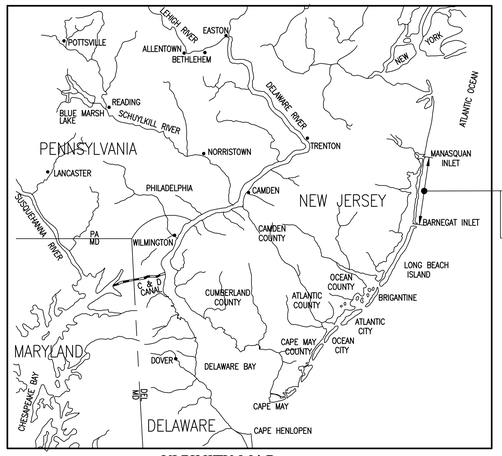
BEACHFILL
INITIAL CONSTRUCTION

MANASQUAN INLET TO BARNEGAT INLET
OCEAN COUNTY, NEW JERSEY

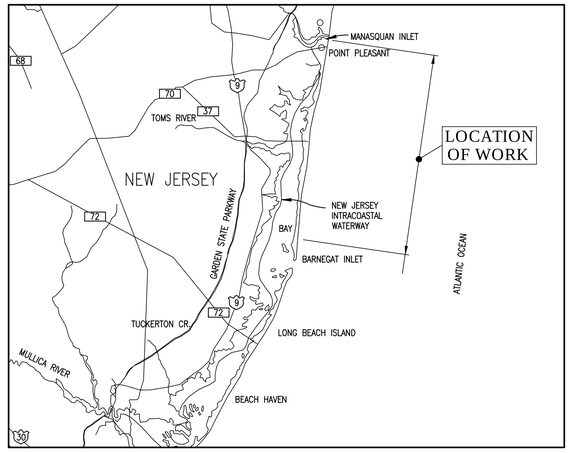
IFB NO. W912BU-16-B-0014



NORTH

VICINITY MAP

0 5 10 20 40
SCALE IN MILES



NORTH

LOCATION MAP

2.5 0 2.5 5 10
SCALE IN MILES

DRAWING INDEX	
SHEET NUMBER	DESCRIPTION
GENERAL	
CS-100	COVER SHEET
C-001	GENERAL INFORMATION SHEET
C-100	GENERAL PLAN
C-101	GENERAL PLAN
C-102	GEOMETRY – SURVEY AND CONSTRUCTION BASELINE
C-103	SURVEY ORIGIN POINT SCHEDULES
C-104	CONTRACTOR WORK LIMIT COORDINATES
BOROUGH OF POINT PLEASANT BEACH	
CPP-100	PLAN – STA. 0+00 TO STA. 26+71 OPTION 1
CPP-101	PLAN – STA. 26+71 TO STA. 61+74 OPTION 1 & 2
CPP-102	PLAN – STA. 61+74 TO STA. 95+50 OPTION 2
CPP-200	TYPICAL SECTIONS – BEACHFILL OPTION 1 & 2
CPP-300	CROSS SECTIONS – STA. 2+00 TO STA. 40+00 OPTION 1 & 2
CPP-301	CROSS SECTIONS – STA. 50+00 TO STA. 90+00 OPTION 2
CPP-400	PLAN – POINT PLEASANT BEACH GRADING OPTION 1
BOROUGH OF BAY HEAD	
CBH-100	PLAN – STA. 95+50 TO STA. 128+94 OPTION 6
CBH-101	PLAN – STA. 128+94 TO STA. 162+36 OPTION 6
CBH-200	TYPICAL SECTIONS – BEACHFILL OPTION 6
CBH-300	CROSS SECTIONS – STA. 100+00 TO STA. 140+00 OPTION 6
CBH-301	CROSS SECTIONS – STA. 150+00 TO STA. 160+00 OPTION 6
BOROUGH OF MANTOLOKING	
CM-100	PLAN – STA. 162+36 TO STA. 191+03 OPTION 9 & 11
CM-101	PLAN – STA. 191+03 TO STA. 219+95 OPTION 11 & BASE CONTRACT
CM-102	PLAN – STA. 219+95 TO STA. 249+87
CM-103	PLAN – STA. 249+87 TO STA. 277+58
CM-200	TYPICAL SECTIONS – BEACHFILL
CM-300	CROSS SECTIONS – STA. 170+00 TO STA. 220+00 OPTION 9, 11 & BASE CONTRACT
CM-301	CROSS SECTIONS – STA. 230+00 TO STA. 270+00
BRICK TOWNSHIP	
CB-100	PLAN – STA. 277+58 TO STA. 308+60
CB-101	PLAN – STA. 308+60 TO STA. 340+45
CB-102	PLAN – STA. 340+45 TO STA. 371+64
CB-200	TYPICAL SECTIONS – BEACHFILL
CB-300	CROSS SECTIONS – STA. 280+00 TO STA. 330+00
CB-301	CROSS SECTIONS – STA. 340+00 TO STA. 370+00
TOMS RIVER TOWNSHIP (NORTH)	
CTN-100	PLAN – STA. 371+64 TO STA. 396+24
CTN-101	PLAN – STA. 396+24 TO STA. 423+76
CTN-102	PLAN – STA. 423+76 TO STA. 449+81
CTN-200	TYPICAL SECTIONS – BEACHFILL
CTN-300	CROSS SECTIONS – STA. 380+00 TO STA. 420+00
CTN-301	CROSS SECTIONS – STA. 430+00 TO STA. 440+00
BOROUGH OF LAVALLETTE	
CL-100	PLAN – STA. 449+81 TO STA. 475+06
CL-101	PLAN – STA. 475+06 TO STA. 501+08
CL-102	PLAN – STA. 501+08 TO STA. 526+37
CL-200	TYPICAL SECTIONS – BEACHFILL
CL-300	CROSS SECTIONS – STA. 450+00 TO STA. 490+00
CL-301	CROSS SECTIONS – STA. 500+00 TO STA. 520+00

DRAWING INDEX	
SHEET NUMBER	DESCRIPTION
TOMS RIVER TOWNSHIP (SOUTH)	
CTS-100	PLAN – STA. 526+37 TO STA. 546+67
CTS-101	PLAN – STA. 546+67 TO STA. 567+09
CTS-200	TYPICAL SECTIONS – BEACHFILL
CTS-300	CROSS SECTIONS – STA. 530+00 TO STA. 560+00
BOROUGH OF SEASIDE HEIGHTS	
CSH-100	PLAN – STA. 567+09 TO STA. 587+62
CSH-101	PLAN – STA. 587+62 TO STA. 608+70
CSH-200	TYPICAL SECTIONS – BEACHFILL
CSH-300	CROSS SECTIONS – STA. 570+00 TO STA. 600+00
BOROUGH OF SEASIDE PARK	
CSP-100	PLAN – STA. 608+70 TO STA. 636+95
CSP-101	PLAN – STA. 636+95 TO STA. 669+24
CSP-102	PLAN – STA. 669+24 TO STA. 698+01
CSP-200	TYPICAL SECTIONS – BEACHFILL
CSP-300	CROSS SECTIONS – STA. 610+00 TO STA. 650+00
CSP-301	CROSS SECTIONS – STA. 660+00 TO STA. 690+00
BERKELEY TOWNSHIP AND ISLAND BEACH STATE PARK	
CBL-100	PLAN – STA. 698+01 TO STA. 735+40 OPTION 32
CBL-200	TYPICAL SECTIONS – BEACHFILL OPTION 32
CBL-300	CROSS SECTIONS – STA. 700+00 TO STA. 730+00 OPTION 32
CIVIL	
C-400	DUNE CROSSOVER SCHEDULE
C-401	DUNE CROSSOVER SCHEDULE
C-402	PLANS – PEDESTRIAN CROSSOVER
C-403	PLANS – PEDESTRIAN CROSSOVER
C-404	PLANS – VEHICLE CROSSOVER
C-405	PLANS – CROSSOVER
C-406	PLANS – CROSSOVER
C-407	PLANS – CROSSOVER
C-408	PLANS – CROSSOVER
C-409	PLANS – CROSSOVER
C-410	PLANS – CROSSOVER
C-411	TYPICAL SECTIONS – PEDESTRIAN CROSSOVER
C-412	TYPICAL SECTIONS – PEDESTRIAN CROSSOVER
C-413	TYPICAL SECTIONS – PEDESTRIAN CROSSOVER
C-414	TYPICAL SECTIONS – VEHICLE CROSSOVER
C-415	TYPICAL SECTIONS – ADA CROSSOVER
C-416	TYPICAL SECTIONS – ADA CROSSOVER
C-417	DETAILS – FENCE
C-418	DETAILS – BULKHEAD
C-419	DETAILS – DUNE PLANTING AND SAND FENCE
C-420	DETAILS – MISCELLANEOUS
C-421	DETAILS – STEEL SHEETPILE
C-422	DETAILS – TEMPORARY DUNE MODIFICATIONS
C-500	PLAN – BORROW AREAS A AND E
C-501	PLAN – BORROW AREA B
C-502	PLAN – BORROW AREA D

DRAWING INDEX	
SHEET NUMBER	DESCRIPTION
SEA AVE PUMP STATION FORCE MAIN POINT PLEASANT BEACH BOROUGH – OPTION 5 26-905-0203	
1 OF 9	PLAN AND PROFILE
2 OF 9	CONTROL TIE SHEET
3 OF 9	DEMOLITION PLAN
4 OF 9	WYE-VAULT SECTIONS
5 OF 9	WYE-VAULT DETAILS
6 OF 9	PILE BENT SECTIONS
7 OF 9	PILE BENT DETAILS
8 OF 9	PILE DETAILS
9 OF 9	PILE JOINT DETAILS

REFERENCE DRAWING INDEX	
SHEET NUMBER	DESCRIPTION
BOROUGH OF BAY HEAD 1503-U-011	
RE-101	U011-MISC – CONSTRUCTION DETAILS
RE-102	U011-MISC – CONSTRUCTION DETAILS (2)
RE-103	PLAN – MOUNT AND HOWE
RE-104	PLAN – JOHNSON AND CHADWICK
RE-105	PLAN – BRIDGE AND HARRIS
RE-106	PLAN – STRICKLAND AND EGBERT
RE-107	PLAN – KARGE AND OSBORNE
BRICK TOWNSHIP AND BOROUGH OF MANTOLOKING 257081	
36	STEEL SHEET PILE – DETAILS
TOMS RIVER SOUTH TOWNSHIP 12-017	
1 OF 5	LOCATION PLAN – 1
2 OF 5	LOCATION PLAN – 2
3 OF 5	CONSTRUCTION DETAILS – 1
4 OF 5	CONSTRUCTION DETAILS – 2
5 OF 5	CONSTRUCTION DETAILS – 3
BOROUGH OF SEASIDE HEIGHTS 12085.00	
1 OF 3	CONSTRUCTION DETAILS
2 OF 3	CONSTRUCTION DETAILS
3 OF 3	CONSTRUCTION DETAILS
BOROUGH OF SEASIDE PARK 1528-U-041	
1 OF 4	TITLE SHEET
2 OF 4	SITE PLAN
3 OF 4	FLOOR AND CEILING PLAN
4 OF 4	CONSTRUCTION DETAILS
BERKELEY TOWNSHIP 1506-U-027	
1 OF 6	TITLE SHEET
2 OF 6	PLAN SHEET – 20TH AVE. AND 21ST AVE.
3 OF 6	PLAN SHEET – 22ND AVE. AND 23RD AVE.
4 OF 6	CONSTRUCTION DETAILS
5 OF 6	CONSTRUCTION DETAILS
6 OF 6	BULKHEAD DETAILS

