

# Erie Canal Park and Preserve Boardwalk and Bridge Construction

Town of Pittsford  
Department of Public Works

## BID DOCUMENTS

February 13, 2020

## NOT FOR CONSTRUCTION



This document was prepared with funding provided by the New York State Department of State under Title 11 of the Environmental Protection Fund.

## LIST OF DRAWINGS

- |     |                               |
|-----|-------------------------------|
| 1.0 | Site Preparation Plan         |
| 2.0 | Site Layout and Grading Plans |
| 3.0 | Typical Construction Details  |

LANDSCAPE ARCHITECT

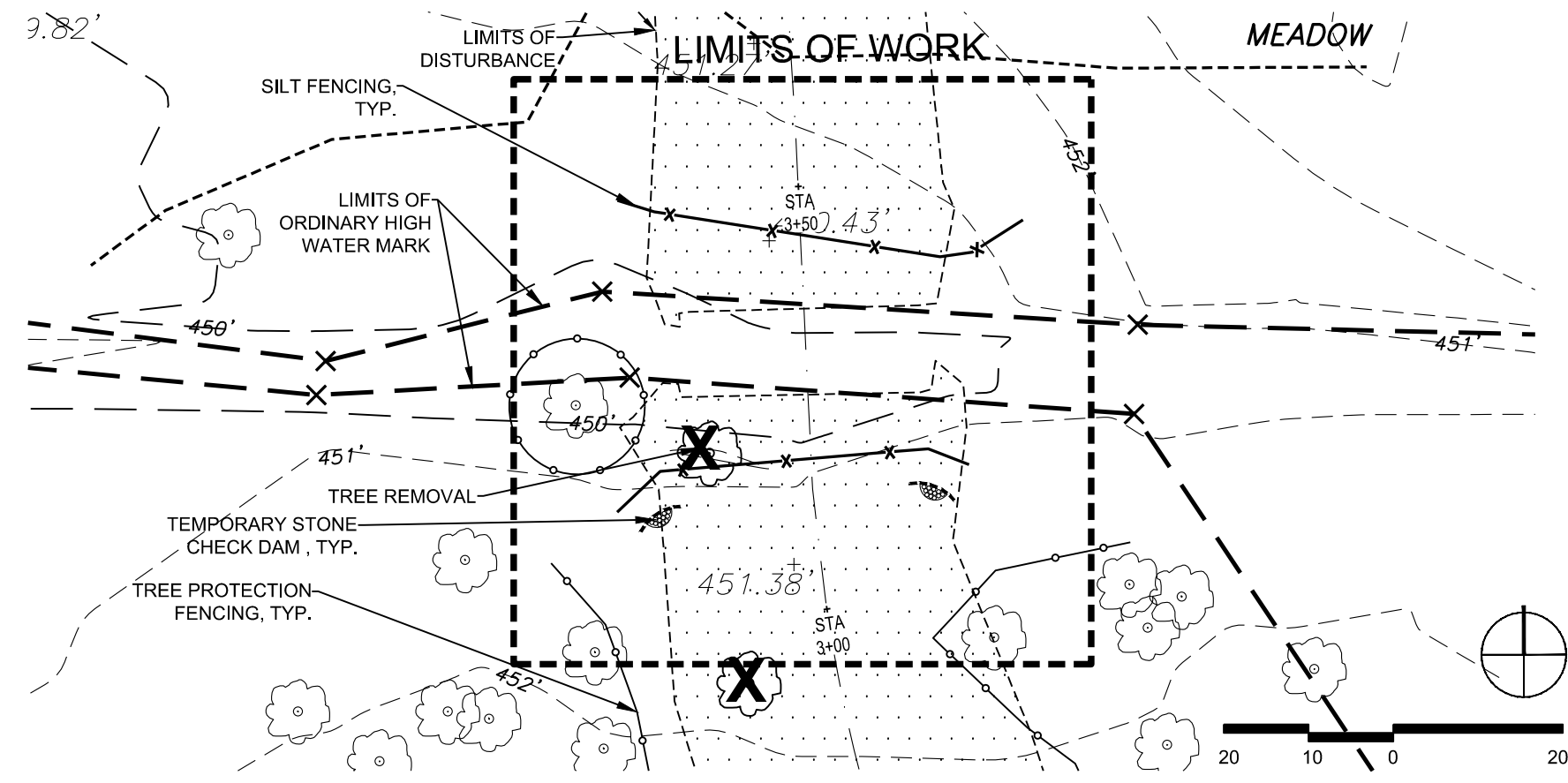
**Sue  
Steele**  
Landscape  
Architecture  
PLLC

