SCZ

SKZ/SCZ Cold Formed Steel Sheet Piling




SKZ/SCZ

| SECTION | Width (w) in (mm) | Height (h) in (mm) | Thickness (t) k/in (kN/m) | Cross Sectional Area in²/ft (cm2/m) | WEIGHT Pile lb/ft (kg/m) | WEIGHT Wall lb/ft² (kg/m²) | Section Modulus in³/ft (cm³/m) | Moment of Inertia in⁴/ft (cm⁴/m) | COATING AREA Both Sides ft²/ft (m²/m) | COATING AREA Coating Area ft²/ft² (m²/m²) |
|---|---|---|---|---|---|---|---|---|---|---|
| SKZ 20 | 28.50 723.9 | 16.00 406.4 | 0.315 8.0 | 6.00 136.20 | 48.24 71.79 | 20.31 98.17 | 31.89 1704 | 253.51 34616 | 7.60 2.32 | 1.60 1.60 |
| SKZ 22 | 28.50 723.9 | 16.00 406.4 | 0.335 9.5 | 6.30 145.40 | 51.30 76.34 | 21.60 105.46 | 33.43 1797 | 267.40 38515 | 7.60 2.32 | 1.60 1.60 |
| SKZ 23 | 28.50 | 16.00 | 0.354 | 6.70 | 54.20 | 22.82 | 35.61 | 284.90 | 7.60 | 1.60 |
| SKZ 24 | 28.50 723.9 | 16.00 406.4 | 0.375 9.5 | 7.10 179.50 | 57.43 85.47 | 24.18 118.08 | 37.73 2028 | 301.80 41213 | 7.60 2.32 | 1.60 1.60 |
| SKZ 25 | 28.50 723.9 | 16.00 406.4 | 0.399 10.1 | 7.56 188.00 | 61.10 90.93 | 25.73 125.61 | 40.14 2158 | 321.12 43851 | 7.60 2.32 | 1.60 1.60 |

O'DONNELL & NACCARATO, INC.
STRUCTURAL ENGINEERS
111 SOUTH INDEPENDENCE MALL EAST
SUITE 950
PHILADELPHIA, PENNSYLVANIA 19106-2524
TELEPHONE: (215) 925-3788
FAX: (215) 627-9261
Project No. 1534.0059.00

Revisions

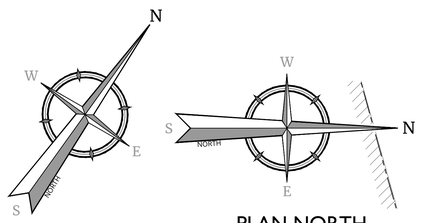
| No. | Date | Description |
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Project
EMERGENCY BULKHEAD - OCEAN OASIS @ MOREY'S PIER

Drawing:
SHEET PILING PLAN

| Designed: PAN | Checked: PAN | Sheet |
|---|---|---|
| Drawn: JJB | Date 5/16/08 | S-1 |
| Scale: As Noted | Project: 1534.0059.00 | 1 of ● |

I:\1534.0059.00 Morey\Plan\sht\sht.dwg 05/19/08 14:51 Scale = 1 = 1.00 Plotted By : dtennett
REFERENCE DRWAING NOT FOR CONSTRUCTION







PLAN NORTH

JUNIPER AVENUE

26TH AVENUE

BLOCK 257
LOT 12

EXISTING RAMP TO BE REMOVED BY CITY

RESTORATION DETAILS OF THIS AREA TO FOLLOW

PILE LABELS, TYP.

BEAM LABELS, TYP.

BM11
D BM10
BM9
BM8
C BM7
BM6
BM5
B BM4
BM3
A BM2
BM1

BLOCK LINE

GIRDER LABEL NUMBERS, TYP.

84 85 86 87 88 89 90 91 92 93

LIGHT POLE LOCATION

EXIST. CONCRETE SIDEWALK

EXIST. TIMBER POST FENCE

TOP OF SIDEWALK TO BE ADJUSTED AS REQUIRED TO MEET PROPOSED SIDEWALK AT BASE OF RAMP/STAIRS

PROPOSED RESTORED PEDESTRIAN WALKWAY (BY OTHERS)

5' (±1") FROM NORTH SIDE OF BOARDWALK GIRDER TO FIRST RISER

LIGHT POLE LOCATION

30'-0" (1:12 RUNNING SLOPE)

5'-0" LANDING

14'-0"± (1:12 RUNNING SLOPE)

7'-3"± LANDING (EL. 14.75±)

13'-9"± STAIRS

6" GAP

14'-0" LANDING

10.98
13.48
13.58
10.98
8.48
8.38
5.68
2%
5.78*
5.78*
5.58**

30'-0" (1:12 RUNNING SLOPE)
30'-0" (1:12 RUNNING SLOPE)
7'-0" LANDING
5'-0" LANDING
72'-0"

DELETE PROPOSED STAIRS, THIS LOC.

MASSAGE SAND TO BE FLUSH WITH TOP OF SIDEWALK

POUR SIDEWALK AFTER TUNNEL CONSTRUCTION

PROPOSED VEHICLE RAMP (BY OTHERS)

5.78
5.98
5.38
5.38

CONSTRUCT NEW ADA COMPLIANT RAMP AND STAIRS

BLOCK 277
LOT 1.01

BEACH SIDE - EAST

BLOCK 277
LOT 2.01

CONSTRUCT 10'-0"± CONC. SIDEWALK W/ 6" TURNDOWN ALL AROUND, 4,000PSI, 6" THICK CONC. SIDEWALK W/ #4 @ 12" C.C. MID-DEPTH

MOREY'S PIER ENTRANCE

BOARDWALK

BLOCK 278
LOT 1.01

* TOP LANDING TO BOTTOM OF RAMP/STAIRS DESIGNED TO BE 8.97' PER COLLIERS EXISTING SURVEY'S (NAVD88 DATUM). CONTRACTOR SHALL FIELD VERIFY TOP OF NEW SIDEWALK AND RAMP/STAIRS ELEVATION WITH MOREY'S SITE ELEVATIONS. MOREY'S FIELD ELEVATIONS PER NGVD29. COLLIERS FIELD ELEVATIONS PER NAVD88.

** THESE ELEVATIONS SHOULD PROVIDE 6'-8" MINIMUM CLEARANCE UNDER THE BOARDWALK BEAM. FIELD VERIFY.

# 26TH AVENUE ADA RAMP RELOCATION AT BOARDWALK

NOTE:
THE ADA COMPLIANT RAMP SHALL BE CONSTRUCTED SO THAT NO SLOPED RAMP SECTIONS EXCEED 1:12 SLOPE AND THE RAMP CROSS-SLOPES AND LANDING CROSS-SLOPES AND TRANSVERSE SLOPES DO NOT EXCEED 2% SLOPE. ANY FIELD ADJUSTMENTS THAT ARE REQUIRED MUST CONSIDER THE ABOVE REQUIREMENTS. COORDINATE WITH THE ENGINEER ON ANY GRADE CHANGES.

10 0 10 20
SCALE : 1" = 10'


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|---|---|---|---|
| | | | |


Richard C. Maloney
NEW JERSEY LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: GE39023
COLLIERS ENGINEERING & DESIGN, INC.
N.J. C.O.A. #: 24GA27986500


BOARDWALK REHABILITATION:
OAK AVE to 26TH AVE
FOR
CITY OF WILDWOOD

PHASE II:
MAPLE± TO 26TH

CITY OF WILDWOOD
CAPE MAY COUNTY
STATE OF NEW JERSEY


Colliers Engineering & Design
RED BANK (Headquarters)
331 Newman Springs Road, Suite 203
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Phone: 732.383.1950
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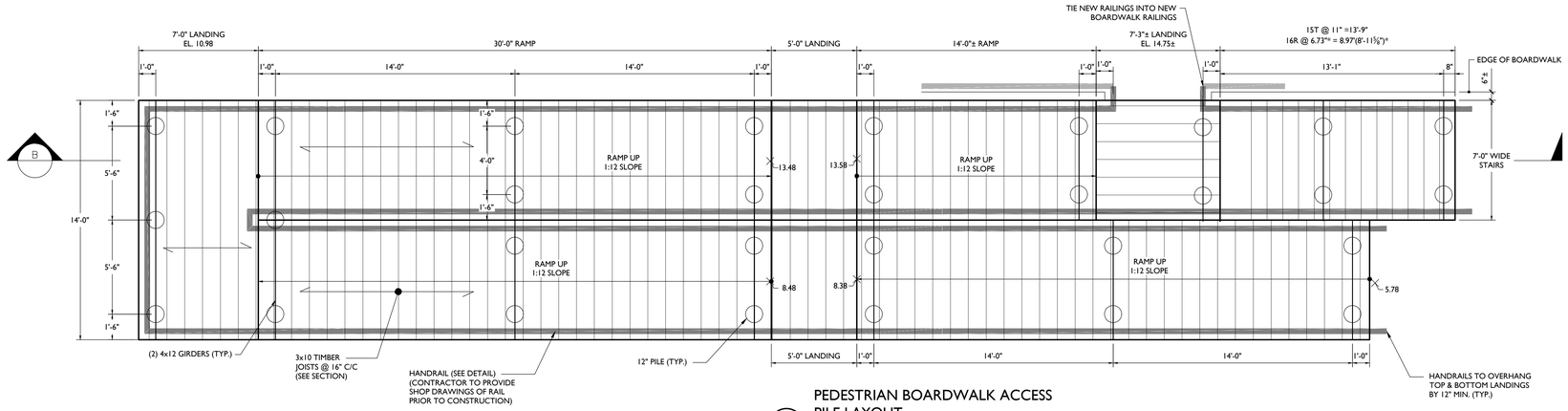

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|---|---|---|---|
| AS SHOWN | 06/05/22 | AEM | RCM |

| PROJECT NUMBER: | DRAWING NAME: |
|---|---|
| 21002353G4 | S-LAYT |

SHEET TITLE:
26TH AVE.
ADA RAMP RELOCATION

SHEET NUMBER:
RSK-1

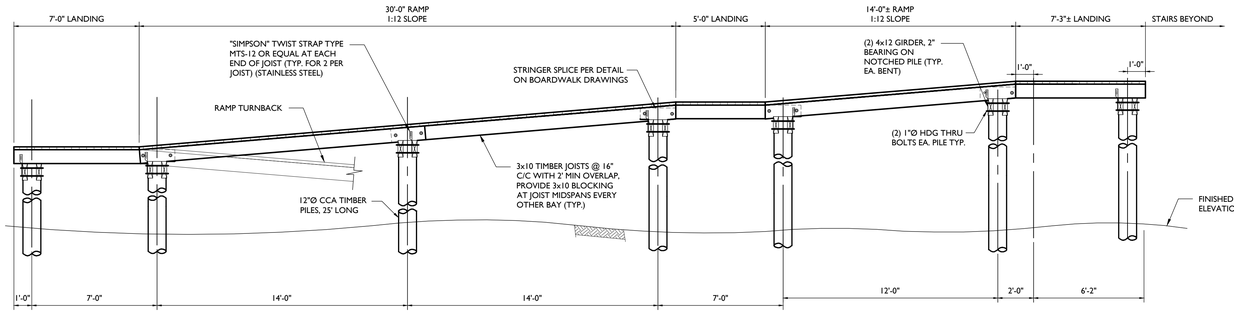

20211210235G4Bridge\Structures\Structure\S-LAYT.dwg\S-02-26th-RAMP By: ALEX.RENA
REFERENCE DRWAING NOT FOR CONSTRUCTION
NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.




## A PEDESTRIAN BOARDWALK ACCESS PILE LAYOUT

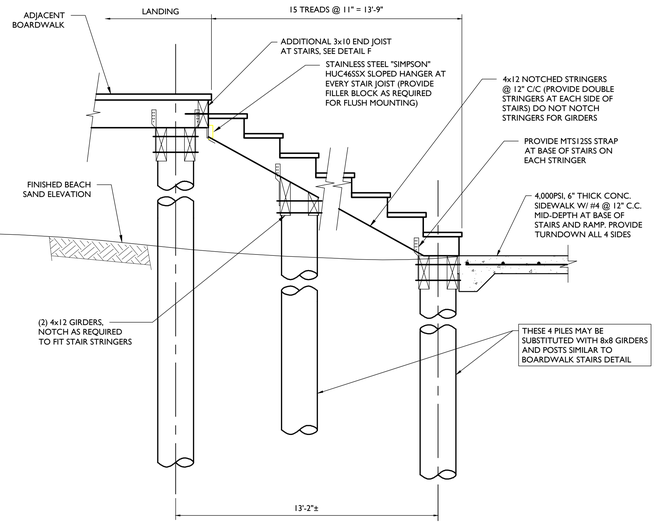
SCALE: 1/4"=1'-0"

NOTES:
1. " INDICATES THAT CONTRACTOR SHALL VERIFY ACTUAL HEIGHT REQUIRED.




## B PEDESTRIAN BEACH ACCESS TYPICAL SECTION

SCALE: 1/4"=1'-0"



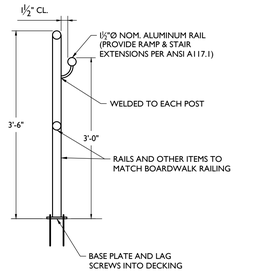

## C PEDESTRIAN BEACH ACCESS - STAIRS TYPICAL SECTION

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

NOTES:
1. ALL DETAILS ARE THE SAME AS BOARDWALK STAIRS EXCEPT THE RISE CHANGES PER VIF ELEVATIONS AND PILES AT BASE OF STAIRS.
2. PROVIDE 3x10 BLOCKING AT ALL RAILING POST LOCATIONS. RAILING NOT SHOWN FOR CLARITY.

## GENERAL NOTES

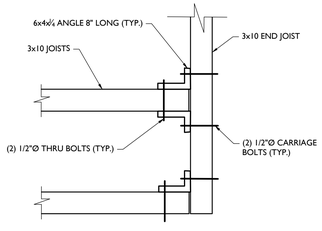
1. ALL WORK SHALL BE IN ACCORDANCE WITH THE NEW JERSEY UNIFORM CONSTRUCTION CODE (NJUCC), BASED ON IBC 2021, WHICH IS THE ADOPTED BUILDING CODE FOR THE PROJECT SITE, AND ITS REFERENCE DOCUMENT, ASCE 7-16, "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES".
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ALL FEDERAL, STATE, COUNTY & MUNICIPAL LAWS, ORDINANCES & REGULATIONS. THE CONTRACTOR SHALL PERFORM ALL CONSTRUCTION OPERATIONS IN ACCORDANCE WITH THE HIGH VOLTAGE PROXIMITY ACT, ALL OSHA REQUIREMENTS, AND THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NJ.
3. CONTRACTOR SHALL REFERENCE "BOARDWALK REHABILITATION: OAK AVE. TO 26TH AVE. FOR CITY OF WILDWOOD" DATED 06/05/22 AND ASSOCIATED ADDENDUMS FOR ALL ITEMS INCLUDING, BUT NOT LIMITED TO, CUMARU DECKING, TIMBER PILES, TIMBER FRAMING, STRUCTURAL CONCRETE, CONCRETE CURING, ALUMINUM RAILINGS, HARDWARE, ETC.
4. CONTRACTOR SHALL FIELD MEASURE AND VERIFY ALL EXISTING CONDITIONS, ELEVATIONS, ADJACENT STRUCTURES, ANGLES, DIMENSIONS, ETC. IN FIELD. ANY UNUSUAL CONDITIONS OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE PURCHASE, FABRICATION, OR ERECTION OF ANY MATERIALS.
5. THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO THEIR ORIGINAL CONDITION OR BETTER.




## E HANDRAIL ALONG BEACH ACCESS STAIRS

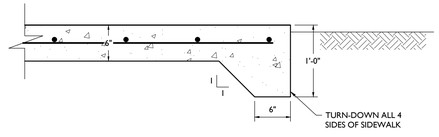
SCALE: 3/4"=1'-0"

NOTE: ALL DETAILS ARE THE SAME AS BOARDWALK RAILINGS EXCEPT A HANDRAIL HAS BEEN ADDED. RAILINGS SHALL MATCH ADJACENT TYPE I RAILINGS.




## F TYPICAL END JOIST DETAIL

SCALE: 3/4"=1'-0"




## D CONCRETE SIDEWALK TURNDOWN

SCALE: 1"=1'-0"

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BOARDWALK REHABILITATION:
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PHASE II:
MAPLE± TO 26TH

CITY OF WILDWOOD
CAPE MAY COUNTY
STATE OF NEW JERSEY

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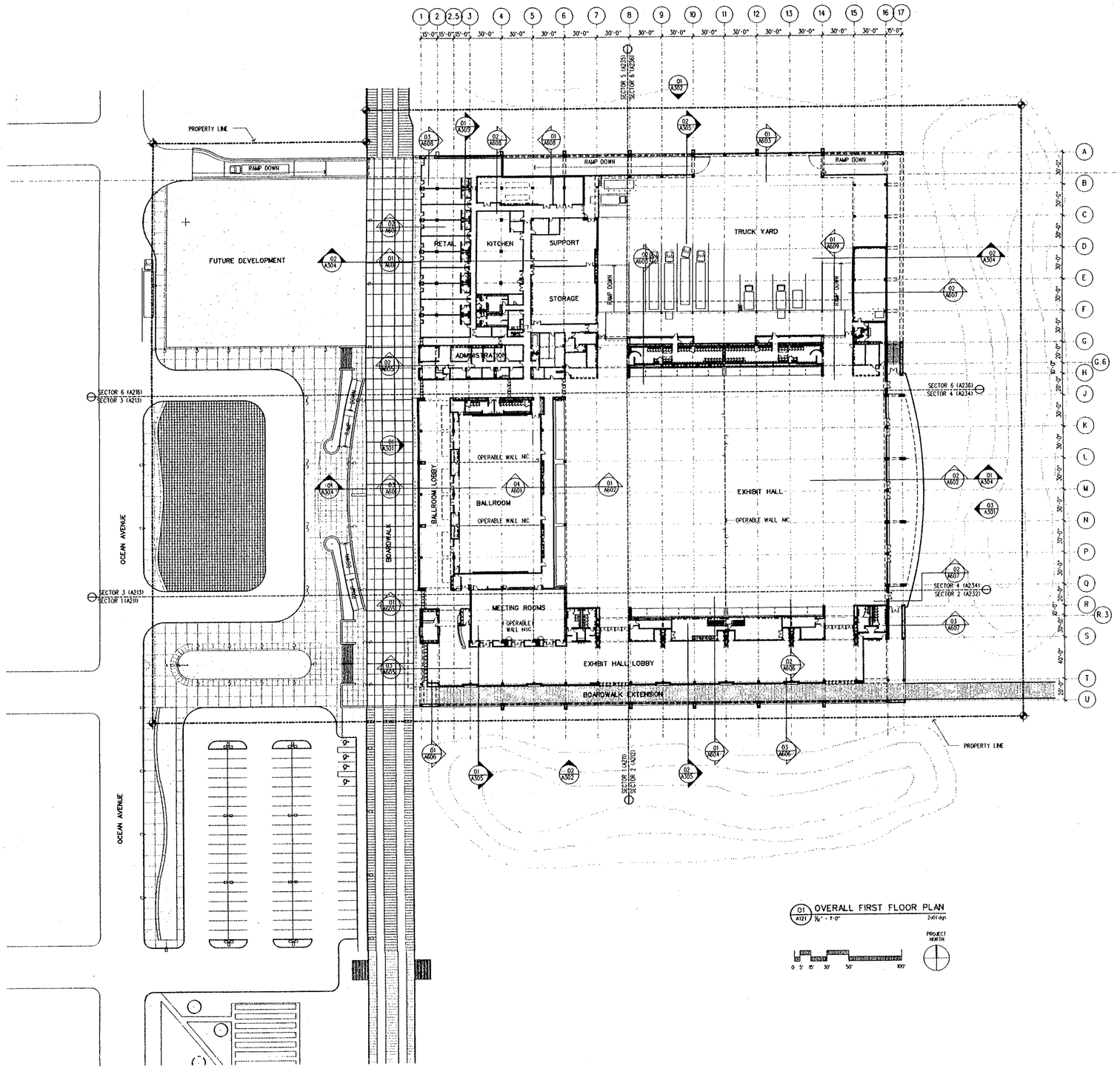
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|---|---|---|---|
| AS SHOWN | 06/05/22 | AEM | RCM |

| PROJECT NUMBER: | DRAWING NAME: |
|---|---|
| 21002353G4 | S-DTLS |

SHEET TITLE:
26TH AVE.
ADA RAMP DETAILS

SHEET NUMBER:
RSK-2

2021\21002353\Gr4Bridge\e-Structures\Structures\S-DTLS.dwg\SK-03 DTLS-RAMP By: AMMENNA




01 A121 OVERALL FIRST FLOOR PLAN
1/16" = 1'-0" 2x01 dgn

PROJECT NORTH

0 5' 15' 30' 50' 100'


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# WILDWOOD CONVENTION CENTER

WILDWOOD, NEW JERSEY

KEY PLAN

CONSTRUCTION DOCUMENT ISSUE PHASE 4

| REVISIONS | | | |
|---|---|---|---|
| NO | DATE | BY | DESCRIPTION |
| | 03.22.00 | | |

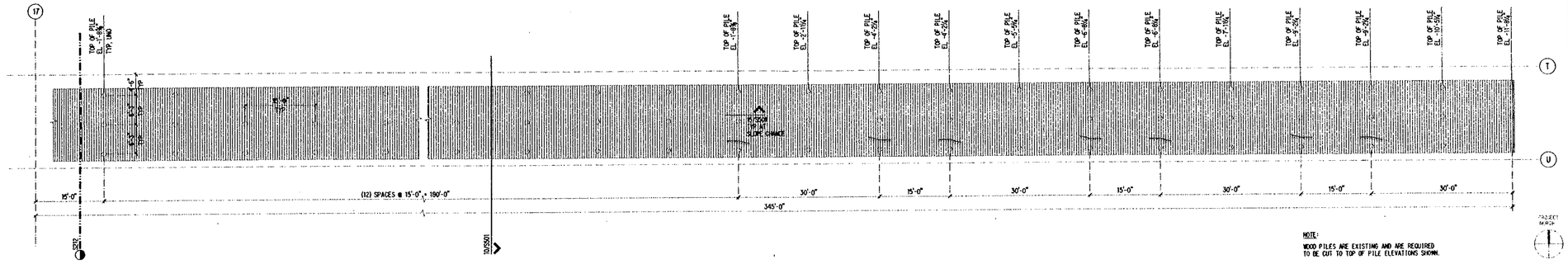
TITLE

FIRST FLOOR PLAN OVERALL

| | |
|---|---|
| DESIGNED | |
| DRAWN | |
| CHECKED | |
| DATE | 02.11.00 |
| CADD FILE | |
| JOB NUMBER | 93084.02.5 |

A121


REFERENCE DRWAING NOT FOR CONSTRUCTION




1/16"=1'-0" PARTIAL PLAN – BOARDWALK EXTENSION 5

**BOARDWALK EXTENSION LUMBER NOTES:**

DIMENSIONAL LUMBER:

DECKING SPECIES SHALL BE SOUTHERN PINE, SELECT STRUCTURAL GRADE AND SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE WORKING STRESSES:

| | |
|---|---|
| BENDING | 2,550 PSI |
| COMPRESSION PARALLEL TO GRAIN | 2,000 PSI |
| COMPRESSION PERPENDICULAR TO GRAIN | 565 PSI |
| SHEAR PARALLEL TO GRAIN | 90 PSI |
| MODULUS OF ELASTICITY | 1,800,000 PSI |

STRINGERS, BRACES, SPLICE PLATES SHALL BE PRESSURE TREATED SOUTHERN PINE, STRUCTURAL SELECT GRADE, AND SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE WORKING STRESSES:

| | |
|---|---|
| BENDING | 2,300 PSI |
| TENSION | 1,300 PSI |
| COMPRESSION PARALLEL TO GRAIN | 1,900 PSI |
| COMPRESSION PERPENDICULAR TO GRAIN | 565 PSI |
| SHEAR PARALLEL TO GRAIN | 90 PSI |
| MODULUS OF ELASTICITY | 1,800,000 PSI |

PILE CAPS SHALL BE PRESSURE TREATED SOUTHERN PINE, NO.1 GRADE, AND SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE WORKING STRESSES:

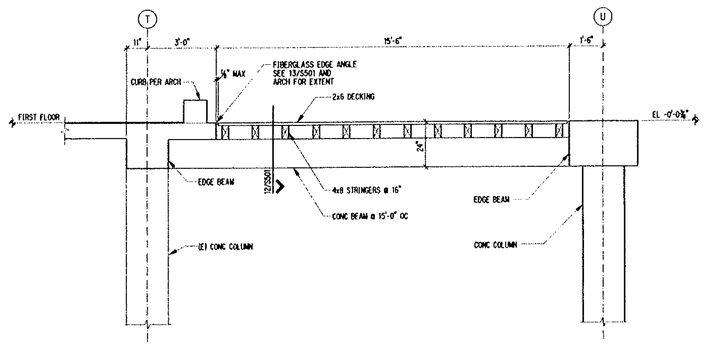
| | |
|---|---|
| BENDING | 1,350 PSI |
| TENSION | 900 PSI |
| COMPRESSION PARALLEL TO GRAIN | 825 PSI |
| COMPRESSION PERPENDICULAR TO GRAIN | 375 PSI |
| SHEAR PARALLEL TO GRAIN | 110 PSI |
| MODULUS OF ELASTICITY | 1,500,000 PSI |

PRESSURE TREATED WOOD SHALL BE TREATED TO CONFORM TO THE REQUIREMENTS OF AWPA STANDARD C1 AND C2. THE MINIMUM PRESERVATIVE RETENTION SHALL NOT BE LESS THAN 0.40 POUNDS PER CUBIC FOOT.

