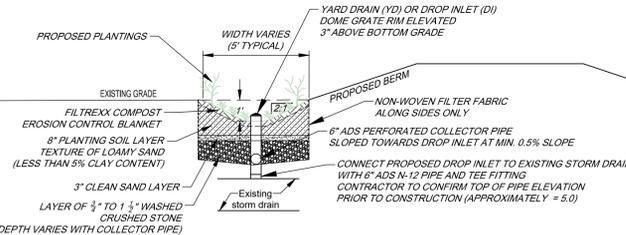


General Notes:

- Performance of the work shall be in compliance with the plans and details, and any permit requirements issued by the Town of Braintree, State of Massachusetts, USACE, or other regulatory agencies for the referenced project and described herein.
- Construction staging area and access shall be coordinated with the Town prior to start of work. During periods of high water levels, all equipment will either be moved above high water at the site or transported from the site as necessary.
- Toe stones should be placed on a 6 inch base layer of crushed stone, buried a minimum of 6 inches below existing grade, and should be a minimum of 1 ton (2.5 foot DIA).
- Filter cloth shall be placed below the 6 inch crushed stone base layer, wrapped behind the landward side of the marsh sill, extended into the core of the sill, and covered with the top stones to anchor the fabric in place and protect it from UV exposure. The joints of the filter cloth shall be staggered at least six feet apart. The filter cloth shall be overlapped at least three feet in each direction. Ends of the filter cloth shall not butt each other. Filter cloth specification as indicated on plan.
- The marsh sill stones shall be placed by equipment within the design footprint. The stones shall not be dumped into a pile. Each stone shall be chosen and placed into position by equipment in order to interlock with adjoining units with maximum contact points. Placement shall be such that the longest dimension of the armor unit lays horizontally. Each stone shall be adequately keyed into proper seating to insure tight fit before another stone is added. Armor units not properly stacked or securely interlocked, upon engineer's judgment, shall be removed and replaced to the engineer's satisfaction.
- Large voids in the armor layer of the marsh sill shall be filled with 1" to 3" stone chips. Stone should be hand fit into the voids with a crow bar and/or hammer and should not be left loose on the face of the sill.
- The ends of the proposed sill shall carefully be tied into the existing salt marsh. The engineer shall be consulted prior to construction of both returns for details and to ensure adequate return construction to minimize impact on the adjacent marsh areas.
- The area between the marsh sill and the existing salt marsh shall be filled with compatible soils, graded to provide an even slope from the existing marsh towards the marsh sill crest, stabilized with jute matting, and planted with vegetation as shown, upon completion of the work.
- Any loose stones or remnant structural components remaining from construction shall be removed by the contractor prior to completion of the work.
- The marsh sill, restored salt marsh, and other work shall be inspected by the Engineer following the completion of the work, as well as approximately 28 days (one full lunar tidal cycle) after construction.
- The marsh sill should be inspected on a regular basis, and maintained as necessary.

Permit Plan:

This plan is for permitting purposes only. The plan describes the full scope of the project. Contractor shall coordinate with the Engineer for detailing prior to providing a bid on this project.



1 PROPOSED RAIN GARDEN - TYPICAL CROSS SECTION
SCALE: 1" = 4'

LEGEND

- 10--- Existing 5' Contour
- 2--- Existing 1' Contour
- 2014 NOAA Lidar Contour
- +1.5 Existing Spot Elevation
- △CB#2 Grain size samples
- High Water Line
- Mean High Water
- Base of Peat Shelf
- 2--- Proposed 1' Contour
- Existing Saltmarsh
- Existing Coastal Bank
- Existing Rocky Intertidal Shore
- Proposed Saltmarsh
- Proposed Marsh Sill (Visible)
- Proposed Coastal Bank Regrading

Survey Notes:

Topographic survey and wetland resource area delineations were conducted in November 2018 and October 2019 by Woods Hole Group. Additional planimetric details provided by the Town of Braintree GIS.