9 Summit Street, Fairport, New York 14450  
(585) 747-9996  
steele.la

SURVEY AND ENVIRONMENTAL

**RAVI Engineering & Land Surveying, P.C.**  
2110 South Clinton Avenue, Suite 1  
Rochester, New York 14618

**SITE PREPARATION NOT IN CONTRACT AND TO BE COMPLETED PRIOR TO START OF CONSTRUCTION. SEE SPECIAL SITE PREPARATION NOTES**



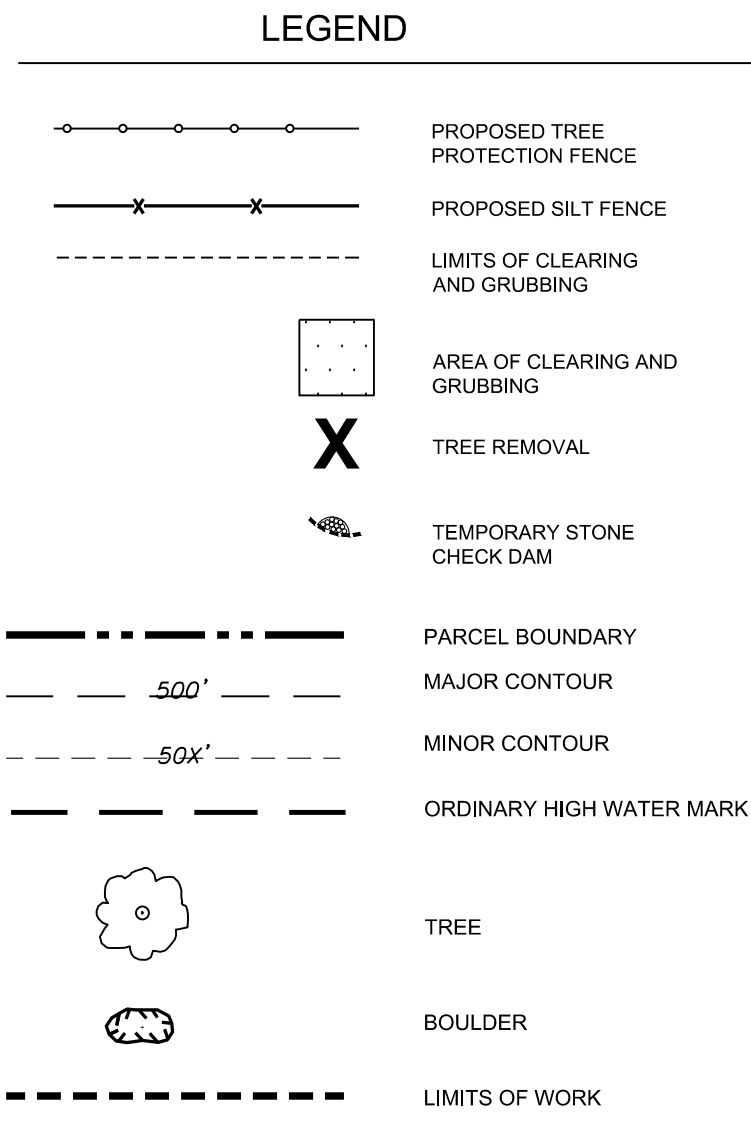
**SITE PREPARATION PLAN AT BRIDGE LOCATION**  
1"=20'