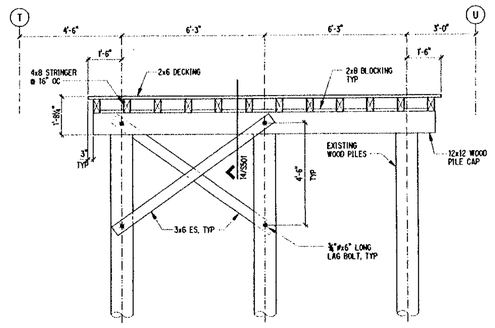
WOOD CONNECTIONS AND FRAMING:

ALL FRAMING DETAILS SHALL BE IN ACCORDANCE WITH THE BUILDING CODE, UNLESS NOTED OTHERWISE ON THE DRAWINGS. ALL NAILS CALLED FOR ON THE STRUCTURAL DRAWINGS SHALL BE GALVANIZED COMMON WIRE NAILS. ALL FRAMING NAILING SHALL CONFORM TO THE NAILING SCHEDULE OF THE BUILDING CODE, UNLESS OTHERWISE SHOWN. IF NAIL SUBSTITUTIONS ARE TO BE USED (I.E., PNEUMATIC DRIVEN), THE CONTRACTOR MUST SUBMIT SCHEDULE OF NAILS DESIRED WITH DATA TO VERIFY EQUIVALENCE AND OBTAIN WRITTEN ACCEPTANCE PRIOR TO USE. STANDARD WASHERS SHALL BE UNDER ALL BOLT HEADS AND NUTS CONTACTING WOOD. ALL METAL CONNECTORS SHALL BE FULLY NAILED OR BOLTED UNLESS OTHERWISE NOTED ON THE PLANS. METAL HANGERS AND CONNECTORS SHOWN ON THE DRAWINGS OR REQUIRED BY INFERENCE TO ACCOMPLISH MEMBER-TO-MEMBER CONNECTION ARE THOSE MANUFACTURED BY THE SIMPSON COMPANY. METAL HANGERS OR CONNECTORS BY OTHER MANUFACTURERS MAY BE CONSIDERED WHERE LOAD CAPACITY AND DIMENSIONS ARE EQUAL OR BETTER. ALL SUBSTITUTIONS MUST BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR REVIEW.

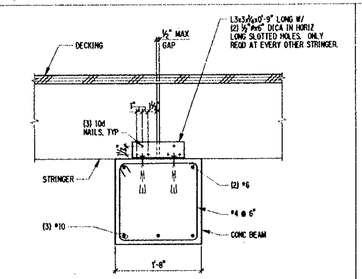
BOARDWALK EXTENSION LUMBER NOTES 11



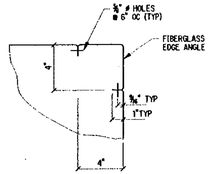

½"=1'-0" TYPICAL BOARDWALK EXTENSION SECTION AT BUILDING 8



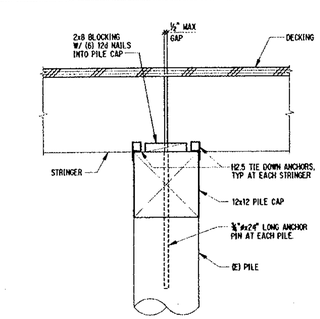

½"=1'-0" TYPICAL BOARDWALK EXTENSION SECTION 10



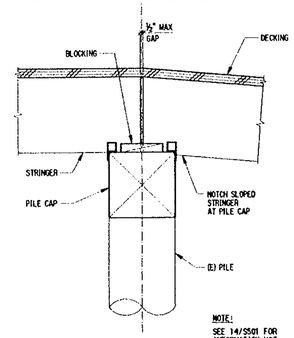

½"=1'-0" STRINGER TO CONC BEAM CONN 12




3"=1'-0" EDGE ANGLE DETAIL 13

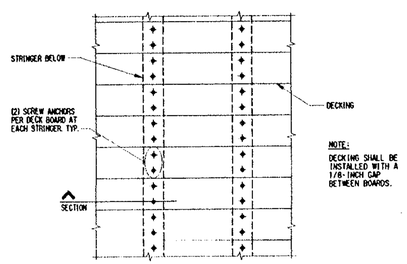



½"=1'-0" SECTION 14



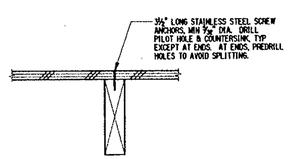

NOTE:
SEE 14/S501 FOR INFORMATION NOT SHOWN.

½"=1'-0" CHANGE IN BOARDWALK SLOPE DETAIL 15

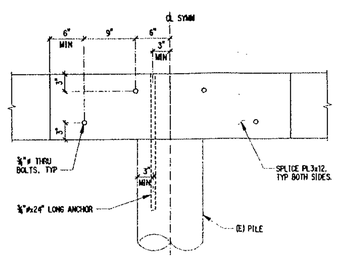



PLAN

NOTE:
DECKING SHALL BE INSTALLED WITH A 1/8-INCH GAP BETWEEN BOARDS.




SECTION




NOTE:
OPTIONAL SPLICE. USE ONLY WHERE REQUIRED.

TYPICAL DECKING ATTACHMENT DETAIL 17 | ½"=1'-0" SECTION 18 | 19 | 20


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801 SECOND AVENUE SUITE 501
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# WILDWOOD CONVENTION CENTER

WILDWOOD, NEW JERSEY


SKILLING WARD MAGNUSSON BARKSHIRE

Consulting Structural and Civil Engineers

1301 5th Avenue
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Seattle, WA 98101-2699
Ph 206 292-1200
Fax 206 292-1961
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PHASE 4 CONSTRUCTION DOCUMENT ISSUE 11 FEBRUARY, 2000

| NO. | DATE | BY | DESCRIPTION |
|---|---|---|---|
| 1 | 03-22-00 | | |

FILE#

BOARDWALK EXTENSION DETAILS

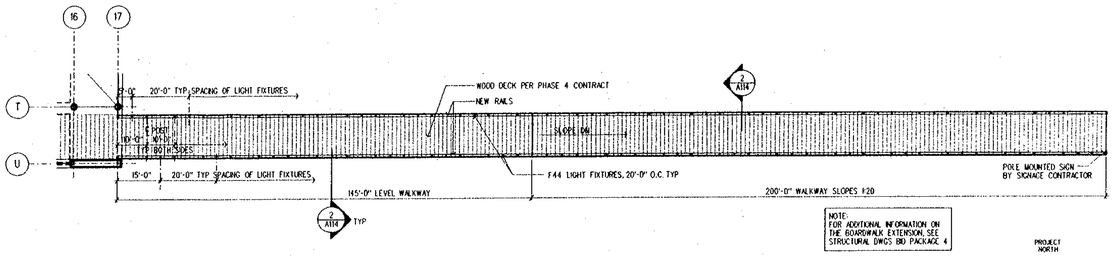
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| DESIGNED | ANTONIAN |
| DRAWN | MAG |
| CHECKED | KPC |
| DATE | 02/11/2000 |
| CAD FILE | |
| SKMW JOB NUMBER | 2081.03 |

S501

LMN JOB NUMBER 9954

12:56:27 | jtw\ld29s501.dgn | 21 MAR 2000 | mag

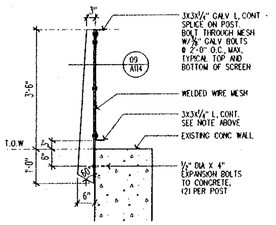
REFERENCE DRWAING NOT FOR CONSTRUCTION



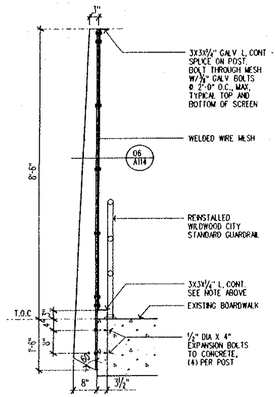

NOTE:
FOR ADDITIONAL INFORMATION ON THE BOARDWALK EXTENSION, SEE STRUCTURAL DWGS BID PACKAGE 4

PROJECT NORTH

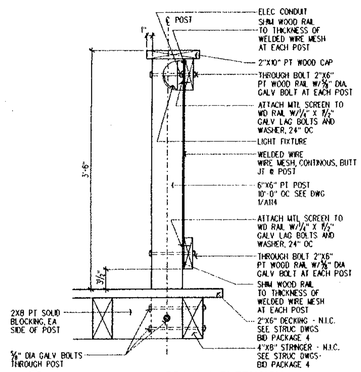
01 A114 BOARDWALK EXTENSION PLAN
1/16" = 1'-0"



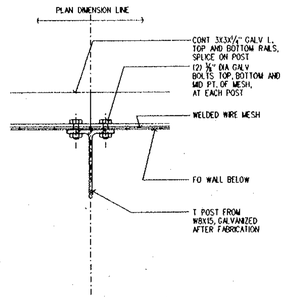

08 A114 GUARDRAIL AT TRUCK RAMP
3/4" = 1'-0"
A114_3B.dgn



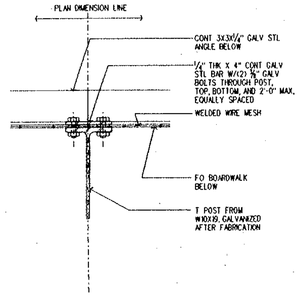

05 A114 SCREEN AT BOARDWALK
3/4" = 1'-0"
A114_3_4.dgn




02 A114 GUARDRAIL AT BOARDWALK EXTENSION
3/4" = 1'-0"
A114_3_2.dgn




09 A114 GUARDRAIL POST AT TRUCK RAMP
3" = 1'-0"
A114_3.dgn




06 A114 SCREEN POST AT BOARDWALK
3" = 1'-0"
A114_3.dgn


LMN ARCHITECTS
801 SECOND AVENUE SUITE 501
SEATTLE WASHINGTON 98104
206.682.3460 FAX 343.9388

IN ASSOCIATION WITH

SOSH ARCHITECTS
1020 ATLANTIC AVENUE
ATLANTIC CITY, NJ 08401
609.345.5222 FAX 345.7486


# WILDWOOD CONVENTION CENTER

WILDWOOD, NEW JERSEY

CONSTRUCTION DOCUMENT ISSUE PHASE 5

PRELIMINARY NOT FOR CONSTRUCTION

REVISIONS

| NO | DATE | BY | DESCRIPTION |
|---|---|---|---|
| | | | |
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| | | | |
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TITLE

SITE WORK DETAILS

| | |
|---|---|
| DESIGNED | |
| DRAWN | |
| CHECKED | |
| DATE | 01.10.01 |
| CADD FILE | |
| JOB NUMBER | 93084 |

A114


REFERENCE DRWAING NOT FOR CONSTRUCTION

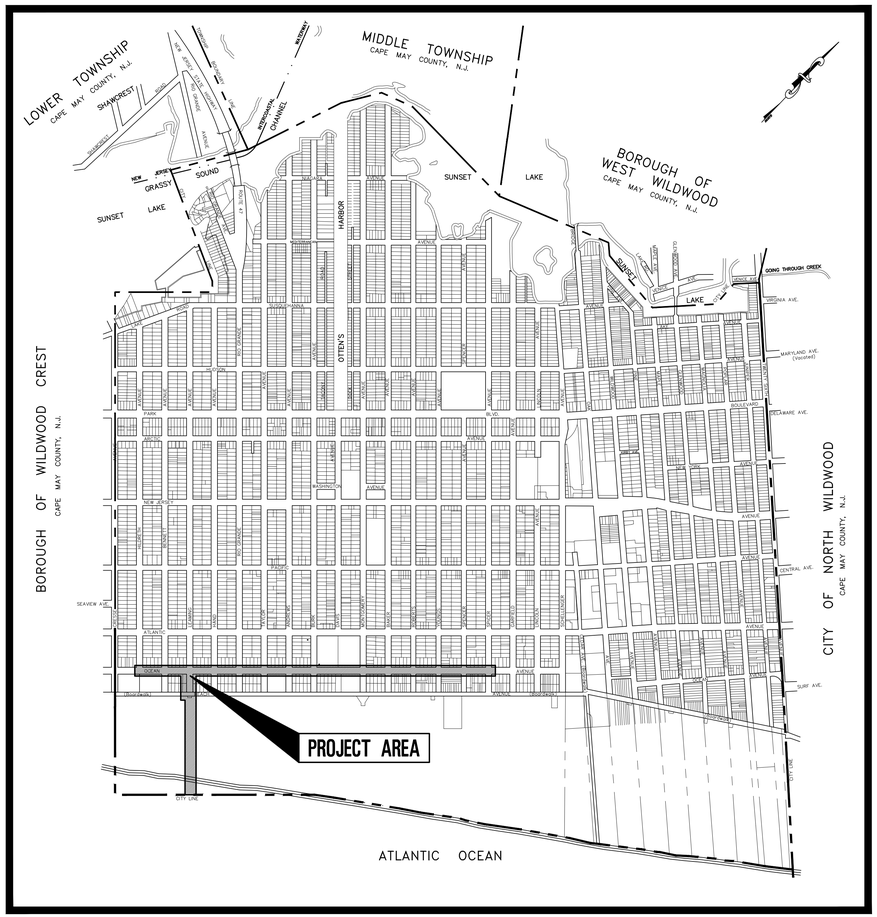
# NJDEP FLOOD HAZARD RISK REDUCTION & RESILIENCY GRANT - STORMWATER PUMP STATION & OUTFALL

## LIST OF UTILITIES

| | |
|---|---|
| **PUBLIC WORKS:** | **WILDWOOD PUBLIC WORKS DEPARTMENT**<br>CHRISTOPHER D'AMICO<br>4400 NEW JERSEY AVENUE<br>WILDWOOD, NJ 08260<br>609-522-2942 |
| **SEWER:** | **WILDWOOD SEWER DEPARTMENT**<br>GLENN BALMER<br>LINCOLN AVENUE AND PARK BOULEVARD<br>WILDWOOD, NJ 08260<br>609-522-5718<br>**CAPE MAY COUNTY M.U.A.**<br>THOMAS J. LAROCCO, P.E.<br>1523 ROUTE 9 NORTH, PO BOX 610<br>CAPE MAY COURT HOUSE, NJ 08210<br>609-465-9026 |
| **WATER:** | **WILDWOOD WATER UTILITY**<br>RON GROOKETT<br>3100 NEW JERSEY AVENUE<br>WILDWOOD, NJ 08260<br>609-846-0600 |
| **ELECTRIC:** | **ATLANTIC CITY ELECTRIC COMPANY**<br>ROBERT WOLCOTT JR.<br>420 ROUTE 9 NORTH<br>CAPE MAY COURT HOUSE, NJ 08210<br>609-463-3816 |
| **CABLE:** | **COMCAST CABLE**<br>CHRIS FREEMAN<br>308 N. RAILROAD AVENUE<br>RIO GRANDE, NJ 08242<br>609-579-6270 |
| **GAS:** | **SOUTH JERSEY GAS COMPANY**<br>JOHN MURPHY<br>1708 ROUTE 9 NORTH<br>CAPE MAY COURT HOUSE, NJ 08210<br>609-465-2900 |
| **TELEPHONE:** | **VERIZON ENGINEERING DEPARTMENT**<br>DAVID LOGAN<br>10 TANSBORO ROAD, FLOOR 2<br>BERLIN, NJ 08009<br>856-306-8590 |

***New Jersey One Call***
**CALL BEFORE YOU DIG**
**811 or 1-800-272-1000**
**ITS THE LAW**

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT NJ ONE CALL PRIOR TO THE START OF CONSTRUCTION. CALL FOR MARKOUTS THREE (3) FULL BUSINESS DAYS IN ADVANCE AND BEGIN EXCAVATION WITHIN 10 DAYS. ALL CONTRACTORS ON-SITE MUST HAVE THEIR OWN MARKOUT.




**PROJECT LOCATION MAP**

NOT TO SCALE

NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF 2007 (U.S. CUSTOMARY ENGLISH UNITS) AND ALL AMENDMENTS IN THE SUPPLEMENTAL SPECIFICATION FORMAT THERE TO SHALL GOVERN.

THE HEADING OF ARTICLES CONTAINED HEREIN CONFORM TO THE NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED 2007 AND ALL ADDENDA THERE-TO WHICH IS TO BE USED IN THE EXECUTION OF THIS CONTRACT.

THE NEW JERSEY DEPARTMENT OF TRANSPORTATION "STANDARD ROADWAY CONSTRUCTION\TRAFFIC CONTROL\BRIDGE CONSTRUCTION DETAILS" BOOKLET DATED 2007 AND "ELECTRICAL BUREAU STANDARD DETAILS, 2007" SHALL GOVERN, EXCEPT FOR THOSE DETAILS CONTAINED HEREIN.