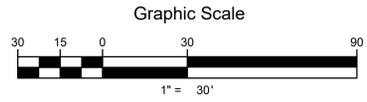
Datum Notes:

Elevations are referenced to NAVD88 datum.
MHW Elevation = 4.3 ft
MLW Elevation = -5.4 ft

Flood Note:

Flood Zone AE (EL. 10) from FEMA Firm Panel #250233 0227 F, Dated June 9, 2014

LAYOUT PLAN
Scale: 1" = 30'

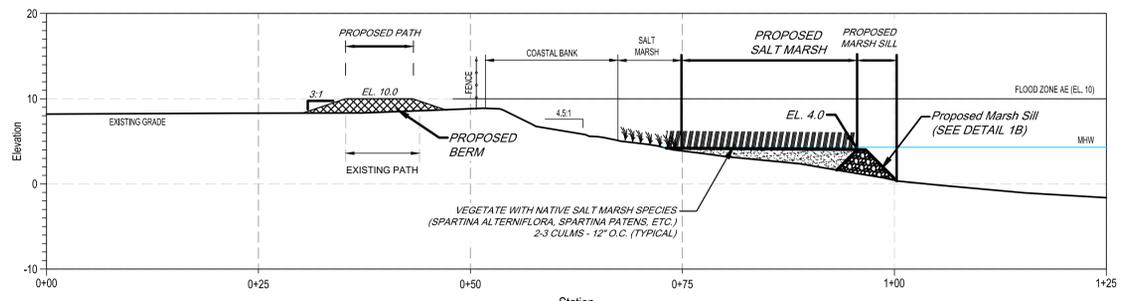


| Revisions | Date |
|--|---------------|
| 1. Review path surface, general notes, and stone sizes | Mar. 27, 2020 |
| 2. Add sheet with planting details | Apr. 23, 2020 |
| 3. | |
| 4. | |
| 5. | |
| 6. | |
| 7. | |

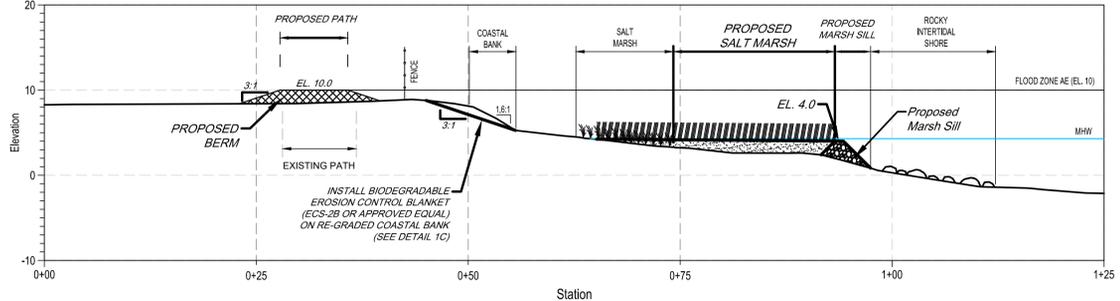
Surveyed By:
WOODS HOLE GROUP
107 WATERHOUSE ROAD,
BOURNE, MA 02532

Title:
Proposed Layout Plan
Shoreline Erosion Mitigation & Coastal Resiliency
Braintree Watson Park
Braintree, MA

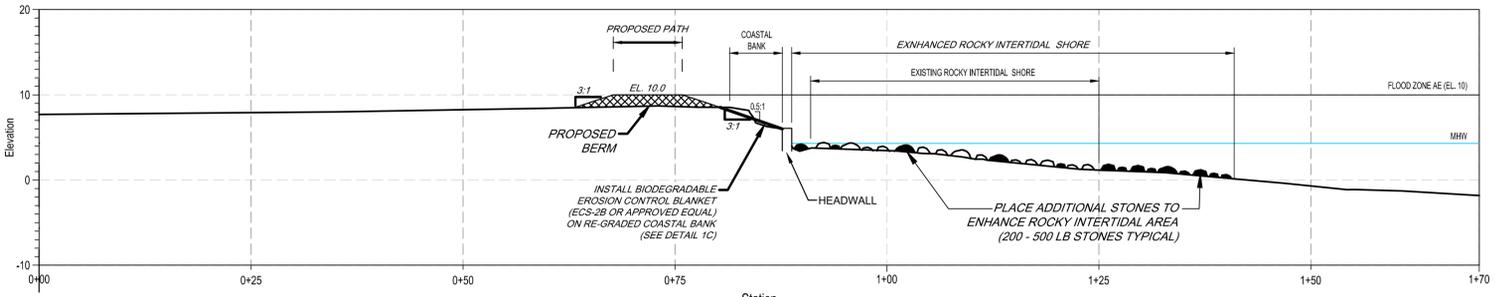
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|----------------------------|
| Project Number: 2019-0072 |
| Dwg File: 2019-0072-SP.dwg |
| Scale: 1" = 30' |
| Date: 3/10/2020 |
| Approved: |
| Drawn: LTM/JRK |