**SPECIAL SITE PREPARATION NOTES:**

- PRIOR TO CONSTRUCTION THE TOWN OF PITTSFORD WILL PERFORM THE FOLLOWING:
  - INSTALLATION OF STABILIZED CONSTRUCTION ACCESS ROUTE
  - CLEARING AND GRUBBING WITHIN LIMITS OF WORK.
  - TREE REMOVALS WITHIN LIMITS OF WORK.
  - INSTALLATION OF REQUIRED TEMPORARY SILT FENCING, TEMPORARY CHECK DAMS, AND TREE PROTECTION FENCING.
- CONTRACTOR RESPONSIBLE FOR MAINTAINING ALL TEMPORARY EROSION AND SEDIMENT CONTROLS AND TREE PROTECTION FENCING DURING THE ENTIRE CONSTRUCTION PERIOD.

**DEMOLITION AND SITE PREPARATION**

- CONTRACTOR SHALL BE RESPONSIBLE FOR STORMWATER MANAGEMENT DURING PROJECT CONSTRUCTION.
- THE CONTRACTOR'S MATERIAL STAGING AND STORAGE AREA IS TO BE LOCATED WITHIN THE CONSTRUCTION AREA LIMITS OR IN AN AREA APPROVED BY THE OWNER.
- REMOVALS LIMITED TO EXCAVATION ASSOCIATED WITH BRIDGE AND BOARDWALK CONCRETE ABUTMENT WALLS AND STONE WING WALLS.
- THE CONTRACTOR SHALL CAREFULLY INSPECT THE EXISTING CONDITIONS AT THE SITE AND FIELD VERIFY THE PRECISE LOCATION AND QUANTITY OF ALL ITEMS THAT MUST BE REMOVED IN ORDER TO CONSTRUCT THIS PROJECT.
- GREAT CARE SHALL BE TAKEN IN REMOVING MATERIALS AND/OR ITEMS WITHIN THE DRIPLINE OF ANY EXISTING TREES TO MINIMIZE ROOT DISTURBANCE. DISCUSS WITH OWNER'S REPRESENTATIVE PRIOR TO EXCAVATING WITHIN THE CANOPY OR DRIP LINE OF ANY TREE.



**EROSION CONTROL NOTES:**

- TOPSOIL OR STOCKPILED SUBSOIL SHALL BE SEEDED IMMEDIATELY IF THEY ARE TO REMAIN IN PLACE FOR MORE THAN 7 DAYS.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN ALL EROSION CONTROL DEVICES AND TEMPORARY SEEDING UNTIL A PERMANENT COVER OF VEGETATION IS ESTABLISHED. MAINTENANCE SHALL INCLUDE, BUT IS NOT LIMITED TO, REMOVAL OF ACCUMULATED SEDIMENT, PREVENTATIVE AND REMEDIAL WORK, REPAIR, REPLACEMENT, WATERING SEEDED AREAS, RESEEDING AND REMULCHING.
- ON-SITE BURIAL OF WASTE MATERIAL CLEARED FROM THE WORK AREA IS NOT PERMITTED. CONTRACTOR SHALL DISPOSE OF OFF-SITE IN A LOCATION APPROVED BY LOCAL AND STATE ORDINANCES.
- THE CONTRACTOR SHALL PROVIDE DUST CONTROL BY WATERING AS NEEDED.
- THE CONTRACTOR SHALL KEEP PAVED SURFACES CLEAN OF MUD AND DEBRIS AT ALL TIMES.
- IF REQUIRED, CONTRACTOR SHALL PROVIDE ADDITIONAL TEMPORARY EROSION CONTROL MEASURES, AT THE EXPENSE OF THE CONTRACTOR, TO PREVENT SILTATION OF DOWNSTREAM PROPERTIES. INSTALLATION OF ADDITIONAL MEASURES SHALL BE REVIEWED BY THE OWNER.
- IN THE EVENT THERE IS A FAILURE OF AN EROSION CONTROL DEVICE, THE CONTRACTOR IS RESPONSIBLE TO RESTORE DOWNSTREAM AREAS, AT THE EXPENSE OF THE CONTRACTOR.
- EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL A PERMANENT COVER OF VEGETATION IS ESTABLISHED. REMOVAL OF DEVICES TO BE COORDINATED WITH TOWN AND LANDSCAPE ARCHITECT.
- ALL SLOPES 3H:1V OR GREATER SHALL BE STABILIZED WITH AN EROSION CONTROL FABRIC.
- THE CONTRACTOR WILL DESIGNATE A MEMBER OF HIS FIRM TO BE RESPONSIBLE TO MONITOR THE EROSION CONTROL, EROSION CONTROL STRUCTURES, TREE PROTECTION, AND PRESERVATION THROUGHOUT CONSTRUCTION.

