

Fort Sewall

BID SET 2/07/2020

Fort Restoration - Phase IIB - Site and Accessibility Improvements

Town of Marblehead

Fort Sewall Lane, Marblehead, MA 01945



CLIENT

TOWN OF MARBLEHEAD
188 Washington Street
Marblehead, Massachusetts 01945
Phone: (781) 631-0000

BOARD OF SELECTMEN

Name	Title
Jackie Belf-Becker	Chair
Harry C. Christensen, Jr.	
Judith R. Jacobi	
James E. Nye	
M.C. Moses Grader	

FORT SEWALL OVERSIGHT COMMITTEE

Name	Title
Rebecca Curran Cutting	Town Planner
Judith Jacobi	At Large
Larry Sands	Glover's Regiment
Judy Anderson	At Large
Ed Lang	Disabilities Commission Representative
Charles Gessner	OMIA Representative
Peter James	Recreation & Parks Superintendent

DRAWING LIST

ARCHITECTURAL

- Cover Sheet
- A1.1 Redoubt Fence Repairs
- A1.2 Alternate No. 1: Granite Cannon Silhouettes /
Alternate No. 3: Flagpole (Base Detail)

LANDSCAPE

- S-000 Site Survey
- L-100 Site Demolition Plan
- L-200 Site Materials Plan
- L-210 Site Layout Plan
- L-220 Add Alt. #4 Stone Wall at Gun Platform
- L-300 Grading Plan
- L-400 Planting Plan
- L-500 Paving and Stair Details
- L-510 Site Details
- L-520 Planting Details

PRESERVATION ARCHITECT



324 Broadway
Somerville, MA 02145
Phone: 617-625-8901
Fax: 617-625-8902
www.mcginleykalsow.com

LANDSCAPE ARCHITECT



Crowley Cottrell
171 Milk Street, Floor 2
Boston, MA 02109
Phone: 617-338-8400
<https://www.crowleycottrell.com/>

LOCUS PLAN





Fort Sewall
 Fort Restoration - Phase IIB -
 Site and Accessibility Improvements
 Fort Sewall Lane
 Marblehead, MA 01945

BID SET

Date: 02/07/2020
 Drawn By: EC
 Reviewed By: WK
 Project No: 1698.03

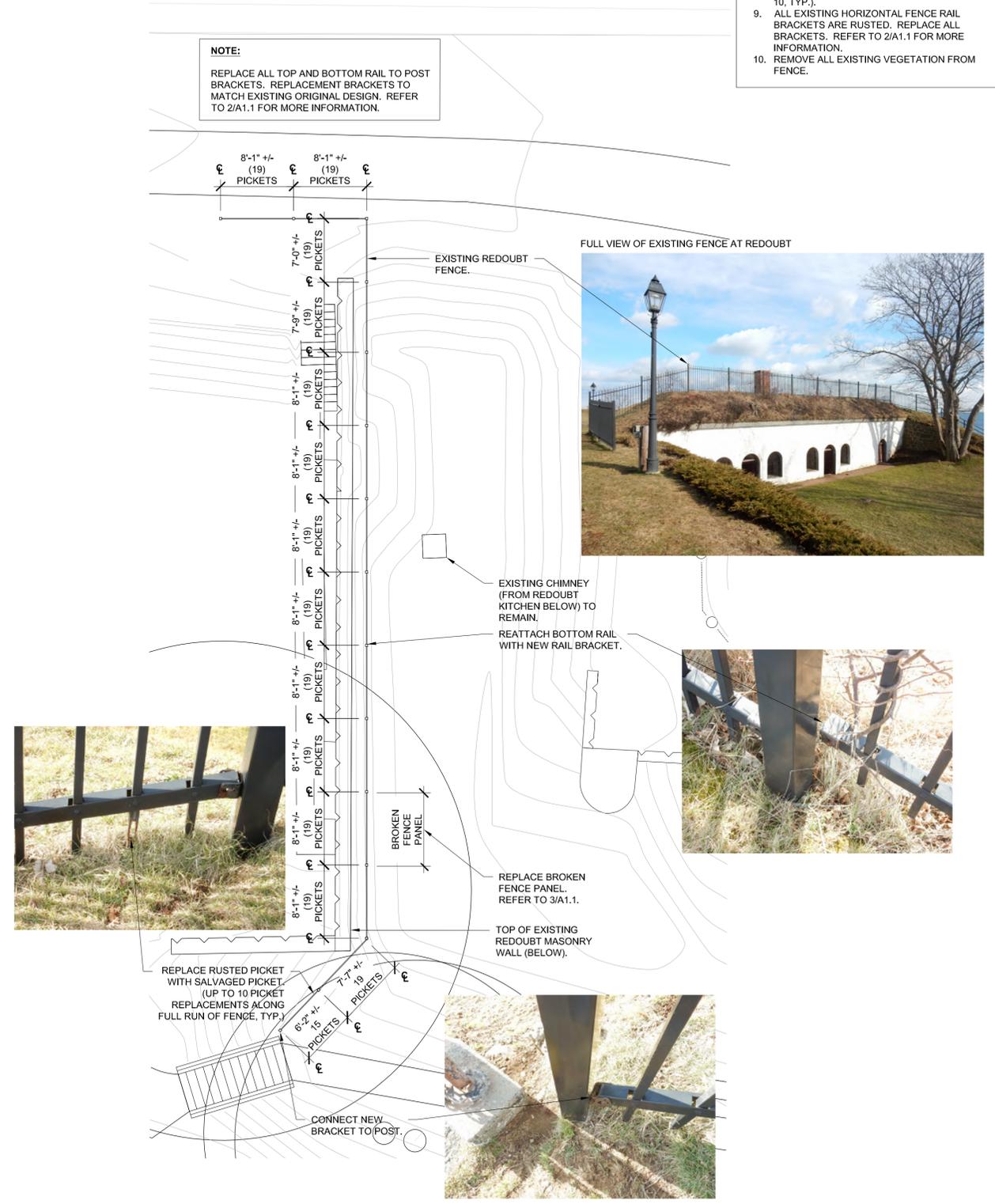
MK & A McGinley Kalsow & Associates Inc.
 ARCHITECTS & PRESERVATION PLANNERS
 324 Broadway, P.O. Box 45248
 Somerville, MA 02145
 617.625.8901 - www.meginleykalsow.com

REDOUBT FENCE REPAIRS

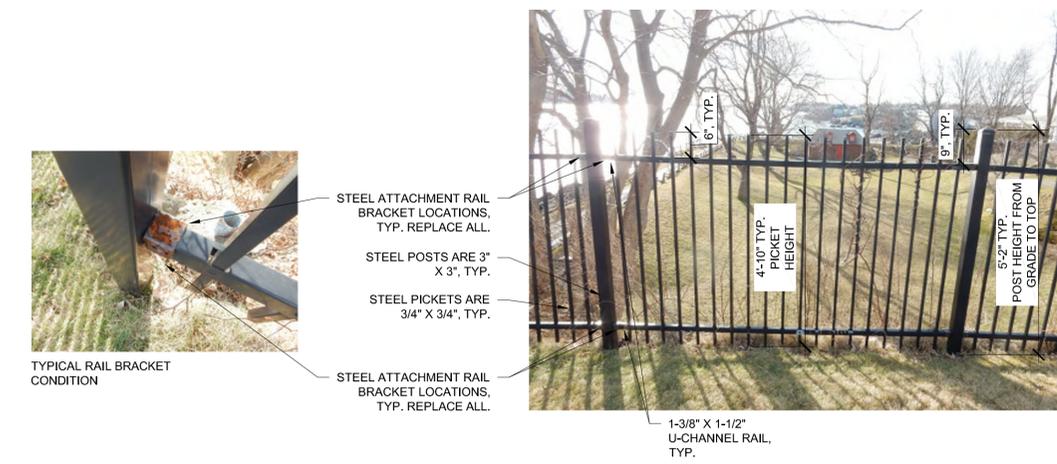
A1.1

- GENERAL NOTES - EXISTING REDOUBT FENCE:**
1. CONTRACTOR TO VERIFY ALL DIMENSIONS AND QUANTITIES.
 2. EXISTING FENCE DESIGN SERIES IS CANTERBURY (2-RAIL) BY IRON WORLD FENCING.
 3. NEW COMPONENTS SHALL MATCH EXISTING.
 4. REPAIR AND REPLACE ELEMENTS AS SHOWN ON THE DRAWINGS AND IN THE SPECIFICATIONS.
 5. ALL EXISTING FENCE COMPONENTS ARE STEEL.
 6. EXISTING FENCE POSTS ARE 3" X 3", TYP.
 7. EXISTING FENCE PICKETS ARE 3/4" X 3/4", TYP.
 8. SALVAGE USABLE PICKETS FROM BROKEN FENCE PANEL FOR SELECTIVE PICKET REPLACEMENT IN OTHER FENCE PANELS (UP TO 10, TYP.).
 9. ALL EXISTING HORIZONTAL FENCE RAIL BRACKETS ARE RUSTED. REPLACE ALL BRACKETS. REFER TO 2/A1.1 FOR MORE INFORMATION.
 10. REMOVE ALL EXISTING VEGETATION FROM FENCE.

NOTE:
 REPLACE ALL TOP AND BOTTOM RAIL TO POST BRACKETS. REPLACEMENT BRACKETS TO MATCH EXISTING ORIGINAL DESIGN. REFER TO 2/A1.1 FOR MORE INFORMATION.



3 ELEVATION OF BROKEN FENCE PANEL
 NOT TO SCALE



2 ELEVATION OF TYPICAL HORIZONTAL FENCE PANEL
 NOT TO SCALE

1 PLAN AT EXISTING REDOUBT FENCE
 SCALE: 1/8" = 1'-0"



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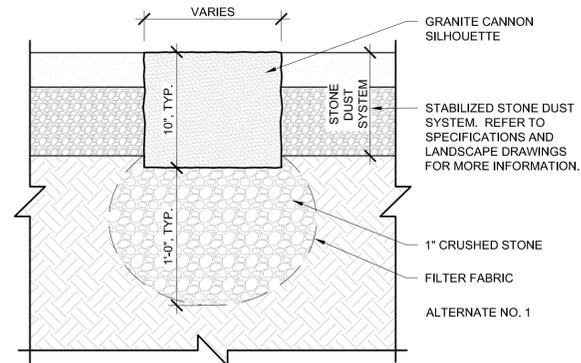
ALTERNATE NO. 1:
GRANITE CANNON
SILHOUETTES

ALTERNATE NO. 3:
FLAGPOLE (BASE
DETAIL)

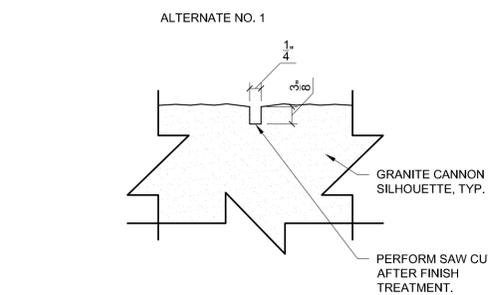
A1.2

GENERAL NOTES - GRANITE CANNONS - ALTERNATE #1

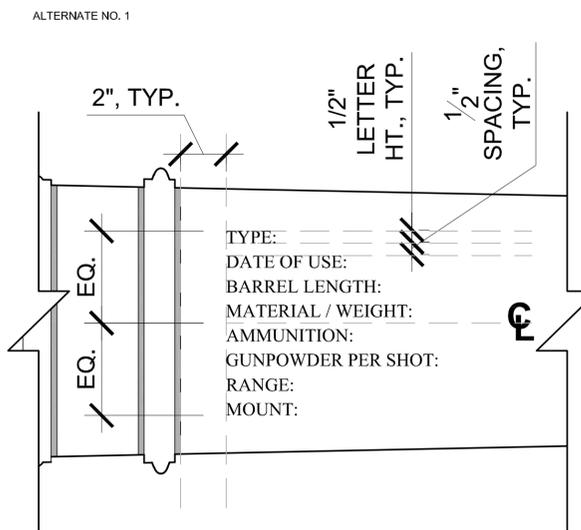
1. FOR CANNON PROFILES, CAD FILES TO BE FURNISHED TO CONTRACTOR AND FABRICATOR.
2. CANNON SILHOUETTES TO BE SET IN LOCATIONS AS SHOWN ON 7/A1.2 (KEY PLAN). REFER ALSO TO LANDSCAPE DRAWINGS.
3. CANNON SILHOUETTES TO BE SET IN STONE DUST. SEE 6/A1.2. REFER ALSO TO SPECIFICATIONS AND LANDSCAPE DRAWINGS FOR ADDITIONAL INFORMATION.
4. CANNON GROOVES TO BE SAW CUT AFTER FINISHING FACE OF GRANITE.