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:
JOSE R. ALVAREZ, P.E.
CHIEF, ENGINEERING BRANCH

APPROVED:
PETER M. TRANCHIK, P.E.
CHIEF, ENGINEERING AND CONSTRUCTION DIVISION

US Army Corps of Engineers
Philadelphia District

MARK	ACTION	DATE	BY	DESCRIPTION

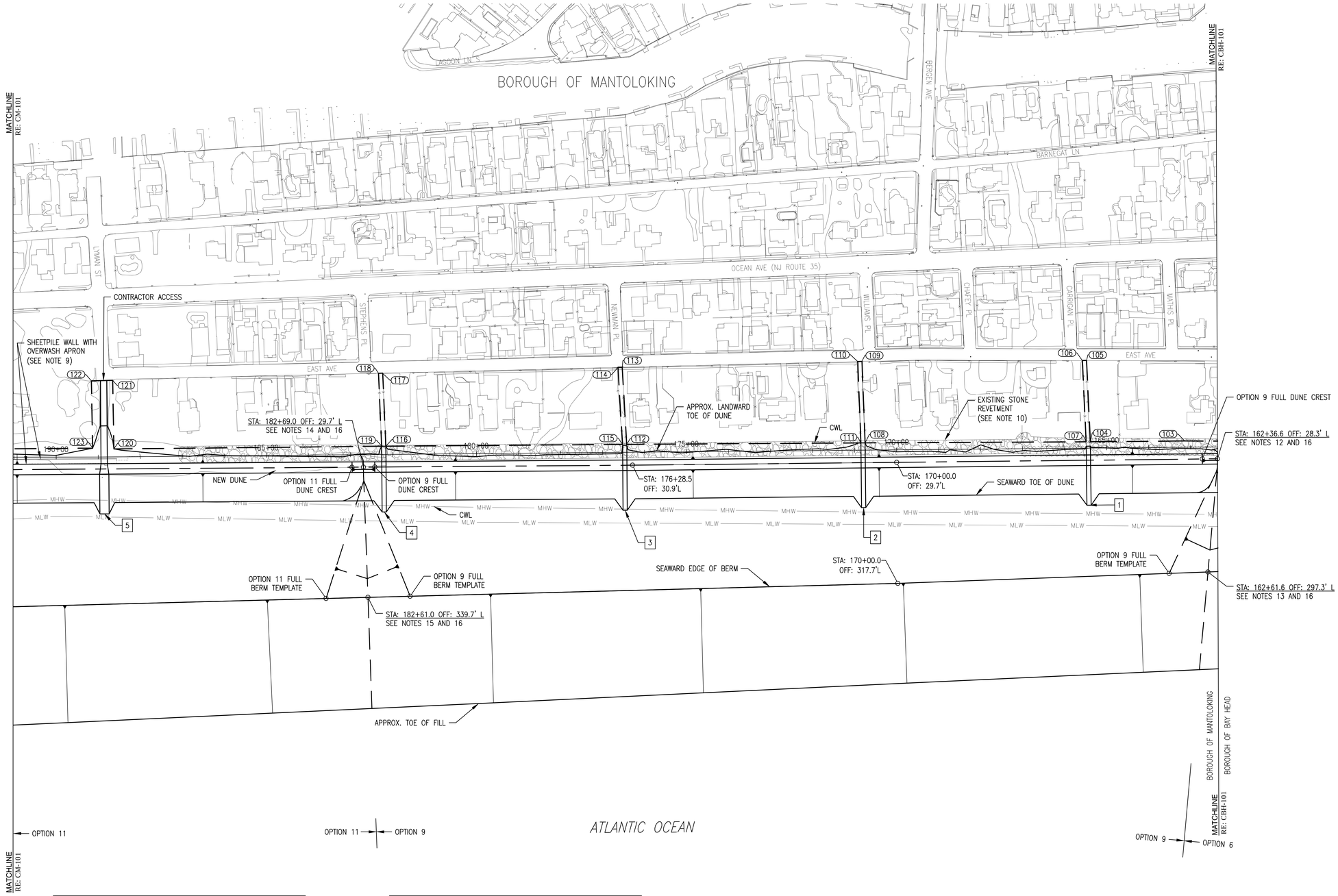
MARK	ACTION	DATE	BY	DESCRIPTION

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT
PHILADELPHIA, PA 19107-3390
www.nap.usace.army.mil

DWN BY: PGS
CKD BY: DMA
DESIGNED BY: ADD
REVIEWED BY: DWA/TEB
ISSUE/RELEASE DATE: 26 SEPT 2016
PROJ. NUMBER:
SOLICITATION NUMBER: IFB NO. W912BU-16-B-0014
CONTRACT NUMBER:
DWG. SCALE: AS SHOWN
DWG. SIZE: 30"x42" ANSI E
FILE NAME: CS-100.DWG

MANASQUAN INLET TO BARNEGAT INLET
OCEAN COUNTY, NEW JERSEY
BEACHFILL
INITIAL CONSTRUCTION
COVER SHEET

SHEET NUMBER
CS-100



OPTION 11 CROSSOVER KEY		
CROSSOVER NO.	STATION	DETAIL NO./SHEET NO.
5	188+86	2/C-404

OPTION 9 CROSSOVER KEY		
CROSSOVER NO.	STATION	DETAIL NO./SHEET NO.
1	165+44	6/C-402
2	170+80	6/C-402
3	176+47	6/C-402
4	182+20	6/C-402

1 PLAN - STA. 162+36 TO STA. 191+03
SCALE: AS SHOWN

100 0 100 200
SCALE IN FEET

NOTES:

1. SEE SHEET C-001 FOR LEGEND AND GENERAL NOTES.
2. SEE SHEET C-102 FOR SURVEY AND CONSTRUCTION BASELINE GEOMETRY.
3. SEE SHEET C-104 FOR CONTRACTOR WORK LIMIT COORDINATES.
4. SEE SHEET CM-200 FOR TYPICAL BEACHFILL SECTIONS, AND SHEETS CM-300 TO CM-301 FOR CROSS SECTIONS.
5. SEE SHEET C-401 FOR DUNE CROSSOVER SCHEDULE AND SHEETS C-402 TO C-404 FOR PLANS OF CROSSOVERS.
6. SEE SHEET C-419 FOR DUNE PLANTING AND FENCE DETAILS.
7. SEE SHEETS C-500 THROUGH C-502 FOR BORROW AREA PLANS.
8. PLACE SANDFILL OR GRADE TO ELIMINATE LOW AREAS BETWEEN THE EXISTING DUNE AND THE DUNE TEMPLATE.
9. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO THE EXISTING STONE REVETMENT OR STEEL SHEETPILE WALL AND ITS APPURTENANCES THAT OCCURS DURING THE BEACHFILL CONSTRUCTION AT NO EXPENSE TO THE GOVERNMENT. EXISTING STEEL SHEETPILE WALL IS LOCATED BETWEEN STA. 187+76± TO STA. 371+35±.
10. THE LIMITS OF THE STONE REVETMENT ARE APPROXIMATE. EXISTING STONE REVETMENT MAY BE PARTIALLY OR COMPLETELY COVERED WITH SAND.
11. THE CWL IS 25' BEYOND THE TOE OF FILL OF A BEACHFILL OPTION IF THE ADJACENT BEACHFILL OPTION IS NOT AWARDED.
12. IF OPTION 6 IS AWARDED BUT OPTION 9 IS NOT AWARDED END DUNE, SLOPE DUNE AT 3H:1V TO OPTION 6 FULL DUNE CREST. IF OPTION 9 IS AWARDED BUT OPTION 6 IS NOT AWARDED BEGIN DUNE, SLOPE DUNE AT 3H:1V TO OPTION 9 FULL DUNE CREST.
13. IF OPTION 6 IS AWARDED BUT OPTION 9 IS NOT AWARDED END BERM, SLOPE AT 5H:1V TO OPTION 6 FULL BERM TEMPLATE. IF OPTION 9 IS AWARDED AND OPTION 6 IS NOT AWARDED BEGIN BERM, SLOPE AT 5H:1V TO OPTION 9 FULL BERM TEMPLATE.
14. IF OPTION 9 IS AWARDED BUT OPTION 11 IS NOT AWARDED END DUNE, SLOPE DUNE AT 3H:1V TO OPTION 9 FULL DUNE CREST. IF OPTION 11 IS AWARDED BUT OPTION 9 IS NOT AWARDED BEGIN DUNE, SLOPE DUNE AT 3H:1V TO OPTION 11 FULL DUNE CREST.
15. IF OPTION 9 IS AWARDED BUT OPTION 11 IS NOT AWARDED END BERM, SLOPE AT 5H:1V TO OPTION 9 FULL BERM TEMPLATE. IF OPTION 11 IS AWARDED AND OPTION 9 IS NOT AWARDED BEGIN BERM, SLOPE AT 5H:1V TO OPTION 11 FULL BERM TEMPLATE.
16. IF ADJACENT OPTIONS ARE AWARDED MAINTAIN FULL DUNE CREST AND CONTINUOUS FULL BERM TEMPLATE BETWEEN THE OPTIONS.

US Army Corps of Engineers Philadelphia District

MARK	ACTION	BY	DATE	DESCRIPTION

MARK	ACTION	BY	DATE	DESCRIPTION

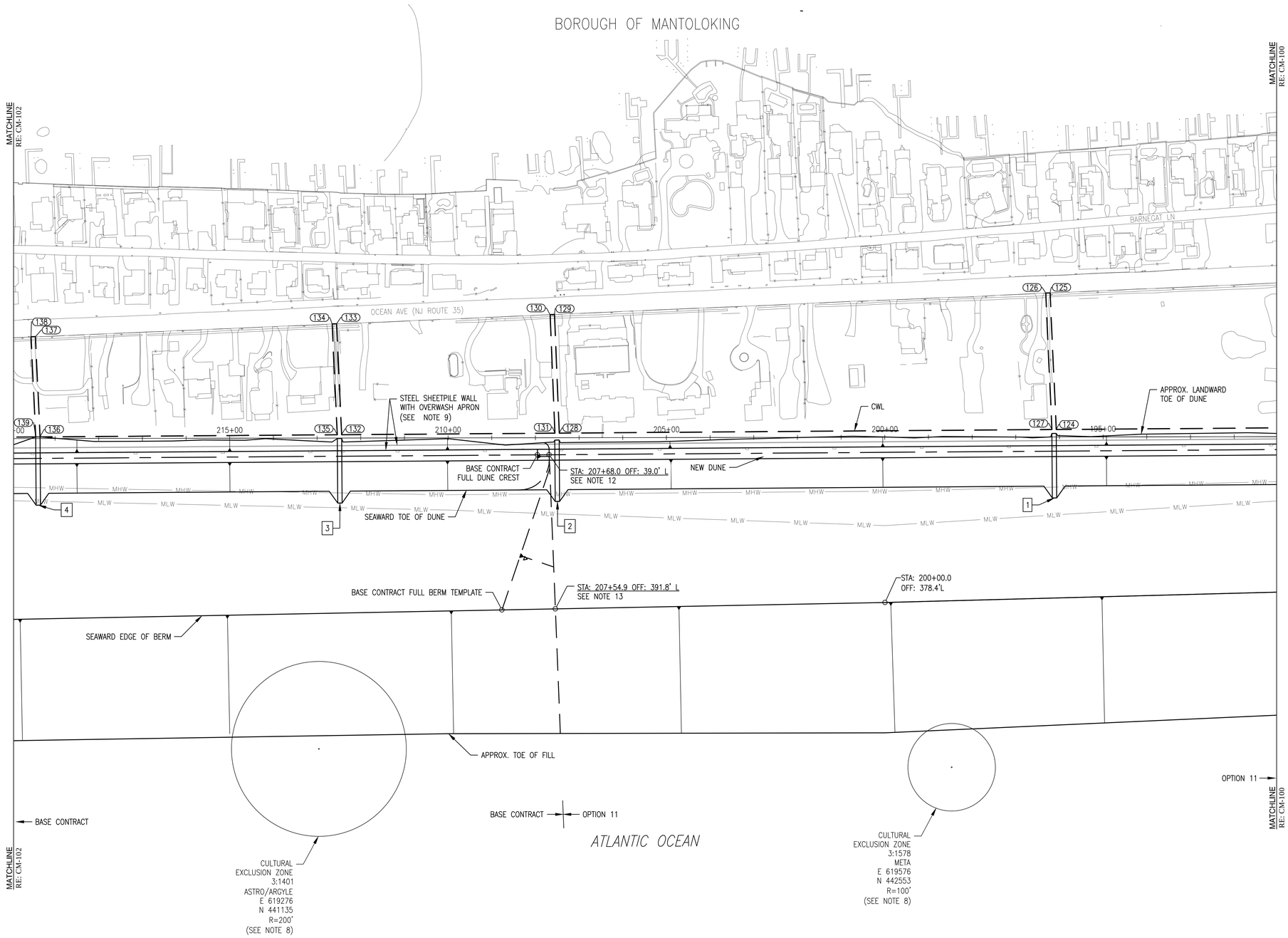
MARK	ACTION	BY	DATE	DESCRIPTION

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT
PHILADELPHIA, PA 19107-3390
www.nap.usace.army.mil

DRAWN BY: ADD
CKD BY: DAS
DESIGNED BY: ADD
REVIEWED BY: DAS/DEL
ISSUE/RELEASE DATE: 28 SEP 2016
PROJ. NUMBER:
SOLICITATION NUMBER: W912BU-16-B-0014
CONTRACT NUMBER:
DWG. SCALE: 1"=100'
DWG. SIZE: 22X32 and 11X17
FILE NAME: 01-Plans.dwg

MANASQUAN INLET TO BARNEGAT INLET
OCEAN COUNTY, NEW JERSEY
BEACHFILL
INITIAL CONSTRUCTION
PLAN - STA. 162+36 TO STA. 191+03
OPTION 9 & 11

SHEET NUMBER
CM-100



CROSSOVER KEY		
CROSSOVER NO.	STATION	DETAIL NO./SHEET NO.
3	212+48	6/C-402
4	219+39	6/C-402

OPTION 11 CROSSOVER KEY		
CROSSOVER NO.	STATION	DETAIL NO./SHEET NO.
1	196+12	6/C-402
2	207+50	6/C-402

1 PLAN - STATION 191+03 TO STATION 219+95
SCALE: AS SHOWN

100 0 100 200
SCALE IN FEET

NOTES:

1. SEE SHEET C-001 FOR LEGEND AND GENERAL NOTES.
2. SEE SHEET C-102 FOR SURVEY AND CONSTRUCTION BASELINE GEOMETRY.
3. SEE SHEET C-104 FOR CONTRACTOR WORK LIMIT COORDINATES.
4. SEE SHEET CM-200 FOR TYPICAL BEACHFILL SECTIONS, AND SHEETS CM-300 TO CM-301 FOR CROSS SECTIONS.
5. SEE SHEET C-400 AND C-401 FOR DUNE CROSSOVER SCHEDULE AND SHEET C-402 FOR PLANS OF CROSSOVERS.
6. SEE SHEET C-419 FOR DUNE PLANTING AND FENCE DETAILS.
7. SEE SHEETS C-500 THROUGH C-502 FOR BORROW AREA PLANS.
8. NO ANCHORING OR PIPELINE PLACEMENT IS PERMITTED WITHIN ANY CULTURAL EXCLUSION ZONE. EXCAVATION WITHIN EXCLUSION ZONES IS ALSO NOT PERMITTED. ONLY PLACEMENT OF BEACHFILL IS PERMITTED WITHIN THE EXCLUSION ZONES. SEE SPECIFICATIONS FOR RESTRICTIONS.
9. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO THE EXISTING STEEL SHEETPILE WALL AND ITS APPURTENANCES THAT OCCURS DURING THE BEACHFILL CONSTRUCTION AT NO EXPENSE TO THE GOVERNMENT. EXISTING STEEL SHEETPILE WALL IS LOCATED BETWEEN STA. 187+76± TO STA. 371+35±.
10. PLACE SANDFILL OR GRADE TO eliminate LOW AREAS BETWEEN THE EXISTING DUNE AND THE DUNE TEMPLATE.
11. THE CWL IS 25' BEYOND THE TOE OF FILL OF THE BASE CONTRACT IF THE ADJACTENT BEACHFILL OPTION IS NOT AWARDED.
12. IF OPTION 11 IS NOT AWARDED END DUNE, SLOPE DUNE AT 3H:1V TO BASE CONTRACT FULL DUNE CREST.
13. IF OPTION 11 IS NOT AWARDED BEGIN BERM, SLOPE AT 5H:1V TO BASE CONTRACT FULL BERM TEMPLATE.