# CITY OF WILDWOOD
# CAPE MAY COUNTY, NEW JERSEY

## SITE IMPROVEMENT DRAWING LIST

| Sheet No. | Sheet Title |
|---|---|
| 1 | TITLE SHEET |
| 2 | LEGEND |
| 3 | ESTIMATE & DISTRIBUTION OF QUANTITIES |
| 4 | GENERAL NOTES |
| 5 | SITE PLAN |
| 6 | UTILITY PLAN |
| 7 | PARKING LOT STRIPING PLAN |
| 8 | OCEAN OUTFALL OVERALL PLAN |
| 9 | OCEAN OUTFALL PLAN VIEWS |
| 10 | OCEAN OUTFALL PIPE PROFILE & DETAILS |
| 11 - 18 | OCEAN AVENUE UTILITIES |
| 19 - 26 | OCEAN AVENUE PROFILE |
| 27 - 34 | OCEAN AVENUE PLAN |
| 35 - 43 | SOIL EROSION & SEDIMENT CONTROL PLAN |
| 44 | SOIL EROSION & SEDIMENT CONTROL NOTES |
| 45 | SOIL EROSION & SEDIMENT CONTROL DETAILS |
| 46 - 52 | CONSTRUCTION DETAILS |

## STRUCTURAL DRAWING LIST

| Sheet No. | Sheet Title |
|---|---|
| S-1 | STRUCTURAL COVER SHEET |
| S-2 | PROPOSED FOUNDATION & PILE PLANS |
| S-3 | PROPOSED FLOOR PLANS |
| S-4 | PROPOSED SECTIONS |
| S-5 | PROPOSED SECTIONS |
| S-6 | PROPOSED ELEVATIONS |
| S-7 | PROPOSED ELEVATIONS |
| S-8 | SECTIONS & DETAILS |
| S-9 | SECTIONS & DETAILS |
| S-10 | ROOFING PLANS, SECTIONS & DETAILS |
| S-11 | SECTIONS & DETAILS |

## ELECTRICAL DRAWING LIST

| Sheet No. | Sheet Title |
|---|---|
| E-1.0 | ELECTRICAL COVER SHEET |
| ES-2.1 | ELECTRICAL SITE PLAN |
| E-2.2 | ELECTRICAL LIGHTING AND POWER FLOOR PLAN |
| E-2.3 | ELECTRICAL HVAC POWER FLOOR PLAN |
| E-3.1 | ELECTRICAL DETAILS AND SCHEDULES |
| E-4.1 | CONTROL DIAGRAMS |
| E-4.2 | CONTROL DIAGRAMS |
| E-4.3 | CONTROL DIAGRAMS |


RVE 1901
REMINGTON & VERNICK **ENGINEERS**
4907 NEW JERSEY AVENUE
WILDWOOD CITY, NJ 08260
(609) 522-5150, FAX (609) 522-5313
WEB SITE ADDRESS : WWW.RVE.COM
*Certification of Authorization: 24 GA 28003300*
*~ENGINEERING EXCELLENCE~*


DATE: 6-12-19
EDWARD D. DENNIS JR.
NJ PROFESSIONAL ENGINEER LIC. No. 47002

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| No. | DATE | BY | CHK |
|---|---|---|---|
| 1 | 6-12-19 | RM | ED |
| | REVISION | | |
| | REVISED FOR BID | | |

TITLE SHEET

NJDEP FLOOD HAZARD RISK REDUCTION & RESILIENCY
GRANT - PACIFIC AVENUE DRAINAGE IMPROVEMENTS
CITY OF WILDWOOD — CAPE MAY COUNTY — STATE OF NEW JERSEY — NEW JERSEY

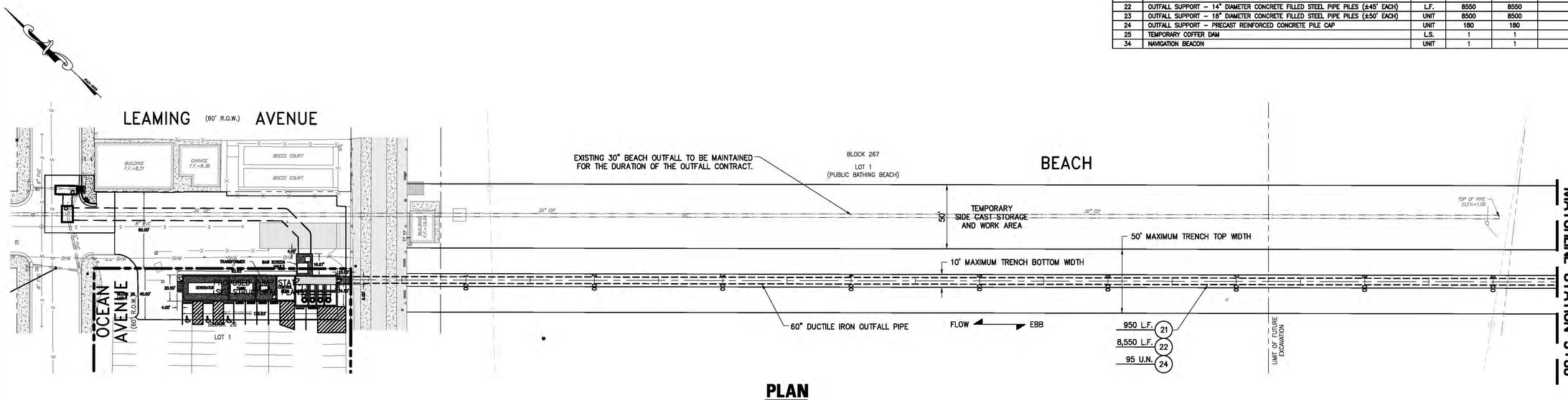
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|---|---|---|---|
| G.E.R. | R.A.M. | E.D.J. | AS NOTED |
| DATE : 4-30-18 | | SHEET No. : 1 of 52 | |
| JOB No. : 05-14-U-109 | | | |

C:\DATA\Wildwood\2015\05-14-U109 - NJDEP FHRRRGP Pacific Avenue Drainage Improvements\Dwg\Forms Plotters, Cutsheets & Details Reference\05-14-U109-001 Cover Reference.dwg 6/20/2019 10:05:27 AM

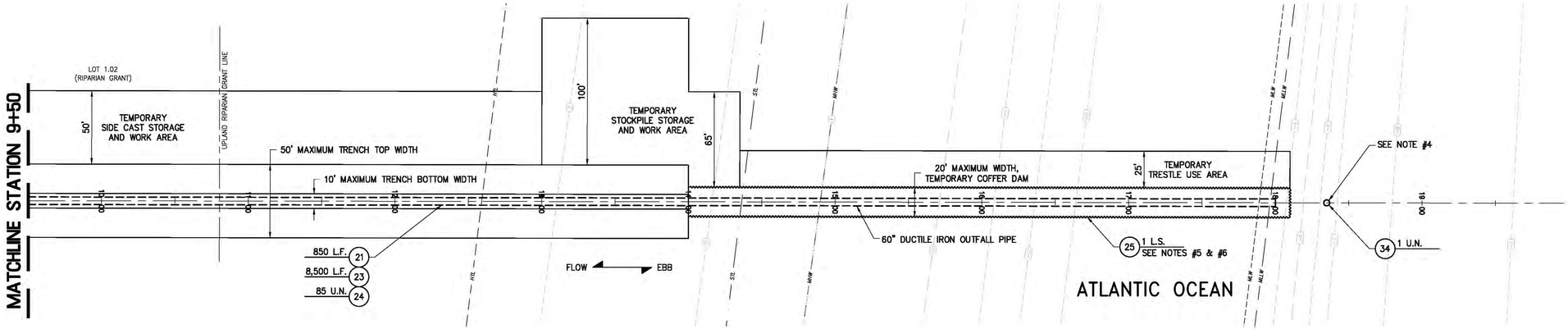
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## TO BE CONSTRUCTED

| ITEM NO. | DESCRIPTION | UNIT | BASE BID QUANTITY | BASE BID QUANTITY | AS-BUILT QUANTITY |
|---|---|---|---|---|---|
| 21 | 60" DIAMETER PRESSURE CLASS 300 DUCTILE IRON PIPE | L.F. | 1800 | 1800 | |
| 22 | OUTFALL SUPPORT – 14" DIAMETER CONCRETE FILLED STEEL PIPE PILES (±45' EACH) | L.F. | 8550 | 8550 | |
| 23 | OUTFALL SUPPORT – 18" DIAMETER CONCRETE FILLED STEEL PIPE PILES (±50' EACH) | UNIT | 8500 | 8500 | |
| 24 | OUTFALL SUPPORT – PRECAST REINFORCED CONCRETE PILE CAP | UNIT | 180 | 180 | |
| 25 | TEMPORARY COFFER DAM | L.S. | 1 | 1 | |
| 34 | NAVIGATION BEACON | UNIT | 1 | 1 | |




**PLAN**
SCALE: 1"= 40'




**PLAN**
SCALE: 1"= 40'

## SURVEY NOTES:

1. THE HORIZONTAL DATUM IS BASED ON THE NEW JERSEY STATE PLANE COORDINATE SYSTEM (NAD–1983) AND THE VERTICAL DATUM IS BASED ON NAVD–1988.
2. PROPERTY AND RIGHT–OF–WAY LINES SHOWN ON THESE PLANS ARE APPROXIMATE LOCATIONS BASED ON THE CURRENT TAX MAPS OF THE CITY OF WILDWOOD, CAPE MAY COUNTY, NEW JERSEY. PROPERTY AND RIGHT–OF–WAY LINES ARE SHOWN FOR GRAPHICAL INFORMATION ONLY AND HAVE NOT BEEN FIELD VERIFIED.
3. EXISTING TOPOGRAPHIC CONDITIONS WERE SURVEYED BY REMINGTON & VERNICK ENGINEERS UNDER THE SUPERVISION OF CHARLES E. ADAMSON, N.J.P.L.S. LICENSE NO. 42627. THE SURVEY WORK WAS COMPLETED ON AUGUST 24, 2017.

## GENERAL NOTES:

1. THE BEACH SURFACE AND OCEAN BOTTOM ELEVATIONS MAY BE DIFFERENT THAN WHAT IS SHOWN ON THE CONSTRUCTION PLANS. IT IS THE CONTRACTORS RESPONSIBILITY TO SURVEY THE ENTIRE PROPOSED PIPE ALIGNMENT IMMEDIATELY PRIOR TO CONSTRUCTION AND SUBMIT THIS INFORMATION TO THE ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONFIRM THE FINAL OUTFALL PIPE ALIGNMENT WITH THE ENGINEER PRIOR TO COMMENCING OUTFALL CONSTRUCTION. THE COST FOR THIS WORK WILL BE INCLUDED IN THE UNIT PRICE FOR THE OUTFALL. NO ADDITIONAL PAYMENT WILL BE MADE FOR HORIZONTAL OR VERTICAL ADJUSTMENTS TO THE PIPE ALIGNMENT OR PROFILE.
2. THE CONTRACTOR MUST PROVIDE A UPDATED SURVEY OF THE BEACH AND OCEAN BOTTOM PROFILE ALONG THE PIPE ALIGNMENT AFTER THE OUTFALL HAS BEEN CONSTRUCTED. THIS SURVEY MUST BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER WITHIN ONE YEAR OF THE PROJECT COMPLETION. THE COST FOR THIS WORK WILL BE INCLUDED IN THE UNIT PRICE FOR THE OUTFALL PIPE.
3. CLEAN OUTS SHALL BE LOCATED ALONG THE PROPOSED OUTFALL SPACED AT A MAXIMUM 400' CENTER TO CENTER. NO SEPARATE PAYMENT WILL BE MADE FOR THE INSTALLATION OF CLEANOUTS. THE COST FOR CLEANOUTS SHALL BE INCLUDED IN THE COST OF THE OUTFALL PIPE.
4. FINAL LOCATION AND ORIENTATION OF THE PROPOSED NAVIGATION BEACON SHALL BE COORDINATED WITH ALL AGENCIES HAVING JURISDICTION.
5. PAYMENT FOR THE ITEM TEMPORARY COFFER DAM SHALL BE MADE AS A LUMP SUM REGARDLESS OF THE ACTUAL LENGTH OF SHEET PILE OR TYPE OF REINFORCEMENT REQUIRED TO INSTALL AND MAINTAIN THE COFFER DAM FOR THE PERIOD OF TIME NEEDED TO CONSTRUCT THE OUTFALL. THERE SHALL BE NO SEPARATE PAYMENT FOR THE DESIGN, CONSTRUCTION, MAINTENANCE, DEWATERING, OR REMOVAL OF THE COFFER DAM.
6. THE CONTRACTOR SHALL SUBMIT A COFFER DAM DESIGN SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY FOR REVIEW AND APPROVAL BY THE ENGINEER PRIOR TO THE START OF CONSTRUCTION. THE COST FOR THIS WORK SHALL BE INCLUDED IN THE BID ITEM TEMPORARY COFFER DAM.

## TIDAL DATUM (NAVD–1988)

| | | |
|---|---|---|
| MLLW | MEAN LOWER LOW WATER | –3.64' |
| MLW | MEAN LOW WATER | –3.48' |
| MHW | MEAN HIGH WATER | 1.01' |
| STL | SPRING TIDE LINE | 1.71' |
| HTL | HIGH TIDE LINE | 3.12' |

GRAPHIC SCALE
40 0 20 40 80 160
( IN FEET )
1 inch = 40 ft.


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4907 NEW JERSEY AVENUE
WILDWOOD CITY, NJ 08260
(609) 522-5150, FAX (609) 522-5313
WEB SITE ADDRESS : WWW.RVE.COM
Certification of Authorization: 24 GA 28003300
~ENGINEERING EXCELLENCE~


DATE: 6-12-19
EDWARD D. DENNIS JR.
NJ PROFESSIONAL ENGINEER LIC. No. 47002

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| No. | REVISION | DATE | BY | CHK'D |
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# OCEAN OUTFALL PLAN VIEWS

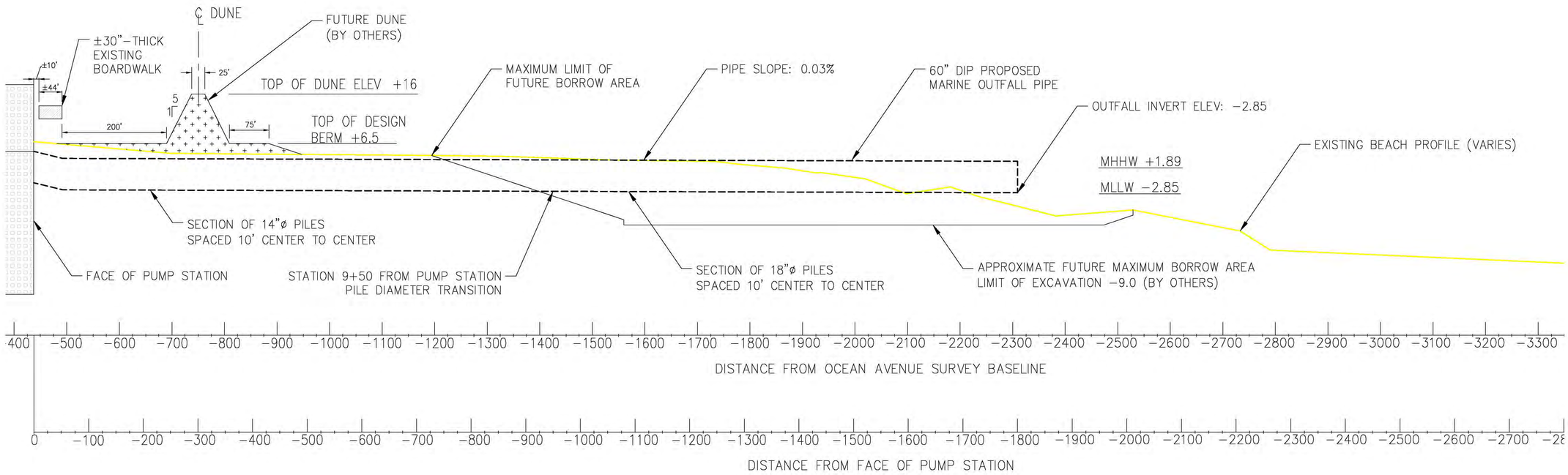
STATE OF NEW JERSEY
NJDEP FLOOD HAZARD RISK REDUCTION & RESILIENCY GRANT - PACIFIC AVENUE DRAINAGE IMPROVEMENTS
CITY OF WILDWOOD CAPE MAY COUNTY NEW JERSEY

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|---|---|---|---|
| G.E.R. | R.A.M. | E.D.J. | AS NOTED |

DATE: 4-30-18
JOB No.: 05-14-U-109
SHEET No.: 9 of 52

I:\Work\Wildwood\05-14-U-109 NJDEP Hereford Pacific Avenue Drainage Improvements\Dwg\Eng Sheets, Outfall, & Ocean Avenue\05-14-U-109-OUTFALL Ocean Avenue.dwg 6/12/2019 10:05:26 AM

REFERENCE DRWAING NOT FOR CONSTRUCTION




## BEACH AND PIPE PROFILE

SCALE: 1"= 120'

## GENERAL NOTES:

1. SEE SHEET S–11 FOR OUTFALL PIPE, OUTFALL PIPE SUPPORT, AND PILING DETAIL.
2. OUTFALL PIPE SHALL BE 60" DIAMETER PRESSURE CLASS 300 DUCTILE IRON PIPE
3. THE TOP OF THE OUTFALL PIPE IS INTENDED TO BE INSTALLED BELOW THE BEACH SAND SURFACE TO THE MAXIMUM EXTENT PRACTICABLE
4. THE OUTFALL PIPE SHALL EXTEND APPROXIMATELY 1,800 LF FROM THE FACE OF THE PUMP STATION STRUCTURE INTO THE ATLANTIC OCEAN


RVE 1901
REMINGTON & VERNICK **ENGINEERS**
4907 NEW JERSEY AVENUE
WILDWOOD CITY, NJ 08260
**(609) 522-5150, FAX (609) 522-5313**
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*Certification of Authorization: 24 GA 28003300*
*~ENGINEERING EXCELLENCE~*


DATE: 6-12-19
EDWARD D. DENNIS JR.
NJ PROFESSIONAL ENGINEER LIC. No. 47002

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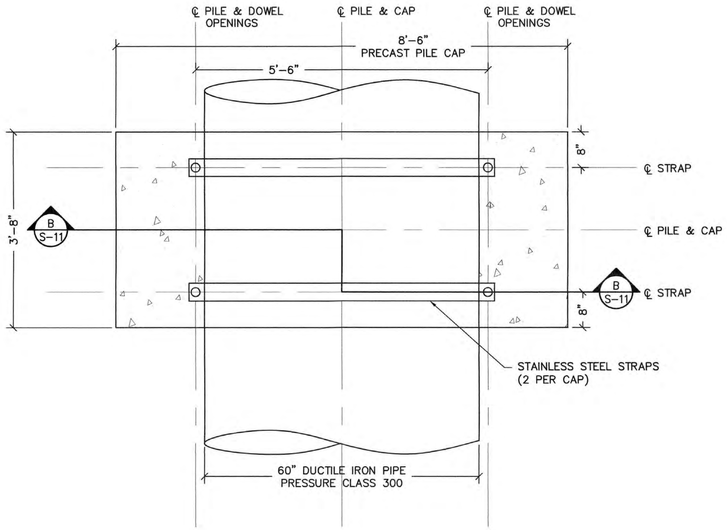
# OCEAN OUTFALL PIPE PROFILE

STATE OF NEW JERSEY
NJDEP FLOOD HAZARD RISK REDUCTION & RESILIENCY
GRANT - PACIFIC AVENUE DRAINAGE IMPROVEMENTS
CITY OF WILDWOOD CAPE MAY COUNTY NEW JERSEY

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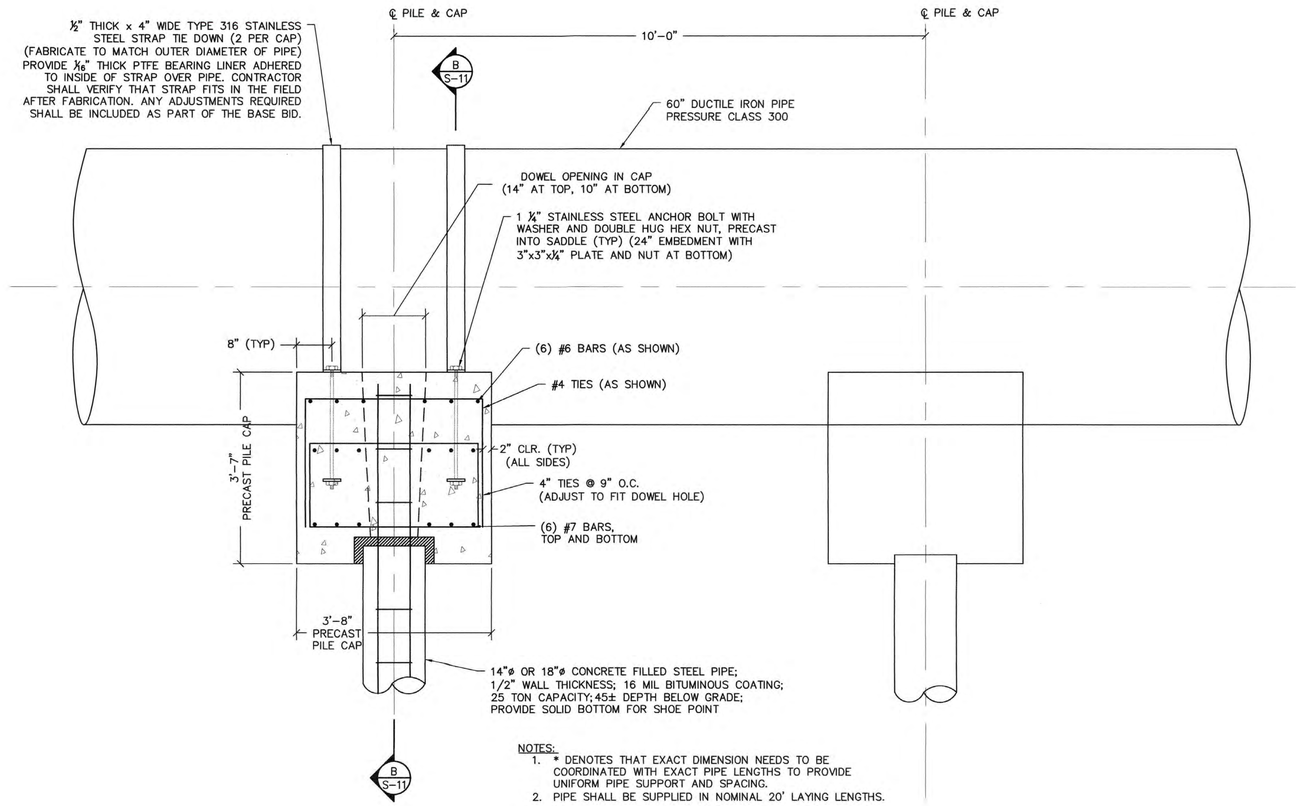
DATE : 4-30-18
JOB No. : 05-14-U-109
SHEET No. : 10 of 52


REFERENCE DRWAING NOT FOR CONSTRUCTION




## TYPICAL PILE SUPPORT PLAN

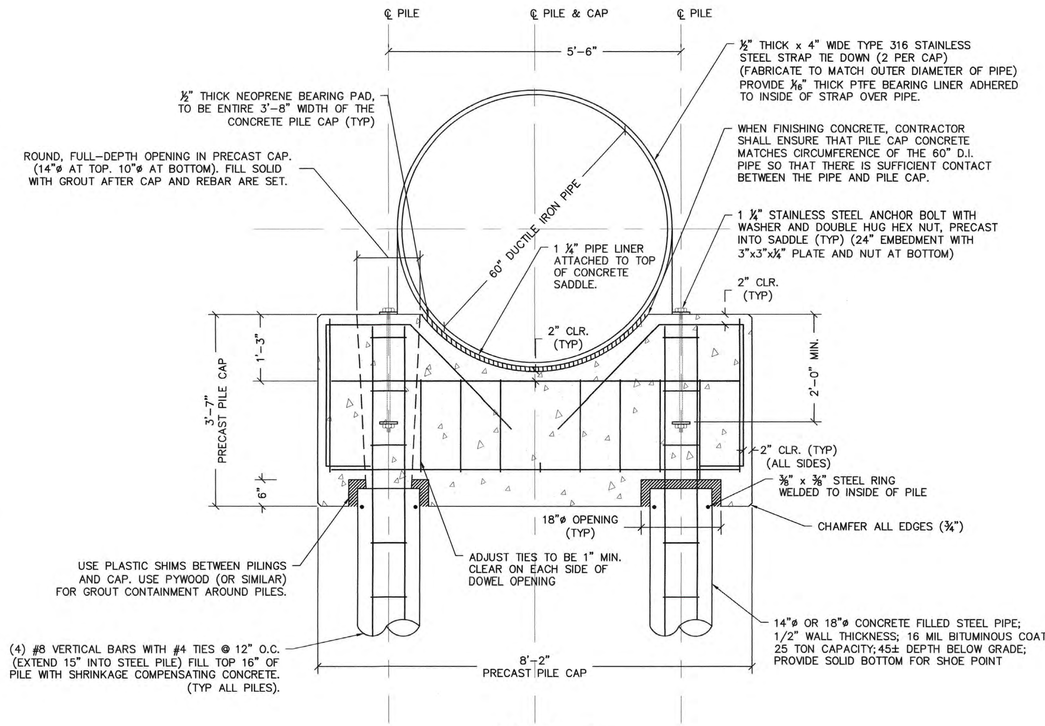
SCALE: N.T.S.




NOTES:
1. * DENOTES THAT EXACT DIMENSION NEEDS TO BE COORDINATED WITH EXACT PIPE LENGTHS TO PROVIDE UNIFORM PIPE SUPPORT AND SPACING.
2. PIPE SHALL BE SUPPLIED IN NOMINAL 20' LAYING LENGTHS.