6 TRANSVERSE SECTION AT GRANITE, TYP.
SCALE: 1 1/2" = 1'-0"

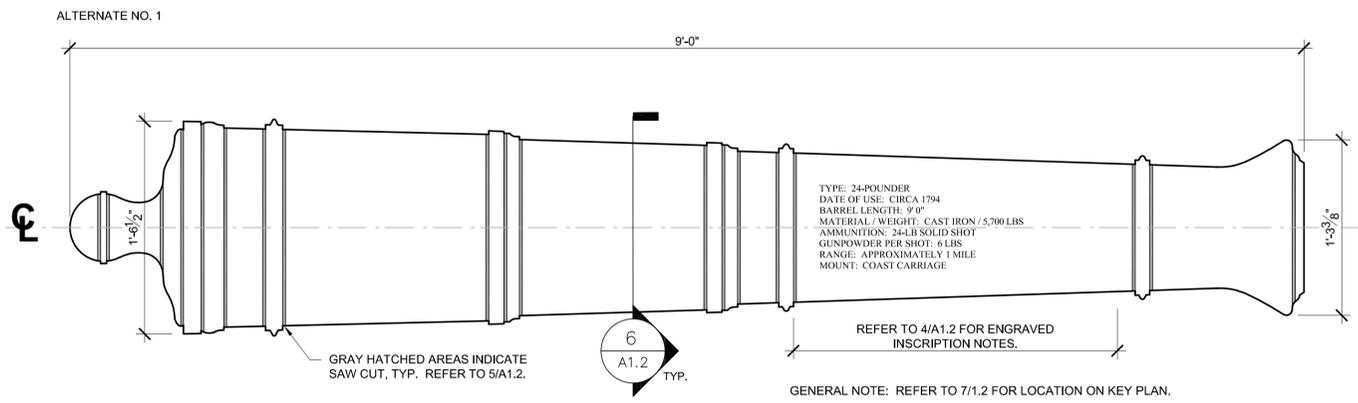


5 DETAIL AT GRANITE SAW CUT
SCALE: 6" = 1'-0"

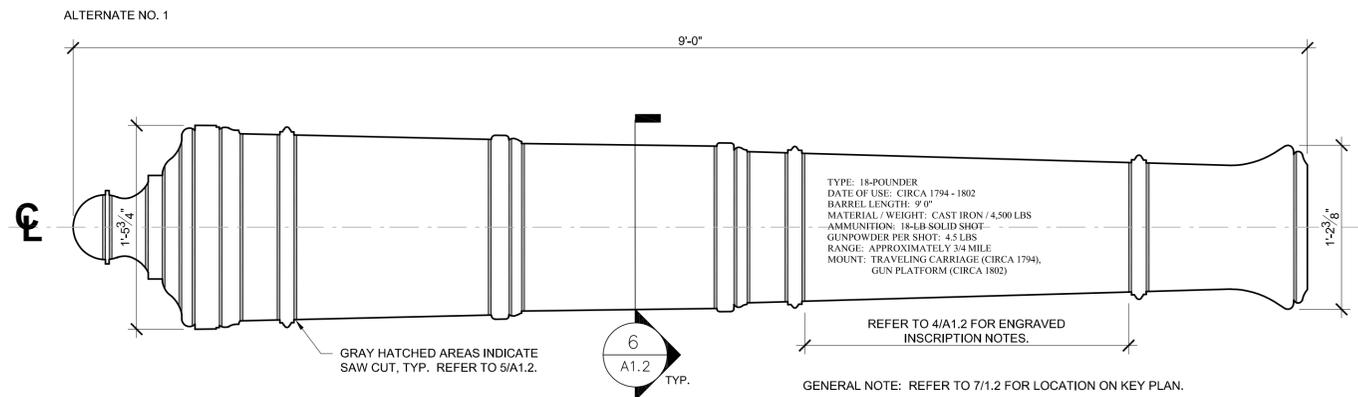


- GENERAL LETTERING NOTES:**
1. FONT TO BE TIMES NEW ROMAN.
 2. LETTERS TO BE ENGRAVED.
 3. ENGRAVING INSETS TO BE PAINTED BLACK WITH LITHOCHROME COLOR HARDENER.
 4. REFER TO SPECIFICATIONS.
 5. CENTER BODY OF ENGRAVED INSCRIPTION ON CENTERLINE OF CANNON SILHOUETTE.

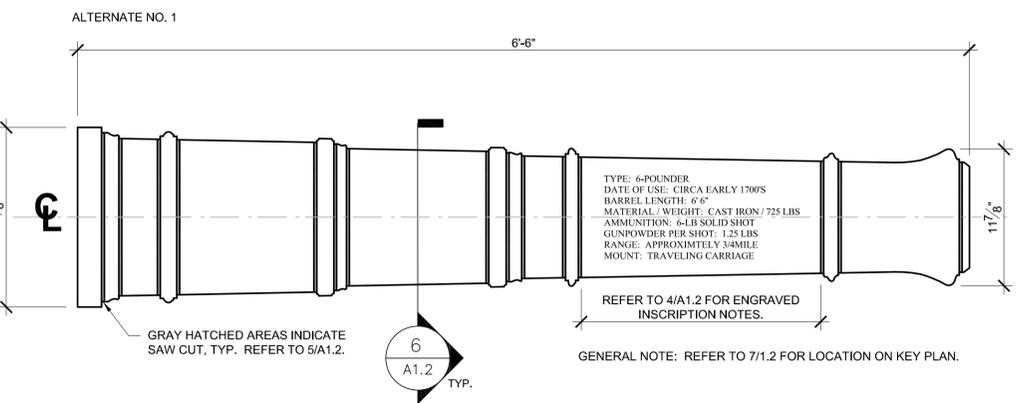
4 ENGRAVED INSCRIPTION DETAIL, TYP.
SCALE: 3" = 1'-0"



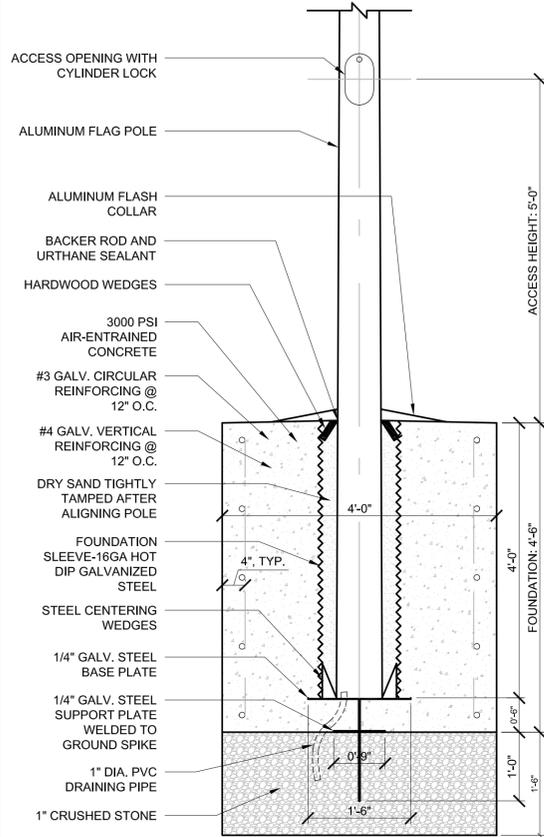
3 PLAN AT 24-POUNDER CANNON
SCALE: 1 1/2" = 1'-0"



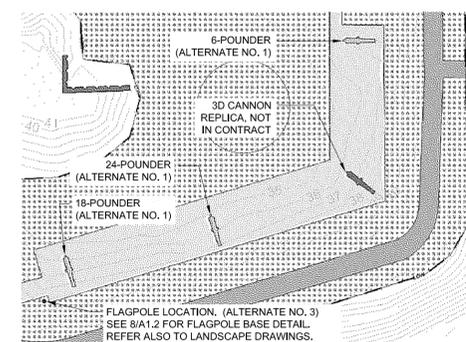
2 PLAN AT 18-POUNDER CANNON
SCALE: 1 1/2" = 1'-0"



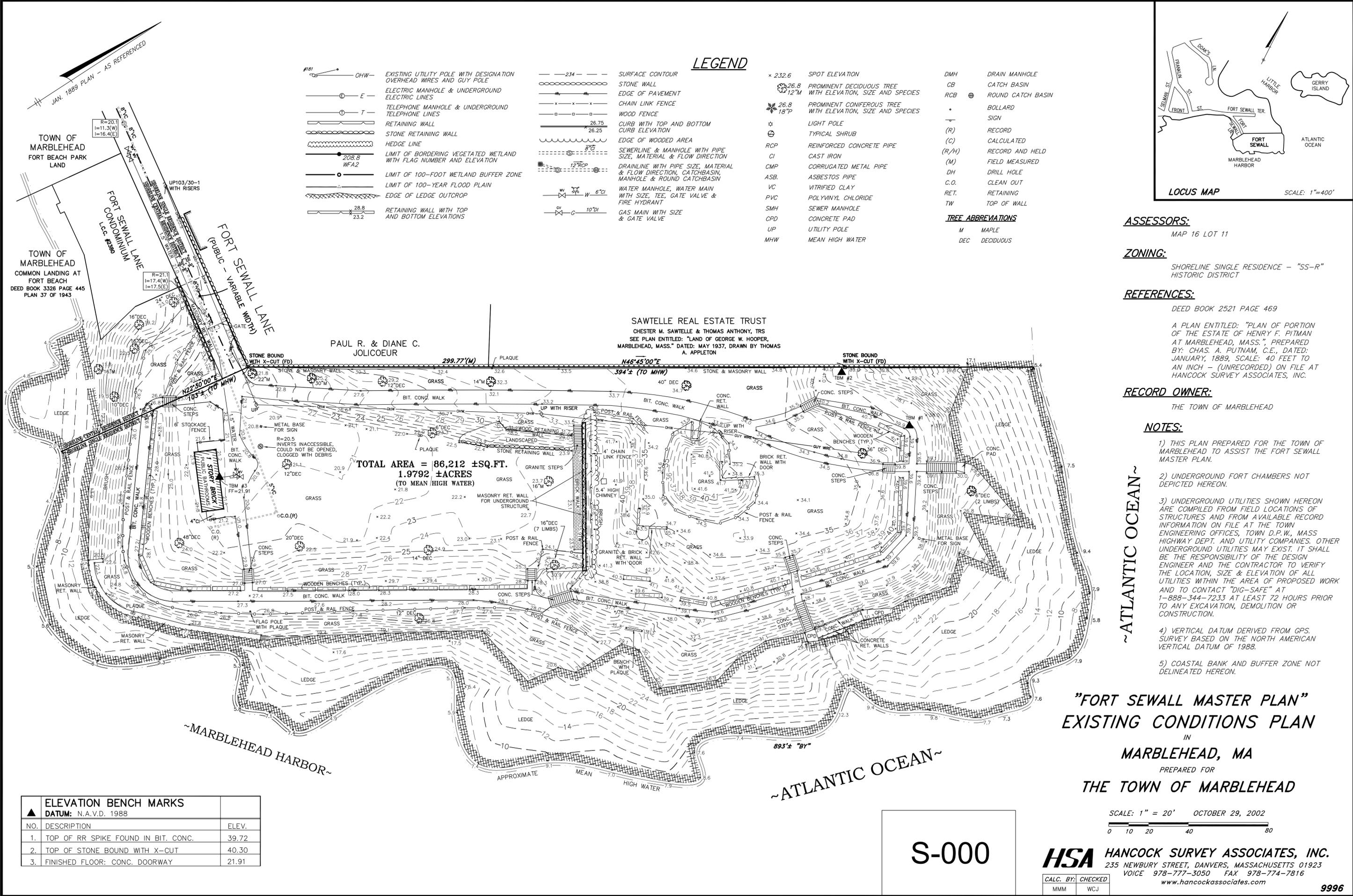
1 PLAN AT 6-POUNDER CANNON
SCALE: 1 1/2" = 1'-0"



8 FLAGPOLE BASE DETAIL (ALTERNATE NO. 3)
3/4" = 1'-0"



7 CANNON SILHOUETTE AND FLAGPOLE KEY PLAN
NOT TO SCALE



JAN. 1889 PLAN - AS REFERENCED

TOWN OF MARBLEHEAD
FORT BEACH PARK LAND

TOWN OF MARBLEHEAD
COMMON LANDING AT
FORT BEACH
DEED BOOK 3326 PAGE 445
PLAN 37 OF 1943

- OHV - EXISTING UTILITY POLE WITH DESIGNATION OVERHEAD WIRES AND GUY POLE
- E - ELECTRIC MANHOLE & UNDERGROUND ELECTRIC LINES
- T - TELEPHONE MANHOLE & UNDERGROUND TELEPHONE LINES
- RETAINING WALL
- STONE RETAINING WALL
- HEDGE LINE
- 208.8 WFA2 - LIMIT OF BORDERING VEGETATED WETLAND WITH FLAG NUMBER AND ELEVATION
- 208.8 WFA2 - LIMIT OF 100-FOOT WETLAND BUFFER ZONE
- 208.8 WFA2 - LIMIT OF 100-YEAR FLOOD PLAIN
- EDGE OF LEDGE OUTCROP
- 28.8 23.2 - RETAINING WALL WITH TOP AND BOTTOM ELEVATIONS