**EROSION CONTROL & CONSTRUCTION SEQUENCE**

**ITEMS 1-7 BY OTHERS**

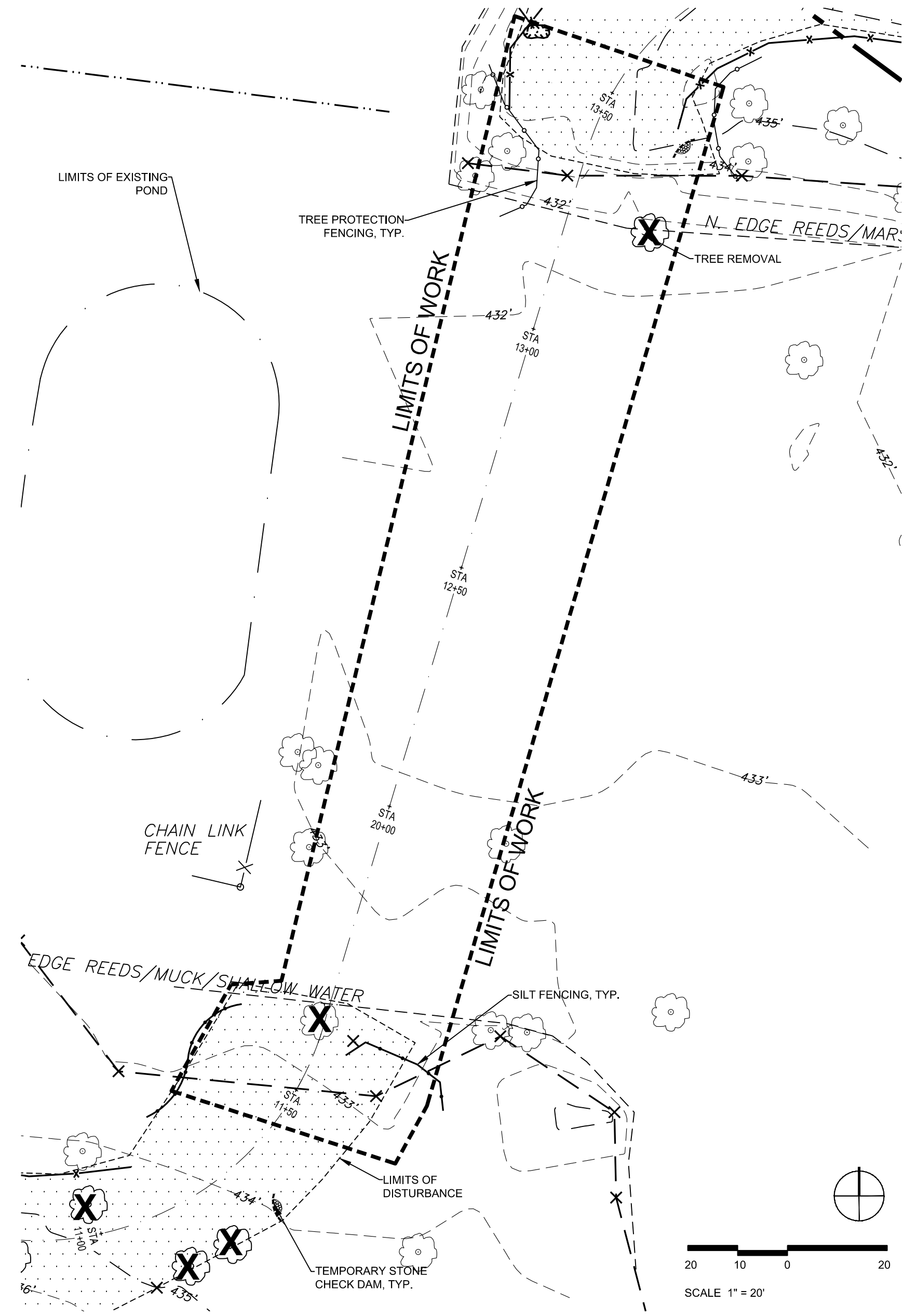
- INSTALL STABILIZED CONSTRUCTION ENTRANCE.
- PROTECT EXISTING VEGETATION AND OTHER ENVIRONMENTAL FEATURES TO BE PRESERVED, SUCH AS WOODS, TREES, WETLANDS AND AREAS OF MINIMAL GRADE CHANGE, WITH SILT OR CONSTRUCTION FENCING.
- INSTALL ALL SEDIMENT & EROSION CONTROLS.
- CLEAR AND GRUB SITE.
- STRIP AND STOCKPILE TOPSOIL AND IMMEDIATELY PROVIDE TEMPORARY SEEDING OF STOCKPILE. INSTALL PERIMETER SILT FENCE PRIOR TO STOCKPILING. TOPSOIL SHALL REMAIN ON SITE UNTIL PROJECT IS COMPLETE OR INSURANCE OF A MINIMUM SEEDBED OF 6" IS PROVIDED. A MAXIMUM OF 5 ACRES OF DISTURBED SOIL IS PERMITTED AT ANY ONE TIME PRIOR TO STABILIZATION.
- BEGIN EARTHWORK AND ROUGH GRADING.
- COMPLETE ROUGH GRADING OF SITE. AREAS WHERE SOIL DISTURBANCE HAS BEEN TEMPORARILY OR PERMANENTLY CEASED SHALL BE SEEDED/MULCHED WITHIN 7 DAYS.