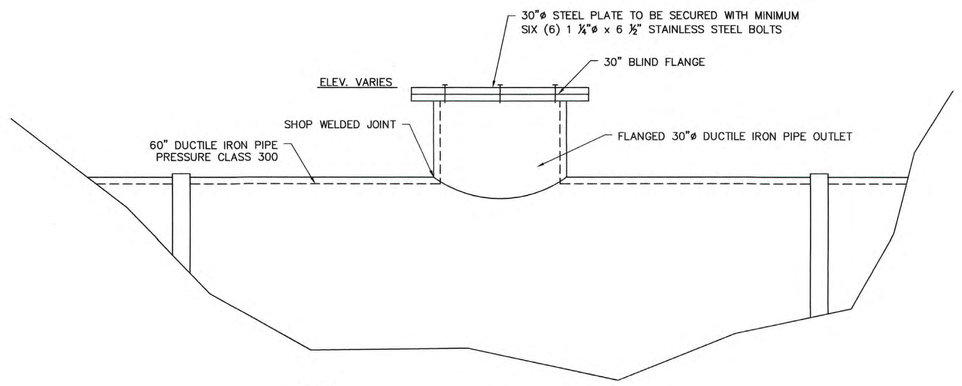
## LONGITUDINAL SECTION A S-11

SCALE: N.T.S.




## SECTION B S-11

SCALE: N.T.S.




NOTES:
CONTRACTOR TO PROVIDE NJPE SIGNED & SEALED SHOP DRAWINGS FOR APPROVAL PRIOR TO ORDERING. NO SEPARATE PAYMENT WILL BE MADE FOR THE CLEANOUT. CONTRACTOR SHALL INCLUDE COST FOR CLEANOUT IN THE UNIT PRICE BID FOR THE PIPE.

## CLEANOUT DETAIL

SCALE: N.T.S.

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RVE 1901
REMINGTON & VERNICK **ENGINEERS**
232 KINGS HIGHWAY EAST
HADDONFIELD, NJ 08033
(856) 795-9595, FAX (856) 795-1882
WEB SITE ADDRESS : WWW.RVE.COM
*Certification of Authorization: 24 GA 28003300*
*~ENGINEERING EXCELLENCE~*

DATE: 6-13-2019
KENNETH C. RESSLER
NJ PROFESSIONAL ENGINEER LIC. No. 34559

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| No. | REVISION | DATE | BY | CHK |
|---|---|---|---|---|

# SECTIONS & DETAILS

STATE OF NEW JERSEY — NEW JERSEY
NJDEP FLOOD HAZARD RISK REDUCTION & RESILIENCY GRANT - PACIFIC AVENUE DRAINAGE IMPROVEMENTS
CITY OF WILDWOOD — CAPE MAY COUNTY

| DRAWN BY : | DESIGN BY : | CHECKED BY : | SCALE : |
|---|---|---|---|
| M.L.M. | C.K. | K.C.R. | AS NOTED |
| DATE: 04 - 30 - 2018 | | | SHEET No. : S-11 |
| JOB No. : 05-14-U-109 | | | |

P:\CADD Projects\NJ\Cape May Co\Wildwood City\05141109 - FHBRR\SP Plans Baldwin\Structural Plans.dwg 5/1/2019 9:30:32 AM

30 0 15 30
HORIZONTAL SCALE: 1"=30'

3 0 1.5 3
VERTICAL SCALE: 1"=3'

302± TO M.L.W.L.

WOOD WALKWAY

2+00 24" D.I.P. STORM SEWER 3+00 4+00 5+00 24" D.I.P. STORM SEWER 6+00 7+00

PILE BENTS (TYPICAL)

AREA OF DISTURBANCE = 2,899 SQ.FT.

8+00 9+00 10+08

PROPOSED PILE BENTS (TYPICAL)

CONSTRUCT 306 L.F. OF 24" D.I.P. STORM SEWER

STA. 7+20

STA. 10+26

HIGH TIDE ELEV. ELEV. 102.95

MEAN HIGH WATER LINE ELEV. 102.51

MEAN LOW WATER LINE ELEV. 98.2

STA. 3+60
STORM MANHOLE
RIM ELEV.=106.91
S.E. INV.=102.68
N.W. INV.=102.68

EXISTING BEACH CENTER LINE OVER PROPOSED STORM SEWER EXTENSION

24" D.I.P. STORM SEWER

24" D.I.P. STORM SEWER

REMOVE PIPE END SAFETY GRATE AND CONNECT NEW DUCTILE IRON STORM SEWER TO EXISTING DUCTILE IRON STORM SEWER. CONTRACTOR SHALL SAWCUT AND REMOVE END SECTION OF EXISTING OUTFALL PIPE IN ORDER TO ELIMINATE THE SECTION WITH BOLTS AND HOLES IN PIPE (PIPE END SAFETY GRATE). IT IS UNDERSTOOD EXISTING PIPE END WILL NEED TO BE BEVELED PRIOR TO INSTALLATION OF NEW PIPE. ALL COSTS TO BE INCLUDED IN UNIT PRICE BID FOR PIPE. (FURNCO CONNECTION IS PROHIBITED)

4 PILE BENTS @ 18' O.C.

26 PILE BENTS @ 9' O.C.

CONSTRUCT 306 L.F. OF 24" D.I.P. STORM SEWER @ 0.40%

EXISTING PILE BENT

APPROX. LOCATION MHW.

APPROX. LOCATION HTL

PROPOSED PILE BENTS (TYPICAL)

CONSTRUCT PIPE END SAFETY GRATE (SEE DETAIL)

INV.=101.99

INV.=100.77

110.8 108.0 108.0 108.9 106.9 106.7 106.5 106.3 106.8 105.9 105.5 105.1 102.95 102.51 102.2 101.4 100.7 99.6 98.2 (M.L.W.)

2+00 3+00 4+00 5+00 6+00 7+00 +20± +42± +34± 8+00 9+00 10+00 11+00

**LEGEND**

- CONCRETE
- LANDSCAPE STONE
- PAVEMENT SEAM
- SANITARY LINE
- GAS LINE
- WATER LINE
- FENCE
- FIRE HYDRANT
- TREE
- SANITARY MANHOLE
- BUSH/SHRUB
- REGULATORY/ STREET SIGN
- UTILITY POLE
- WATER VALVE
- GAS VALVE
- WATER METER
- SEWER CLEANOUT
- GAS SERVICE
- SEWER VENT
- STORM INLET
- UTILITY POLE w/STREET LIGHT
- GUY WIRE

| | | |
|---|---|---|
| 306 | L.F. | 24" D.I.P. STORM SEWER |
| 30 | EA. | PILE BENTS |
| 1 | EA. | PIPE END SAFETY GRATE |

**NOTES:**

1 ALL WORK WILL BE COMPLETED USING LAND BASED EQUIPMENT.

2 CONTRACTOR WILL BE REQUIRED TO NOTIFY NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION 1 WEEK PRIOR TO CONSTRUCTION IN ORDER TO ENABLE A REPRESENTATIVE OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION TO WITNESS CONSTRUCTION TO ENSURE COMPLIANCE WITH ALL APPLICABLE COASTAL RULES AND REGULATIONS.

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4 DATUM: NATIONAL GEODETIC VERTICAL DATUM ADJUSTMENT OF 1929.

5 THE OUTFALL PIPES SHALL UNDERGO A VISUAL INSPECTION BY THE DEPARTMENT OF PUBLIC WORKS WEEKLY DURING SPRING AND SUMMER, AND MONTHLY DURING THE FALL AND WINTER. CLEANING SHALL BE PERFORMED AS NECESSARY.

6 NO STAGING WILL BE COMPLETED ON THE BEACH. CONTRACTOR SHALL STOCKPILE ALL MATERIALS ON STREET ENDS WEST OF BULKHEAD

7 PROPOSED CONSTRUCTION ACTIVITY WILL NOT IMPACT (OR DISTURB) ANY DUNES

| REV. | DESCRIPTION | DATE | APP. BY |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| 4 | SCS, NJDEP, ACOE REV. | 7/30/09 | RP |
| 3 | NJDEP REVISIONS | 7/22/09 | RP |
| 2 | ADD AREA OF DISTURBANCE | 5/29/09 | RP |
| 1 | ACOE REVISIONS | 4/06/09 | RP |

2/26/09
DATE

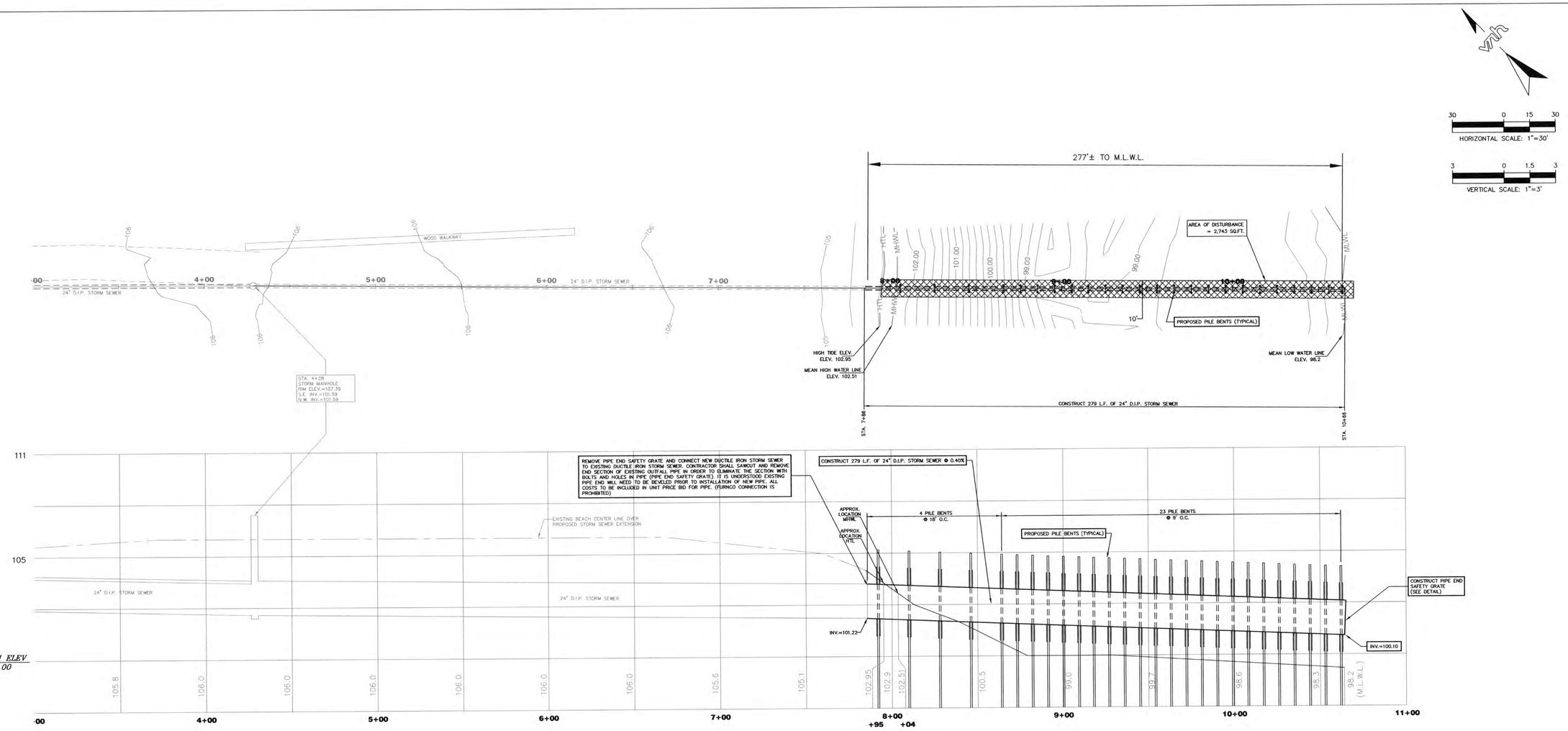
**RALPH PETRELLA, JR.**
N.J. PROFESSIONAL ENGINEER & LAND SURVEYOR LIC. #23226

van note-harvey associates
consulting engineers, planners, & land surveyors
777 Alexander Road • Princeton, N.J. 08540
(609) 987-2323 Voice (609) 987-0005 Fax
211 North Main Street • Cape May Courthouse, N.J. 08210
(609) 465-2600 Voice (609) 465-8028 Fax

PLAN AND PROFILE OF
STORM SEWER OUTFALL EXTENSION
**WASHINGTON AVENUE**
**BOROUGH OF WILDWOOD CREST**
CAPE MAY COUNTY, N.J.

| DRAWN BY | FIELD BOOK | ORDER NO. | FILE NO. | SHEET NO. |
|---|---|---|---|---|
| MBC | 14 WCC PAGE 11-17 | 38994-400-21 | A-719 | 14/27 |
| CHECKED BY RP | | | | |

REFERENCE DRWAING NOT FOR CONSTRUCTION




HORIZONTAL SCALE: 1"=30'

VERTICAL SCALE: 1"=3'

**CONSTRUCT:**

| | | |
|---|---|---|
| 279 | L.F. | 24" D.I.P. STORM SEWER |
| 27 | EA. | PILE BENTS |
| 1 | E.A. | PIPE END SAFETY GRATE |

**NOTES:**

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4 DATUM: NATIONAL GEODETIC VERTICAL DATUM ADJUSTMENT OF 1929.

5 THE OUTFALL PIPES SHALL UNDERGO A VISUAL INSPECTION BY THE DEPARTMENT OF PUBLIC WORKS WEEKLY DURING SPRING AND SUMMER, AND MONTHLY DURING THE FALL AND WINTER. CLEANING SHALL BE PERFORMED AS NECESSARY.

6 NO STAGING WILL BE COMPLETED ON THE BEACH. CONTRACTOR SHALL STOCKPILE ALL MATERIALS ON STREET ENDS WEST OF BULKHEAD

7 PROPOSED CONSTRUCTION ACTIVITY WILL NOT IMPACT (OR DISTURB) ANY DUNES

**LEGEND**

- CONCRETE
- LANDSCAPE STONE
- PAVEMENT SEAM
- SANITARY LINE
- GAS LINE
- WATER LINE
- FENCE
- FIRE HYDRANT
- TREE
- SANITARY MANHOLE
- BUSH/SHRUB
- REGULATORY/ STREET SIGN
- UTILITY POLE
- WATER VALVE
- GAS VALVE
- WATER METER
- SEWER CLEANOUT
- GAS SERVICE
- SEWER VENT
- STORM INLET
- UTILITY POLE w/STREET LIGHT
- GUY WIRE

| REV. | DESCRIPTION | DATE | APP. BY |
|---|---|---|---|
| | | | |
| | | | |
| 4 | SCS, NJDEP, ACOE REV. | 7/30/09 | (RJ) |
| 3 | NJDEP REVISIONS | 7/22/09 | RP |
| 2 | ADD AREA OF DISTURBANCE | 5/29/09 | RP |
| 1 | ACOE REVISIONS | 4/06/09 | RP |

2/26/09
DATE

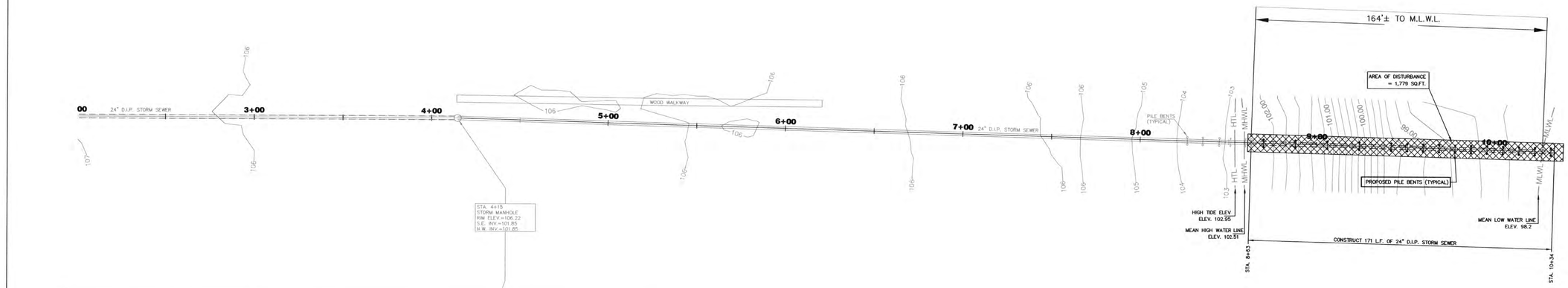
**RALPH PETRELLA, JR.**
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PLAN AND PROFILE OF
STORM SEWER OUTFALL EXTENSION
**HOLLYWOOD AVENUE**
**BOROUGH OF WILDWOOD CREST**
CAPE MAY COUNTY, N.J.

| DRAWN BY | FIELD BOOK | ORDER NO. | FILE NO. | SHEET NO. |
|---|---|---|---|---|
| MBC | 14 WCC PAGE 11-17 | 38994 400-21 | A-719 | 15/27 |
| CHECKED BY RP | | | | |

REFERENCE DRWAING NOT FOR CONSTRUCTION




30 0 15 30
HORIZONTAL SCALE: 1"=30'

3 0 1.5 3
VERTICAL SCALE: 1"=3'

**CONSTRUCT:**

| | | |
|---|---|---|
| 15 | EA. | PILE BENTS |
| 171 | L.F. | 24" D.I.P. STORM SEWER |
| 1 | EA. | PIPE END SAFETY GRATE |

**NOTES:**

1 ALL WORK WILL BE COMPLETED USING LAND BASED EQUIPMENT.

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6 NO STAGING WILL BE COMPLETED ON THE BEACH. CONTRACTOR SHALL STOCKPILE ALL MATERIALS ON STREET ENDS WEST OF BULKHEAD

7 PROPOSED CONSTRUCTION ACTIVITY WILL NOT IMPACT (OR DISTURB) ANY DUNES

**LEGEND**

- CONCRETE
- LANDSCAPE STONE
- PAVEMENT SEAM
- SANITARY LINE
- GAS LINE
- WATER LINE
- FENCE
- FIRE HYDRANT
- TREE
- SANITARY MANHOLE
- BUSH/SHRUB
- REGULATORY/ STREET SIGN
- UTILITY POLE
- WATER VALVE
- GAS VALVE
- WATER METER
- SEWER CLEANOUT
- GAS SERVICE
- SEWER VENT
- STORM INLET
- UTILITY POLE w/STREET LIGHT
- GUY WIRE

| REV. | DESCRIPTION | DATE | APP. BY |
|---|---|---|---|
| | | | |
| | | | |
| 4 | SCS, NJDEP, ACOE REV. | 7/30/09 | MJ |
| 3 | NJDEP REVISIONS | 7/22/09 | RP |
| 2 | ADD AREA OF DISTURBANCE | 5/29/09 | RP |
| 1 | ACOE REVISIONS | 4/06/09 | RP |

2/26/09
DATE

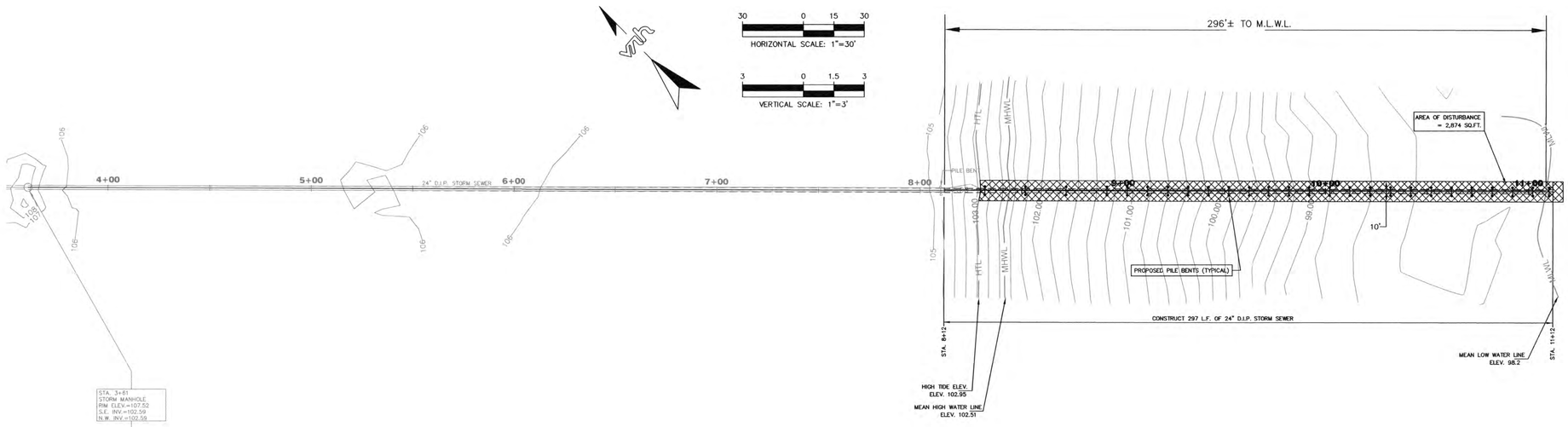
**RALPH PETRELLA, JR.**
N.J. PROFESSIONAL ENGINEER & LAND SURVEYOR LIC. #23226

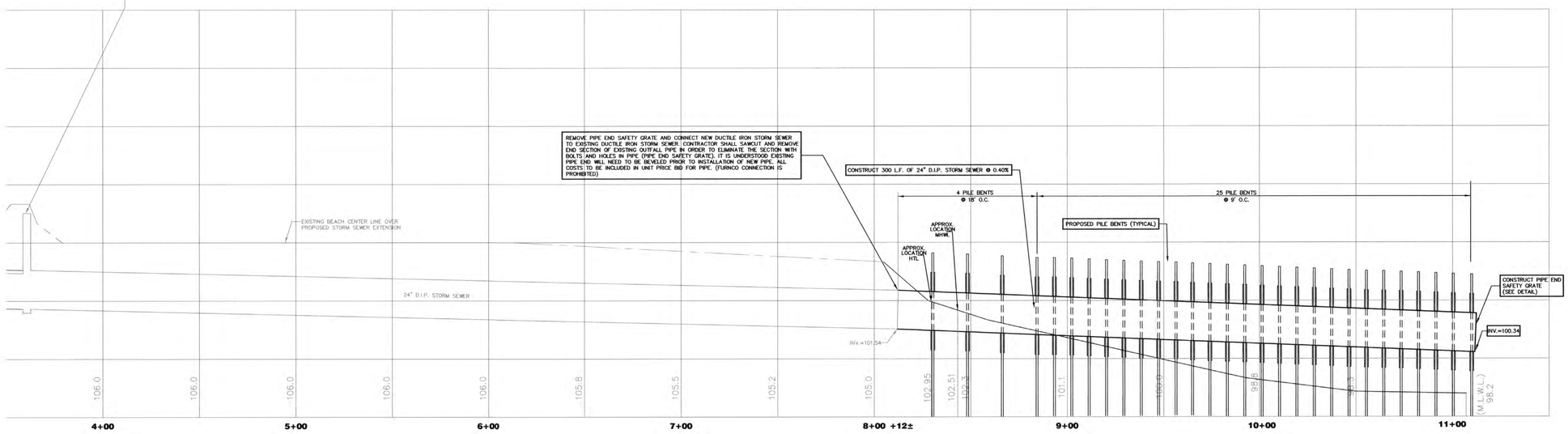
van note-harvey associates
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PLAN AND PROFILE OF
STORM SEWER OUTFALL EXTENSION
**MIAMI AVENUE**
**BOROUGH OF WILDWOOD CREST**
CAPE MAY COUNTY, N.J.

| DRAWN BY | FIELD BOOK | ORDER NO. | FILE NO. | SHEET NO. |
|---|---|---|---|---|
| MBC | 14 WCC PAGE 11-17 | 38994-400-21 | A-719 | 16/27 |
| CHECKED BY RP | | | | |

REFERENCE DRWAING NOT FOR CONSTRUCTION




**LEGEND**

| | |
|---|---|
| CONCRETE | REGULATORY/ STREET SIGN |
| LANDSCAPE STONE | UTILITY POLE |
| PAVEMENT SEAM | WATER VALVE |
| SANITARY LINE | GAS VALVE |
| GAS LINE | WATER METER |
| WATER LINE | SEWER CLEANOUT |
| FENCE | GAS SERVICE |
| FIRE HYDRANT | SEWER VENT |
| TREE | STORM INLET |
| SANITARY MANHOLE | UTILITY POLE w/STREET LIGHT |
| BUSH/SHRUB | GUY WIRE |

| | | |
|---|---|---|
| 300 | L.F. | 24" D.I.P. STORM SEWER |
| 29 | EA. | PILE BENTS |
| 1 | EA. | PIPE END SAFTY GRATE |

**NOTES:**

1 ALL WORK WILL BE COMPLETED USING LAND BASED EQUIPMENT.

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4 DATUM: NATIONAL GEODETIC VERTICAL DATUM ADJUSTMENT OF 1929.