- 234 - SURFACE CONTOUR
- STONE WALL
- EDGE OF PAVEMENT
- CHAIN LINK FENCE
- WOOD FENCE
- 26.75 26.25 - CURB WITH TOP AND BOTTOM CURB ELEVATION
- EDGE OF WOODED AREA
- SEWERLINE & MANHOLE WITH PIPE SIZE, MATERIAL & FLOW DIRECTION
- DRAINLINE WITH PIPE SIZE, MATERIAL & FLOW DIRECTION, CATCHBASIN, MANHOLE & ROUND CATCHBASIN
- 12" RCP
- W 6" CI - WATER MANHOLE, WATER MAIN WITH SIZE, TEE, GATE VALVE & FIRE HYDRANT
- G 10" DI - GAS MAIN WITH SIZE & GATE VALVE

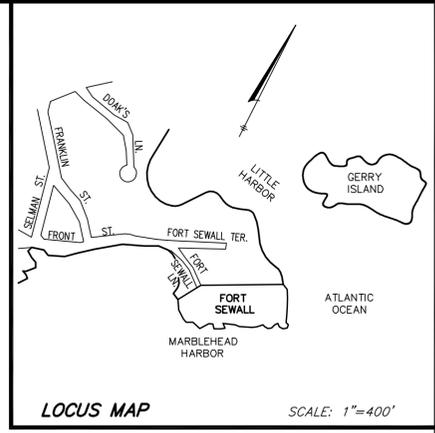
LEGEND

- 232.6 - SPOT ELEVATION
- 26.8 12" M - PROMINENT DECIDUOUS TREE WITH ELEVATION, SIZE AND SPECIES
- 26.8 18" P - PROMINENT CONIFEROUS TREE WITH ELEVATION, SIZE AND SPECIES
- LIGHT POLE
- TYPICAL SHRUB
- RCP - REINFORCED CONCRETE PIPE
- CI - CAST IRON
- CMP - CORRUGATED METAL PIPE
- ASB. - ASBESTOS PIPE
- VC - VITRIFIED CLAY
- PVC - POLYVINYL CHLORIDE
- SMH - SEWER MANHOLE
- CPD - CONCRETE PAD
- UP - UTILITY POLE
- MHW - MEAN HIGH WATER

- DMH - DRAIN MANHOLE
- CB - CATCH BASIN
- RCB - ROUND CATCH BASIN
- BOLLARD
- SIGN
- (R) - RECORD
- (C) - CALCULATED
- (R/H) - RECORD AND HELD
- (M) - FIELD MEASURED
- DH - DRILL HOLE
- C.O. - CLEAN OUT
- RET. - RETAINING
- TW - TOP OF WALL

TREE ABBREVIATIONS

- M - MAPLE
- DEC - DECIDUOUS



ASSESSORS:

MAP 16 LOT 11

ZONING:

SHORELINE SINGLE RESIDENCE - "SS-R" HISTORIC DISTRICT

REFERENCES:

DEED BOOK 2521 PAGE 469
A PLAN ENTITLED: "PLAN OF PORTION OF THE ESTATE OF HENRY F. PITMAN AT MARBLEHEAD, MASS.," PREPARED BY: CHAS. A. PUTNAM, C.E., DATED: JANUARY, 1889, SCALE: 40 FEET TO AN INCH - (UNRECORDED) ON FILE AT HANCOCK SURVEY ASSOCIATES, INC.

RECORD OWNER:

THE TOWN OF MARBLEHEAD

NOTES:

- 1) THIS PLAN PREPARED FOR THE TOWN OF MARBLEHEAD TO ASSIST THE FORT SEWALL MASTER PLAN.
- 2) UNDERGROUND FORT CHAMBERS NOT DEPICTED HEREON.
- 3) UNDERGROUND UTILITIES SHOWN HEREON ARE COMPILED FROM FIELD LOCATIONS OF STRUCTURES AND FROM AVAILABLE RECORD INFORMATION ON FILE AT THE TOWN ENGINEERING OFFICES, TOWN D.P.W., MASS HIGHWAY DEPT. AND UTILITY COMPANIES. OTHER UNDERGROUND UTILITIES MAY EXIST. IT SHALL BE THE RESPONSIBILITY OF THE DESIGN ENGINEER AND THE CONTRACTOR TO VERIFY THE LOCATION, SIZE & ELEVATION OF ALL UTILITIES WITHIN THE AREA OF PROPOSED WORK AND TO CONTACT "DIG-SAFE" AT 1-888-344-7233 AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION, DEMOLITION OR CONSTRUCTION.
- 4) VERTICAL DATUM DERIVED FROM GPS. SURVEY BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988.
- 5) COASTAL BANK AND BUFFER ZONE NOT DELINEATED HEREON.

SAWTELLE REAL ESTATE TRUST
CHESTER M. SAWTELLE & THOMAS ANTHONY, TRS
SEE PLAN ENTITLED: "LAND OF GEORGE W. HOOPER, MARBLEHEAD, MASS." DATED: MAY 1937, DRAWN BY THOMAS A. APPLETON

PAUL R. & DIANE C. JOLICOEUR

TOTAL AREA = 86,212 ± SQ. FT.
1.9792 ± ACRES
(TO MEAN HIGH WATER)

**"FORT SEWALL MASTER PLAN"
EXISTING CONDITIONS PLAN**

IN
MARBLEHEAD, MA
PREPARED FOR
THE TOWN OF MARBLEHEAD

SCALE: 1" = 20' OCTOBER 29, 2002

ELEVATION BENCH MARKS		
DATUM: N.A.V.D. 1988		
NO.	DESCRIPTION	ELEV.
1.	TOP OF RR SPIKE FOUND IN BIT. CONC.	39.72
2.	TOP OF STONE BOUND WITH X-CUT	40.30
3.	FINISHED FLOOR: CONC. DOORWAY	21.91

S-000

HSA HANCOCK SURVEY ASSOCIATES, INC.
235 NEWBURY STREET, DANVERS, MASSACHUSETTS 01923
VOICE 978-777-3050 FAX 978-774-7816
www.hancockassociates.com

GENERAL NOTES

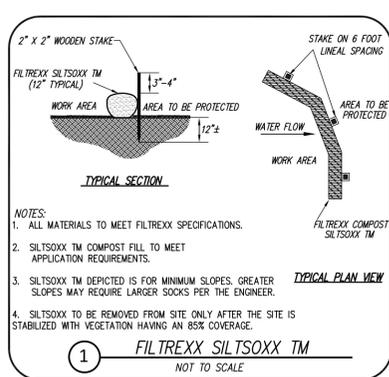
- Existing conditions and topography are from Hancock Survey Associates, Inc. 235 Newbury Street, Danvers, MA 01923 on October 29, 2002.
- Contractor shall verify location of any existing utilities and services and provide protection during construction. Utilities damaged during construction shall be repaired at contractor's expense.
- Project Permit (Marblehead Conservation Commission Order of Conditions and land disturbance - MASS DEP 40-1424) was issued on January 15, 2020. Refer to specification section 010101 - Order of Conditions 40-1424 for Order of Conditions document for additional information and requirements. No additional permits required at the time of bidding. Permit fees shall be waived.
- Contractor shall leave site clean and orderly during construction process. Remove from site all excess materials, soil, debris and equipment. Store materials only in an approved location.

SITE LOGISTICS AND DEMOLITION NOTES

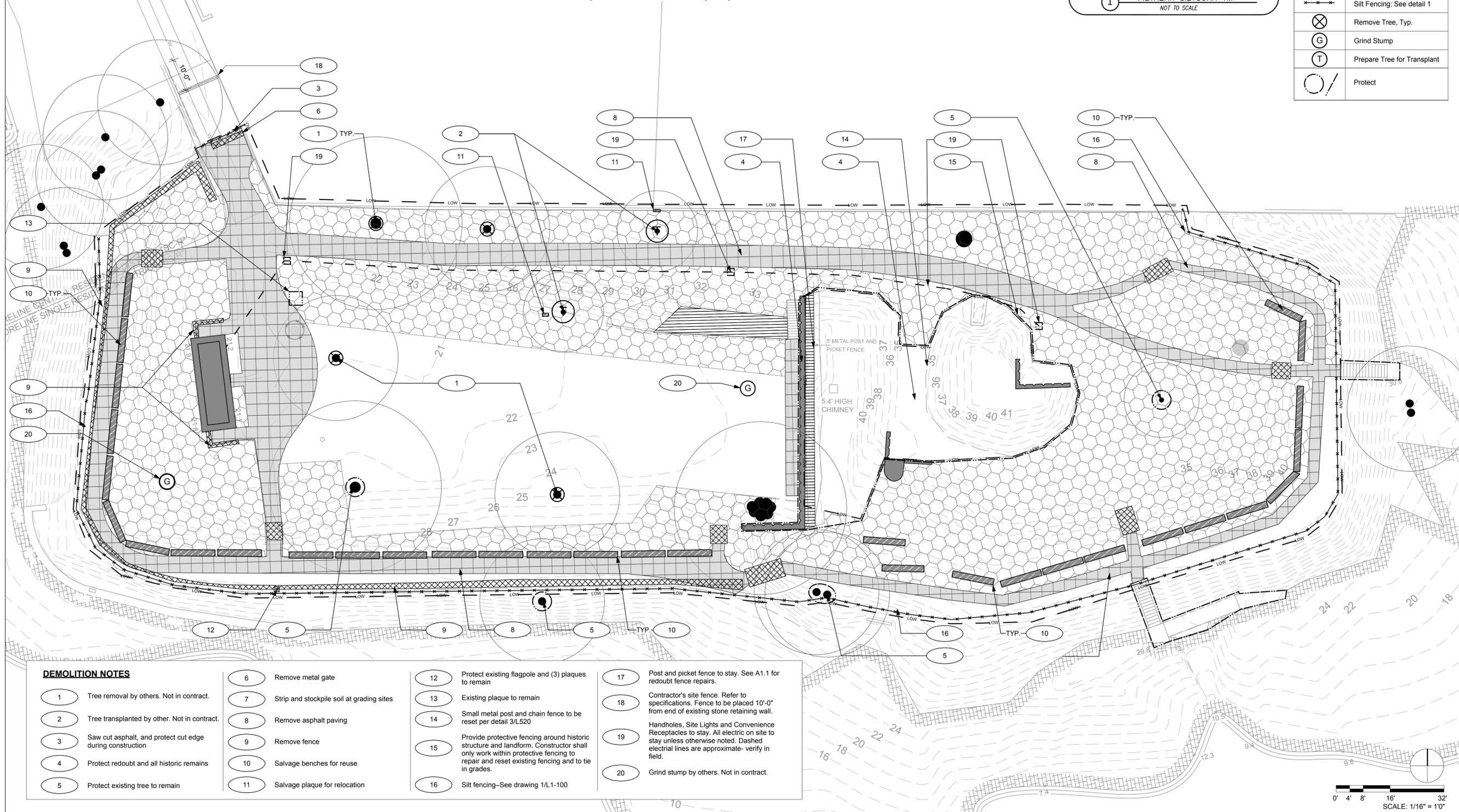
- Contractor shall verify all existing conditions in the field and report any discrepancies between plans and actual conditions to Landscape Architect before beginning work.
- Building, structure and paving removal shall include the disconnection and capping of any utilities, footings, slabs, associated base material and satisfactory off-site disposal of all debris produced through the removal operations.
- Tree and shrub removal shall include the felling, cutting, grubbing out of roots and satisfactory off-site disposal of all stumps vegetative and extraneous debris produced through the removal operations.
- Existing trees and shrubs to remain shall not be altered under any circumstances and must remain in the same condition as observed prior to construction.
- No heavy machinery is to be used within the root system of existing trees. Excavation within root system zones is to be performed by hand.
- Any items scheduled to remain which are damaged by Contractor's operations shall be at Contractor's expense.
- Any items scheduled to be stockpiled on site which are damaged by Contractor's operations shall be at Contractor's expense.