PLAN NORTH

US Army Corps of Engineers
Philadelphia District

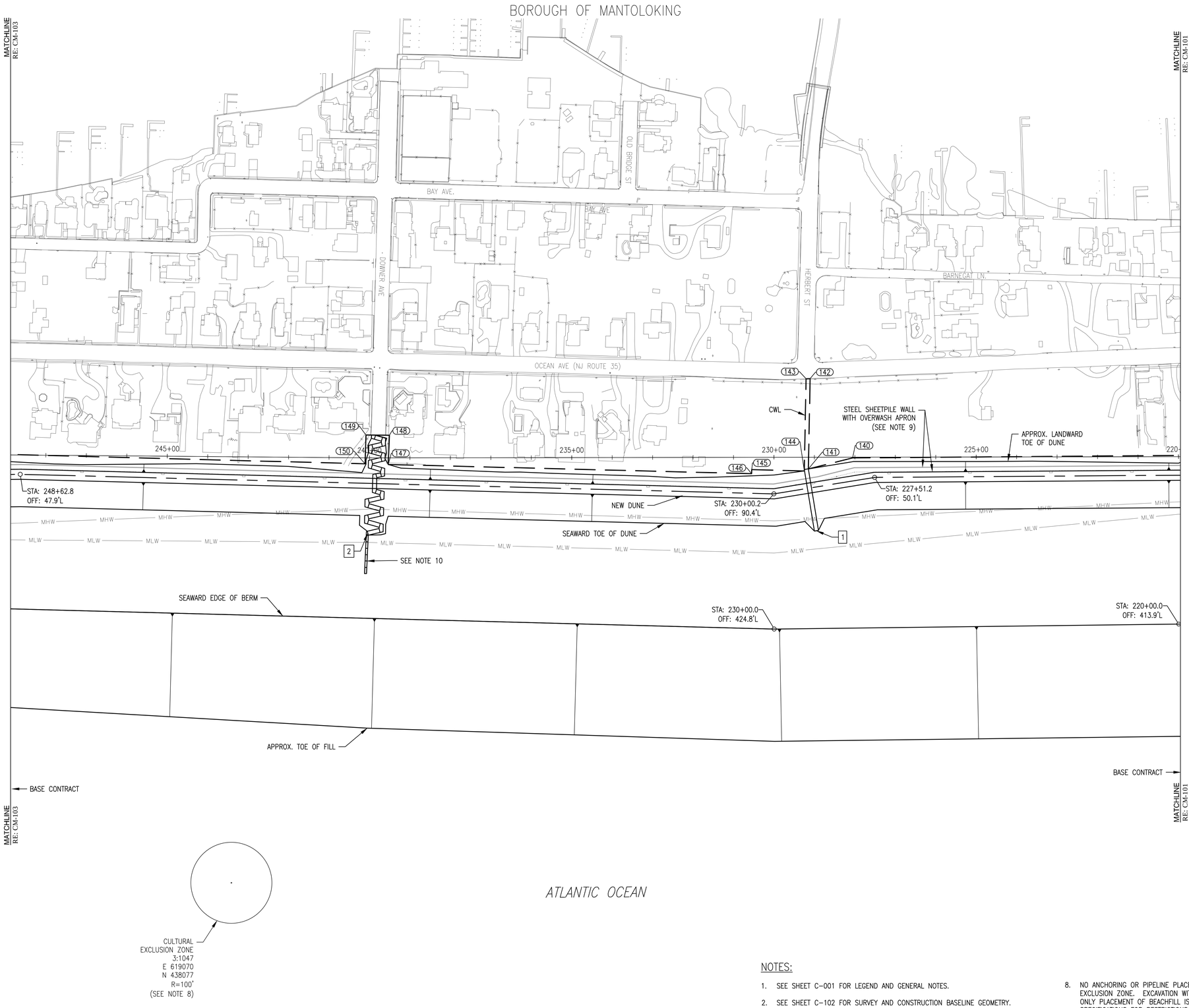
MARK	ACTION	DATE	BY	DESCRIPTION

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT
PHILADELPHIA, PA 19107-3390
www.nap.usace.army.mil

DWN BY: ADD
CKD BY: DAN
DESIGNED BY: ADD
REVIEWED BY: DAN/DES
ISSUE/RELEASE DATE: 28 SEP 2016
PROJ. NUMBER:
SOLICITATION NUMBER: W912DJ-16-B-0014
CONTRACT NUMBER:
DWG SCALE: 1"=100'
DWG. SIZE: 22X32 ANSI E
FILE NAME: 01-Plan.dwg

MANASQUAN INLET TO BARNEGAT INLET
OCEAN COUNTY, NEW JERSEY
BEACHFILL
INITIAL CONSTRUCTION
PLAN - STA. 191+03 TO STA. 219+95
OPTION 11 & BASE CONTRACT

SHEET NUMBER
CM-101



CROSSOVER KEY		
CROSSOVER NO.	STATION	DETAIL NO./SHEET NO.
1	229+12	6/C-402
2	239+87	2/C-406

1 PLAN - STA. 219+95 TO STA. 249+87
SCALE: AS SHOWN

100 0 100 200
SCALE IN FEET

NOTES:

1. SEE SHEET C-001 FOR LEGEND AND GENERAL NOTES.
2. SEE SHEET C-102 FOR SURVEY AND CONSTRUCTION BASELINE GEOMETRY.
3. SEE SHEET C-104 FOR CONTRACTOR WORK LIMIT COORDINATES.
4. SEE SHEET CM-200 FOR TYPICAL BEACHFILL SECTIONS, AND SHEETS CM-300 TO CM-301 FOR CROSS SECTIONS.
5. SEE SHEET C-400 FOR DUNE CROSSOVER SCHEDULE AND SHEETS C-402 TO C-406 FOR PLANS OF CROSSOVERS.
6. SEE SHEET C-419 FOR DUNE PLANTING AND FENCE DETAILS.
7. SEE SHEETS C-500 THROUGH C-502 FOR BORROW AREA PLANS.
8. NO ANCHORING OR PIPELINE PLACEMENT IS PERMITTED WITHIN ANY CULTURAL EXCLUSION ZONE. EXCAVATION WITHIN EXCLUSION ZONES IS ALSO NOT PERMITTED. ONLY PLACEMENT OF BEACHFILL IS PERMITTED WITHIN THE EXCLUSION ZONES. SEE SPECIFICATIONS FOR RESTRICTIONS.
9. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO THE EXISTING STEEL SHEETPILE WALL AND ITS APPURTENANCES THAT OCCURS DURING THE BEACHFILL CONSTRUCTION AT NO EXPENSE TO THE GOVERNMENT. EXISTING STEEL SHEETPILE WALL IS LOCATED BETWEEN STA. 187+76± TO STA. 371+35±.
10. CONSTRUCT BERM STABILIZATION MAT. SEE REMARKS ON SHEET C-400 FOR AREA OF MAT. SEE DETAIL 1/ C-420 FOR BERM STABILIZATION MAT TO I-5 TIE IN. SEE SPECIFICATIONS FOR REQUIREMENTS.
11. PLACE SANDFILL OR GRADE TO ELIMINATE LOW AREAS BETWEEN THE EXISTING DUNE AND THE DUNE TEMPLATE.

US Army Corps of Engineers
Philadelphia District

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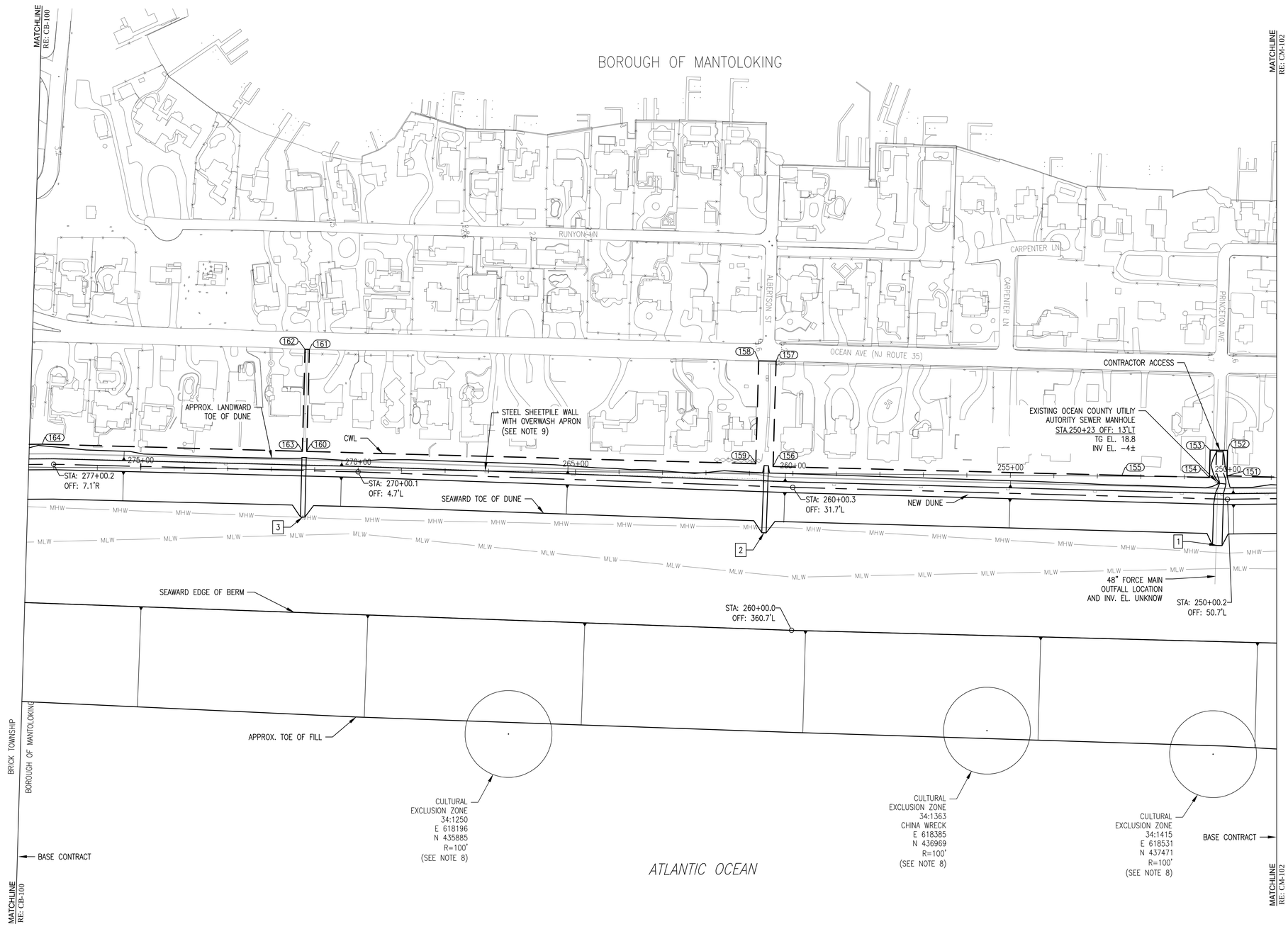
U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT
PHILADELPHIA, PA 19107-3390
www.nap.usace.army.mil