**ITEMS 8 BY CONTRACTOR**

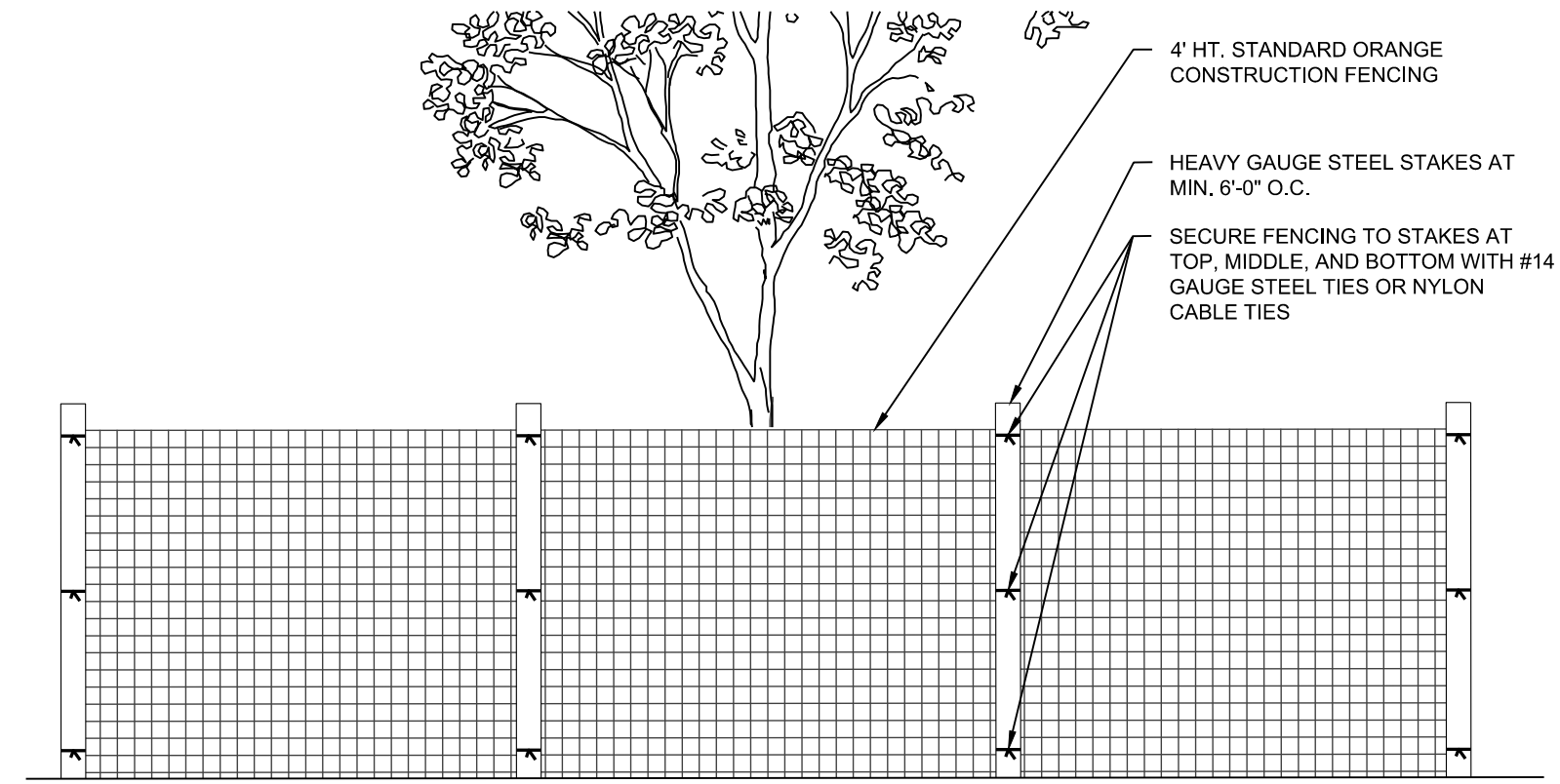