- Area for stockpiled items shall be located by Landscape Architect and approved by owner prior to removal operations.
- Contractor shall leave work site free of any debris at the end of each day's operations.
- The contractor shall visit the site and thoroughly examine and become familiar with existing conditions including delivery and removal of materials to and from the site.
- The contractor shall protect adjoining property, public rights-of-way, and the public from dust and construction hazards during the project. The contractor shall provide, install and maintain protection barriers to ensure public safety. The contractor shall clean up any dust which impacts adjoining properties or public ways.
- Site construction sign to be provided by the Town of Marblehead. Contractor to supply and install MASS DEP project sign. Refer to specifications, Section 010101-Order of Conditions, 40-1424.
- Work described in either drawings or specification shall be considered part of this contract.
- Field dimensions and dimensional coordination shall be the responsibility of the contractor.
- Sections and details apply to all similar conditions unless otherwise noted.
- Restore any damage to buildings or site caused during construction to its condition prior to the start of construction. Contractor shall photographically document existing conditions and note areas of existing damage.

- Control noise, this site is directly adjacent to residences. Contain all dust and legally dispose of all construction debris.
- Do not scale the drawings. If critical dimensions are missing from the drawings contact the architect for clarification.
- Contractor shall carefully review site conditions and submit plan for security and site access for review by owner.
- Work hours will be 7am-5pm, Monday through Friday, 8am-4pm on Saturday when scheduled in advance with owner. No work on Sunday or major holidays.
- A limited number of construction vehicles to park on site, to be coordinated with Town of Marblehead and architect. Personal vehicles to park off site.
- Separate from this project, a building repair project will be taking place concurrently on the site (That project includes selective masonry repairs to the interior of the redoubt rooms, and selective masonry repairs to the exterior of the north entrance and powder magazine entrance.) The contractor for the redoubt project will have permission to bring (2) vehicles on site. All construction activities to be coordinated with other contractor and Town of Marblehead.
- The contractor shall visit the site and thoroughly examine and become familiar with existing conditions including delivery and removal of materials to and from the site.



SYM.	DESCRIPTION
---	Limit of Work
[Pattern]	Strip and Stockpile Topsoil
[Pattern]	Remove Pavement
[Pattern]	Remove Structure
[Pattern]	Remove Vegetation
[Pattern]	Salvage Structure
[Pattern]	Remove Curb
[Pattern]	Sawcut Paving
[Pattern]	Silt Fencing: See detail 1
[Symbol]	Remove Tree, Typ.
[Symbol]	Grind Stump
[Symbol]	Prepare Tree for Transplant
[Symbol]	Protect



DEMOLITION NOTES

- | | | | |
|---|---|---|---|
| 1 Tree removal by others. Not in contract. | 6 Remove metal gate | 12 Protect existing flagpole and (3) plaques to remain | 17 Post and picket fence to stay. See A1.1 for redoubt fence repairs. |
| 2 Tree transplanted by other. Not in contract. | 7 Strip and stockpile soil at grading sites | 13 Existing plaque to remain | 18 Contractor's site fence. Refer to specifications. Fence to be placed 10'-0" from end of existing stone retaining wall. |
| 3 Saw cut asphalt, and protect cut edge during construction | 8 Remove asphalt paving | 14 Small metal post and chain fence to be reset per detail 3/L520 | 19 Handholes, Site Lights and Convenience Receptacles to stay. All electric on site to stay unless otherwise noted. Dashed electrical lines are approximate- verify in field. |
| 4 Protect redoubt and all historic remains | 9 Remove fence | 15 Provide protective fencing around historic structure and landform. Contractor shall only work within protective fencing to repair and reset existing fencing and to tie in grades. | 20 Grind stump by others. Not in contract. |
| 5 Protect existing tree to remain | 10 Salvage benches for reuse | 16 Silt fencing-See drawing 1/L1-100 | |
| | 11 Salvage plaque for relocation | | |



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**SITE
 DEMOLITION
 PLAN**

L-100

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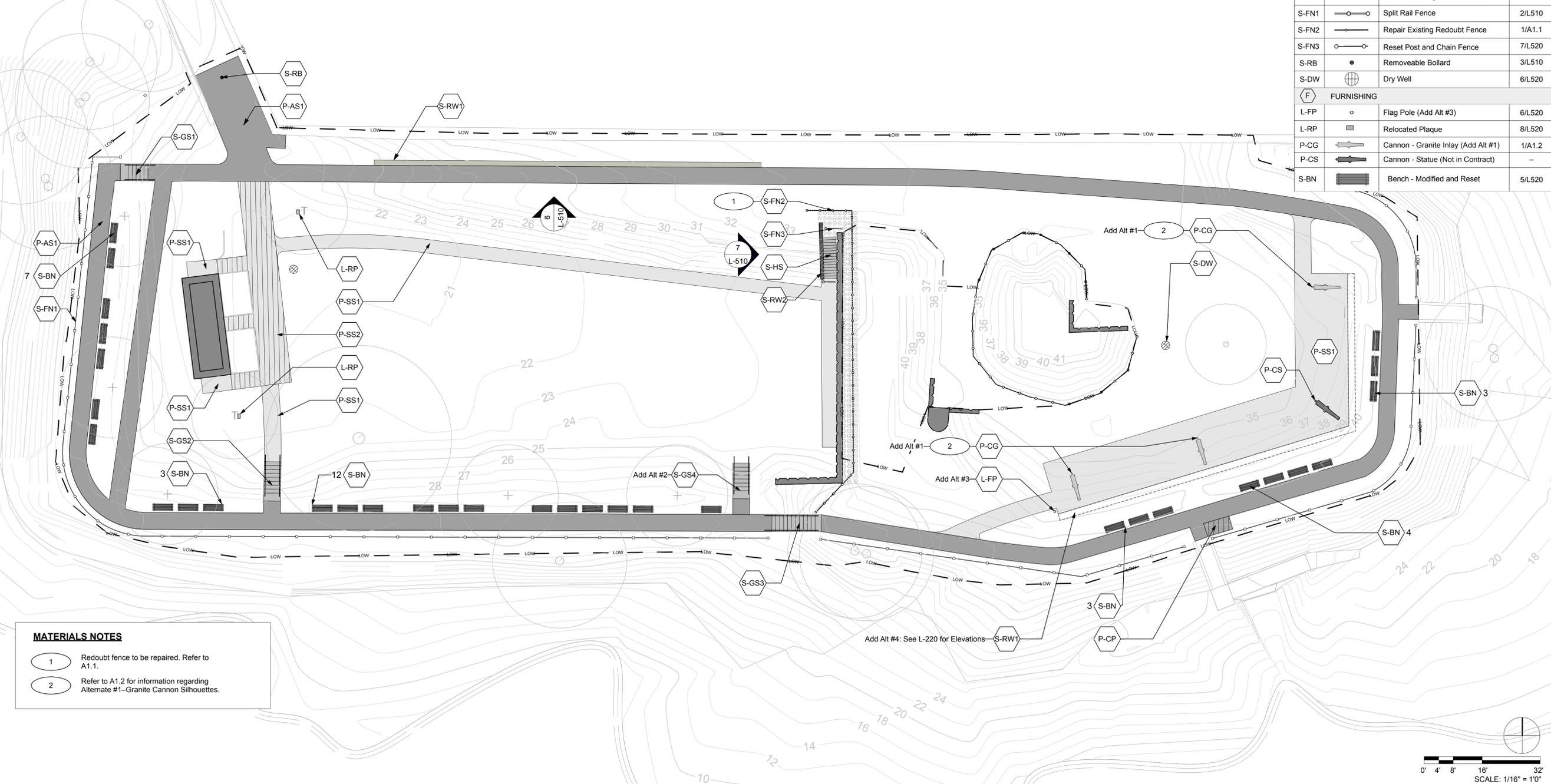
LAYOUT NOTES

- Do not scale drawings.
- Contractor shall verify all existing conditions and layout dimensions in the field. Report any discrepancies to the Landscape Architect for design prior to commencing construction.
- Stake or otherwise flag all design elements and features in the field. Obtain Landscape Architect's approval prior to commencing construction.
- All dimensions from structure are from face of finish of exterior wall unless otherwise stated.
- All angles are assumed to be 90 degrees unless otherwise stated.
- See planting plans for location of trees and shrubs, planting beds and extent of sodding and seeding.
- See architectural drawings for all building dimensions.
- Dimensions at curbs of pavement edging are given from outside face of curb to outside face of curb unless otherwise stated.
- Any changes proposed to dimensions shown on this drawing shall be approved by the Landscape Architect prior to construction.

KEY NOTE	SYM.	DESCRIPTION	DETAIL
(P) PAVING			
P-AS1		Asphalt Paving	1/L500
P-CP		Concrete Paving	2/L500
P-SS1		Stonedust Paving-Pedestrian	3/L500
P-SS2		Stonedust Paving-Vehicular	4/L500
(S) SITE STRUCTURES			
S-GS1		Granite Step with Handrail 1	5/L500
S-GS2		Granite Step with Handrail 2	6/L500
S-GS3		Granite Step with Handrail 3	7/L500
S-HS		Reset Historic Stair	8/L500
S-GS4		Granite Step with Handrail 4 (Add Alt #2)	9/L500
S-HR		Painted Metal Handrail	1/L510
S-RW1		Fieldstone Wall	4/L510
S-RW2		Stone Retaining Wall at Redoubt	5/L510
S-FN1		Split Rail Fence	2/L510
S-FN2		Repair Existing Redoubt Fence	1/A1.1
S-FN3		Reset Post and Chain Fence	7/L520
S-RB		Removeable Bollard	3/L510
S-DW		Dry Well	6/L520
(F) FURNISHING			
L-FP		Flag Pole (Add Alt #3)	6/L520
L-RP		Relocated Plaque	8/L520
P-CG		Cannon - Granite Inlay (Add Alt #1)	1/A1.2
P-CS		Cannon - Statue (Not in Contract)	-
S-BN		Bench - Modified and Reset	5/L520



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MATERIALS NOTES

- Redoubt fence to be repaired. Refer to A1.1.
- Refer to A1.2 for information regarding Alternate #1-Granite Cannon Silhouettes.

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Crowley Cottrell, LLC
 171 Milk St, Floor 2
 Boston MA 02109
 617.338.8400
 www.crowleycottrell.com

SITE MATERIALS PLAN

L-200

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LAYOUT LEGEND	
SYM.	DESCRIPTION
	Centerline
	Align
	Dimension

MATERIALS LEGEND	
SYM.	DESCRIPTION
PAVING	
	Asphalt Paving
	Asphalt Paving at Binocular Platform
	Stonedust Paving-Pedestrian
	Stonedust Paving-Vehicular
SITE STRUCTURES	
	Granite Step with Handrail 1
	Granite Step with Handrail 2
	Granite Step with Handrail 3
	Reset Historic Stair
	Granite Step with Handrail 4 (Add Alt #2)
	Painted Metal Handrail
	Fieldstone Wall
	Stone Retaining Wall at Redoubt
	Split Rail Fence
	Repair Existing Redoubt Fence
	Reset Post and Chain Fence
	Removeable Bollard
	Dry Well
FURNISHING	
	Flag Pole (Add Alt #3)
	Relocated Plaque
	Cannon - Granite Inlay (Add Alt #1)
	Cannon - Statue (Not in Contract)
	Bench - Modified and Reset