DWN BY: ADD
CKD BY: DM
DESIGNED BY: ADD
REVIEWED BY: DWR/TEW
ISSUE/RELEASE DATE: 28 SEPT 2018
PROJ. NUMBER:
SOLICITATION NUMBER: W912DQ-14-B-0014
CONTRACT NUMBER:
DWG. SCALE: 1"=100'
DWG. SIZE: 22"X34" ANSI D
FILE NAME: CM-102.dwg

MANASQUAN INLET TO BARNEGAT INLET
OCEAN COUNTY, NEW JERSEY
BEACHFILL
INITIAL CONSTRUCTION
PLAN - STA. 219+95 TO STA. 249+87

SHEET NUMBER
CM-102



CROSSOVER KEY		
CROSSOVER NO.	STATION	DETAIL NO./SHEET NO.
1	250+21	3/C-404
2	260+63	6/C-402
3	271+25	6/C-402

1 PLAN - STA. 249+87 TO STA. 277+58
SCALE: AS SHOWN

100 0 100 200
SCALE IN FEET

NOTES:

1. SEE SHEET C-001 FOR LEGEND AND GENERAL NOTES.
2. SEE SHEET C-102 FOR SURVEY AND CONSTRUCTION BASELINE GEOMETRY.
3. SEE SHEET C-104 FOR CONTRACTOR WORK LIMIT COORDINATES.
4. SEE SHEET CM-200 FOR TYPICAL BEACHFILL SECTION, AND SHEETS CM-300 TO CM-301 FOR CROSS SECTIONS.
5. SEE SHEET C-400 FOR DUNE CROSSOVER SCHEDULE AND SHEETS C-402 TO C-404 FOR PLANS OF CROSSOVERS.
6. SEE SHEET C-419 FOR DUNE PLANTING AND FENCE DETAILS.
7. SEE SHEETS C-500 THROUGH C-502 FOR BORROW AREA PLANS.
8. NO ANCHORING OR PIPELINE PLACEMENT IS PERMITTED WITHIN ANY CULTURAL EXCLUSION ZONE. EXCAVATION WITHIN EXCLUSION ZONES IS ALSO NOT PERMITTED. ONLY PLACEMENT OF BEACHFILL IS PERMITTED WITHIN THE EXCLUSION ZONES. SEE SPECIFICATIONS FOR RESTRICTIONS.
9. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO THE EXISTING STEEL SHEETPILE WALL AND ITS APPURTENANCES OR EXISTING 48" FORCE MAIN THAT OCCURS DURING THE BEACHFILL CONSTRUCTION AT NO EXPENSE TO THE GOVERNMENT. EXISTING STEEL SHEETPILE WALL IS LOCATED BETWEEN STA. 187+76± TO STA. 371+35±.
10. PLACE SANDFILL OR GRADE TO ELIMINATE LOW AREAS BETWEEN THE EXISTING DUNE AND THE DUNE TEMPLATE.

PLAN NORTH

US Army Corps of Engineers
Philadelphia District

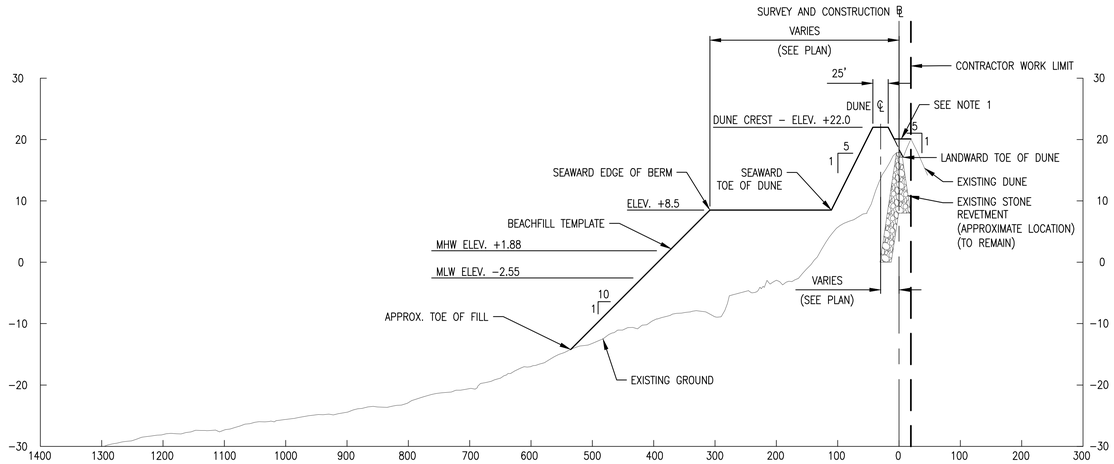
MARK	ACTION	DATE	BY	DESCRIPTION

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT
PHILADELPHIA, PA 19107-3390
www.nap.usace.army.mil

DWN BY: ADD
CKD BY: DJA
DESIGNED BY: ADD
REVIEWED BY: DWATER
ISSUE/RELEASE DATE: 28 SEPT 2016
PROJ. NUMBER:
SOLICITATION NUMBER: W912DQ-16-B-0014
CONTRACT NUMBER:
DWG. SCALE: 1"=100'
DWG. SIZE: 22X34 (ANSI E)
FILE NAME: CM-103.dwg

MANASQUAN INLET TO BARNEGAT INLET
OCEAN COUNTY, NEW JERSEY
BEACHFILL
INITIAL CONSTRUCTION
PLAN - STA. 249+87 TO STA. 277+58

SHEET NUMBER
CM-103



1 TYPICAL SECTION - STA. 162+36 TO STA. 187+00
SCALE: AS SHOWN

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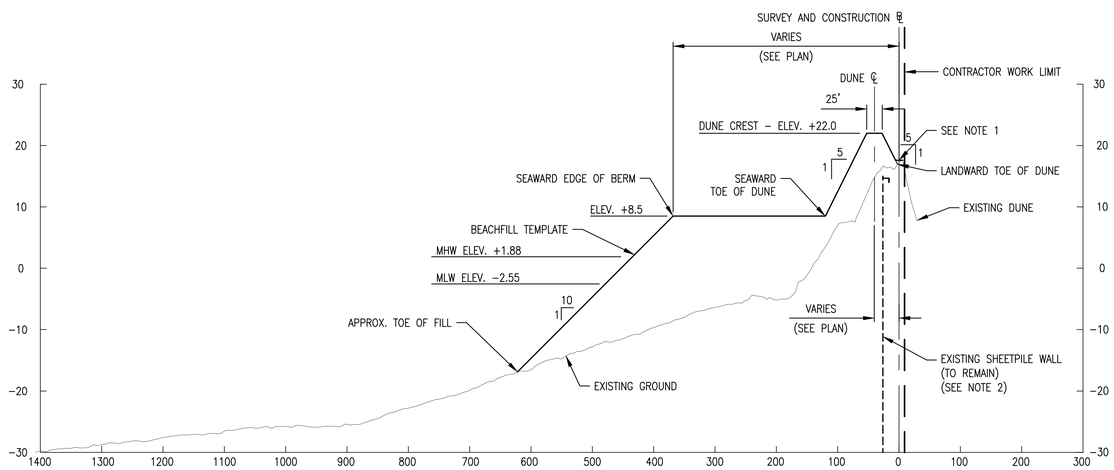
SCALE IN FEET



2 TYPICAL SECTION - STA. 187+00 TO STA. 277+58
SCALE: AS SHOWN

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

NOTES:

1. PLACE SANDFILL TO ELIMINATE LOW AREAS BETWEEN THE EXISTING DUNE AND THE DUNE TEMPLATE OR GRADE EXISTING SAND INTO DUNE TEMPLATE. FOR CLARITY THE LIMIT OF ADDITIONAL SANDFILL OR GRADING IS NOT SHOWN ON PLAN SHEETS. GRADING BEYOND THE CONTRACTOR WORK LIMIT (CWL) IS NOT PERMITTED.
2. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO THE EXISTING STONE REVETMENT OR STEEL SHEETPILE WALL AND ITS APPURTENANCES THAT OCCURS DURING THE BACKFILL CONSTRUCTION AT NO EXPENSE TO THE GOVERNMENT.
3. FOR BEACHFILL PLACEMENT AND PAYMENT TOLERANCES, SEE CONTRACT SPECIFICATIONS.

US Army Corps of Engineers
Philadelphia District

MARK	ACTION	DATE	BY

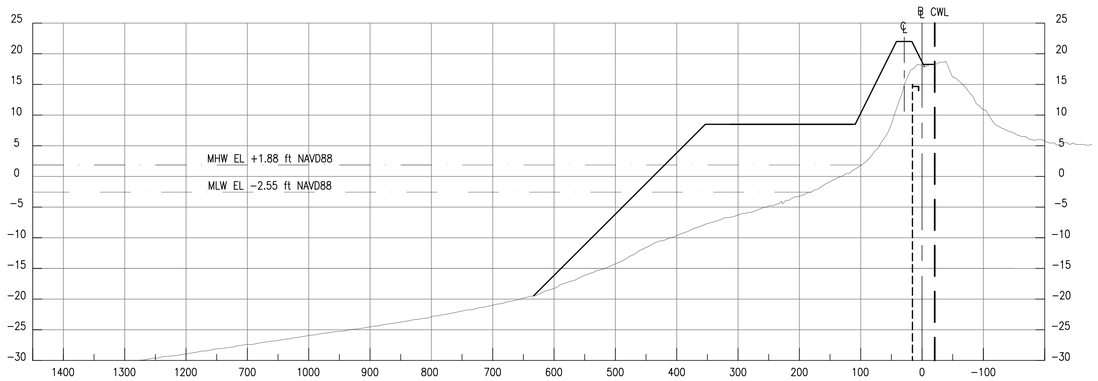
MARK	DESCRIPTION	DATE	BY

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT
PHILADELPHIA, PA 19107-3390
www.nap.usace.army.mil

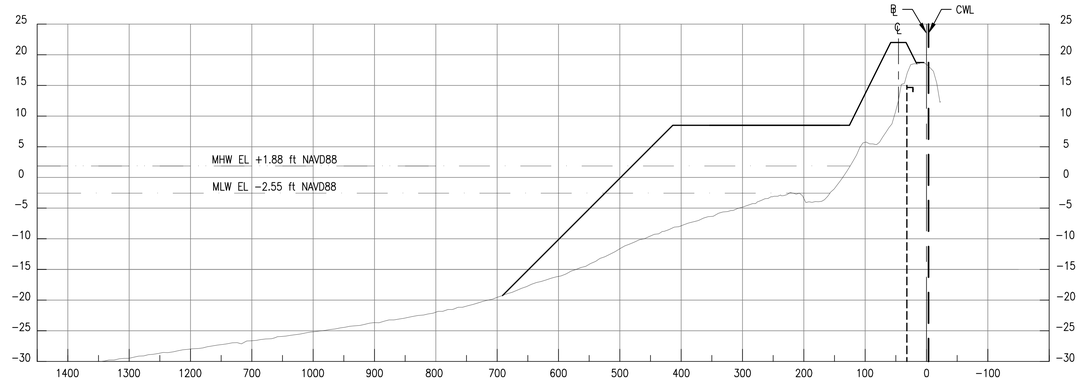
DWN BY: PGS
CKD BY: DAI
DESIGNED BY: ADD
ENGINEERED BY: DWN/EDT
ISSUE/RELEASE DATE: 26 SEPT 2018
PROJ. NUMBER:
SOLICITATION NUMBER: #B NO. W912BU-18-S-0074
CONTRACT NUMBER:
DWG. SCALE: AS SHOWN
DWG. SIZE: 22"x34" (ANSI D)
FILE NAME: CS300.dgn