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7 PROPOSED CONSTRUCTION ACTIVITY WILL NOT IMPACT (OR DISTURB) ANY DUNES

| REV. | DESCRIPTION | DATE | APP. BY |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| 4 | SCS, NJDEP, ACOE REV. | 7/30/09 | RP |
| 3 | NJDEP REVISIONS | 7/22/09 | RP |
| 2 | ADD AREA OF DISTURBANCE | 5/29/09 | RP |
| 1 | ACOE REVISIONS | 4/06/09 | RP |

2/26/09
DATE

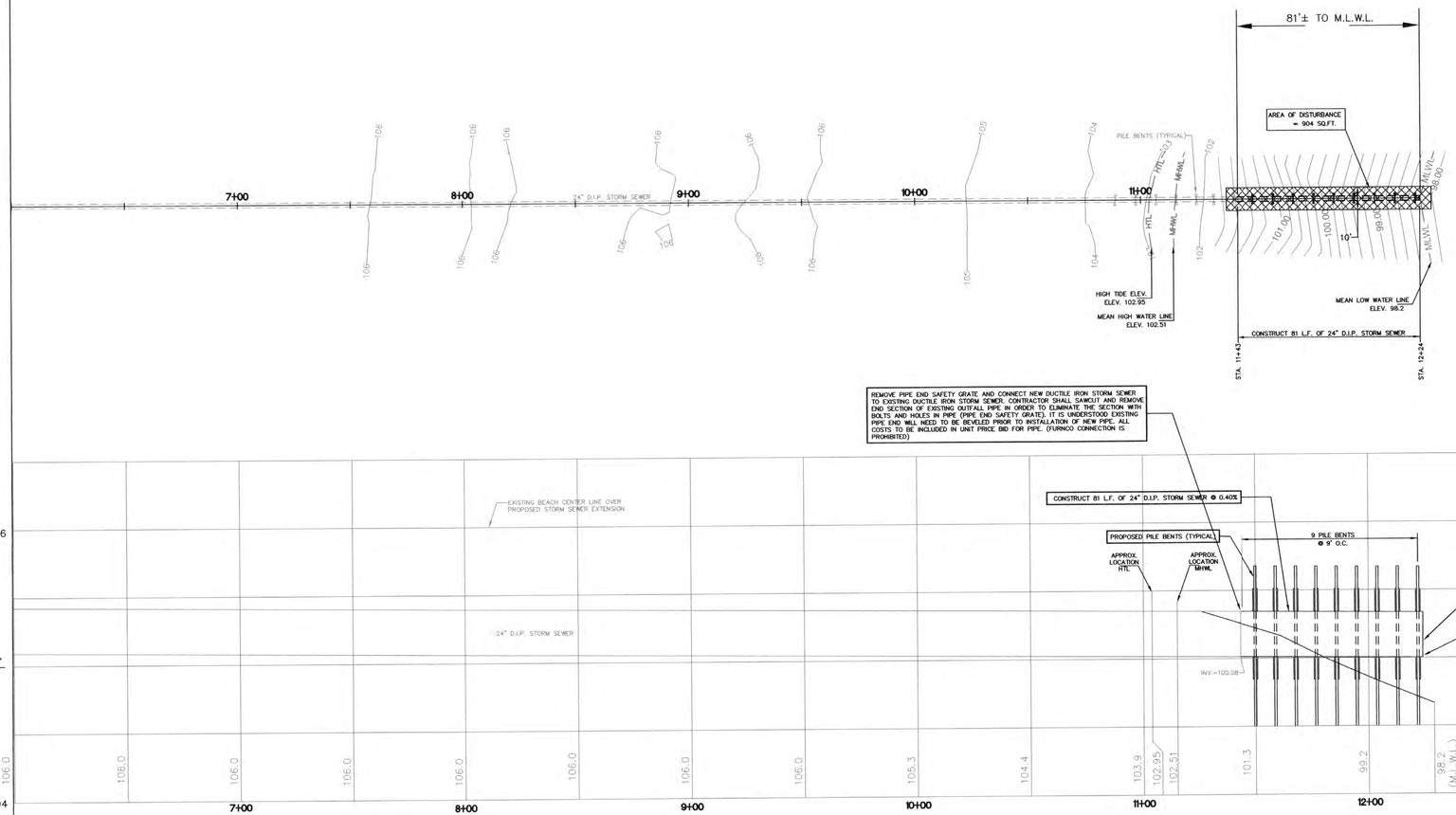
**RALPH PETRELLA, JR.**
N.J. PROFESSIONAL ENGINEER & LAND SURVEYOR LIC. #23226

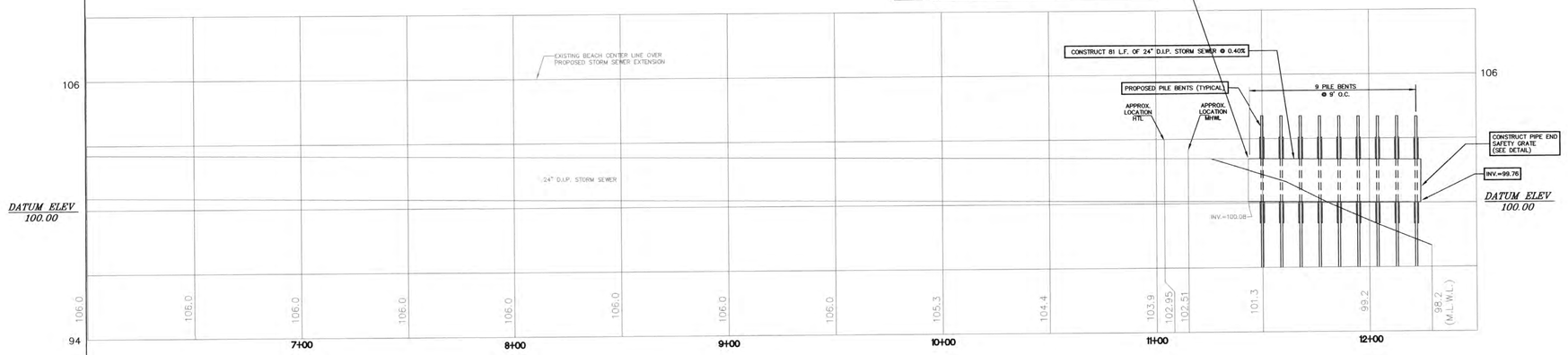
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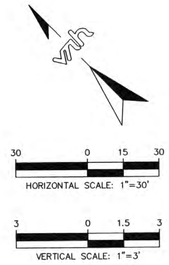
PLAN AND PROFILE OF
STORM SEWER OUTFALL EXTENSION
# ATLANTA AVENUE
# BOROUGH OF WILDWOOD CREST
CAPE MAY COUNTY, N.J.

| DRAWN BY | FIELD BOOK | ORDER NO. | FILE NO. | SHEET NO. |
|---|---|---|---|---|
| MBC | 14 WCC | 38994-400-21 | A-719 | 17/27 |
| CHECKED BY RP | PAGE 11-17 | | | |

REFERENCE DRWAING NOT FOR CONSTRUCTION




**NOTES:**

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7 PROPOSED CONSTRUCTION ACTIVITY WILL NOT IMPACT (OR DISTURB) ANY DUNES

| QUANTITY | UNIT | DESCRIPTION |
|---|---|---|
| 81 | LF | 24" D.I.P. STORM SEWER |
| 9 | EA. | PILE BENTS |
| 1 | EA. | PIPE END SAFETY GRATE |

**LEGEND**

- CONCRETE
- LANDSCAPE STONE
- PAVEMENT SEAM
- SANITARY LINE
- GAS LINE
- WATER LINE
- FENCE
- FIRE HYDRANT
- TREE
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- WATER METER
- SEWER CLEANOUT
- GAS SERVICE
- SEWER VENT
- STORM INLET
- UTILITY POLE w/STREET LIGHT
- GUY WIRE

| REV. | DESCRIPTION | DATE | APP. BY |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| 4 | SCS, NJDEP, ACOE REV. | 7/30/09 | RP |
| 3 | NJDEP REVISIONS | 7/22/09 | RP |
| 2 | ADD AREA OF DISTURBANCE | 5/29/09 | RP |
| 1 | ACOE REVISIONS | 4/06/09 | RP |

2/26/09
DATE

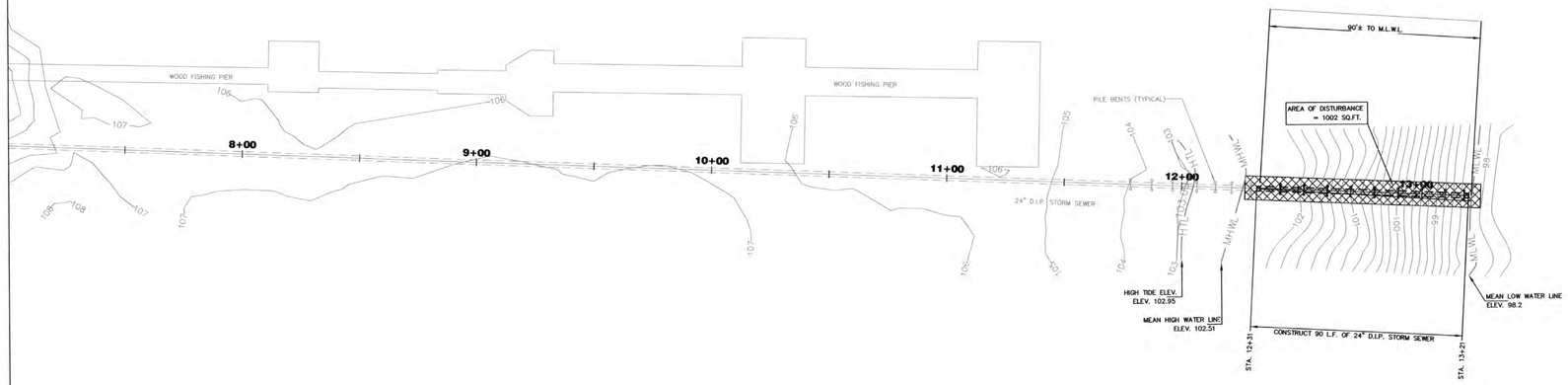
**RALPH PETRELLA, JR.**
N.J. PROFESSIONAL ENGINEER & LAND SURVEYOR LIC. #23226

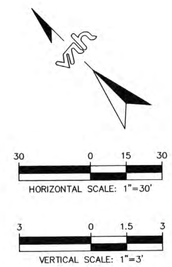
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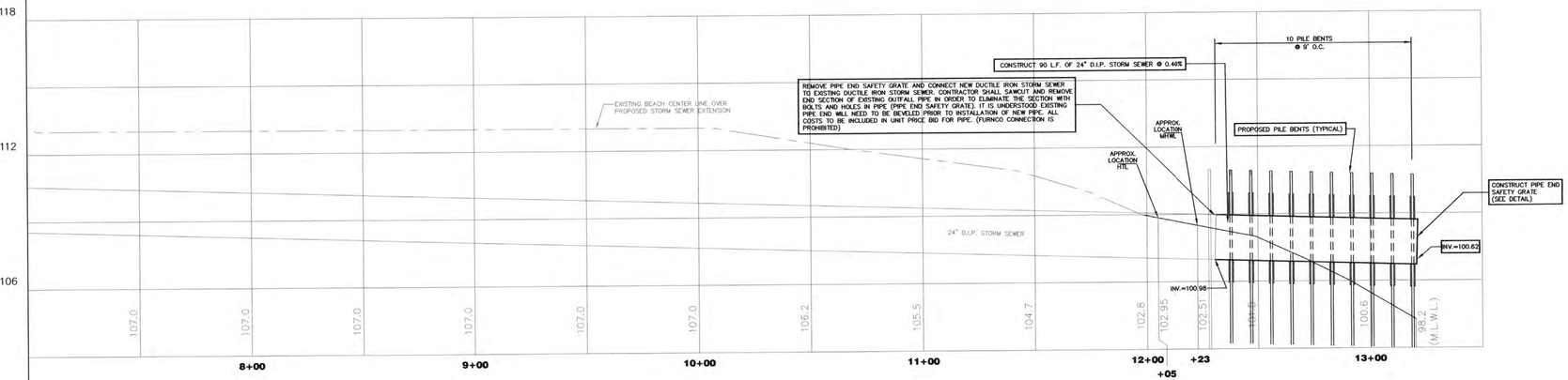
PLAN AND PROFILE OF
STORM SEWER OUTFALL EXTENSION
# FERN ROAD
# BOROUGH OF WILDWOOD CREST
CAPE MAY COUNTY, N.J.

| DRAWN BY | FIELD BOOK | ORDER NO. | FILE NO. | SHEET NO. |
|---|---|---|---|---|
| MBC | 14 WCC PAGE 11-17 | 38994-400-21 | A-719 | 18/27 |
| CHECKED BY RP | | | | |

REFERENCE DRWAING NOT FOR CONSTRUCTION




| CONSTRUCT: QUANTITY | UNIT | DESCRIPTION |
|---|---|---|
| 90 | LF | 24" D.I.P. STORM SEWER |
| 10 | EA. | PILE BENTS |
| 1 | EA. | PIPE END SAFETY GRATE |

**NOTES:**

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4 DATUM: NATIONAL GEODETIC VERTICAL DATUM ADJUSTMENT OF 1929.

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**LEGEND**

- CONCRETE
- LANDSCAPE STONE
- PAVEMENT SEAM
- SANITARY LINE
- GAS LINE
- WATER LINE
- FENCE
- FIRE HYDRANT
- TREE
- SANITARY MANHOLE
- BUSH/SHRUB
- REGULATORY/ STREET SIGN
- UTILITY POLE
- WATER VALVE
- GAS VALVE
- WATER METER
- SEWER CLEANOUT
- GAS SERVICE
- SEWER VENT
- STORM INLET
- UTILITY POLE w/STREET LIGHT
- GUY WIRE

| REV. | DESCRIPTION | DATE | APP. BY |
|---|---|---|---|
| | | | |
| | | | |
| 4 | SCS, NJDEP, ACOE REV. | 7/30/09 | RP |
| 3 | NJDEP REVISIONS | 7/22/09 | RP |
| 2 | ADD AREA OF DISTURBANCE | 5/29/09 | RP |
| 1 | ACOE REVISIONS | 4/06/09 | RP |

2/26/09
DATE

**RALPH PETRELLA, JR.**
N.J. PROFESSIONAL ENGINEER & LAND SURVEYOR LIC. #23326

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(609) 465-2600 Voice • (609) 465-8028 Fax

PLAN AND PROFILE OF
STORM SEWER OUTFALL EXTENSION
**HEATHER ROAD**
**BOROUGH OF WILDWOOD CREST**
CAPE MAY COUNTY, N.J.

| DRAWN BY | FIELD BOOK | ORDER NO. | FILE NO. | SHEET NO. |
|---|---|---|---|---|
| MBC | 14 WCC PAGE 11-17 | 38994-400-21 | A-719 | 19/27 |
| CHECKED BY RP | | | | |



REFERENCE DRWAING NOT FOR CONSTRUCTION

## SOIL CONSERVATION AND SEDIMENT CONTROL NOTES

1. The site should be graded as needed and as is feasible to permit the use of conventional equipment onsite. Immediately prior to seeding and topsoil application, the surface should be scarified 6 inches to 12 inches where there has been soil compaction provided no danger is posed to underground utilities. The entire area to be vegetated shall receive a uniform application of topsoil at a depth of 4 inches. The topsoil should be handled only when it is dry enough to work without damaging the soil structure. Apply fertilizer at a rate of 11 pounds per 1,000 square feet of 10–20–10 or equivalent with 50% water insoluble nitrogen unless a soil test indicates otherwise. Apply limestone in accordance with Table 4–1 of "Standards for Soil and Sediment Control in New Jersey." For loamy sand, sand, apply pulverized dolomitic limestone at a rate of 45 pounds per 1,000 square feet. Work both the limestone and fertilizer into the soil as nearly as practical to a depth of 4 inches with a disc, springtooth harrow, or other suitable equipment. The final harrowing or discing operation should be on the general contour. Continue tillage until a reasonable uniform seedbed is prepared. In accordance with Table 4–2 of "Standards for Soil and Sediment Control in New Jersey," apply seed mixture 9 uniformly using a conventional seeding method. Hydroseeding may be used for areas too steep for conventional equipment to traverse or too obstructed with rocks, stumps, etc. As specified in Table 4–3, seed mixture 9 consists of the following: strong creeping red fescue at 1.4 lbs. per 1000 square feet; Kentucky bluegrass at 0.92 lbs. per 1000 square feet; and perennial ryegrass at 0.25 lbs. per 1000 square feet. Except for drilled, hydroseeded, or cultipacked seedings, seed shall be incorporated into the soil within 24 hours of seedbed preparation to a depth of 1/2 inch by raking or dragging. After seeding, firm the soil where feasible with a corrugated roller to assure good seed–to–soil contact, restore capillarity, and improve seedling emergence. Seeding should occur during an optimal planting period between March 1 and April 30 or August 15 and November 30, but is also acceptable between May 1 and August 14.

2. Mulching is required on all seeding. If the seed is applied between February 1 and November 30, then the seeding shall be mulched with either straw or salt hay at a rate of 70 – 90 pounds per 1,000 square feet. Anchoring shall be accomplished immediately after placement to minimize loss by wind or water. If the construction is not occurring during an optimal or acceptable planting period, then the contractor shall provide for temporary stabilization with mulch until more suitable protection can be applied. (Refer to section 5–1 Standard for Stabilization with Mulch Only of "Standards for Soil Erosion and Sediment Control in New Jersey")

3. If topsoil is to be stockpiled onsite, then temporary stabilization shall be provided using either vegetative cover or mulching depending on planting feasibility. If construction occurs between February 15 and May 1 or August 15 and October 15, then seeding of perennial ryegrass at a rate of 1 pound per 1,000 square feet will be required in accordance with Table 7–2 of "Standards for Soil Erosion and Sediment Control." Otherwise, suitable mulch will be required until a more suitable protection can be applied. The stockpiled topsoil shall be situated so as not to obstruct natural drainage or cause off–site environmental damage. Weeds should not be allowed to grow on stockpile.

4. The contractor shall provide means for dust control on the construction site and adjacent streets. Such provisions shall be in accordance with section 16–1 Standard for Dust Control set forth by "Standards for Soil Erosion and Sediment Control in New Jersey."

5. A report of compliance must be obtained from the Cape–Atlantic Soil Conservation District prior to receiving a certificate of occupancy from the municipality. Requests for a district inspection for the release of a report of compliance must be made 5 working days in advance. This applies to both complete (final) and conditional (temporary) certificates.

6. All sediment spilled, dropped, washed, or tracked onto public rights–of–way must be removed immediately.

7. The contractor shall be responsible for maintenance of all soil erosion and sediment control measures during construction in accordance with "Standards for Soil Erosion and Sediment Control in New Jersey."

8. The owner shall be responsible for maintenance of permanent soil erosion and sediment control measures after construction in accordance with "Standards for Soil Erosion and Sediment Control in New Jersey." Maintaining vegetation shall include frequent mowing (4–7 days), occasional fertilization, lime, and weed control. In addition, all storm inlets shall undergo a visual inspection weekly, and shall be cleared of debris as necessary.

9. Areas to be utilized for staging and stockpiling of materials, appropriate temporary soil erosion and sediment control measures must be utilized during construction. These areas must be permanently stabilized following their use.

10. The contractor shall be responsible for any erosion or sedimentation that may occur below stormwater outfalls or offsite as a result of construction of the project.

11. If dewatering activities are required during the construction of the project, or if stormwater facilities need to be dewatered to facilitate completion, measures must be taken to remove suspended sediments. Refer to section 14 of the "Standards for Soil Erosion and Sediment Control in New Jersey".

12. Every effort shall be made to prevent and correct problems associated with erosion and sedimentation which could occur during and after project construction. At a minimum the following measures will be incorporated:

(a) All erosion and sedimentation control measures shall be in place prior to any grading operations or construction of proposed facilities and shall be maintained until construction is complete and the construction area is stabilized. After restoration is complete, temporary control measures shall be removed and disposed of properly.
(b) All erosion and sedimentation control measures shall be constructed and maintained in accordance with the "Standards for Soil Erosion and Sediment Control in New Jersey", prepared by the New Jersey State Soil Conservation Committee, Latest Edition.
(c) Disturbed areas that will be exposed in excess of 14 days shall be temporarily seeded and/or mulched until proper weather conditions exist for establishment of a permanent vegetative cover except in areas where final restoration is expected to be completed within 7 days after the completion of construction, in which case no temporary protective measures will be required. If final restoration is expected to begin more than 7 days and completed more than 30 days after the start of construction, seeding shall be required for temporary protection, except where seasonal conditions are not suitable for growing vegetation. In this case, mulch may be applied until conditions are suitable for establishing vegetative cover or until final restoration is implemented.