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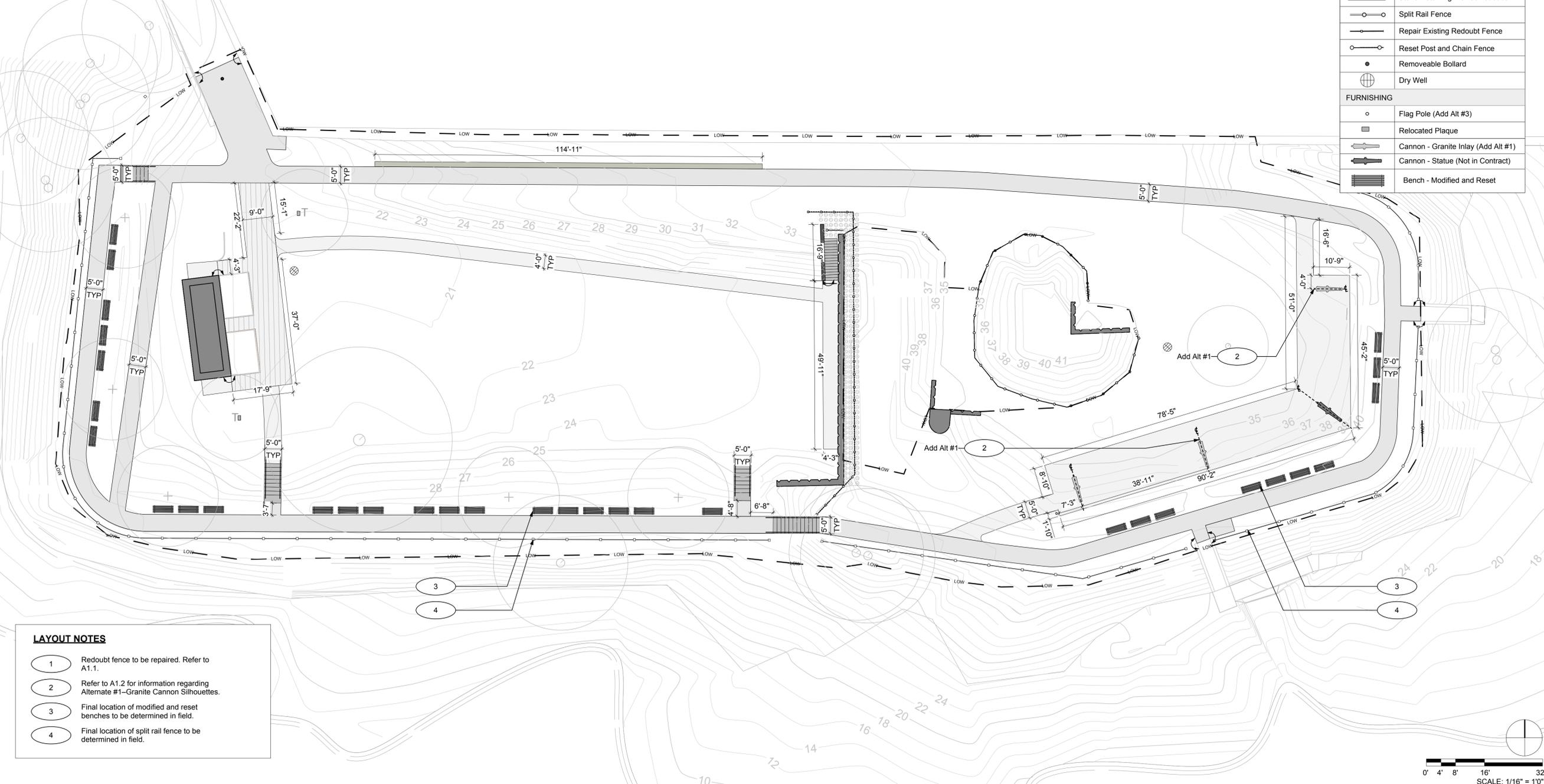
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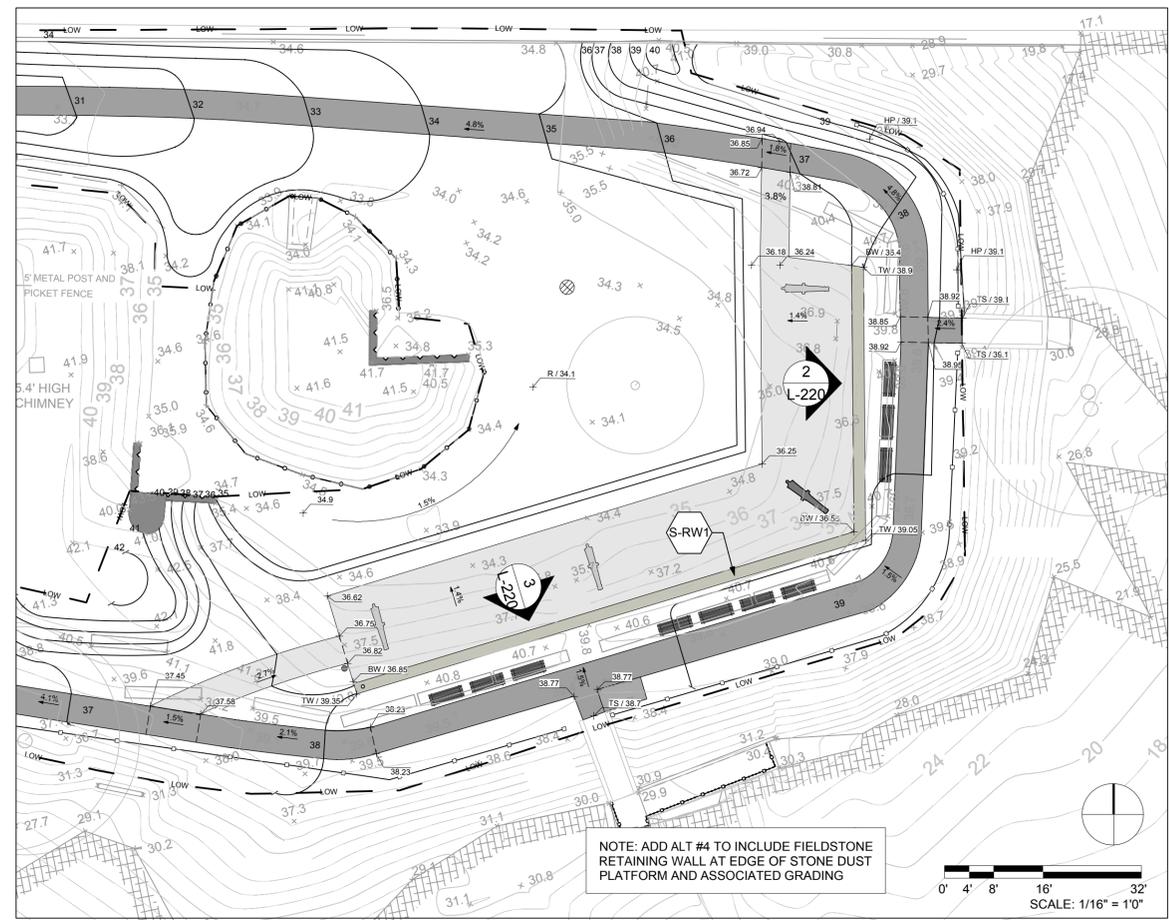
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 171 Milk St, Floor 2
 Boston MA 02109
 617.338.8400
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SITE LAYOUT PLAN

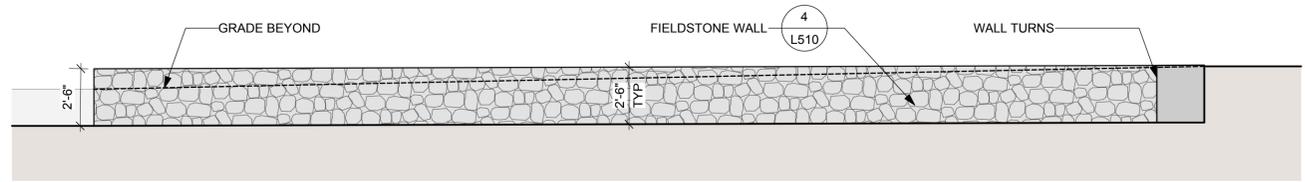
L-210



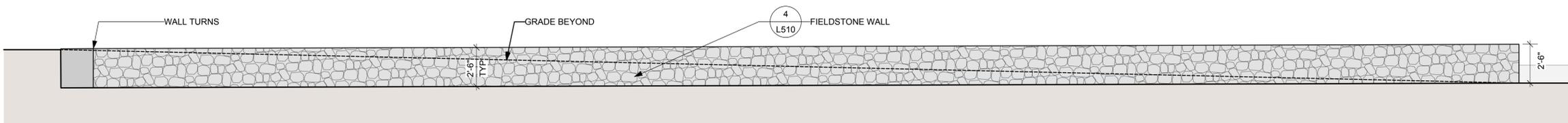
- LAYOUT NOTES**
- Redoubt fence to be repaired. Refer to A1.1.
 - Refer to A1.2 for information regarding Alternate #1-Granite Cannon Silhouettes.
 - Final location of modified and reset benches to be determined in field.
 - Final location of split rail fence to be determined in field.



1 PLAN-WALL AT GUN PLATFORM (ADD ALT #4)
Scale: 1/16" = 1'-0"



2 ELEVATION A-WALL AT GUN PLATFORM (ADD ALT #4)
Scale: 1/4" = 1'-0"



3 ELEVATION B-WALL AT GUN PLATFORM (ADD ALT #4)
Scale: 1/4" = 1'-0"

GENERAL NOTES

- Existing conditions and topography are from Hancock Survey Associates, Inc. 235 Newbury Street, Danvers, MA 01923 on October 29, 2002.
- Contractor shall verify location of any existing utilities and services and provide protection during construction. Utilities damaged during construction shall be repaired at contractor's expense.
- Project Permit (Marblehead Conservation Commission Order of Conditions and land disturbance - MASS DEP 40-1424) was issued on January 15, 2020. Refer to specification section 010101 - Order of Conditions 40-1424 for Order of Conditions document for additional information and requirements. No additional permits required at the time of bidding. Permit fees shall be waived.
- Contractor shall leave site clean and orderly during construction process. Remove from site all excess materials, soil, debris and equipment. Store materials only in an approved location.

LAYOUT NOTES

- Do not scale drawings.
- Contractor shall verify all existing conditions and layout dimensions in the field. Report any discrepancies to the Landscape Architect for design prior to commencing construction.
- Stake or otherwise flag all design elements and features in the field. Obtain Landscape Architect's approval prior to commencing construction.
- All dimensions from structure are from face of finish of exterior wall unless otherwise stated.
- All angles are assumed to be 90 degrees unless otherwise stated.
- See planting plans for location of trees and shrubs, planting beds and extent of sodding and seeding.
- See architectural drawings for all building dimensions.
- Dimensions at curbs of pavement edging are given from outside face of curb to outside face of curb unless otherwise stated.
- Any changes proposed to dimensions shown on this drawing shall be approved by the Landscape Architect prior to construction.

MATERIALS LEGEND

KEY NOTE	SYM.	DESCRIPTION	DETAIL
P PAVING			
P-AS1	[Symbol]	Asphalt Paving	1/L500
P-CP	[Symbol]	Concrete Paving	2/L500
P-SS1	[Symbol]	Stonedust Paving-Pedestrian	3/L500
P-SS2	[Symbol]	Stonedust Paving-Vehicular	4/L500
S SITE STRUCTURES			
S-GS1	[Symbol]	Granite Step with Handrail 1	5/L500
S-GS2	[Symbol]	Granite Step with Handrail 2	6/L500
S-GS3	[Symbol]	Granite Step with Handrail 3	7/L500
S-HS	[Symbol]	Reset Historic Stair	8/L500
S-GS4	[Symbol]	Granite Step with Handrail 4 (Add Alt #2)	9/L500
S-HR	[Symbol]	Painted Metal Handrail	1/L510
S-RW1	[Symbol]	Fieldstone Wall	4/L510
S-RW2	[Symbol]	Stone Retaining Wall at Redoubt	5/L510
S-FN1	[Symbol]	Split Rail Fence	2/L510
S-FN2	[Symbol]	Repair Existing Redoubt Fence	1/A.1
S-FN3	[Symbol]	Reset Post and Chain Fence	7/L520
S-RB	[Symbol]	Removeable Bollard	3/L510
S-DW	[Symbol]	Dry Well	6/L520
F FURNISHING			
L-PP	[Symbol]	Flag Pole (Add Alt #3)	6/L520
L-RP	[Symbol]	Relocated Plaque	8/L520
P-CG	[Symbol]	Cannon - Granite Inlay (Add Alt #1)	1/A.1.2
P-CS	[Symbol]	Cannon - Statue (Not in Contract)	-
S-BN	[Symbol]	Bench - Modified and Reset	5/L520

GRADING LEGEND

SYM.	DESCRIPTION
149	Proposed Minor Contour
150	Proposed Major Contour
29	Existing Contour
---	Grade Break
+ 37.2	Proposed Spot Elevation
x 34.2	Existing Spot Elevation
2%	Slope
[Symbol]	Flush
+HP	High Point
+LP	Low Point



Fort Sewall
Fort Restoration - Phase IIB -
Site and Accessibility Improvements

Fort Sewall Lane
Marblehead, MA 01945

BID SET

Date: 02/07/20
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Project No: 1698.03


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ADD ALT #4
STONE WALL AT
GUN PLATFORM