MANASQUAN INLET TO BARNEGAT INLET
OCEAN COUNTY, NEW JERSEY
BEACHFILL
INITIAL CONSTRUCTION
TYPICAL SECTIONS - BEACHFILL

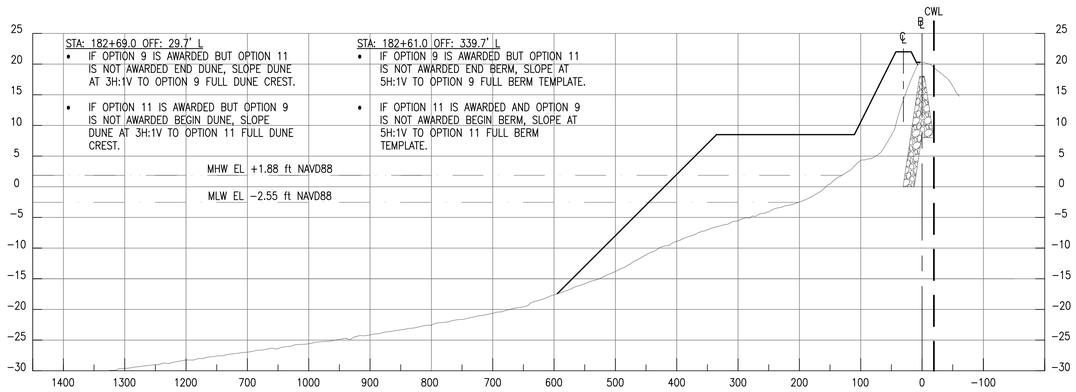
SHEET NUMBER
CM-200



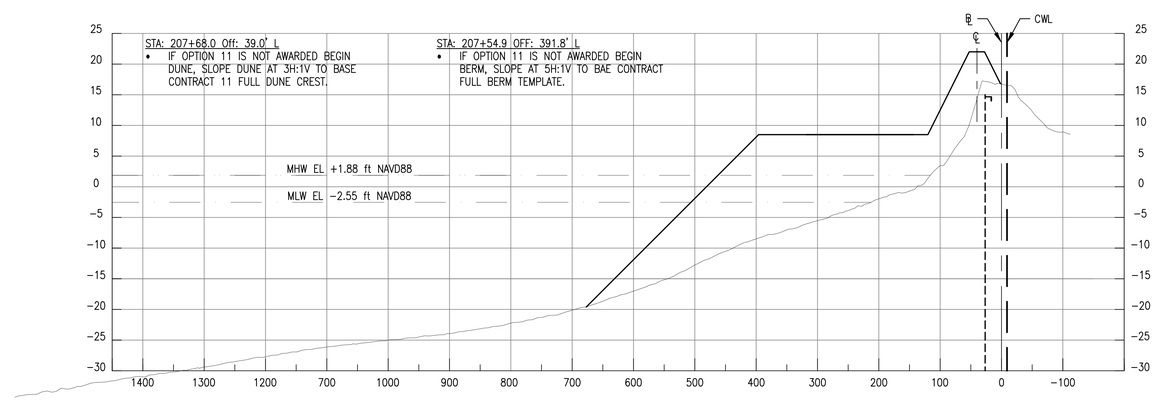
STA. 190+00



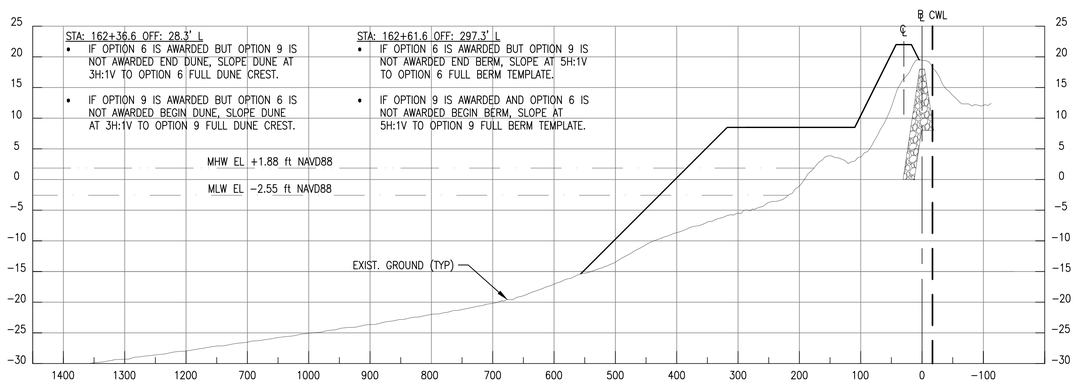
STA. 220+00



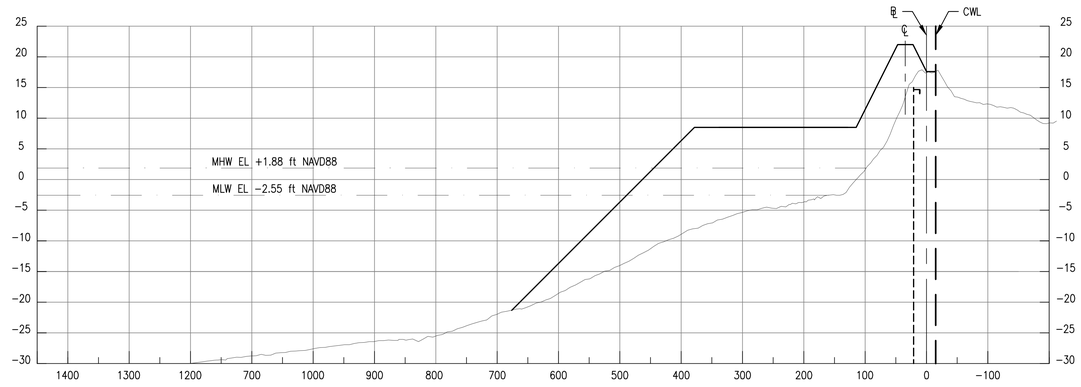
STA. 180+00



STA. 210+00



STA. 170+00



STA. 200+00

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

NOTES:

1. CULTURAL EXCLUSION ZONES NOT SHOWN ON CROSS SECTIONS, SEE PLAN SHEET AND SPECIFICATIONS.
2. FOR TYPICAL SECTIONS, SEE SHEET CM-200.
3. EXISTING STONE REVETMENT LOCATION AND ELEVATION ARE APPROXIMATE.

US Army Corps of Engineers Philadelphia District

MARK	ACTION	DATE	BY

MARK	ACTION	DATE	BY

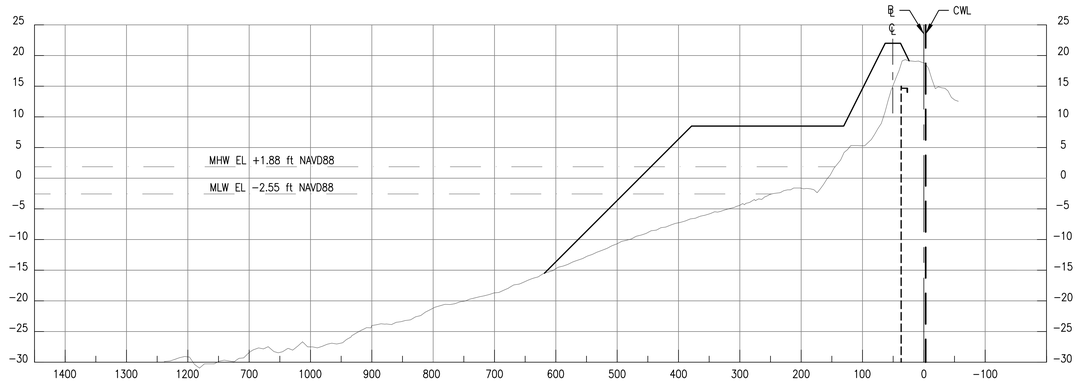
MARK	ACTION	DATE	BY	DESCRIPTION

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT
PHILADELPHIA, PA 19107-3390
www.nap.usace.army.mil

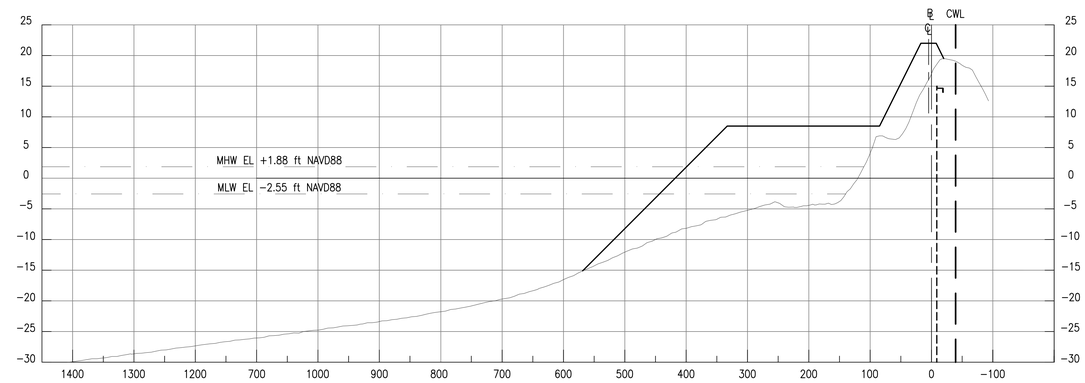
DWN BY: PTF
CKD BY: DA
DESIGNED BY: ADD
REVIEWED BY: KWEBER
ISSUE/RELEASE DATE: 28 SEPT 2016
PROJ. NUMBER:
SOLICITATION NUMBER: IFB NO. W912BU-14-B-0014
CONTRACT NUMBER:
DWG. SCALE: 1" = 50'
DWG. SIZE: 22"X34" ANSI D
FILE NAME: 0300.dwg

MANASQUAN INLET TO BARNEGAT INLET
OCEAN COUNTY, NEW JERSEY
BEACHFILL
INITIAL CONSTRUCTION
CROSS SECTIONS - STA. 170+00 TO STA. 220+00
OPTION 9, 11 & BASE CONTRACT

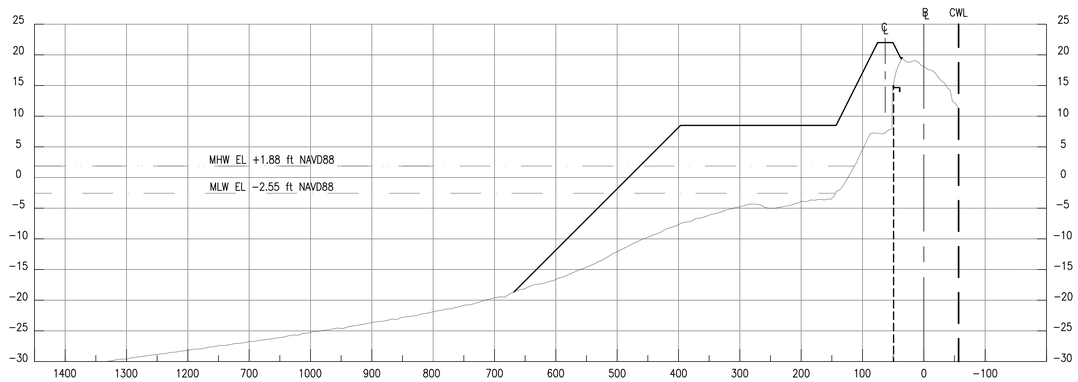
SHEET NUMBER
CM-300



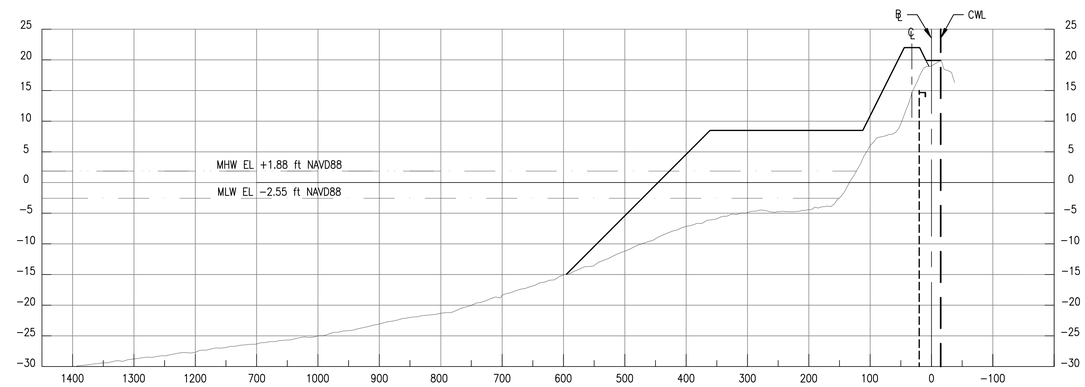
STA. 250+00



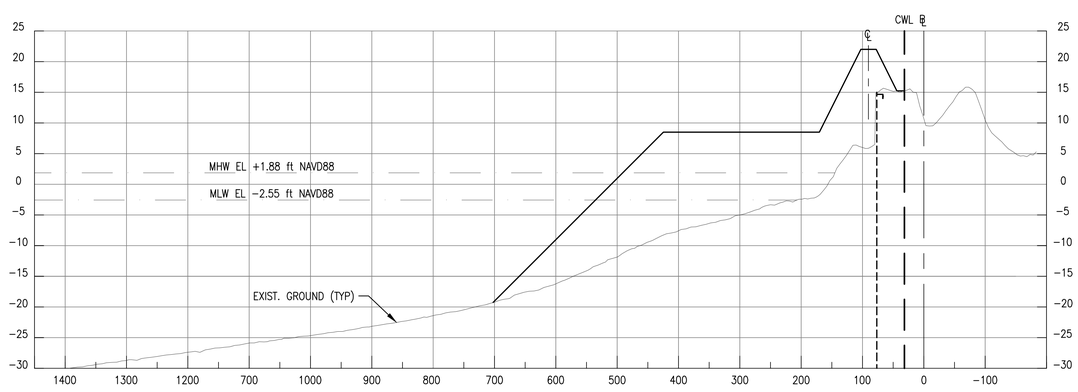
STA. 270+00



STA. 240+00



STA. 260+00



STA. 230+00

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

NOTES:

1. CULTURAL EXCLUSION ZONES NOT SHOWN ON CROSS SECTIONS, SEE PLAN SHEET AND SPECIFICATIONS.
2. FOR TYPICAL SECTIONS, SEE SHEET CM-200.