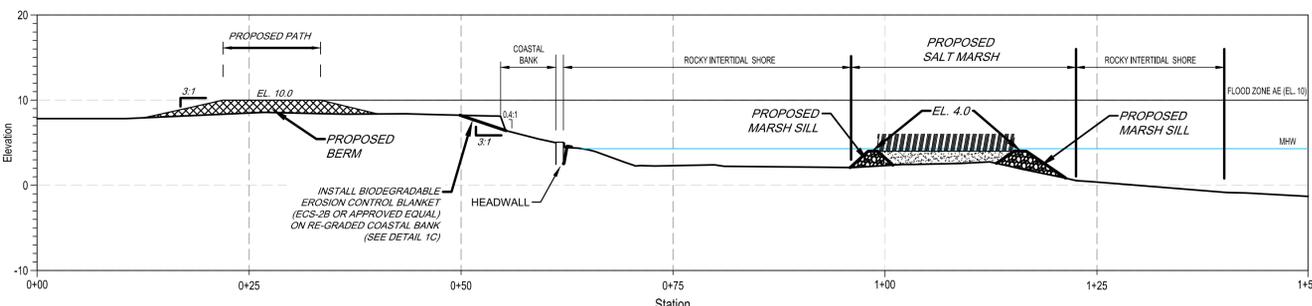
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Vertical Scale: 1" = 10'



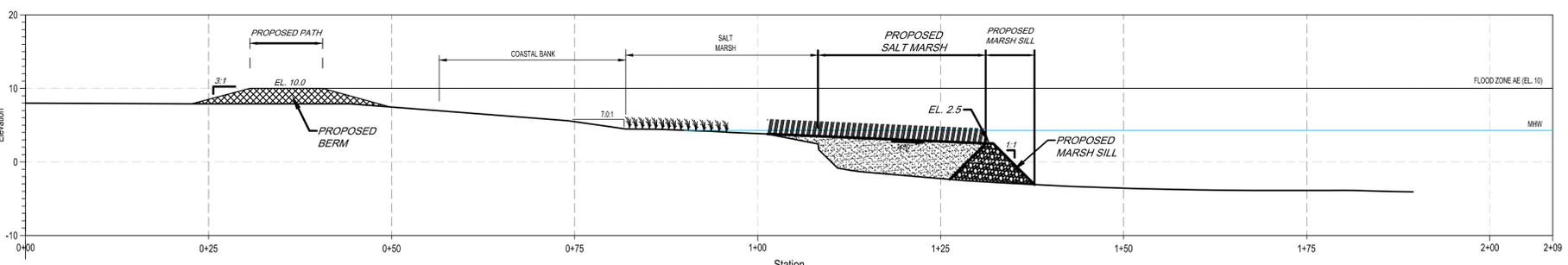
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Vertical Scale: 1" = 10'



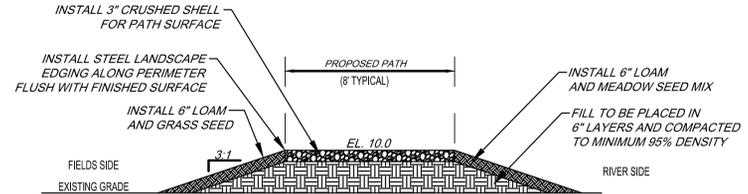
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Vertical Scale: 1" = 10'



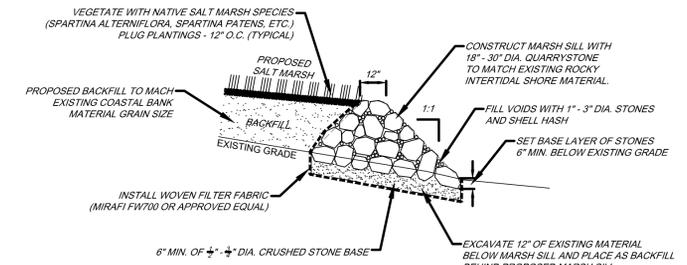
TRANSECT 4 CROSS SECTION
Horizontal Scale: 1" = 10'
Vertical Scale: 1" = 10'