L-220

GENERAL NOTES

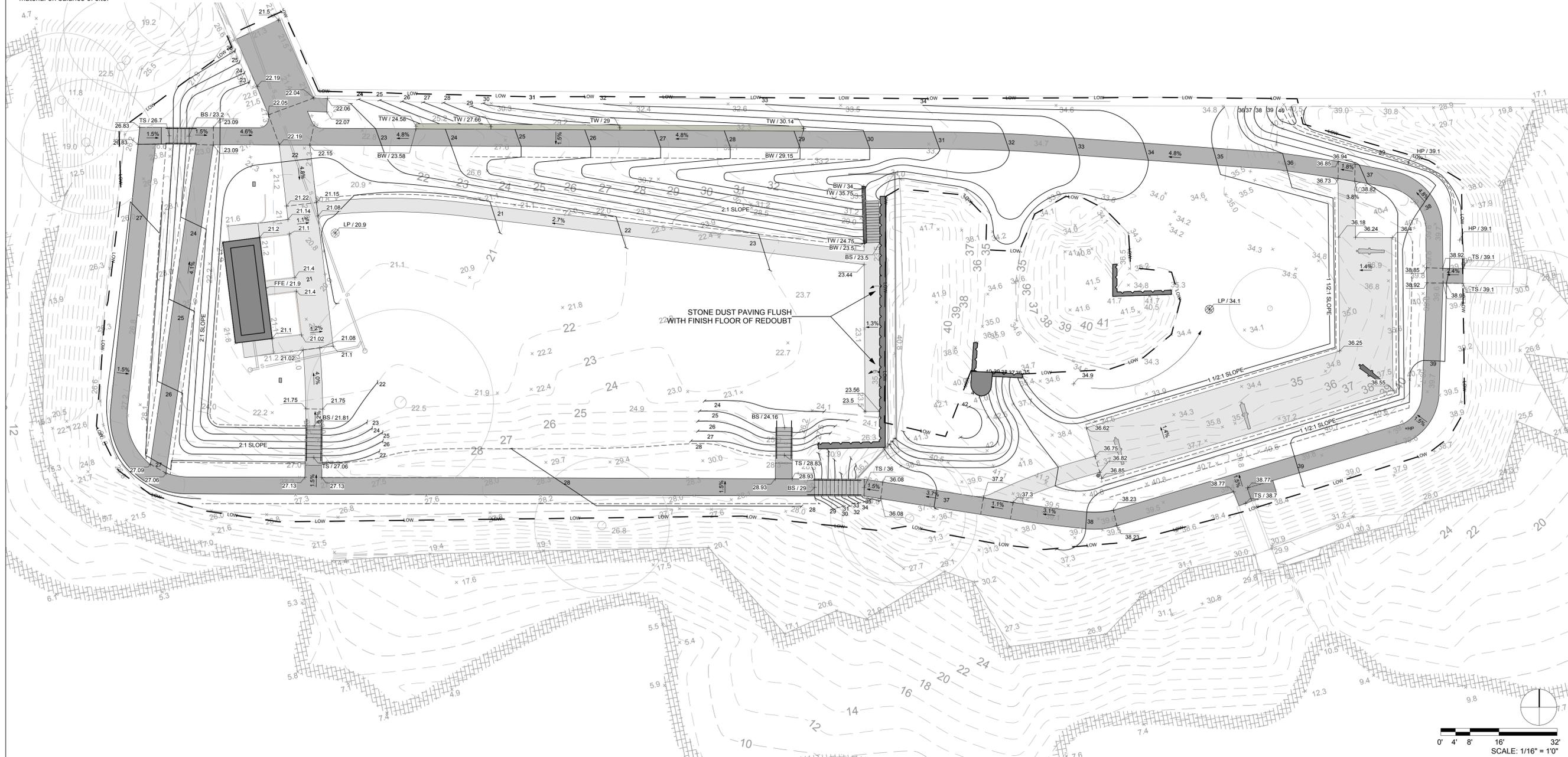
- Existing conditions and topography are from Hancock Survey Associates, Inc. 235 Newbury Street, Danvers, MA 01923 on October 29, 2002.
- Contractor shall verify location of any existing utilities and services and provide protection during construction. Utilities damaged during construction shall be repaired at contractors expense.
- Project Permit (Marblehead Conservation Commission Order of Conditions and land disturbance - MASS DEP 40-1424) was issued on January 15, 2020. Refer to specification section 010101 - Order of Conditions 40-1424 for Order of Conditions document for additional information and requirements. No additional permits required at the time of bidding. Permit fees shall be waived.
- Contractor shall leave site clean and orderly during construction process. Remove from site all excess materials, soil, debris and equipment. Store materials only in an approved location.

GRADING NOTES

- Contractor shall verify all existing grades in the field and report any discrepancies immediately to the landscape architect.
- Stake proposed finish grade and cut/fills of existing grade in the field. Obtain Landscape Architect's approval prior to commencing construction.
- Slope away from all buildings.
- Provide vertical curves or roundings at abrupt changes in grade unless otherwise noted. Blend new earthwork smoothly into existing grades.
- Maintain existing grades at existing plant material to remain.
- Grade surfaces to assure positive drainage from all structures and to prevent ponding of surface drainage.
- All fill material is subject to approval by Landscape Architect.
- Pitch evenly between spot grades. All paved areas must pitch to drain at a minimum of 1/8" per foot. Any discrepancies not allowing this to occur shall be reported to the Landscape Architect prior to continuing work.
- Once grading operations are completed, all disturbed areas within or outside of the limits of work shall be stabilized by fine grading and seeding or mulching as directed by the Landscape Architect.
- All erosion control measures are to be constructed to meet field conditions at the time of construction and prior to any grading or disturbance of existing material on balance of site.

GRADING LEGEND

SYM.	DESCRIPTION
149	Proposed Minor Contour
150	Proposed Major Contour
29	Existing Contour
---	Grade Break
37.2	Proposed Spot Elevation
x 34.2	Existing Spot Elevation
2%	Slope
↔	Flush
+HP	High Point
+LP	Low Point



Fort Sewall
 Fort Restoration - Phase IIB -
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GRADING PLAN

L-300



GENERAL NOTES

- Existing conditions and topography are from Hancock Survey Associates, Inc. 235 Newbury Street, Danvers, MA 01923 on October 29, 2002.
- Contractor shall verify location of any existing utilities and services and provide protection during construction. Utilities damaged during construction shall be repaired at contractors expense.
- Project Permit (Marblehead Conservation Commission Order of Conditions and land disturbance - MASS DEP 40-1424) was issued on January 15, 2020. Refer to specification section 010101 - Order of Conditions 40-1424 for Order of Conditions document for additional information and requirements. No additional permits required at the time of bidding. Permit fees shall be waived.
- Contractor shall leave site clean and orderly during construction process. Remove from site all excess materials, soil, debris and equipment. Store materials only in an approved location.

PLANTING NOTES

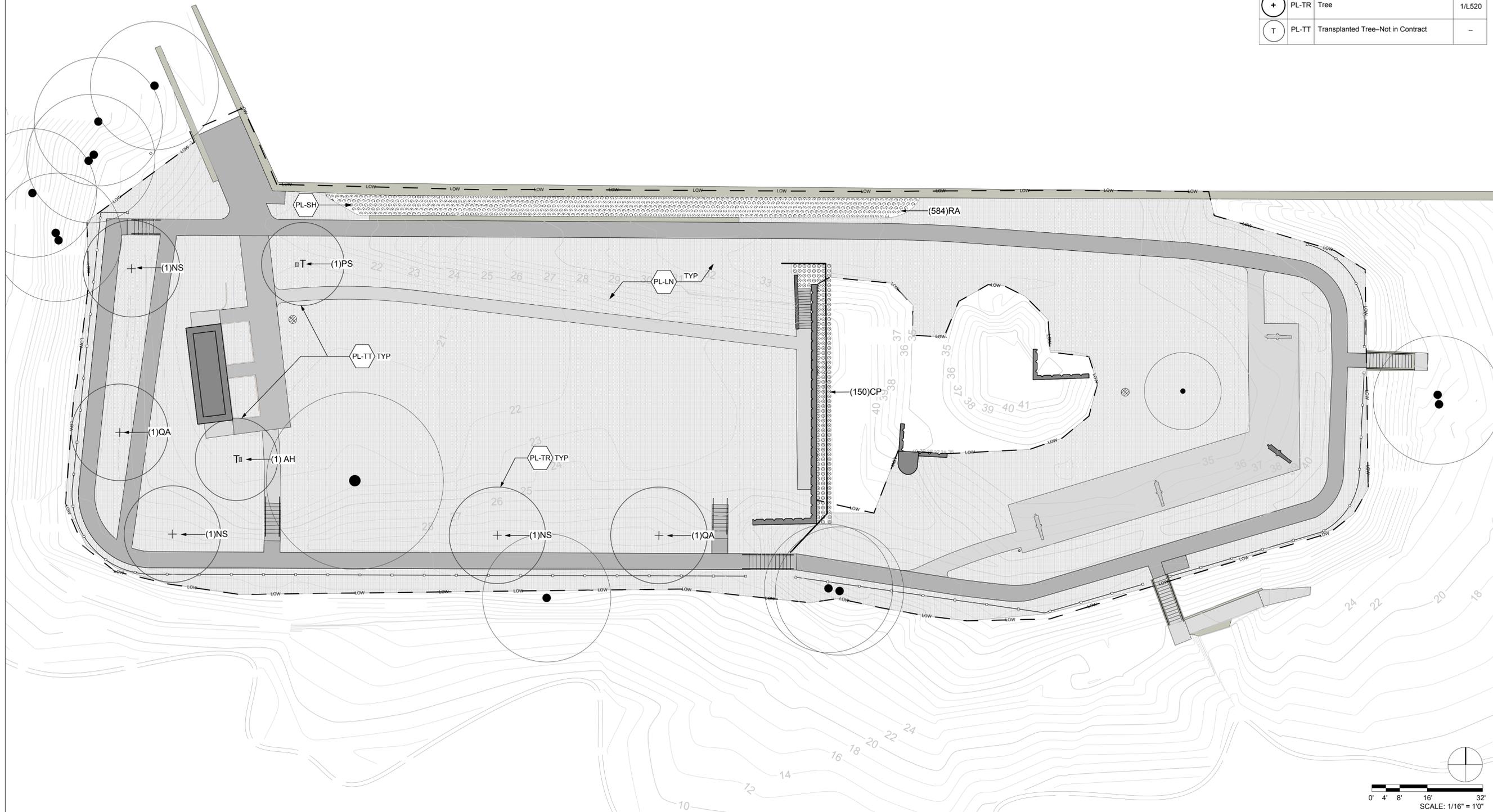
- The Contractor shall supply all plant material in quantities sufficient to complete the planting shown on all drawings.
- Contractor shall verify all existing conditions in the field. Report any discrepancies to the Landscape Architect for design prior to commencing planting.
- All plant material shall conform to the guidelines established by "The American Standard for Nursery Stock" published by the American Nursery and Landscape Association, latest edition.
- All plants shall be balled and burlap unless otherwise noted on the plant list.
- All plants shall be approved by Landscape Architect prior to their installation at the site.
- Contractor shall stake all plant locations in the field. Obtain approval of Landscape Architect before starting plant installations.
- Plants to be transplanted shall be flagged and exact planting locations staked in the field.
- All areas disturbed by construction activities are to be fine graded and seeded.

PLANT LIST - L400

ID	QTY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
TREES					
NS	3	<i>Nyssa sylvatica</i>	Tupelo Tree	4-5" cal.	B&B
QA	2	<i>Quercus alba</i>	White Oak	4-5" cal.	B&B
SHRUBS					
RA	585	<i>Rhus aromatica 'low grow'</i>	Low Grow Aromatic Sumac	1 Gal.	18" o.c.
CP	185	<i>Comptonia peregrina</i>	Sweet Fern	1 Gal.	18" o.c.

PLANTING LEGEND

SYM.	KEY NOTE	DESCRIPTION	DETAIL/SHEET
PL		PLANTING	
[Hatched Box]	PL-LN	Lawn - Seeded	3/L520
[Circle with dots]	PL-SH	Shrub	2/L520
[Circle with cross]	PL-TR	Tree	1/L520
[Circle with T]	PL-TT	Transplanted Tree-Not in Contract	-



Fort Sewall
 Fort Restoration - Phase IIB -
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PLANTING PLAN

L-400



Fort Sewall
 Fort Restoration - Phase IIB -
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 Fort Sewall Lane
 Marblehead, MA 01945

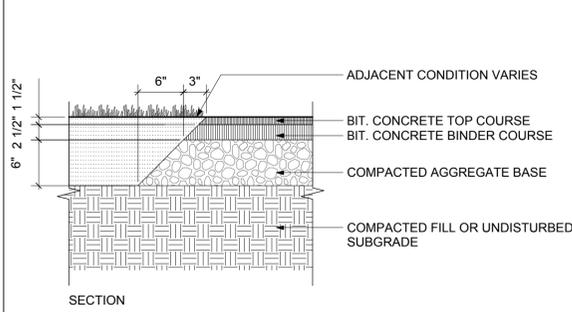
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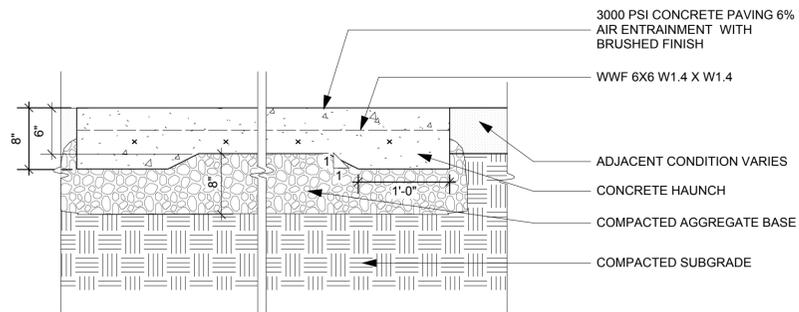