US Army Corps of Engineers Philadelphia District

MARK	ACTION	DATE	BY	DESCRIPTION

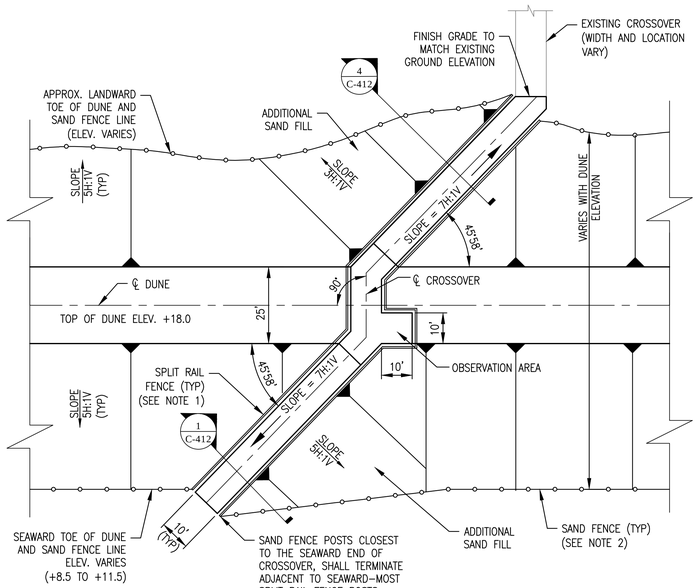
MARK	ACTION	DATE	BY	DESCRIPTION

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT
PHILADELPHIA, PA 19107-3390
www.nap.usace.army.mil

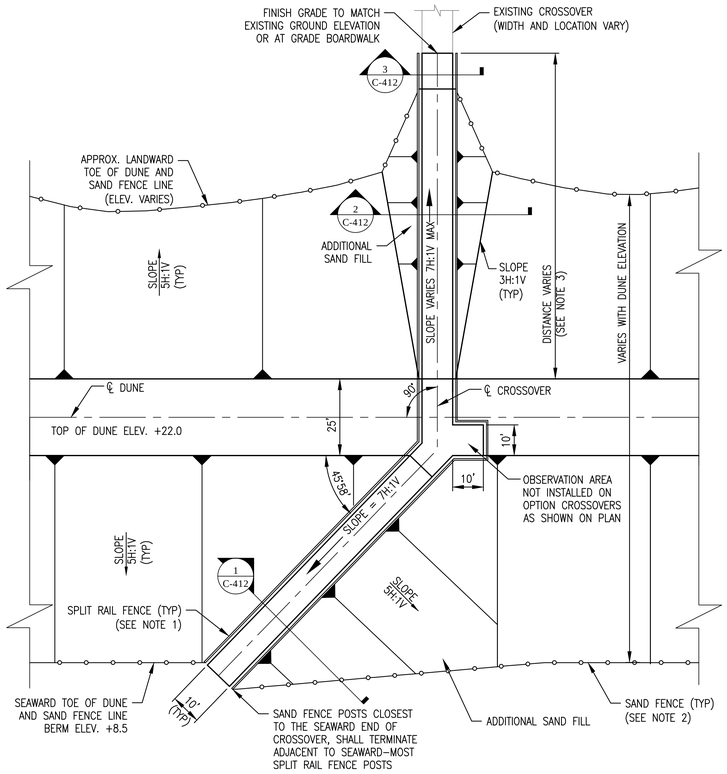
DWN BY: PTF
CKD BY: DW
DESIGNED BY: ADD
REVIEWED BY: DW/CTR
ISSUE/RELEASE DATE: 26 SEPT 2016
PROJ. NUMBER:
SOLICITATION NUMBER: IFB NO. W912BU-16-B-0014
CONTRACT NUMBER:
DWG. SCALE: 1" = 100'
DWG. SIZE: 22" X 34" (ARCH E)
FILE NAME: 23-300.dwg

MANASQUAN INLET TO BARNEGAT INLET
OCEAN COUNTY, NEW JERSEY
BEACHFILL
INITIAL CONSTRUCTION
CROSS SECTIONS - STA. 230+00 TO STA. 270+00

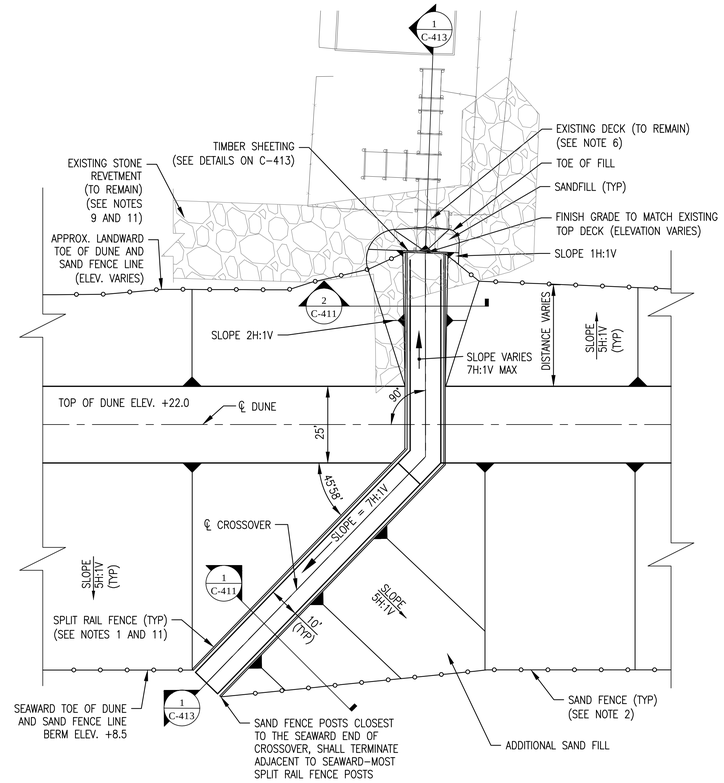
SHEET NUMBER
CM-301



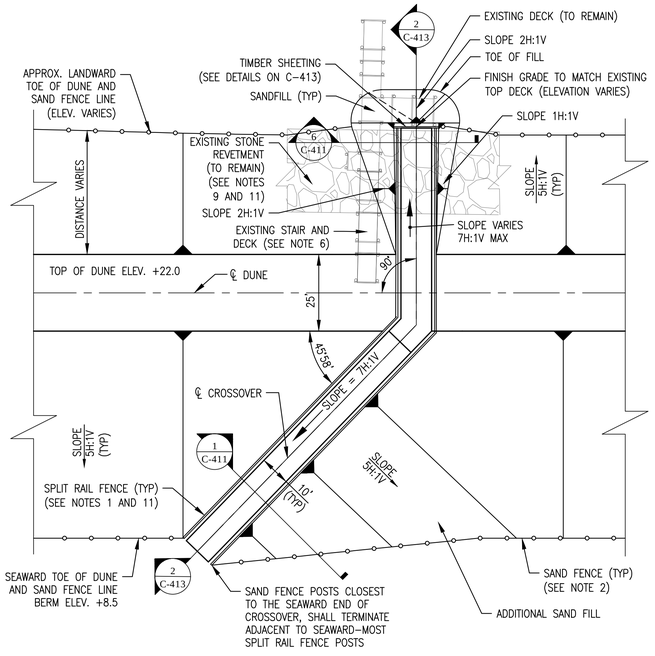
1 PLAN - TYPICAL GRADED SAND PEDESTRIAN CROSSOVER WITH STABILIZATION MATS (POINT PLEASANT BEACH)
SCALE: AS SHOWN (SEE NOTE 10)
20 0 20 40
SCALE IN FEET



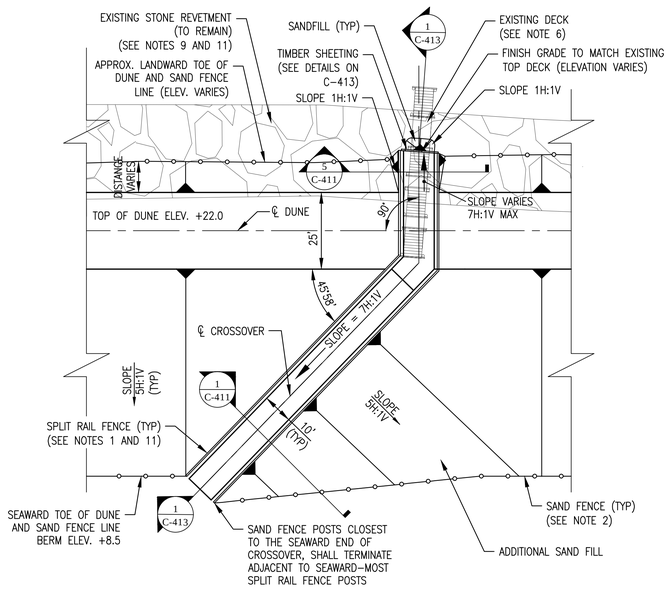
2 PLAN - TYPICAL GRADED SAND PEDESTRIAN CROSSOVER WITH STABILIZATION MATS (POINT PLEASANT BEACH AND TOMS RIVER)
SCALE: AS SHOWN
20 0 20 40
SCALE IN FEET



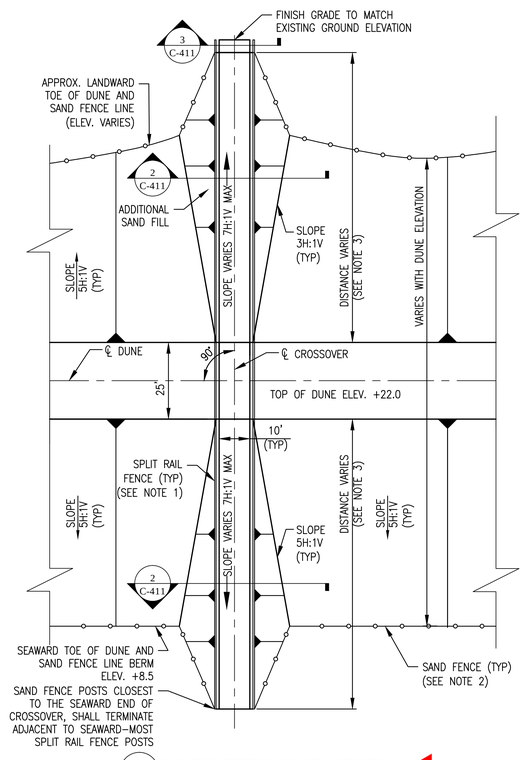
3 PLAN - PEDESTRIAN CROSSOVER (BAY HEAD - KARGE STREET)
SCALE: AS SHOWN
20 0 20 40
SCALE IN FEET



4 PLAN - TYPICAL PEDESTRIAN CROSSOVER (BAY HEAD)
SCALE: AS SHOWN (SEE NOTE 8)
20 0 20 40
SCALE IN FEET



5 PLAN - PEDESTRIAN CROSSOVER (BAY HEAD - STRICKLAND ST AND CHADWICK ST)
SCALE: AS SHOWN
20 0 20 40
SCALE IN FEET



6 PLAN - TYPICAL PEDESTRIAN CROSSOVER (MANTOLOKING)
SCALE: AS SHOWN
20 0 20 40
SCALE IN FEET

NOTES:

1. SPLIT RAIL FENCE POSTS NOT SHOWN FOR CLARITY. FOR DETAILS OF SPLIT RAIL FENCE, SEE SHEET C-417.
2. FOR SAND FENCE AND DUNE PLANTING DETAILS, SEE SHEET C-419.
3. CONSTRUCTION OF FULL LENGTH OF CROSSOVER ON LAND SIDE OF DUNE VARIES WITH EXISTING GROUND ELEVATION.
4. SEE SHEET C-400 AND C-401 FOR DUNE CROSSOVER SCHEDULE AND LOCATION SPECIFIC REMARKS.
5. OBSERVATION AREA NOT INSTALLED IN MANTOLOKING AND BAY HEAD.
6. EXISTING PILES AND SUPER STRUCTURE SHALL BE CUT OFF AND REMOVED TO A DEPTH OF 3' BELOW EXISTING GRADE. SEE BAY HEAD REFERENCE DRAWINGS FOR EXISTING STRUCTURES.
7. THE ORIENTATION OF THE LANDWARD LEG OF THE CROSSOVER MAY BE OPPOSITE HAND OF THE ONE SHOWN AT SEVERAL LOCATIONS, SEE SHEET CPP-101 NOTE 12.
8. THE PLAN IS TYPICAL FOR HARRIS STREET, BRIDGE AVENUE, HOWE STREET, MOUNT STREET, JOHNSON STREET AND EGBERT STREET.
9. BEACHFILL SHALL BE PLACED OVER EXISTING STONE REVETMENT.
10. THE LANDWARD LEG OF CROSSOVERS AT NEW JERSEY AVE AND MID-BLOCK (STA. 36+15) ARE A MIRROR IMAGE OF THE SEAWARD LEG.
11. IF 4' EMBEDMENT OF THE SPLIT RAIL FENCE POSTS CANNOT BE ACHIEVED DUE TO THE EXISTING STONE REVETMENT, SAND FENCE SHALL BE INSTALLED FROM THE SEAWARD CREST OF THE EXISTING STONE REVETMENT TO THE LANDWARD LIMIT OF THE CROSSOVER.