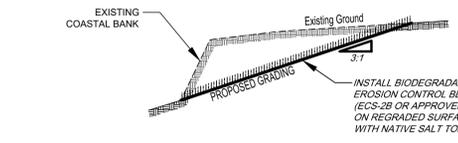
TRANSECT 5 CROSS SECTION
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Vertical Scale: 1" = 10'



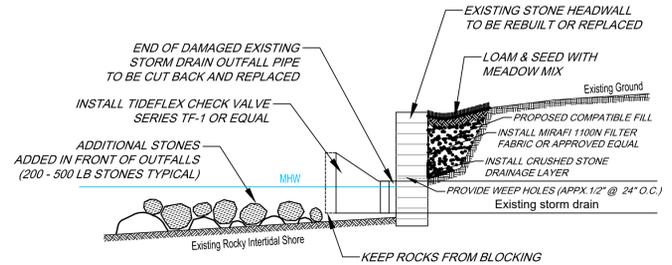
1A PROPOSED BERM - TYPICAL CROSS SECTION
SCALE: 1" = 4'



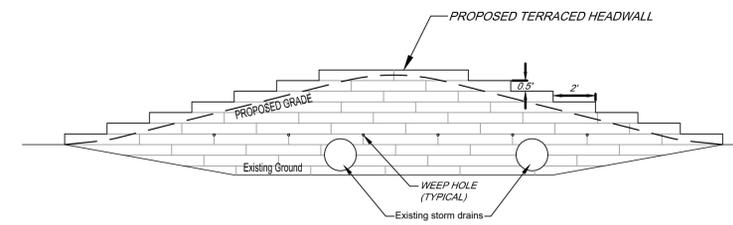
1B PROPOSED MARSH SILL - TYPICAL CROSS SECTION
SCALE: 1" = 4'



1C PROPOSED COASTAL BANK GRADING - TYPICAL CROSS SECTION
SCALE: 1" = 4'



1D PROPOSED OUTFALL - TYPICAL CROSS SECTION
SCALE: 1" = 4'



1E PROPOSED HEADWALL
SCALE: 1" = 4'



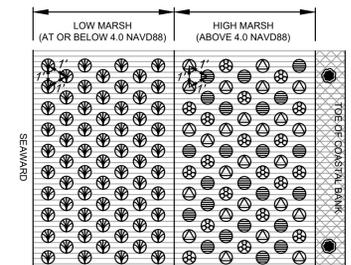
Joel R. Kubick
FE

| Date | Revisions |
|--------------|---|
| Mar 27, 2020 | 1. Review path surface, general notes, and cross sections |
| Apr 23, 2020 | 2. Add sheet 1 with planting details |
| | 3. |
| | 4. |
| | 5. |
| | 6. |
| | 7. |

Surveyed By:
WOODS HOLE GROUP
107 WATERHOUSE ROAD,
BOURNE, MA 02532

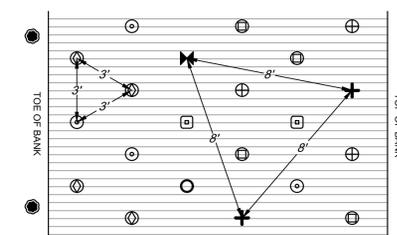
Title: Cross Sections and Details
Shoreline Erosion Mitigation & Coastal Resiliency
Braitree Watson Park
Braitree, MA

| |
|----------------------------|
| Project Number: 2019-0072 |
| Dwg File: 2019-0072-SP.dwg |
| Scale: AS SHOWN |
| Date: 3/10/2020 |
| Approved: |
| Drawn: LTM/JRK |