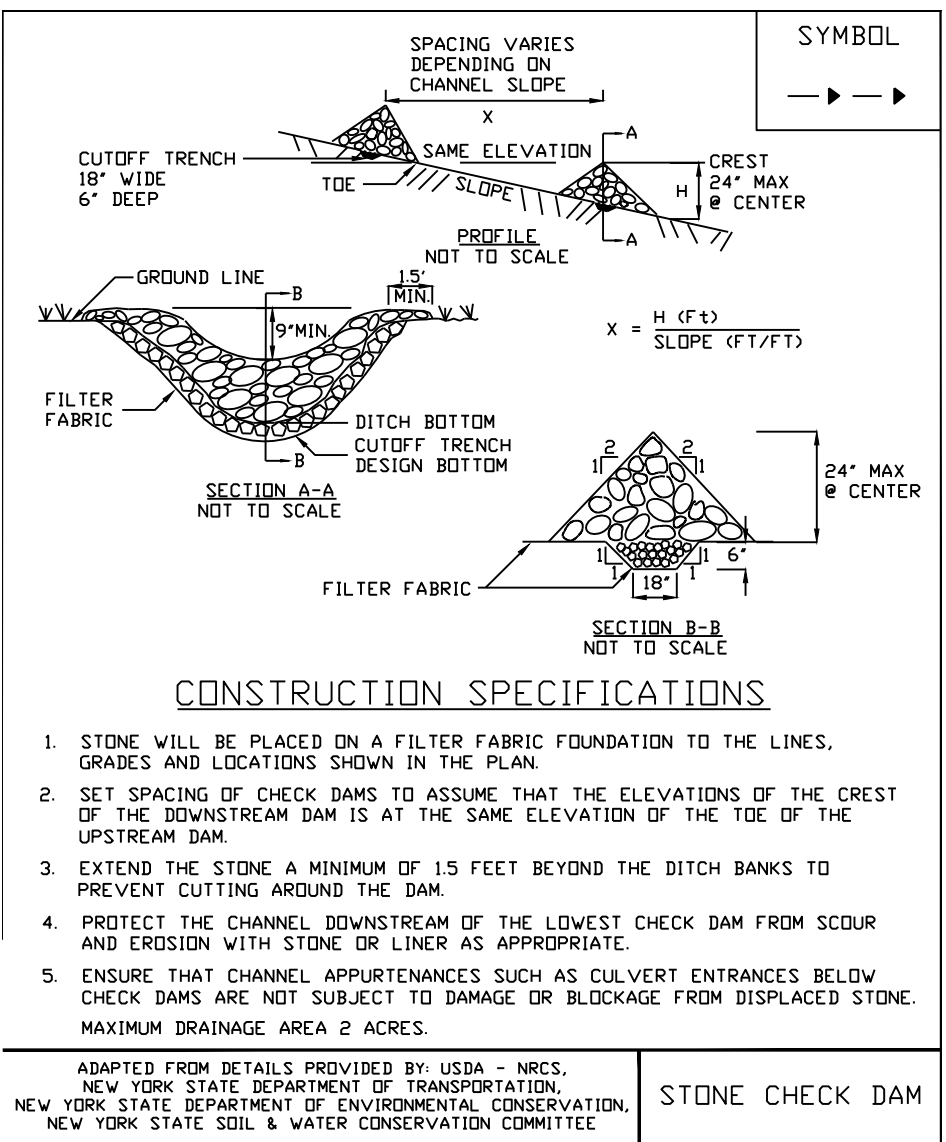
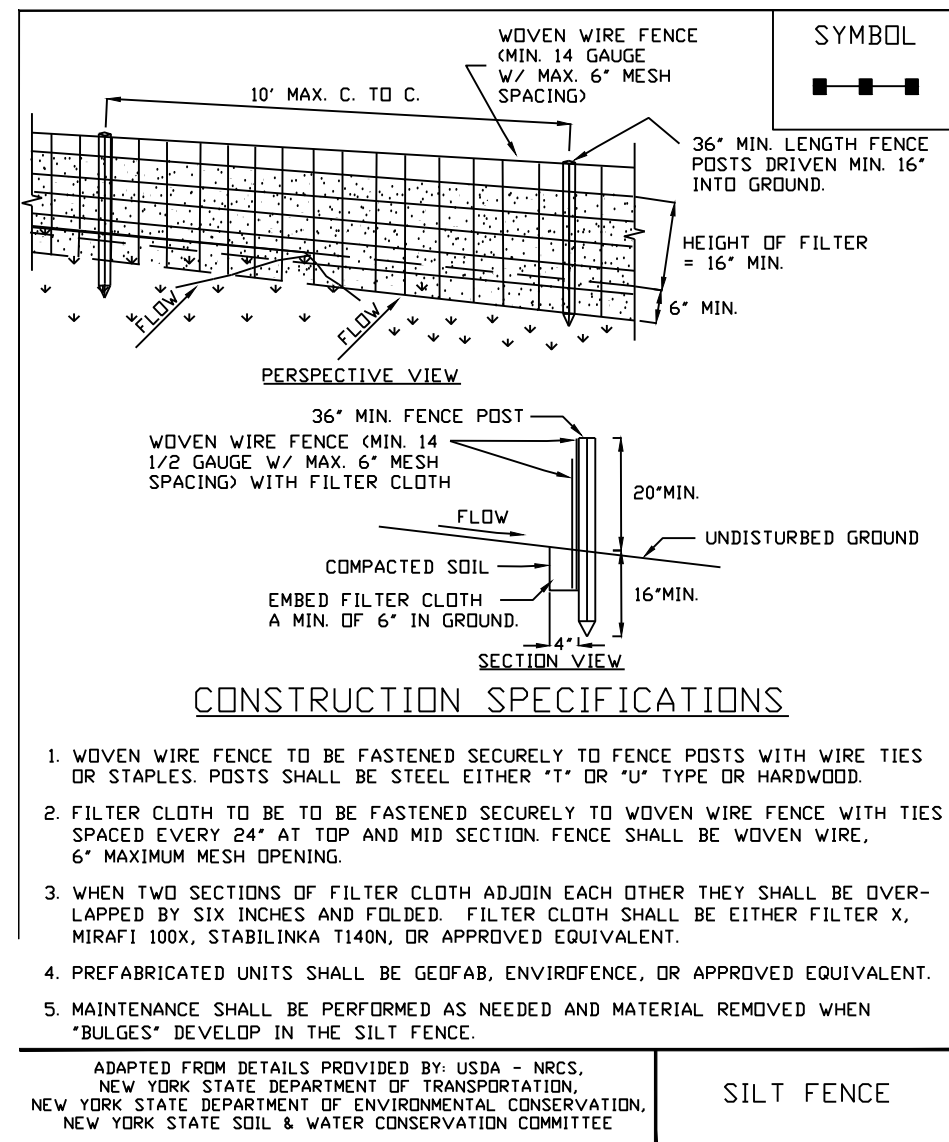
- INSTALL SITE STRUCTURES, FEATURES, AND PAVEMENTS.