US Army Corps of Engineers Philadelphia District

MARK	ACTION	DATE	BY	DESCRIPTION

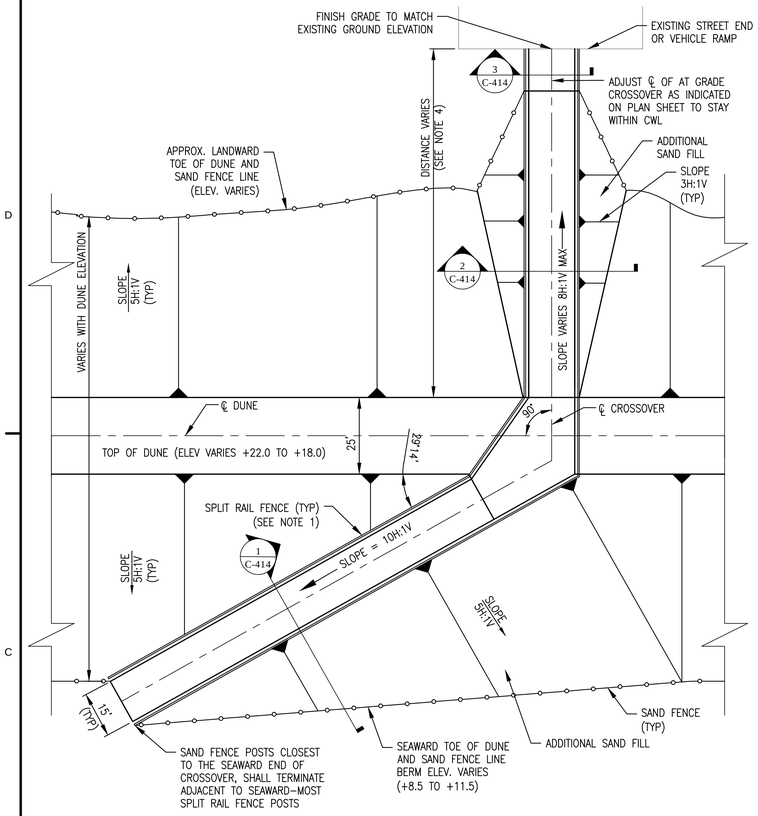
U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT
PHILADELPHIA, PA 19107-3390
www.nap.usace.army.mil

DWN BY: GMG, PCS	DESIGNED BY: ADD
CKD BY: DWT	REVIEWED BY: DWT, TEM
DWG. SCALE: AS SHOWN	
DWG. SIZE: 30"x42" (ANSI E)	FILE NAME: C402-PLANS-PEDESTRIAN-CROSSOVER.dwg

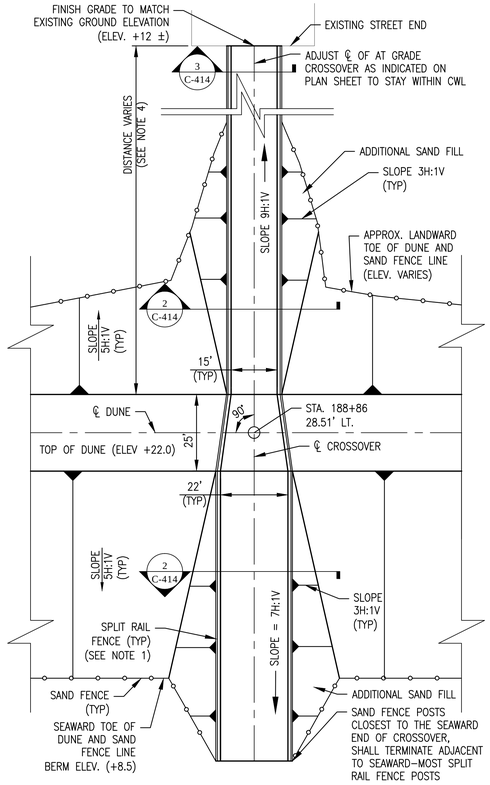
ISSUE/RELEASE DATE: 26 SEPT 2016
PROJ. NUMBER:
SOLICITATION NUMBER: W912DS-14-B-0014
CONTRACT NUMBER:

MANASQUAN INLET TO BARNEGAT INLET
OCEAN COUNTY, NEW JERSEY
BEACHFILL
INITIAL CONSTRUCTION
PLANS - PEDESTRIAN CROSSOVER

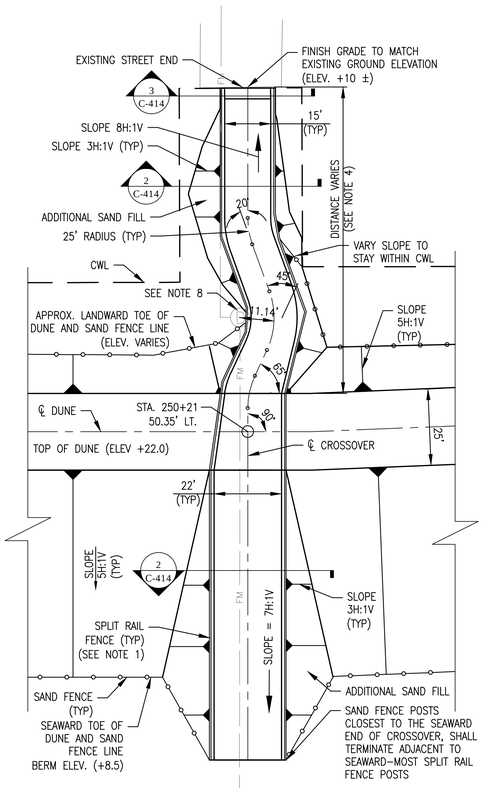
SHEET NUMBER
C-402



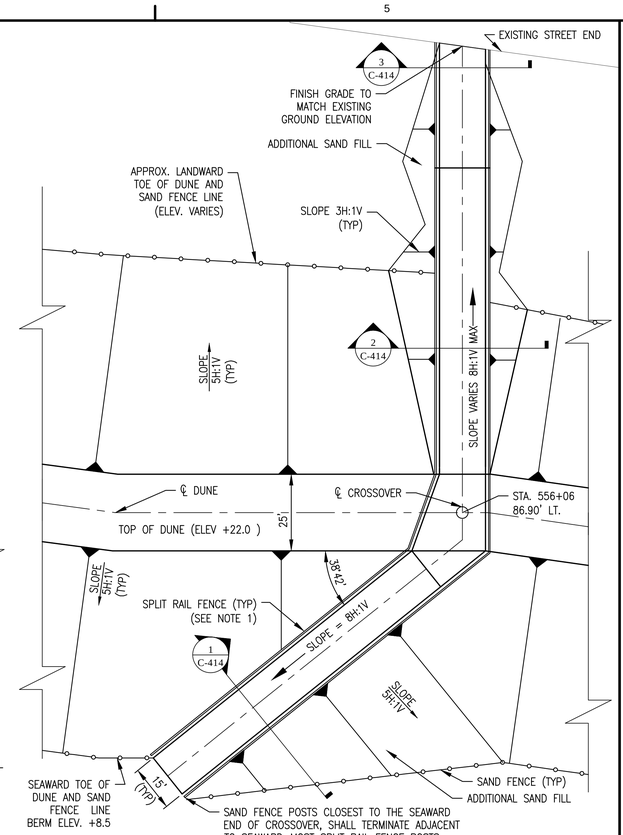
1 PLAN - TYPICAL VEHICLE CROSSOVER
SCALE: AS SHOWN
20 0 20 40
SCALE IN FEET



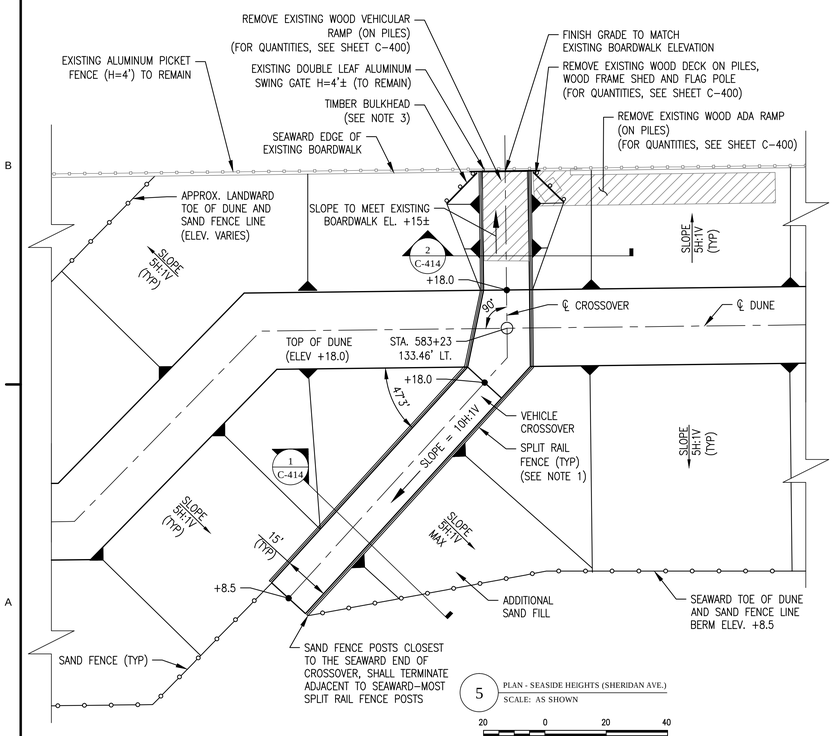
2 PLAN - MANTOLOKING (LYMAN ST.)
SCALE: AS SHOWN
20 0 20 40
SCALE IN FEET



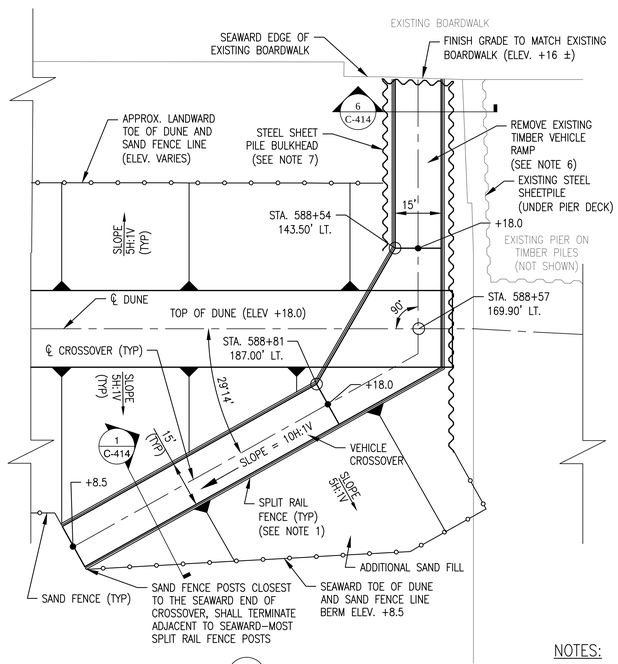
3 PLAN - MANTOLOKING (PRINCETON AVE.)
SCALE: AS SHOWN
20 0 20 40
SCALE IN FEET



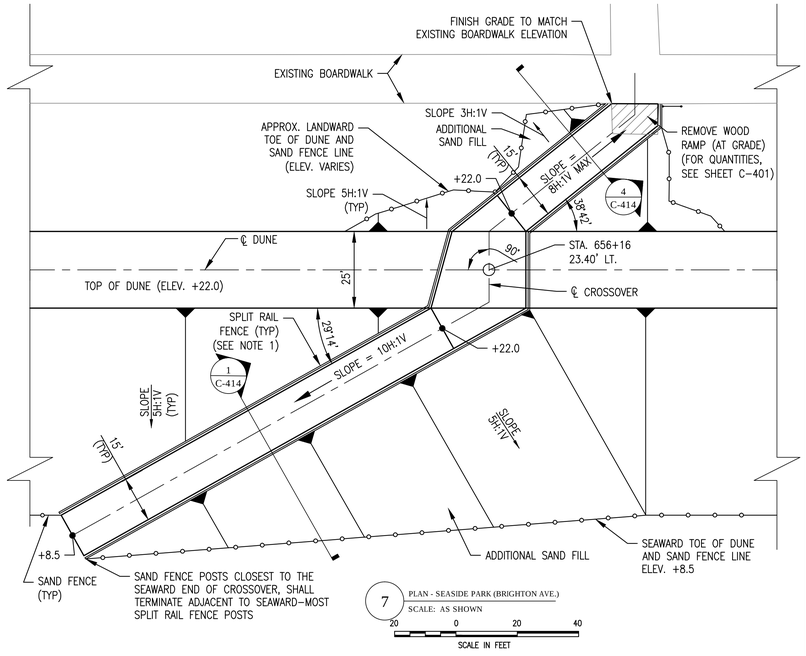
4 PLAN - TOMS RIVER (SOUTH) (HARDING AVE.)
SCALE: AS SHOWN
20 0 20 40
SCALE IN FEET



5 PLAN - SEASIDE HEIGHTS (SHERIDAN AVE.)
SCALE: AS SHOWN
20 0 20 40
SCALE IN FEET



6 PLAN - SEASIDE HEIGHTS (GRANT AVE.)
SCALE: AS SHOWN
20 0 20 40
SCALE IN FEET



7 PLAN - SEASIDE PARK (BRIGHTON AVE.)
SCALE: AS SHOWN
20 0 20 40
SCALE IN FEET

NOTES:

1. SPLIT RAIL FENCE POSTS NOT SHOWN FOR CLARITY. FOR DETAILS OF SPLIT RAIL FENCE, SEE SHEET C-417.
2. FOR SAND FENCE AND DUNE PLANTING DETAILS, SEE SHEET C-419.
3. FOR DETAILS OF TIMBER BULKHEAD, SEE DETAIL 7/C-418.
4. CONSTRUCTION OF FULL LENGTH OF CROSSOVER ON LAND SIDE OF DUNE VARIES WITH EXISTING GROUND ELEVATION.
5. SEE SHEET C-400 AND C-401 FOR DUNE CROSSOVER SCHEDULE AND LOCATION SPECIFIC REMARKS.
6. THE FOUNDATIONS OF ALL EXISTING RAMPS AND OTHER STRUCTURES TO BE DEMOLISHED SHALL BE REMOVED IN THEIR ENTIRETY BELOW GRADE.
7. FOR HORIZONTAL GEOMETRY LAYOUT AND DETAILS OF STEEL SHEETPILE BULKHEAD, SEE SHEET C-421.
8. THE SPLIT RAIL FENCE POST SPACING SHALL BE ADJUSTED IN THE FIELD SO THAT THERE IS A 6" CLEAR ZONE AROUND THE EXISTING MANHOLE. ACCESS TO LID SHALL BE MAINTAINED AND NO SPLIT RAIL SHALL BE INSTALLED ABOVE THE MANHOLE LID.