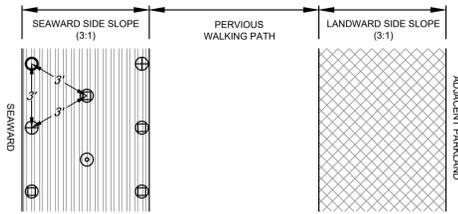
- 1 LAYER OF 100% BIODEGRADABLE EROSION CONTROL BLANKET (ECS-2B OR SIMILAR) AND 1 LAYER OVERLAY OF 90% COIR BLANKET ANCHORED @ 36" O.C.
 - NEWP COASTAL SALT TOLERANT SEED MIX APPLIED @ 35 LB/ACRE
- PLUG PLANTINGS @ 12" ON-CENTER**
- SPARTINA ALTERNIFLORA SALT MARSH CORDGRASS
 - SPARTINA PATENS SALT MARSH HAY
 - DISTICHLIS SPICATA SALTGRASS
 - JUNCUS GERARDII BLACKGRASS
- POTTED PLANTINGS 1-2 GALLONS @ 8" ON-CENTER**
- IVA FRUTESCENS HIGH TIDE BUSH

SM SALT MARSH PLANTING DETAIL
SCALE: 1" = 4'



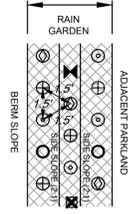
- 1 LAYER OF 100% BIODEGRADABLE EROSION CONTROL BLANKET (ECS-2B OR SIMILAR) AND 1 LAYER OVERLAY OF 90% COIR BLANKET ANCHORED @ 36" O.C. AND NEWP COASTAL SALT TOLERANT SEED MIX APPLIED @ 35 LB/ACRE
- PLUG PLANTINGS @ 36" ON-CENTER**
- PANICUM VIRGATUM SWITCHGRASS
 - SORGHASTRUM NUTANS INDIAN GRASS
 - SCHIZACHYRIUM SCOPARIUM LITTLE BLUESTEM
 - ANDROPOGON GERARDI BIG BLUESTEM
 - SOLIDAGO SEMPERVIRENS SEASIDE GOLDENROD
 - ASCLEPIAS TUBEROSA BUTTERFLY MILKWEED
- POTTED PLANTINGS 1-2 GALLONS @ 8" ON-CENTER**
- MYRICA PENNSYLVANICA BAYBERRY
 - PRUNUS MARITIMA BEACH PLUM
 - IVA FRUTESCENS HIGH TIDE BUSH

CB COASTAL BANK PLANTING DETAIL
SCALE: 1" = 4'



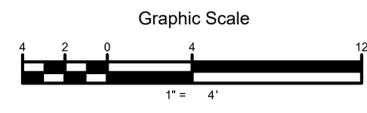
- FILTREXX COMPOST MULCH BLANKET MEDIA AND NEWP NATIVE UPLAND SEED MIX APPLIED @ 23 LB/ACRE
 - FILTREXX COMPOST MULCH BLANKET MEDIA AND LAVOIE PLAYERS BEST SEED MIX APPLIED @ 200 LB/ACRE
- PLUG PLANTINGS @ 36" ON-CENTER**
- PANICUM VIRGATUM SWITCHGRASS
 - SORGHASTRUM NUTANS INDIAN GRASS
 - SCHIZACHYRIUM SCOPARIUM LITTLE BLUESTEM
 - ANDROPOGON GERARDI BIG BLUESTEM

VB VEGETATED BERM PLANTING DETAIL
SCALE: 1" = 4'



- FILTREXX COMPOST MULCH BLANKET MEDIA AND NEWP NEW ENGLAND WARM SEASON SEED MIX APPLIED @ 23 LB/ACRE
- PLUG PLANTINGS @ 18" ON-CENTER**
- PANICUM VIRGATUM SWITCHGRASS
 - SORGHASTRUM NUTANS INDIAN GRASS
 - SCHIZACHYRIUM SCOPARIUM LITTLE BLUESTEM
 - ANDROPOGON GERARDI BIG BLUESTEM
- POTTED PLANTINGS 1-2 GALLONS @ 6" ON-CENTER**
- MYRICA PENNSYLVANICA BAYBERRY
 - RHUS AROMATICA FRAGRANT SUMAC

RG RAIN GARDEN PLANTING DETAIL
SCALE: 1" = 4'



[Signature]
FE

| Revisions | Date |
|--|---------------|
| 1. Review path surface, general notes, and storm rates | Mar. 27, 2020 |
| 2. Add planting details | Apr. 23, 2020 |
| 3. | |
| 4. | |
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