13. The boundary of the stockpile area shall be clearly marked by hay bales, silt fencing, or another appropriate method. where fill is to be stored in excess of 14 days, a suitable means of protecting excavated material from wind and water erosion shall be employed. Erosion control methods may include one or more of the following: mulching, sprinkling, silt fencing, haybaling, and stone covering.

Criteria for protecting remaining trees:

(1) General mechanical damage – see Figures 9–3 to 9–6 for correct placement of tree protection.
(2) Box trees within 25 feet of a building site to prevent mechanical injury. Fencing or other barrier should be installed at the drip line of the tree branches or beyond. See Figure 9–3. Tree root systems commonly extend well beyond the drip line.
(3) Boards will not be nailed to trees during building operations.
(4) Feeder roots should not be cut in area inside the drip line of the tree branches.
(5) Damaged trunks or exposed roots should have damaged bark removed immediately and no paint shall be applied. Exposed roots should be covered with topsoil immediately after excavation is complete. Roots shall be pruned to give a clean, sharp surface amenable to healing. Roots exposed during hot weather should be irrigated to prevent permanent tree injury. Care for serious injury should be prescribed by a professional forester or certified tree expert.
(6) Tree limb removal, where necessary, will be done as natural target pruning to remove the desired branch as close as possible to the branch collar. There should be NO flush cuts. Flush cuts destroy a major defense system of the tree. See Figure 9–1. No tree paint shall be applied. All cuts shall be made at the outside edge of the branch collar (fig. 9–1 and 9–2). Cuts made too far beyond the branch collar may lead to excess sprouting, cracks and rot. Removal of a "V" crotch should be considered for free standing specimen trees (see figure 9–2) to avoid splitting damage.
Note: For more specific data on certain tree characteristics, consult the Standard for Selection of Trees, Shrubs and Vines or consult local professional tree experts, Soil Conservation District or Rutgers Cooperative Extension.

14. The contractor shall be responsible for maintenance of permanent soil erosion and sediment control measures after construction in accordance with "Standards for Soil Erosion and Sediment Control in New Jersey". Maintaining vegetation shall include frequent mowing (4–7 days), occasional fertilization, lime, and weed control. In addition, all storm inlets shall undergo a visual inspection weekly, and shall be cleared of debris as necessary.

15. The contractor shall be responsible for any erosion or sedimentation that may occur below storm water outfalls or offsite as a result of construction of this project.

16. In order to control dust, as often as required during each working day, and particular prior to the conclusion of each working day, areas under immediate construction (including access road and other areas affected thereby) shall be swept and kept wet down with water sufficiently to lay dust. In addition, these areas shall be wet down during non working hours (including weekends) as often as required to keep dust under control.

17. The silt fence sediment control barrier must comply with section 25 of the "Standards for Soil Erosion and Sediment Control in New Jersey" a drawstring must be incorporated into the top portion of the fabric. (see detail)

## STANDARD FOR TOPSOILING

DEFINITION
Topsoiling entails the distribution of suitable quality soil on areas to be vegetated.

PURPOSE
To improve the soil medium for plant establishment and maintenance.

WATER QUALITY ENHANCEMENT
Growth and establishment of a vigorous vegetative cover is facilitated by topsoil, preventing soil loss by wind and rain offsite and into streams and other stormwater conveyances.

WHERE APPLICABLE
Topsoil shall be used where soils are to be disturbed and will be revegetated.

METHODS AND MATERIALS
Materials
Topsoil should be friable , loamy , free of debris, objectionable weeds and stones, and contain no toxic substance or adverse chemical or physical condition that may be harmful to plant growth. Soluble salts should not be excessive (conductivity less than 0.5 millohms per centimeter. More than 0.5 millohms may desiccate seedlings and adversely impact growth). Topsoil hauled in from offsite should have a minimum organic matter content of 2.75 percent. Organic matter content may be raised by additives. Topsoil substitute is a soil material which may have been amended with sand, silt, clay, organic matter, fertilizer or lime and has the appearance of topsoil. Topsoil substitutes may be utilized on sites with insufficient topsoil for establishing permanent vegetation. All topsoil substitute materials shall meet the requirements of topsoil noted above. Soil tests shall be performed to determine the components of sand, silt, clay, organic matter, soluble salts and pH level.

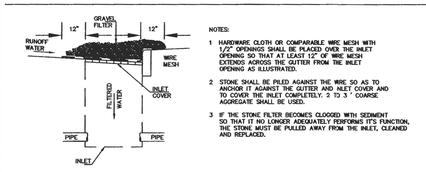
Stripping and Stockpiling
Field exploration should be made to determine whether quantity and or quality of surface soil justifies stripping.
Stripping should be confined to the immediate construction area.
Where feasible, lime may be applied before stripping at a rate to be determined by soil tests to bring the soil pH to approximately 6.5. In lieu of soil tests, see lime rate guide in seedbed preparation for Permanent Vegetative Cover for Soil Stabilization, pg. 4–1.
A 4–6 inch stripping depth is common, but may vary depending on the particular soil.
Stockpiles of topsoil should be situated so as not to obstruct natural drcinage or cause offsite environmental damage.
Stockpiles should be vegetated in accordance with standards previously described herein; see standards for Permanent (pg. 4–1) or Temporary (pg. 7–1) Vegetative Cover for Soil Stabilization. Weeds should not be allowed to grow on stockpiles.

Site Preparation
Grade at the onset of the optimal seeding period so as to minimize the duration and area of exposure of disturbed soil to erosion. immediately proceed to establish vegetative cover in accordance with the specified seed mixture. Time is of the essence.
Grade as needed and feasible to permit the use of conventional equipment for seedbed preparation, seeding, mulch application and anchoring, and maintenance. See the Standard for Land Grading, pg. 19–1.
As guidance for ideal conditions, subsoil should be tested for lime requirement. Limestone, if needed, should be applied to bring soil to a pH of approximately 6.5 and incorporated into the soil as nearly as practical to a depth of 4 inches.
Immediately prior to top soiling, the surface should be scarified 6" to 12' where there has been soil compaction. This will help insure a good bond between the topsoil and subsoil. This practice is permissible only where there is no danger to underground utilities (cables. irrigation systems, etc.)
A. Employ needed erosion control practices such as diversions, grade stabilization structures, channel stabilization measures, sedimentation basins, and waterways. See Standards 11 through 42.

Applying Topsoil
Topsoil should be handled only when it is dry enough to work without damaging soil structure; i.e., less than field capacity (see glossary).
A uniform application to a depth of 5 inches (unsettled) is recommended. Soils with a pH of 4.0 or less or containing iron sulfide shall be covered with a minimum depth of 12 inches of soil having a pH of 5.0 or more, in accordance with the Standard for Management of High Acid Producing Soil (pg. 1–1).

Friable means easily crumbles in the fingers, as defined in most soils texts.
Loamy means texture groups consisting of coarse loamy sands, sandy loam, fine and very fine sandy loam, loam, silt loam, clay loam, sandy clay loam and silty clay loam textures and having less than 35% coarse fragments (particles less than 2mm in size) as defined in the Glossary of Soil Science Terms, 1996, Soil Science Society of America.

*(STANDARDS FOR SOIL EROSION & SEDIMENT CONTROL IN NEW JERSEY, JULY 1999 EDITION)*




NOTES:
1 HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2" OPENINGS SHALL BE PLACED OVER THE INLET OPENING SO THAT AT LEAST 12" OF WIRE MESH EXTENDS ACROSS THE GUTTER FROM THE INLET OPENING AS ILLUSTRATED.
2 STONE SHALL BE PILED AGAINST THE WIRE SO AS TO ANCHOR IT AGAINST THE GUTTER AND INLET COVER AND TO COVER THE INLET COMPLETELY. 2 TO 3 " COARSE AGGREGATE SHALL BE USED.
3 IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS IT'S FUNCTION, THE STONE MUST BE PULLED AWAY FROM THE INLET, CLEANED AND REPLACED.

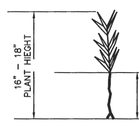
### GRAVEL INLET SEDIMENT FILTER
NOT TO SCALE

ALL COSTS TO BE INCLUDED IN VARIOUS UNIT PRICES BID FOR ALL ITEMS IN PROPOSAL.

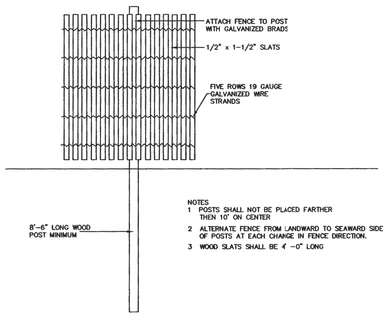
1. All sediment spilled, dropped, washed, or tracked onto public rights–of–way must be removed immediately.

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3. In order to control dust, as often as required during each working day, and particularly prior to the conclusion of each working day, areas under immediate construction (including access road and other areas affected thereby) shall be swept and kept wet down with water sufficiently to lay dust. In addition, these areas shall be wet down during non working hours (including weekends) as often as required to keep dust under control.

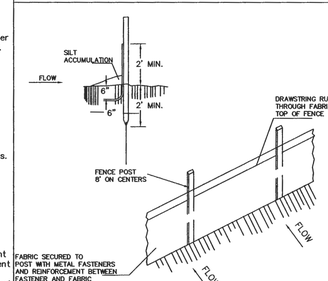



### DUNE GRASS PLANTING DETAIL
NTS

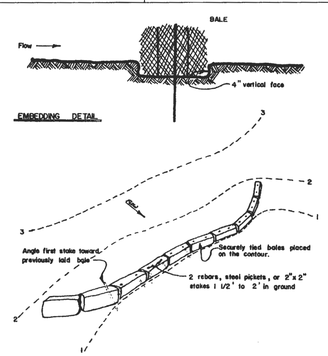



NOTES
1 POSTS SHALL NOT BE PLACED FARTHER THEN 10' ON CENTER
2 ALTERNATE FENCE FROM LANDWARD TO SEAWARD SIDE OF POSTS AT EACH CHANGE IN FENCE DIRECTION.
3 WOOD SLATS SHALL BE 4' –0" LONG

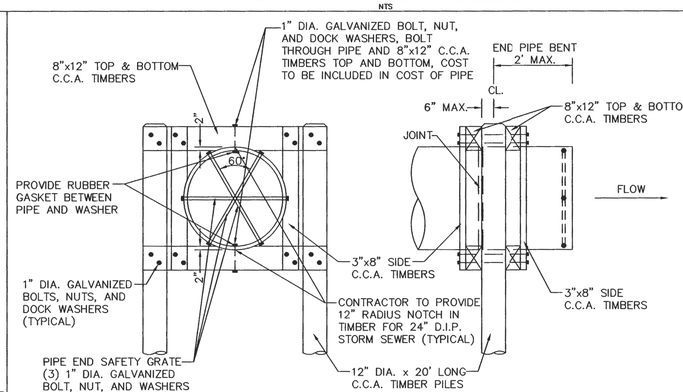
### SAND FENCE AND POST DETAIL
NTS




### SILT FENCE DETAIL
NOT TO SCALE



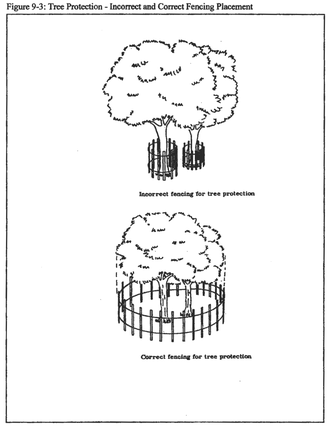

### PLACEMENT AND ANCHORING DETAIL
### BALE SEDIMENT BARRIERS
NOT TO SCALE




### PILE BENT AND PIPE END SAFETY GRATE DETAIL
NOT TO SCALE

*Standards for Soil Erosion and Sediment Control in New Jersey* July 1999

Figure 9-3: Tree Protection - Incorrect and Correct Fencing Placement



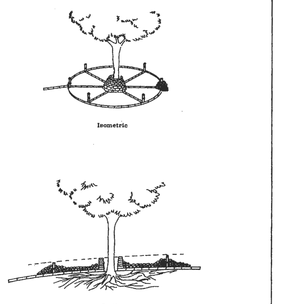
Incorrect fencing for tree protection

Correct fencing for tree protection

*Tree Protection During Construction* 9-5

*Standards for Soil Erosion and Sediment Control in New Jersey* July 1999

Figure 9-4: Tree Protection in Fill Areas

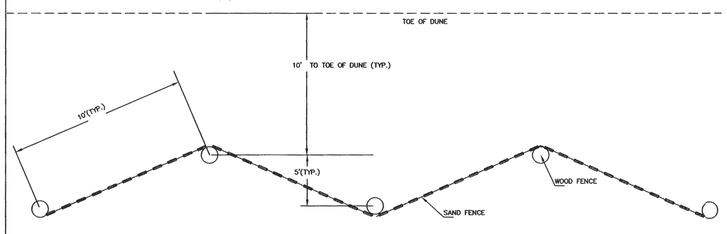


Isometric

Section

Tree protection - tile and gravel will allow air circulation to root zone under a fill

*9-6 Tree Protection During Construction*




### SAND FENCE LAYOUT DETAIL
NTS

*Standards for Soil Erosion and Sediment Control in New Jersey* July 1999

Figure 9-1- Removal of Tree Limb

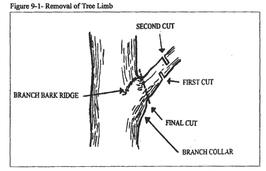
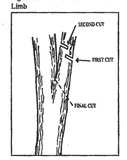
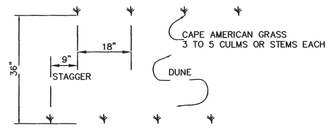


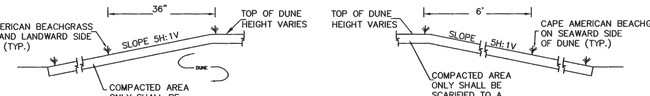

Figure 9-2 - Removal of "V" Crotch Limb




*9-4 Tree Protection During Construction*




PLAN VIEW




SECTION VIEW

### DUNE GRASS PLANTING PATTERN DETAIL
NTS

*Standards for Soil Erosion and Sediment Control in New Jersey* July 1999

Figure 9-5: Tree Protection in Cut Areas

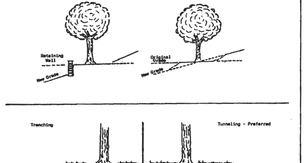
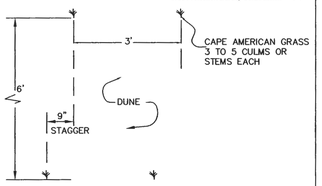



Figure 9-6: Tree Protection - Underground Utility Installation

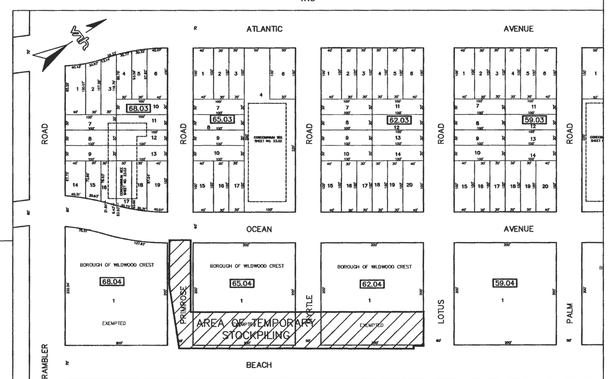
*Tree Protection During Construction* 9-7







### DUNE GRASS PLANTING PATTERN DETAIL
NTS




SHEET NO. 38

### SKETCH SHOWING AREA OF STOCKPILING
NOT TO SCALE

| REV. | DESCRIPTION | DATE | APP. BY |
|---|---|---|---|
| 1 | SCS, NJDEP, ACOE REV. | 7/30/09 | |


van note–harvey associates
consulting engineers, planners, & land surveyors
777 Alexander Road • Princeton, N.J. 08540
(609) 987–2323 Voice (609) 987–0005 Fax
211 North Main Street • Cape May Courthouse, N.J. 08210
(609) 465–2600 Voice (609) 465–8028 Fax


DETAIL SHEET FOR:

**STREET AND UTILITY RECONSTRUCTION & VARIOUS STORM SEWER IMPROVEMENTS**
**BOROUGH OF WILDWOOD CREST**
CAPE MAY COUNTY, N.J.

2/26/09
DATE


**RALPH PETRELLA, JR.**
N.J. PROFESSIONAL ENGINEER & LAND SURVEYOR LIC. #23226


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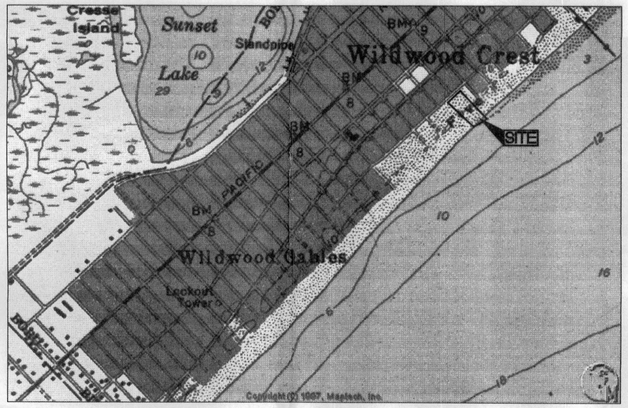
REFERENCE DRWAING NOT FOR CONSTRUCTION

# PLANS FOR
# HEATHER ROAD FISHING PIER

## BOROUGH OF WILDWOOD CREST
## CAPE MAY COUNTY, N.J.

### BOROUGH OF WILDWOOD CREST

| | |
|---|---|
| CARL GROON | MAYOR |
| JOYCE GOULD | COMMISSIONER |
| DON CABRERA | COMMISSIONER |




KEY MAP
N.T.S.

NOTES:
LOCATION OF UTILITIES IS BASED UPON BEST AVAILABLE INFORMATION AND PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY THE ACTUAL LOCATIONS IN THE FIELD. THE LEAST OF WHICH SHALL BE BY TELEPHONING GARDEN STATE UNDERGROUND PLANT LOCATION SERVICE AT 1-800-272-1000

DATUM: NATIONAL GEODETIC VERTICAL DATUM ADJUSTMENT OF 1929.

van note harvey associates
consulting engineers, planners & land surveyors
211 North Main Street, Suite 203
Cape May Court House, N.J.
08210

36564-200-21
FILE # A-670

REFERENCE DRWAING NOT FOR CONSTRUCTION

BLOCK 11.04

BEACH AVENUE

LAVENDER ROAD

BLOCK 11.05
LOT 1

BLOCK 16.04

BLOCK 16.05
LOT 1.01

CONTRACTOR SHALL VERIFY
ALL DIMENSIONS

960'±

CONCRETE BIKEPATH

GATE

AWNING

32.0' x 57.3' FRAME BUILDING ON PILING K/A "WILDWOOD CREST FISHING CLUB" BUILDING NOT IN CONTRACT.

ROOFED OVER SECTION

LIGHT POLE

LIGHT POLE

4' X 8.7' "BOOTH"

GATE

LIGHT POLE

LIGHT POLE

LIGHT POLE

3.5' X 8' "BOOTH"

LIGHT POLE

LIGHT POLE

4.1' X 9.7' "BOOTH"

4' X 12' "BOOTH"

HEATHER ROAD

BITUMINOUS CONCRETE

LOT 1.02

UTILITY POLE GUY WIRES & OVERHEAD WIRES

REMAINS OF WOOD & WIRE FENCE

BLOCK 21.04

BEACH AVENUE

BLOCK 21.05
LOT 1

11.80' 12.18' 14.07' 14.50' 14.80' 15.18' 15.54' 15.41' 15.52' 15.18' 14.98' 15.16' 15.25' 15.39' 18.81' 18.82' 18.55' 18.25'

| REV. | DESCRIPTION | DATE | APP. BY |
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| | | | |
| | | | |
| | | | |

Ralph Petrella, Jr. 9/19/07
DATE

RALPH PETRELLA, JR.
NJ PROFESSIONAL ENGINEER & LAND SURVEYOR LIC. #23226

van note–harvey associates
consulting engineers, planners, & land surveyors
777 Alexander Road • Princeton, N.J. 08540
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# EXISTING CONDITION PLAN
# REHABILITATION OF
# HEATHER ROAD FISHING PIER
# BOROUGH OF WILDWOOD CREST
## CAPE MAY COUNTY, N.J.

| DRAWN BY | FIELD BOOK | ORDER NO. | FILE NO. | SHEET NO. |
|---|---|---|---|---|
| BMP | | 36564–200–21 | A–670 | 1 OF 5 |
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REFERENCE DRWAING NOT FOR CONSTRUCTION

BLOCK 11.04

BEACH AVENUE

LAVENDER ROAD

BLOCK 11.05
LOT 1

BLOCK 16.04

CONTRACTOR SHALL VERIFY ALL DIMENSIONS

BLOCK 16.05
LOT 1.01

960'±

AREA #1
THIS SECTION REMOVE EXISTING PIER AND CONSTRUCT NEW PIER
REPLACE ALL PILES, BEAMS AND JOIST

AREA #2
THIS SECTION REMOVE ALL DECKING AND REPLACE PILES
AS INDICATED, REPLACE BEAMS AND JOIST AS AUTHORIZED BY THE ENGINEER.

CONSTRUCT 8' WIDE RAMP — SLOPE 1:12

CONSTRUCT 8' WIDE CONCRETE PATH COST TO BE INCLUDED IN BASE BID

ELEV. 14.50

8' WIDE PROPOSED

5' WIDE

ROOFED OVER SECTION

EXISTING BUILDING NOT IN CONTRACT

"H" ELECTRICAL PANEL IN AREA OF ENCLOSURE

MATCH EXISTING GRADE AT PARKING AREA

ELEV. 12.00

HEATHER ROAD

LOT 1.02

REPLACE LANDING IN KIND

DENOTES PILES TO BE REMOVED TYPICAL

BLOCK 21.04

BEACH AVENUE

BLOCK 21.05
LOT 1

EXISTING PIER PROFILE

SET NEW PIER AT ELEVATION 15.50. ADJUST HEIGHT OF PIER AT EXISTING BUILDING TO MEET EXISTING HEIGHT.