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**PAVING AND
 STAIR DETAILS**

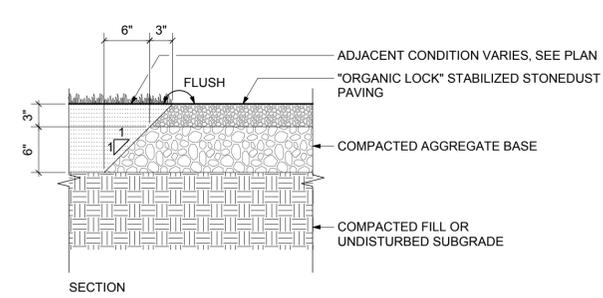
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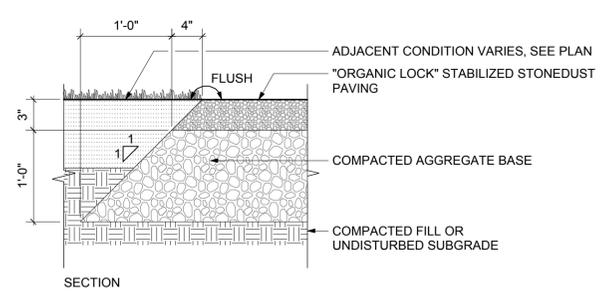
1 (P-AS1) ASPHALT PAVING
 Scale: 1" = 1'-0"



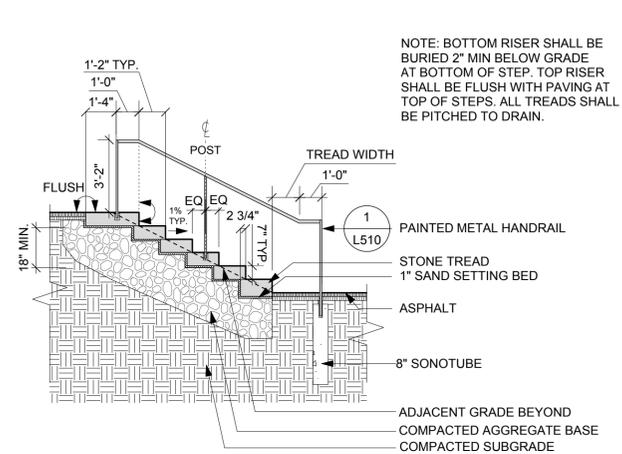
2 (P-CP) CONCRETE PAVING
 Scale: 1" = 1'-0"



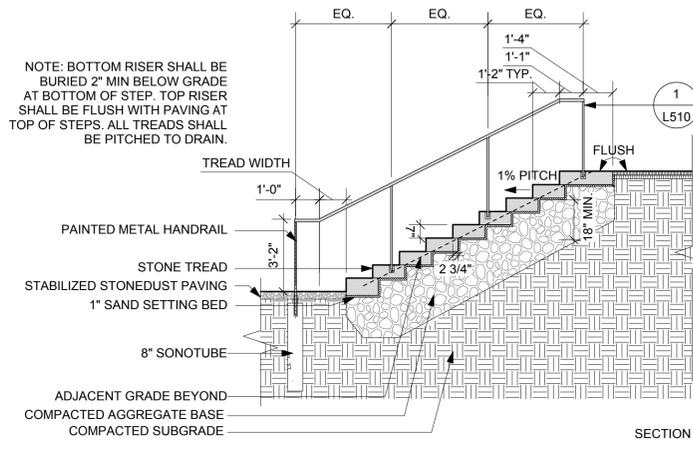
3 (P-SS1) STONE DUST PAVING-PEDESTRIAN
 Scale: 1" = 1'-0"



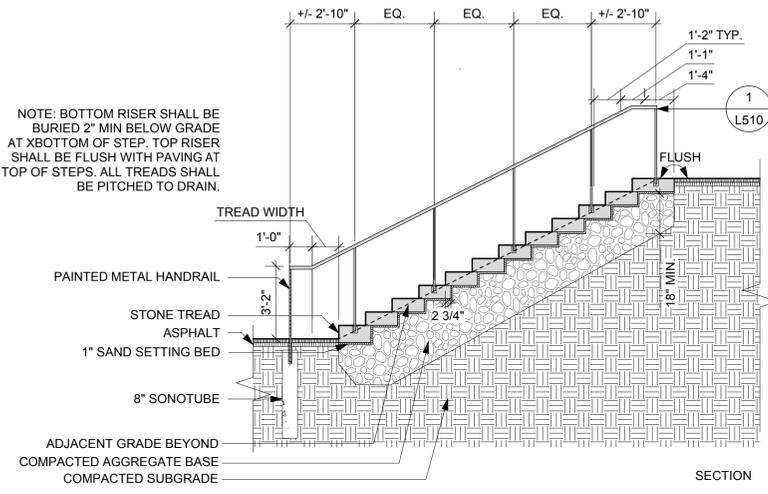
4 (P-SS2) STONE DUST PAVING-VEHICULAR
 Scale: 1" = 1'-0"



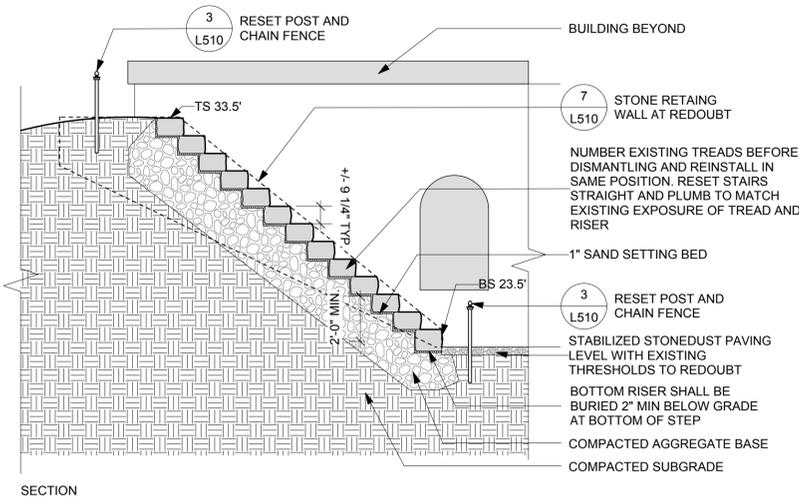
5 (S-GS1) GRANITE STAIR WITH HANDRAIL 1
 Scale: 1/4" = 1'-0"



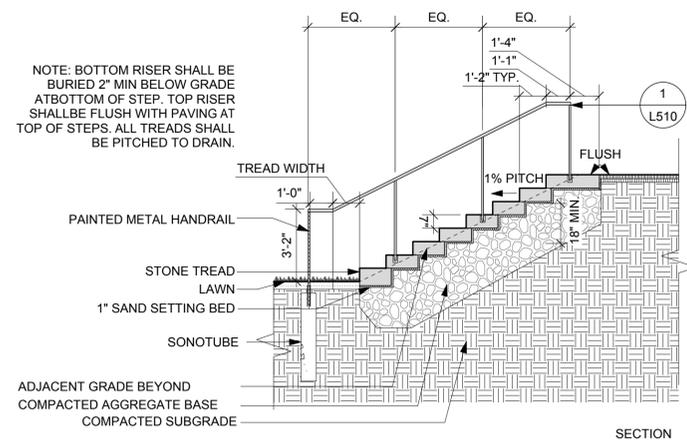
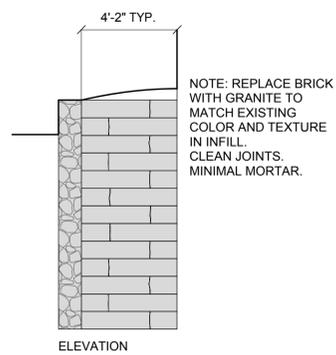
6 (S-GS2) GRANITE STAIR WITH HANDRAIL 2
 Scale: 1/4" = 1'-0"



7 (S-GS3) GRANITE STAIR WITH HANDRAIL 3
 Scale: 1/4" = 1'-0"



8 (S-HS) RESET HISTORIC STAIR
 Scale: 1/4" = 1'-0"



9 (S-GS4) GRANITE STAIR WITH HANDRAIL 4 (ADD ALT #2)
 Scale: 1/4" = 1'-0"



Fort Sewall
 Fort Restoration - Phase IIB -
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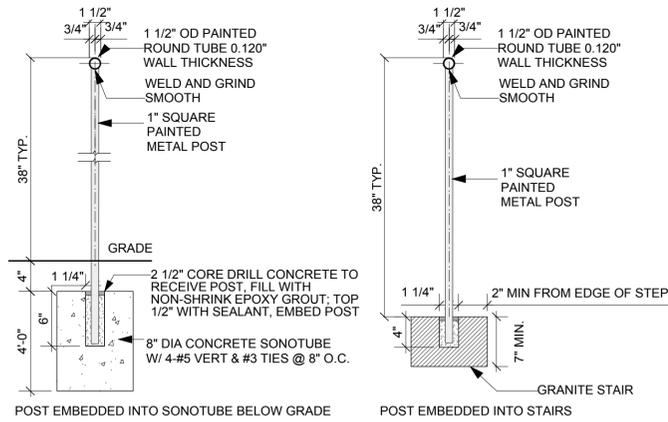
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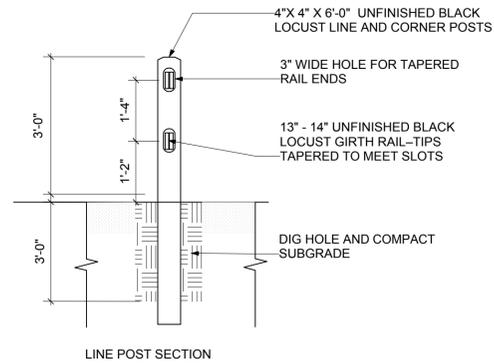

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SITE DETAILS

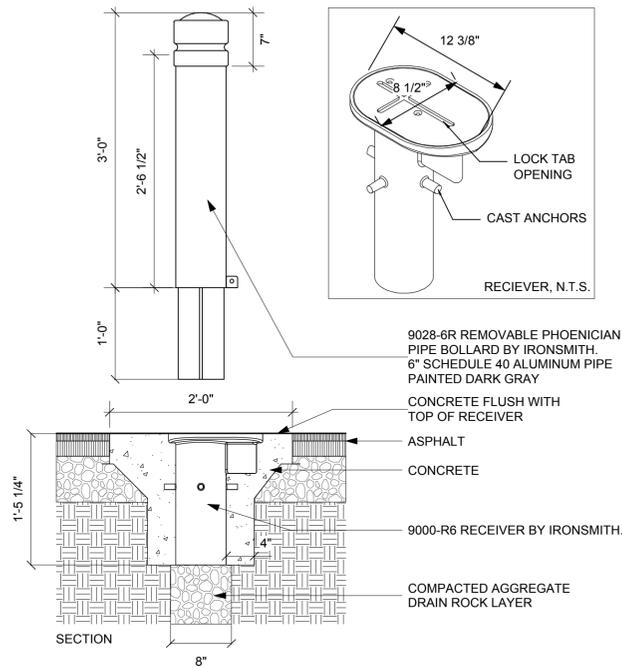
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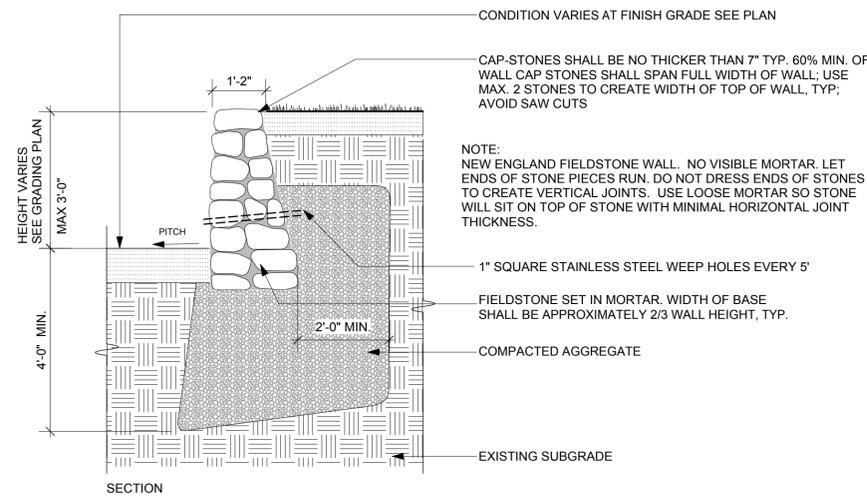
1 (S-HR) PAINTED METAL HANDRAIL
 Scale: 1" = 1'-0"