US Army Corps of Engineers
Philadelphia District

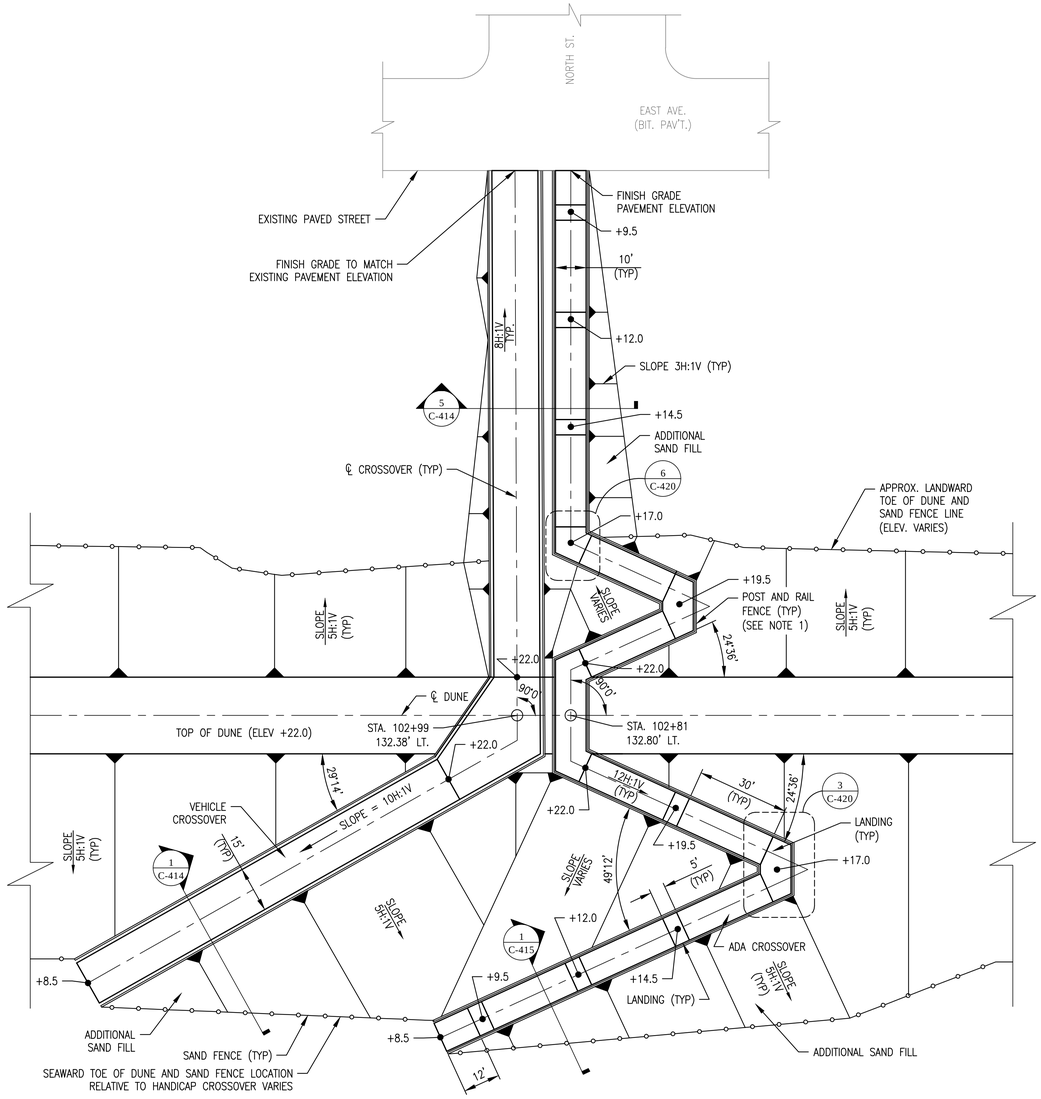
MARK	DESCRIPTION	DATE	BY	MARK	DESCRIPTION	DATE	BY

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT
PHILADELPHIA, PA 19107-3390
www.nap.usace.army.mil

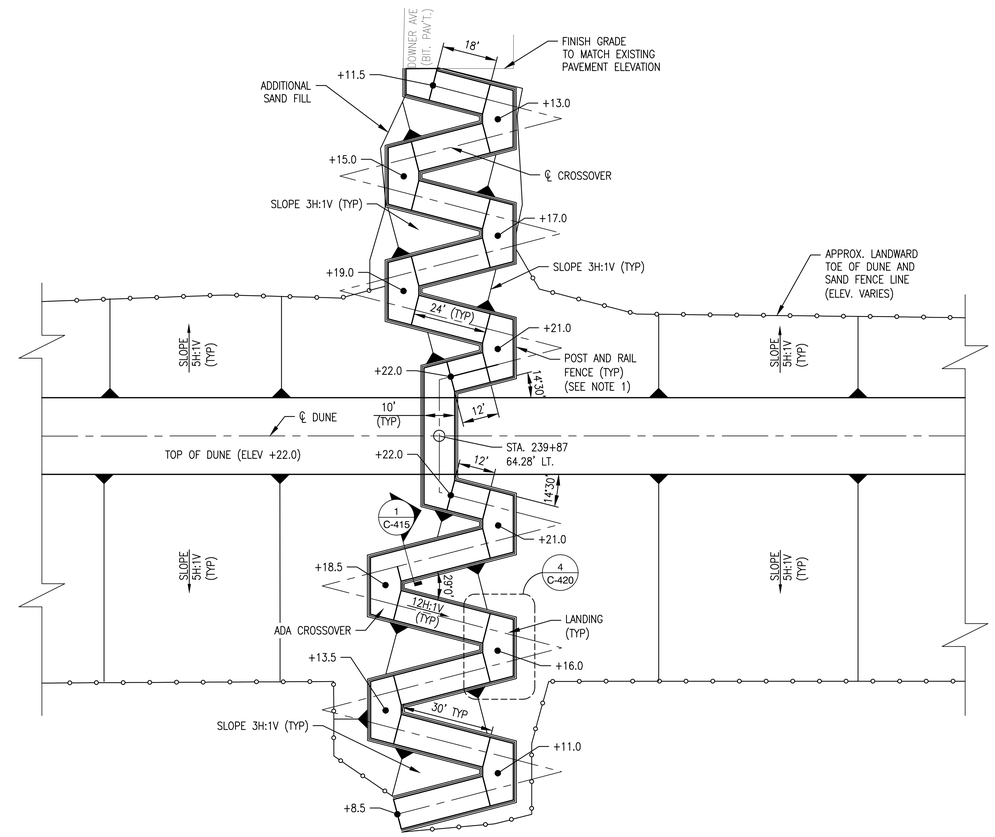
DESIGNED BY: ADD
DRAWN BY: GMG
CKD BY: DMT
DATE: 28 SEPT 2018
ISSUE/RELEASE DATE:
PROJ. NUMBER:
SOLICITATION NUMBER: IFB NO. WP(B)J-14-8014
CONTRACT NUMBER:
DWG. SCALE: AS SHOWN
DWG. SIZE: 30"X42" (ANSI D)
FILE NAME: C404-TYPIC VEHICLE CROSSOVER.dwg

MANASQUAN INLET TO BARNEGAT INLET
OCEAN COUNTY, NEW JERSEY
BEACHFILL
INITIAL CONSTRUCTION
PLANS - VEHICLE CROSSOVER

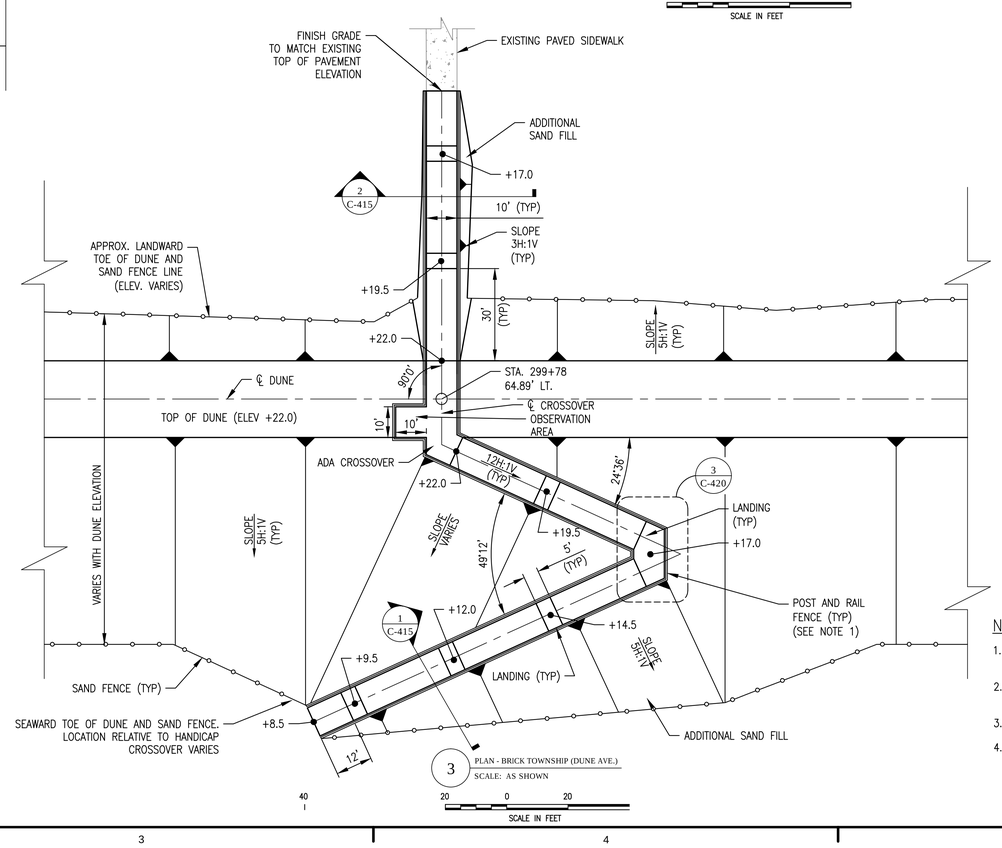
SHEET NUMBER
C-404



1 PLAN - BAYHEAD (NORTH ST.)
SCALE: 1:20_XREF
20 0 20 40
SCALE IN FEET



2 PLAN - MANTOLOKING (DOWNER AVE.)
SCALE: AS SHOWN
20 0 20 40
SCALE IN FEET



3 PLAN - BRICK TOWNSHIP (DUNE AVE.)
SCALE: AS SHOWN
20 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-417.
2. FOR SAND FENCE AND DUNE PLANTING DETAILS, SEE SHEET C-419.
3. FOR DETAILS OF TIMBER BULKHEAD, SEE SHEET C-418.
4. 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	DESCRIPTION	DATE	BY

MARK	DESCRIPTION	DATE	BY

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT
PHILADELPHIA, PA 19107-3390
www.nap.usace.army.mil

DWN BY: GMG / PGS
CKD BY: DA
DESIGNED BY: ADD
REVIEWED BY: DWR / TEB
ISSUE/RELEASE DATE: 28 SEPT 2018
PROJ. NUMBER:
SOLICITATION NUMBER: #B1K0_W912BU-14-B-0014
CONTRACT NUMBER:
DWG. SIZE: 22"X34" ANSI D
DWG. SCALE: AS SHOWN
FILE NAME: C-406_PLANS - CROSSOVER.dwg

MANASQUAN INLET TO BARNEGAT INLET
OCEAN COUNTY, NEW JERSEY
BEACHFILL
INITIAL CONSTRUCTION
PLANS - CROSSOVER

SHEET NUMBER
C-406