11.80' 12.18' 14.07' 14.50' 14.80' 15.18' 15.54' 15.41' 15.52' 15.18' 14.98' 15.16' 15.25' 15.39' 18.81' 18.82' 18.55' 18.25'

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9/19/07
DATE

RALPH PETRELLA, JR.
NJ PROFESSIONAL ENGINEER & LAND SURVEYOR LIC. #23226

van note—harvey associates
consulting engineers, planners, & land surveyors
777 Alexander Road • Princeton, N.J. 08540
(609) 987-2323 Voice (609) 987-0005 Fax
211 North Main Street • Cape May Courthouse, N.J. 08210
(609) 465-2600 Voice (609) 465-8028 Fax

PROPOSED PLAN
REHABILITATION OF
HEATHER ROAD FISHING PIER
BOROUGH OF WILDWOOD CREST
CAPE MAY COUNTY, N.J.

| DRAWN BY | FIELD BOOK | ORDER NO. | FILE NO. | SHEET NO. |
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| BMP | | 36564-200-21 | A-670 | 2 OF 5 |
| CHECKED BY | PAGE | | | |

REFERENCE DRWAING NOT FOR CONSTRUCTION

CONSTRUCT 8' WIDE
RAMP – SLOPE 1:12

27'

308'±

CONTRACTOR SHALL VERIFY
ALL DIMENSIONS

CONSTRUCT 8' WIDE
CONCRETE PATH
COST TO BE INCLUDED
IN BASE BID

ELEV. 14.50

8' WIDE PROPOSED

9' WIDE

MISSING PILING

8' WIDE PROPOSED

48'±

8' WIDE

ELEV.
11.5±

30'

ROOFED
OVER
SECTION

NEW
ELECTRICAL
PANEL
IN NEMA 4X
ENCLOSURE

EXISTING
BUILDING NOT
IN CONTRACT

MATCH EXISTING
GRADE AT PARKING AREA

ELEV. 12.00

LOT

AREA #1

THIS SECTION REMOVE EXISTING PIER AND CONSTRUCT NEW PIER

REPLACE ALL PILES, BEAMS AND JOIST

22'

279'

NEW LIGHT POLE (TYP. FOR 11)
NEW LOCATION TO BE
DETERMINED IN FEILD

8' WIDE PROPOSED

16'

REPLACE LANDING IN KIND

1.02

DENOTES NEW LIGHTING FIXTURES AND POLES

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vnh

PLAN OF FISHING PIER
BOROUGH OF WILDWOOD CREST
CAPE MAY COUNTY, N.J.

9/9/07
DATE

RALPH PETRELLA, JR.
NJ PROFESSIONAL ENGINEER & LAND SURVEYOR LIC. #23226

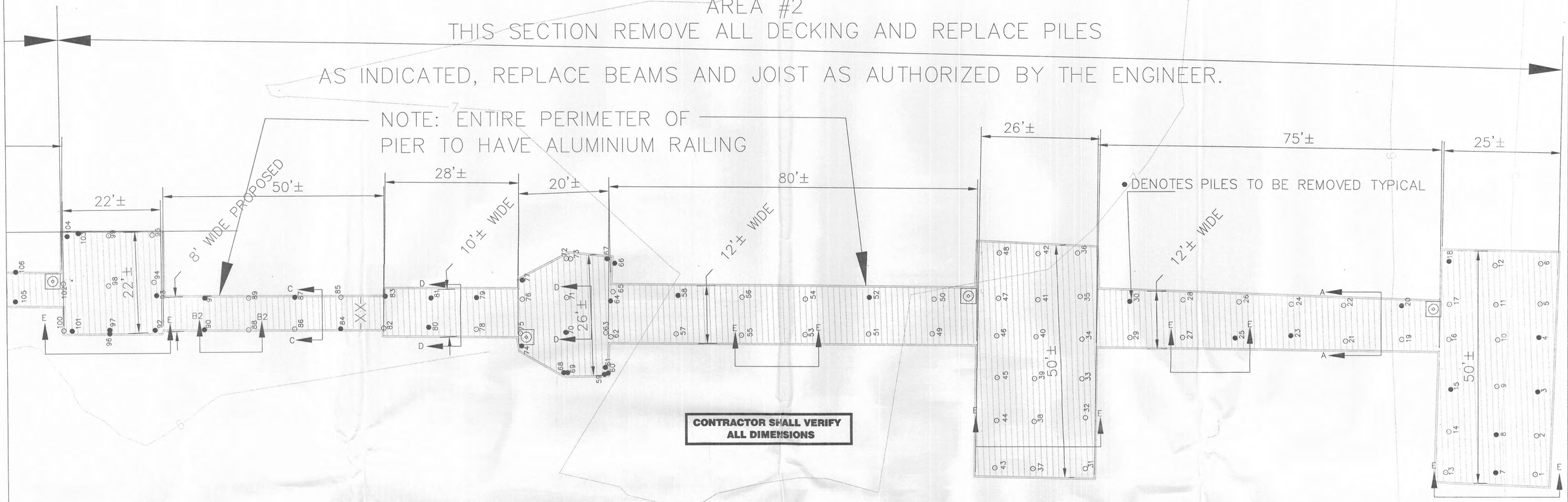
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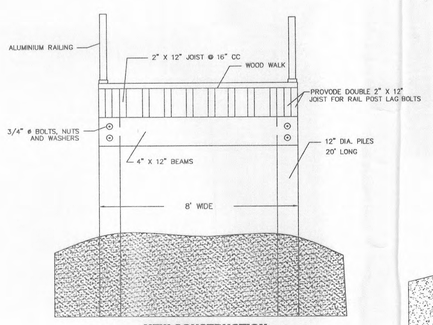
AREA #2

THIS SECTION REMOVE ALL DECKING AND REPLACE PILES

AS INDICATED, REPLACE BEAMS AND JOIST AS AUTHORIZED BY THE ENGINEER.

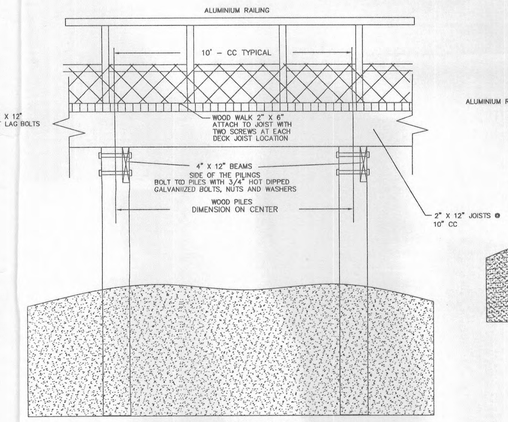
NOTE: ENTIRE PERIMETER OF PIER TO HAVE ALUMINIUM RAILING



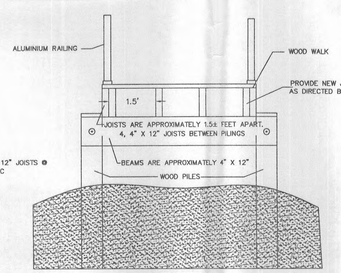

**NEW CONSTRUCTION TYPICAL SECTION A-A**

NOT TO SCALE



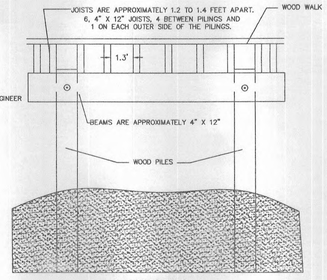

**NIEW CONSTRUCTION TYPICAL SECTION B-B**

NOT TO SCALE



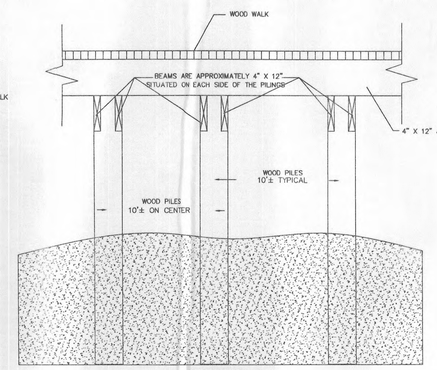

**EXISTING TYPICAL SECTION C-C**

NOT TO SCALE




**EXISTING TYPICAL SECTION D-D**

NOT TO SCALE




**EXISTING TYPICAL SECTION E-E**

NOT TO SCALE

● DENOTES PILES TO BE REPLACED

◎ DENOTES NEW LIGHTING FIXTURES AND POLES

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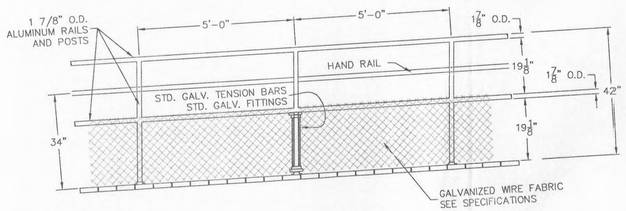
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# PLAN OF FISHING PIER
## BOROUGH OF WILDWOOD CREST
CAPE MAY COUNTY, N.J.

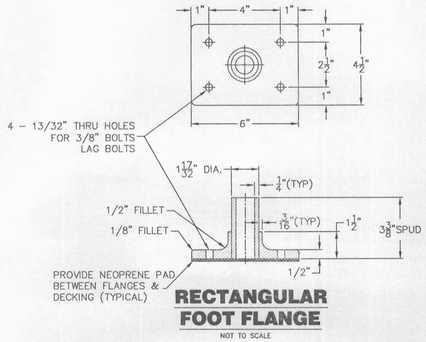
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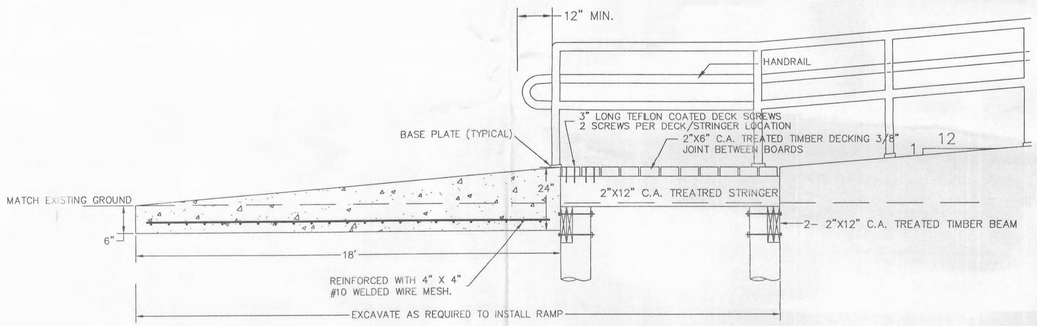

**TYPICAL RAILING DETAIL**

NOT TO SCALE



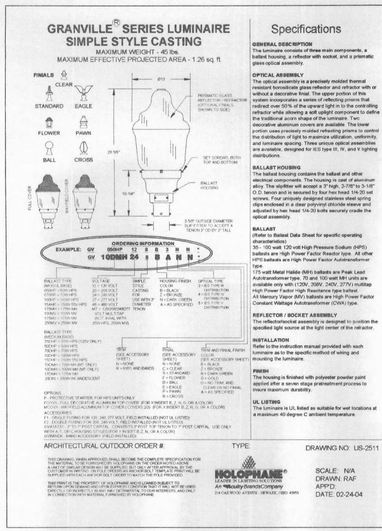

**RECTANGULAR FOOT FLANGE**

NOT TO SCALE

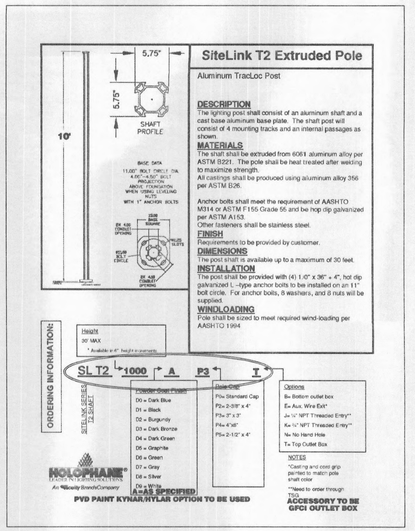


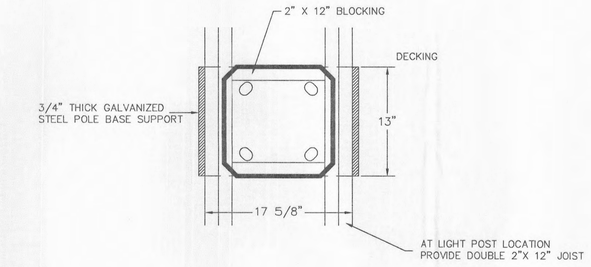

**SECTION A-A**

NOT TO SCALE



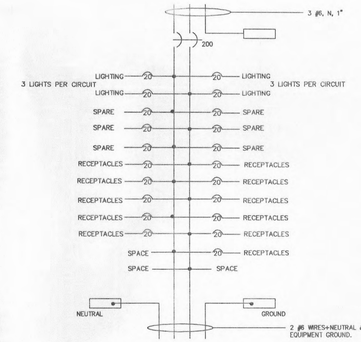

CONTRACTOR SHALL SUPPLY AND INSTALL 11 POLES AND LIGHT FIXTURES AT THE LOCATIONS AS SHOWN ON THE PLANS




NOTE:
IN AREA #2 THE CONTRACTOR SHALL FIELD ADJUST EXISTING JOIST AS REQUIRED TO ACCEPT GALVANIZED STEEL PLATE POLE SUPPORT

## LIGHT POLE SUPPORT DETAIL




## PANELBOARD SCHEMATIC

1. PANELBOARD SHALL BE 24 POLE MINIMUM, 200 AMPERE MAINS.
2. 20 AMPERE BRANCH CIRCUIT WIRING SHALL BE 2#12 WIRES + GROUND IN 1/2" ø CONDUIT MINIMUM.

NOTE:
CONTRACTOR TO VERIFY WIRE SIZES ACCORDING TO LOADS.

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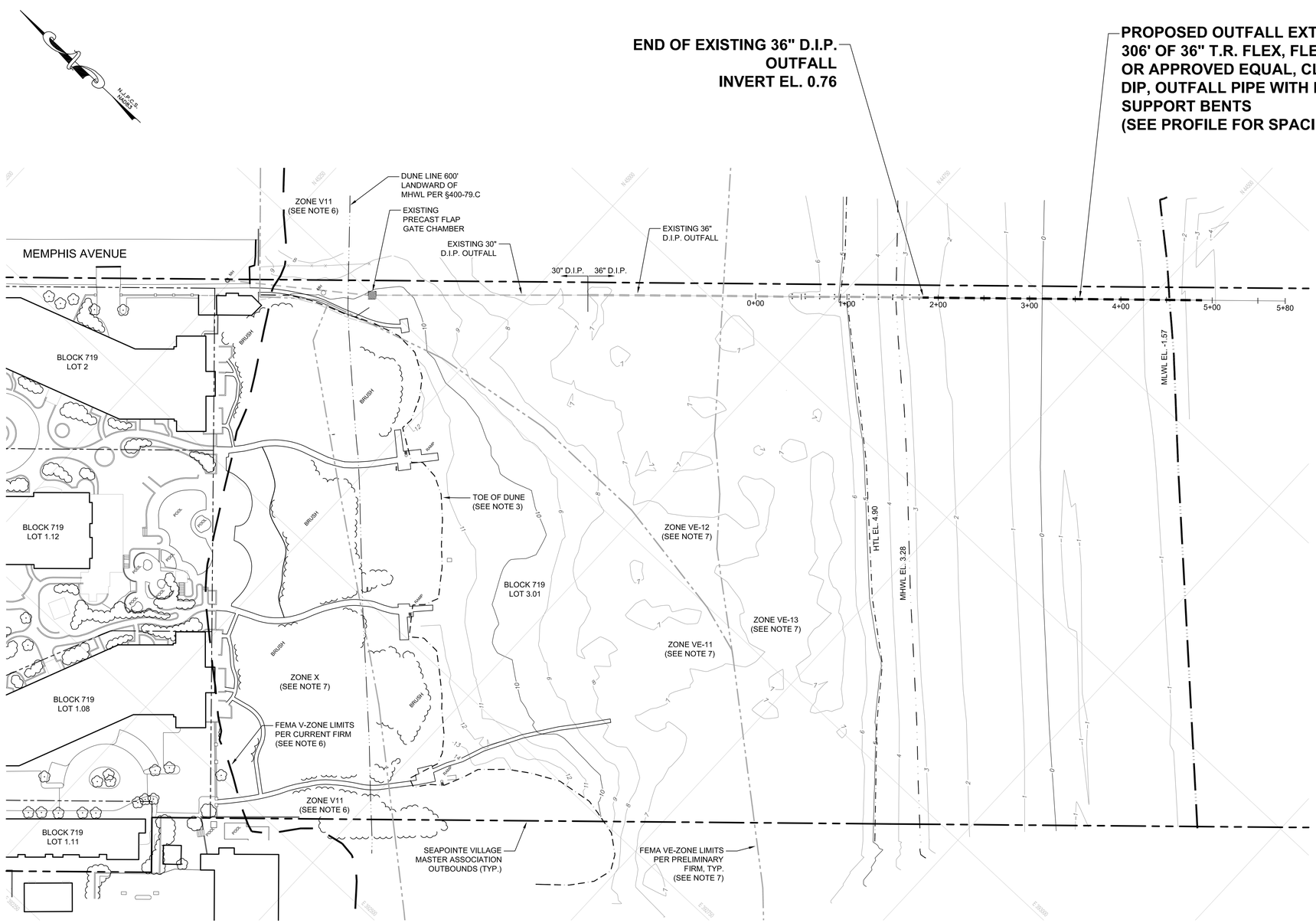

PLAN OF FISHING PIER
ELECTRICAL AND BUILDING DETAILS
BOROUGH OF WILDWOOD CREST
CAPE MAY COUNTY, N.J.

9/14/07
DATE


RALPH PETRELLA, JR.
NJ PROFESSIONAL ENGINEER & LAND SURVEYOR LIC. #23226


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## STORMWATER OUTFALL PIPE EXTENSION

60 0 60 120

SCALE IN FEET

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Client

SEAPOINTE VILLAGE MASTER ASSOCIATION, TOWNSHIP OF LOWER CAPE MAY COUNTY, NEW JERSEY

STORMWATER OUTFALL PIPE EXTENSION PLAN, TAX MAP SHEET NO. 12.03 - BLOCK 719, LOT 3.01 PLAN

STATE OF NEW JERSEY THOMAS R. THOMAS No. GE41770 LICENSED PROFESSIONAL ENGINEER

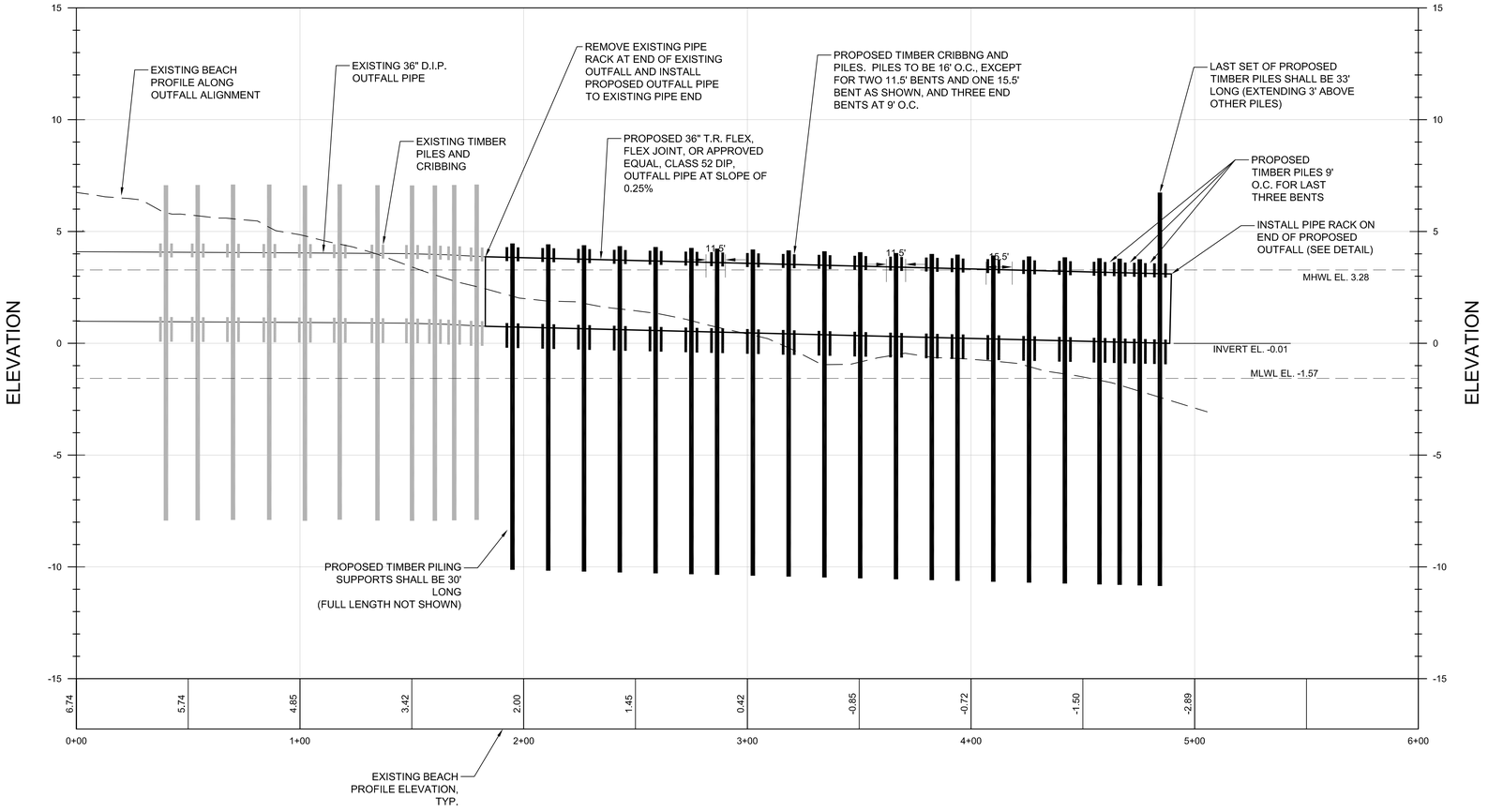
Date 02/08/2022

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| Designed | SM | | Eng check | TT | |
| Drawn | SM/AH/RL | | Coordination | | |
| Dwg check | RL | | Approved | TT | |
| Scale at ARCH E1 | Status | | Rev | Security | STD |

Drawing Number

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PROFILE

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SEAPOINTE VILLAGE MASTER ASSOCIATION, TOWNSHIP OF LOWER CAPE MAY COUNTY, NEW JERSEY

# STORMWATER OUTFALL PIPE EXTENSION PLAN, TAX MAP SHEET NO. 12.03 - BLOCK 719, LOT 3.01 PROFILE

STATE OF NEW JERSEY THOMAS R. THORNTON No. GE41770 LICENSED PROFESSIONAL ENGINEER

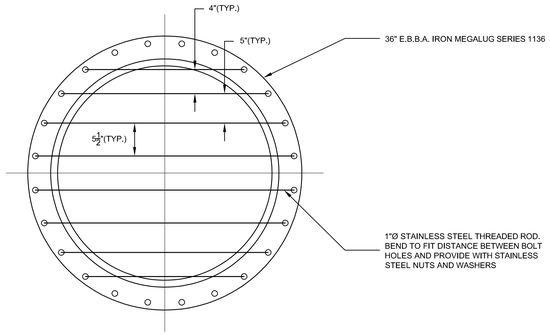
Date 02/08/2022

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| Designed | SM | | Eng check | TT | |
| Drawn | SM/AH/RL | | Coordination | | |
| Dwg check | RL | | Approved | TT | |
| Scale at ARCH E1 | Status | | Rev | Security | STD |

Drawing Number

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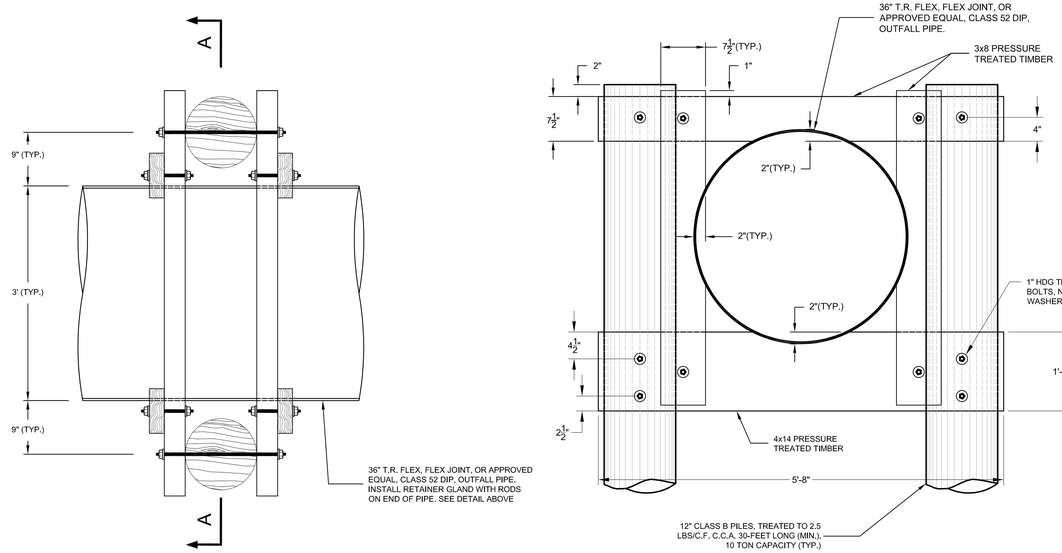

## PIPE RACK DETAIL

SCALE: 1" = 1'-0"

## TIDE TABLE

| DESCRIPTION | N.G.V.D. 1929 DATUM |
|---|---|
| HIGH TIDE LINE | 4.90 |
| MEAN HIGHER-HIGH WATER | 3.72 |
| MEAN HIGH WATER | 3.28 |
| MEAN LOWER WATER | -1.57 |
| MEAN LOWER-LOW WATER | -1.73 |

NOTE: TIDAL ELEVATIONS BASED ON NEW JERSEY TIDAL BENCHMARK NETWORK, STATION ID 8536110, CAPE MAY, NJ.