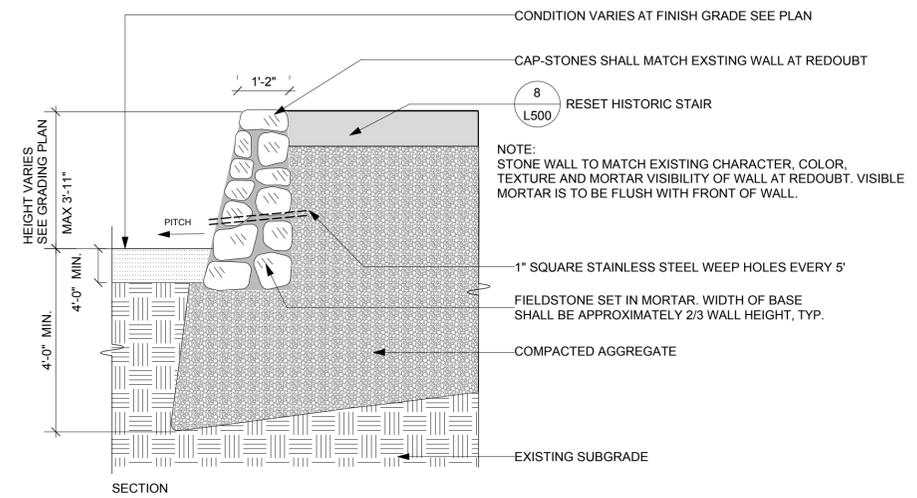
2 (S-FN1) SPLIT RAIL FENCE
 Scale: 1/2" = 1'-0"



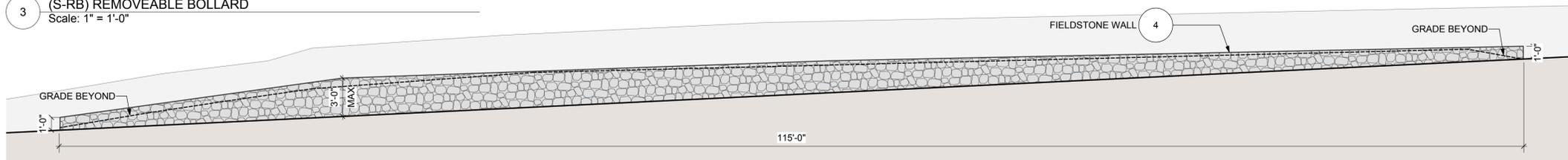
3 (S-RB) REMOVABLE BOLLARD
 Scale: 1" = 1'-0"



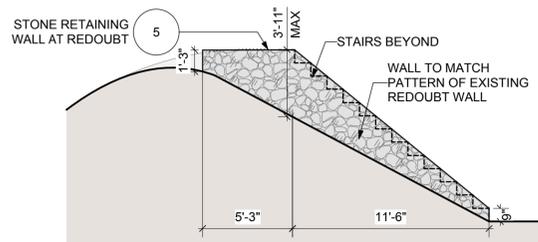
4 (S-RW1) FIELDSTONE WALL
 Scale: 1/2" = 1'-0"



5 (S-RW2) STONE RETAINING WALL AT REDOUBT
 Scale: 1/2" = 1'-0"



6 ELEVATION-FIELDSTONE RETAINING WALL AT PATH
 Scale: 3/16" = 1'-0"



7 ELEVATION-STONE WALL AT REDOUBT
 Scale: 3/16" = 1'-0"



Fort Sewall
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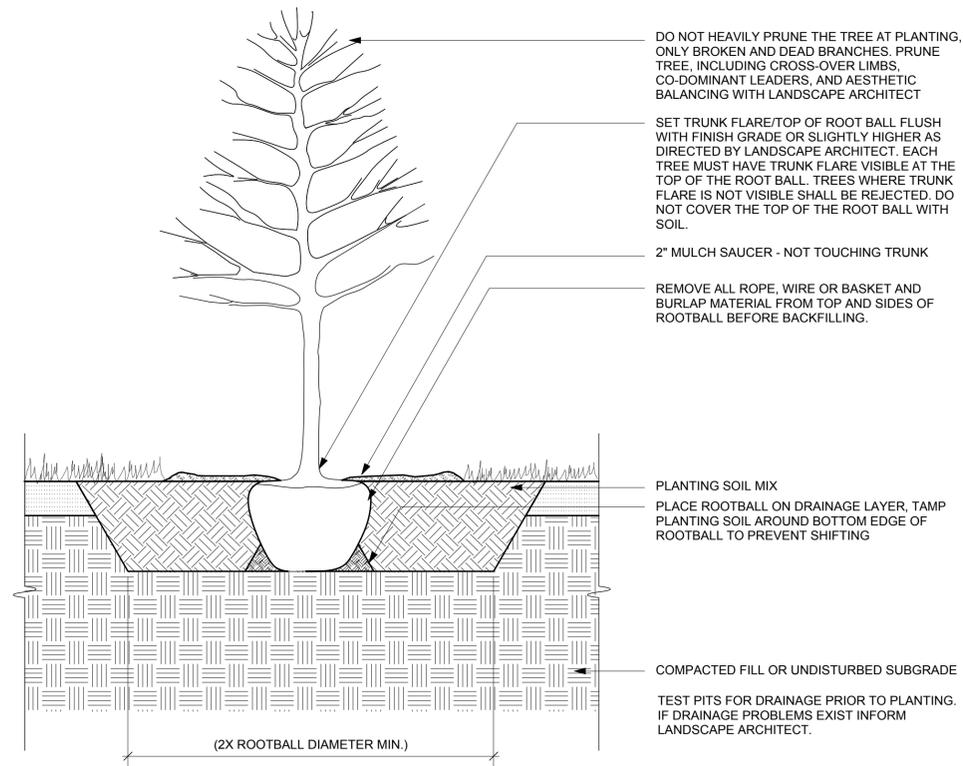
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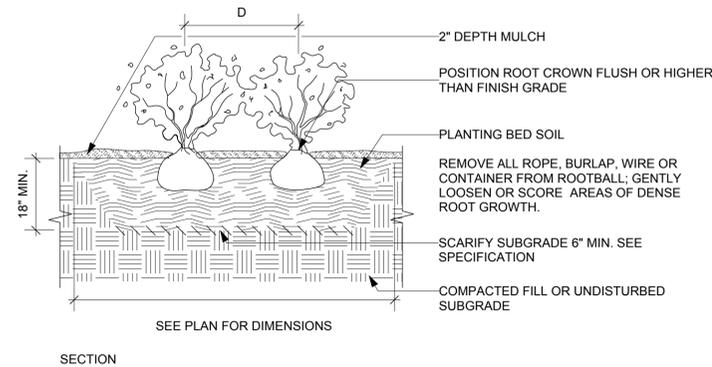

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**PLANTING
 DETAILS**

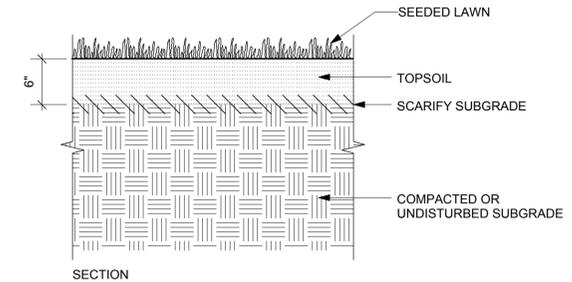
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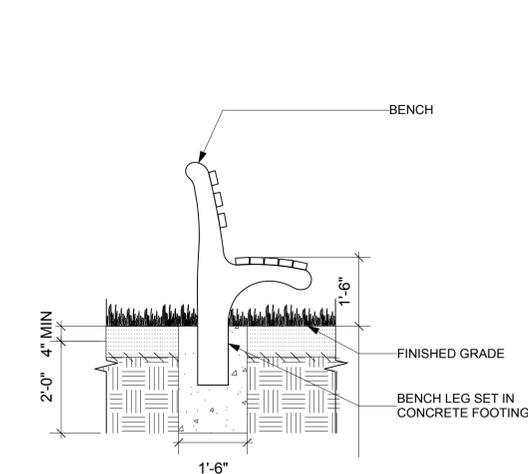
1 (PL-TR) TREE PLANTING
 Scale: 1/2" = 1'-0"



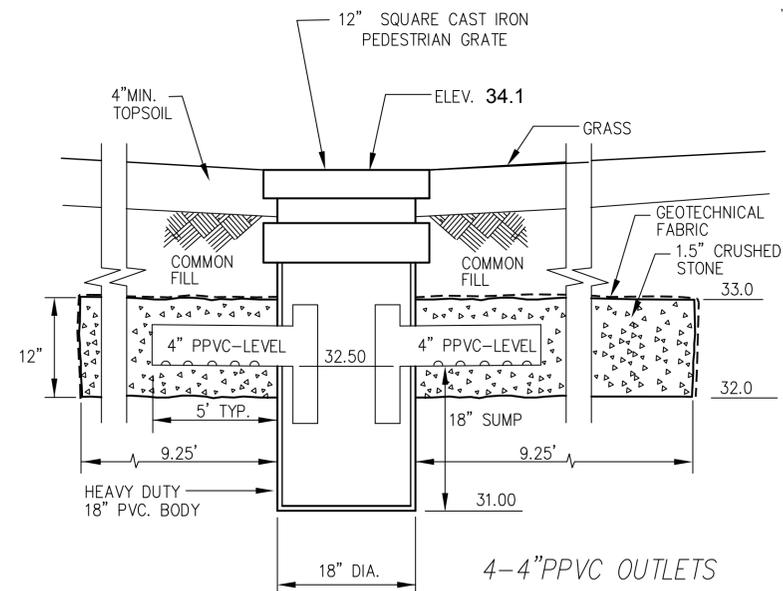
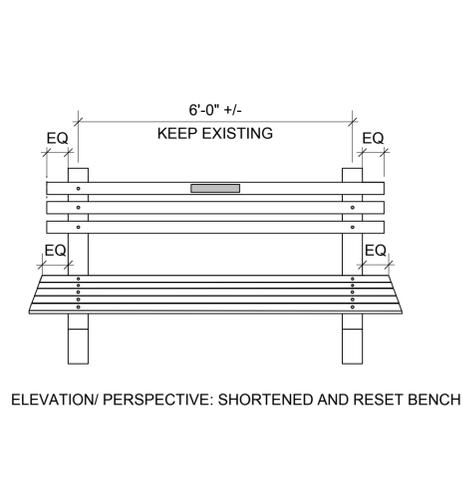
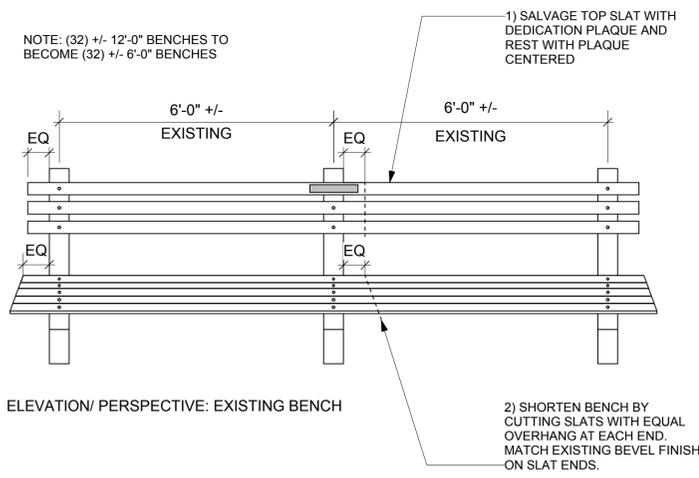
2 (PL-SH) SHRUB AND GROUNDCOVER PLANTING
 Scale: 1/2" = 1'-0"



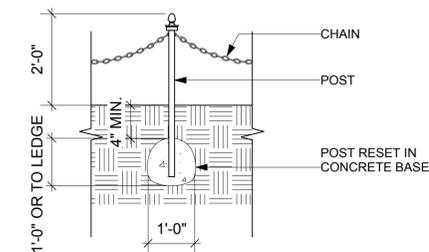
3 (PL-LN) SEEDED LAWN
 Scale: 1" = 1'-0"



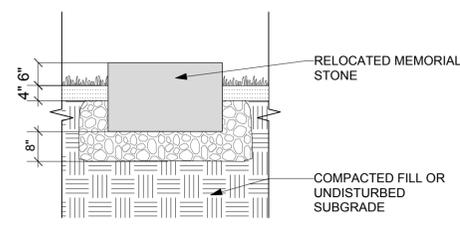
4 (S-BN) BENCH-MODIFIED AND RESET
 Scale: 1/2" = 1'-0"



6 (S-DW) DRYWELL
 Scale: 1" = 1'-0"



7 (S-FN3) RESET POST AND CHAIN FENCE
 Scale: 1/2" = 1'-0"



8 (L-RP) RELOCATED PLAQUE
 Scale: 1/2" = 1'-0"