PLAN VIEW

SECTION A-A

## CRIBBING AND PILING DETAIL

SCALE: 1" = 1'-0"

# GENERAL NOTES

1. EXISTING CONDITIONS AND TOPOGRAPHICAL INFORMATION TO THE SOUTHEAST OF THE DUNES IS BASED UPON A FIELD SURVEY PERFORMED BY MOTT MACDONALD ON DECEMBER 13 AND 28, 2020.
2. EXISTING FEATURES SHOWN TO THE NORTHWEST OF THE DUNES BASED UPON AN AERIAL SURVEY PREPARED BY PROMAPS, INC. ON JUNE 12, 2004.
3. TOE OF DUNE LOCATED AND FLAGGED BY NJDEP ON MARCH 11, 2020 AND SURVEYED BY MOTT MACDONALD ON MARCH 13, 2020.
4. VERTICAL DATUM IS NGVD '29 AND HORIZONTAL DATUM IS NAD83.
5. HIGH TIDE LINE (HTL) BASED ON HIGHEST PREDICTED TIDE FROM PREVIOUS 12 MONTHS (NOVEMBER 16, 2020), OBTAINED FROM NEW JERSEY TIDAL BENCHMARK NETWORK, STATION ID 8536110, CAPE MAY, NJ.
6. ZONE V11 LINE TAKEN FROM FEMA FLOOD INSURANCE RATE MAP (FIRM), COMMUNITY PANEL NUMBER 340153 0008 B, EFFECTIVE DATE FEBRUARY 2, 1983.
7. ZONE VE LINES TAKEN FROM FEMA PRELIMINARY FLOOD INSURANCE RATE MAP (FIRM), COMMUNITY PANEL NUMBER 340153 0303 G, REVISED JANUARY 30, 2015.
8. THIS DOCUMENT IS NOT A PROPERTY SURVEY. PROPERTY BOUNDARIES SHOWN ARE BASED ON LIMITED FIELD RECONNAISSANCE AND DEED RESEARCH. PROPERTY INFORMATION BASED ON "BLOCK 714.01, LOTS 1.01-1.21, BLOCK 719, LOTS 1.01-1.12, 2, 3.01, 3.02 & 3.03 CAFRA PERMITTING PLAN", PREPARED BY HATCH MOTT MACDONALD, DATED NOVEMBER 18, 2004, LAST REVISED MARCH 21, 2005, SIGNED BY JAMES K. WALZ, PLS.
9. THE CONTRACTOR SHALL ADEQUATELY PROTECT ALL EXISTING STRUCTURES AND UTILITIES. ANY DAMAGE TO EXISTING STRUCTURES OR UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND ALL COSTS FOR REPAIRS SHALL BE BORNE BY THE CONTRACTOR.
10. AVAILABLE INFORMATION AS TO THE LOCATION OF EXISTING SUBSTRUCTURES AND UTILITIES HAS BEEN COLLECTED FROM VARIOUS SOURCES. THE RESULTS OF SUCH INVESTIGATIONS AS MAY BE SHOWN ON THE CONTRACT DRAWINGS, ARE NOT GUARANTEED AS TO ACCURACY OR COMPLETENESS. ALL EXISTING UTILITIES ARE SHOWN FOR GENERAL INFORMATION ONLY. CONTRACTOR SHALL DIG TEST PITS TO VERIFY TRUE AND EXACT LOCATIONS OF UNDERGROUND LINES, AS HE DEEMS NECESSARY TO COMPLETE THE CONSTRUCTION.
11. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES A MINIMUM OF 72 HOURS PRIOR TO EXCAVATION. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ANY AND ALL NECESSARY PERMITS FROM THE AFFECTED UTILITY COMPANIES AND FOR SCHEDULING OF INSPECTIONS BY UTILITY COMPANY PERSONNEL, IF REQUIRED, DURING CONSTRUCTION.
12. THE CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE AND FEDERAL LAWS, ORDINANCES, ETC. IN THE EXECUTION OF THIS WORK.
13. PRIOR TO THE START OF ANY CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A WORK SCHEDULE, AND CERTIFICATES OF INSURANCE (FOR GENERAL AND SUBCONTRACTORS) TO THE OWNER AND ENGINEER FOR APPROVAL.
14. CONTRACTOR ACKNOWLEDGES THAT HE HAS UNDERTAKEN WHATEVER PRE-BID INVESTIGATIONS HE DEEMS NECESSARY TO ASCERTAIN THE COMPOSITION, SIZE, SHAPE, LOCATION, AND DEPTH OF MATERIALS THAT WILL BE DEMOLISHED AND REMOVED THAT PRESENTLY EXIST ABOVE OR BELOW GRADE, WITHIN THE LIMIT OF CONSTRUCTION.
15. ALL WORK WHICH MAY HAVE AN INFLUENCE, OR EFFECT THE OPERATIONS OF THE UTILITY FACILITIES SHALL BE SCHEDULED IN CONJUNCTION WITH THE UTILITY SUPERINTENDENT AND THE CONTRACTOR SHALL COOPERATE AT ALL TIMES TO MAINTAIN SATISFACTORY OPERATION OF THE UTILITIES.
16. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES IN ACCORDANCE WITH THE "UNDERGROUND FACILITY PROTECTION ACT" (P.L. 1994 CH. 118) AND PROVIDE THE ENGINEER WITH THE NOTIFICATION CONFIRMATION NUMBER PRIOR TO ANY EXCAVATION.
17. PRIOR TO ANY CONNECTION TO EXISTING FACILITIES, THE CONTRACTOR SHALL NOTIFY THE OWNER. ALL CONNECTIONS TO EXISTING FACILITIES WILL BE DONE AT THE CONVENIENCE OF THE OWNER.
18. ALL LUMBER USED IN CONSTRUCTION OF TIMBER CRIBBING SUPPORTS SHALL BE SOUTHERN YELLOW PINE, MINIMUM GRADE STRUCTURAL NO. 2.
19. EXCAVATED SAND DURING CONSTRUCTION OF STORMWATER OUTFALL EXTENSION SHALL BE USED FOR TRENCH BACKFILL. ALL CONSTRUCTION ACTIVITIES RELATED TO SAND REMOVAL SHALL COMPLY WITH SECTION 400-79D(4) OF THE LOWER TOWNSHIP CODE.
20. THIS DUNE REVIEW APPLICATION CONSISTS OF THE EXTENSION OF THE EXISTING STORMWATER OUTFALL BY 306 FEET WITHIN BLOCK 719, LOT 3.01.
21. THE SUBJECT PROPERTY IS LOCATED WITHIN THE R-6/H ZONING DISTRICT.

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SEAPOINTE VILLAGE MASTER ASSOCIATION, TOWNSHIP OF LOWER CAPE MAY COUNTY, NEW JERSEY

STORMWATER OUTFALL PIPE EXTENSION PLAN, TAX MAP SHEET NO. 12.03 - BLOCK 719, LOT 3.01
NOTES AND DETAILS

STATE OF NEW JERSEY — THOMAS R. THORNTON — No. GE41770 — LICENSED PROFESSIONAL ENGINEER

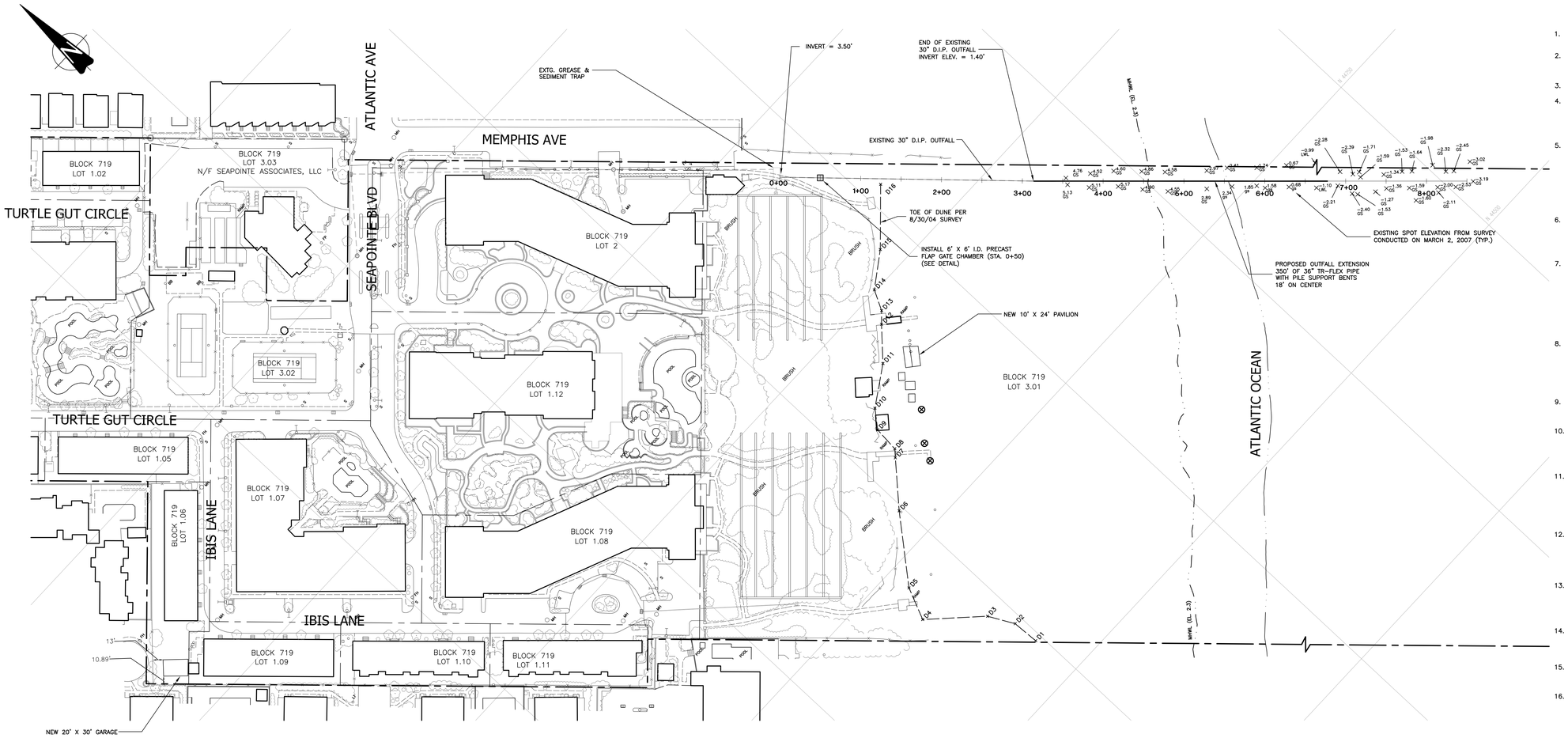
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|---|---|---|---|---|---|
| Designed | SM | | Eng check | TT | |
| Drawn | SM/AH/RL | | Coordination | | |
| Dwg check | RL | | Approved | TT | |
| Scale at ARCH E1 | Status | | Rev | Security | STD |

Drawing Number

REFERENCE DRWAING NOT FOR CONSTRUCTION

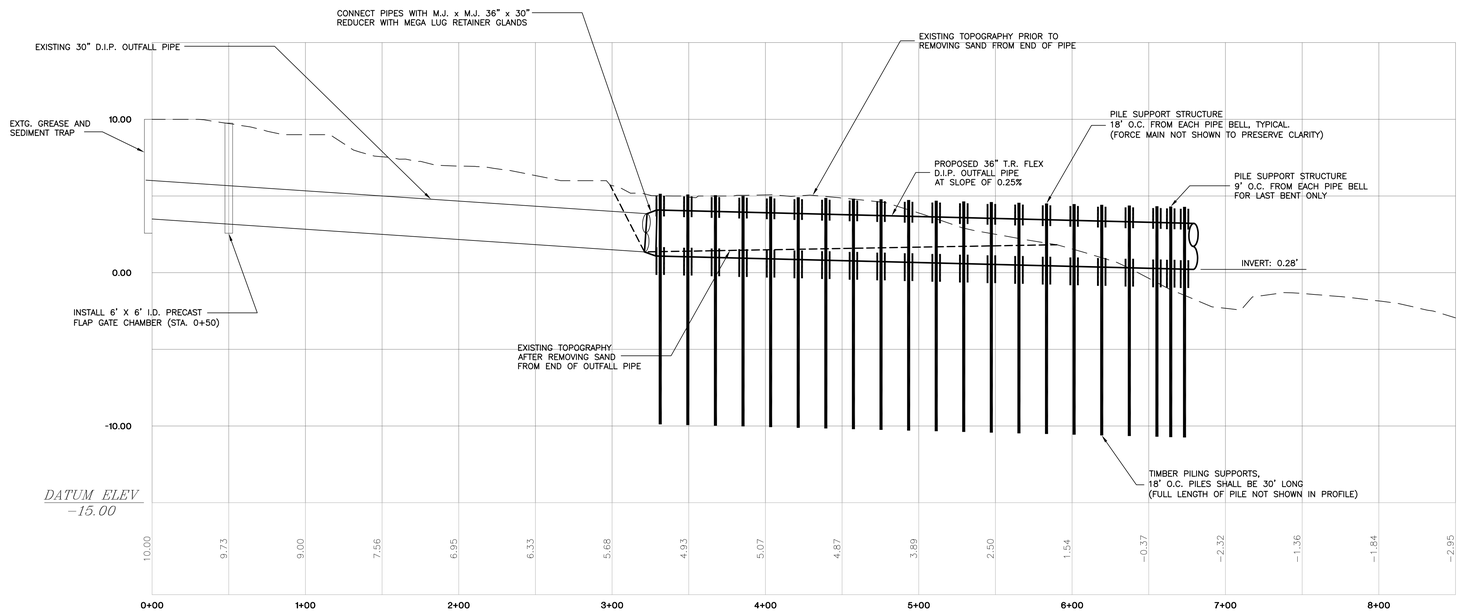



## GENERAL NOTES

1. THIS PLAN WAS PREPARED BASED UPON AERIAL SURVEY PERFORMED BY PROMAPS, INC. ON JUNE 12, 2004.
2. TOE OF DUNE LOCATED BY LOMAX–MOREY ON AUGUST 30, 2004, AND SURVEYED BY HATCH MOTT MACDONALD ON AUGUST 30, 2004.
3. VERTICAL DATUM: NGVD '29
4. MEAN HIGH WATER ELEV. 2.3 BASED UPON "PLAN OF EXISTING AND ORIGINAL CAFRA DUNE COMPARISON, & CAFRA MODIFICATION FOR: SEA POINTE VILLAGE, BLOCK 719 LOT 3.01", PREPARED BY LEWIS H. CONLEY JR., DATED MAY 22, 2002.
5. THIS DOCUMENT IS NOT A PROPERTY SURVEY. PROPERTY BOUNDARIES SHOWN ARE BASED ON LIMITED FIELD RECONNAISSANCE AND DEED RESEARCH. PROPERTY INFORMATION BASED ON "BLOCK 714.01, LOTS 1.01–1.21, BLOCK 719, LOTS 1.01–1.12, 2, 3.01, 3.02 & 3.03 CAFRA PERMITTING PLAN", PREPARED BY HATCH MOTT MACDONALD, DATED NOVEMBER 18, 2004, LAST REVISED MARCH 21, 2005, SIGNED BY JAMES K. WALZ, PLS.
6. THE CONTRACTOR SHALL ADEQUATELY PROTECT ALL EXISTING STRUCTURES AND UTILITIES. ANY DAMAGE TO EXISTING STRUCTURES OR UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND ALL COSTS FOR REPAIRS SHALL BE BORNE BY THE CONTRACTOR.
7. AVAILABLE INFORMATION AS TO THE LOCATION OF EXISTING SUBSTRUCTURES AND UTILITIES HAS BEEN COLLECTED FROM VARIOUS SOURCES. THE RESULTS OF SUCH INVESTIGATIONS AS MAY BE SHOWN ON THE CONTRACT DRAWINGS, ARE NOT GUARANTEED AS TO ACCURACY OR COMPLETENESS. ALL EXISTING UTILITIES ARE SHOWN FOR GENERAL INFORMATION ONLY. CONTRACTOR SHALL DIG TEST PITS TO VERIFY TRUE AND EXACT LOCATIONS OF UNDERGROUND LINES, AS HE DEEMS NECESSARY TO COMPLETE THE CONSTRUCTION.
8. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES A MINIMUM OF 72 HOURS PRIOR TO EXCAVATION. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ANY AND ALL NECESSARY PERMITS FROM THE AFFECTED UTILITY COMPANIES AND FOR SCHEDULING OF INSPECTIONS BY UTILITY COMPANY PERSONNEL, IF REQUIRED, DURING CONSTRUCTION.
9. THE CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE AND FEDERAL LAWS, ORDINANCES, ETC. IN THE EXECUTION OF THIS WORK.
10. PRIOR TO THE START OF ANY CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A WORK SCHEDULE, AND CERTIFICATES OF INSURANCE (FOR GENERAL AND SUBCONTRACTORS) TO THE OWNER AND ENGINEER FOR APPROVAL.
11. CONTRACTOR ACKNOWLEDGES THAT HE HAS UNDERTAKEN WHATEVER PRE–BID INVESTIGATIONS HE DEEMS NECESSARY TO ASCERTAIN THE COMPOSITION, SIZE, SHAPE, LOCATION, AND DEPTH OF MATERIALS THAT WILL BE DEMOLISHED AND REMOVED THAT PRESENTLY EXIST ABOVE OR BELOW GRADE, WITHIN THE LIMIT OF CONSTRUCTION.
12. ALL WORK WHICH MAY HAVE AN INFLUENCE, OR EFFECT THE OPERATIONS OF THE UTILITY FACILITIES SHALL BE SCHEDULED IN CONJUNCTION WITH THE UTILITY SUPERINTENDENT AND THE CONTRACTOR SHALL COOPERATE AT ALL TIMES TO MAINTAIN SATISFACTORY OPERATION OF THE UTILITIES.
13. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES IN ACCORDANCE WITH THE "UNDERGROUND FACILITY PROTECTION ACT" (P.L. 1994 CH. 118) AND PROVIDE THE ENGINEER WITH THE NOTIFICATION CONFIRMATION NUMBER PRIOR TO ANY EXCAVATION.
14. PRIOR TO ANY CONNECTION TO EXISTING FACILITIES, THE CONTRACTOR SHALL NOTIFY THE OWNER. ALL CONNECTIONS TO EXISTING FACILITIES WILL BE DONE AT THE CONVENIENCE OF THE OWNER.
15. ALL LUMBER USED IN CONSTRUCTION OF TIMBER CRIBBING SUPPORTS SHALL BE SOUTHERN YELLOW PINE, MINIMUM GRADE STRUCTURAL NO. 1.
16. NEW PAVILION AND GARAGE LOCATED BY HATCH MOTT MACDONALD ON 8/28/08 AND 9/2/08.

## STORMWATER SYSTEM IMPROVEMENTS

60 0 60 120
SCALE IN FEET




## PROFILE

40 0 HORZ. 40 80
4 0 VERT. 4 8

| No. | Date | Revision |
|---|---|---|
| 1 | 09/02/08 | Addition of new garage and pavilion |

THOMAS R. THORNTON
Professional Engineer - NJ Lic. No. 24GE04177000
Designed MAW | Drawn MAW | Checked MAW | Approved TRT | Date 11/14/07

Hatch Mott MacDonald
Certificate No. 24GA28016600
833 Route 9 North
Cape May Court House, NJ 08210
P 609.465.9377 F 609.465.5270

SEAPOINTE VILLAGE MASTER ASSOCIATION
TOWNSHIP OF LOWER, CAPE MAY COUNTY, NEW JERSEY

# STORMWATER SYSTEM IMPROVEMENTS

## OUTFALL PIPE EXTENSION PLAN

Job 226356 | No. 1 | B/O 1 | Total 2

Contract No.

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