**ITEMS 9-0 BY OTHERS**

- COMPLETE FINISH GRADING, INSTALL PERMANENT SEEDING, FERTILIZER AND MULCH.
- ALL TEMPORARY EROSION CONTROL DEVICES SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL A PERMANENT COVER OF VEGETATION HAS BEEN ESTABLISHED AND REMOVAL IS APPROVED BY THE TOWN AND LANDSCAPE ARCHITECT.



**SITE PREPARATION PLAN AT BOARDWALK LOCATION**  
1"=20'



**NOTES:**

- FENCE LOCATION AS INDICATED ON SITE PREPARATION PLANS. FOR INDIVIDUAL TREES THE FENCE SHALL BE PLACED AT THE DRIP LINE (EXTENT OF CANOPY). IF NOT POSSIBLE THE FENCE SHALL BE LOCATED AS CLOSE TO THE DRIP LINE AS POSSIBLE AND IN NO CASE CLOSER THAN 10 FEET AWAY FROM THE TREE TRUNK.
- DO NOT LEAVE CONSTRUCTION EQUIPMENT RUNNING (IDLING) UNDER TREE CANOPIES.
- TREE PROTECTION FENCING SHALL NOT BE REMOVED WITHOUT APPROVAL OF OWNER'S REPRESENTATIVE. FENCING SHALL BE REPLACED IMMEDIATELY AFTER APPROVED ACTIVITIES IN THE AREA OF PROTECTION ARE COMPLETE.

**Sue Steele Landscape Architecture PLLC**

9 Summit Street, Fairport, New York 14450  
(585) 747-9996  
steeleja



This document was prepared with funding provided by the New York State Department of State under Title 11 of the Environmental Protection Fund

Project Name and Address

**Erie Canal Park and Preserve Boardwalk and Bridge Construction**

Town of Pittsford, New York  
Department of Public Works

Commissioner of Public Works  
Paul Schenkel

Issue Date  
February 13, 2020

No.	Date	Revision

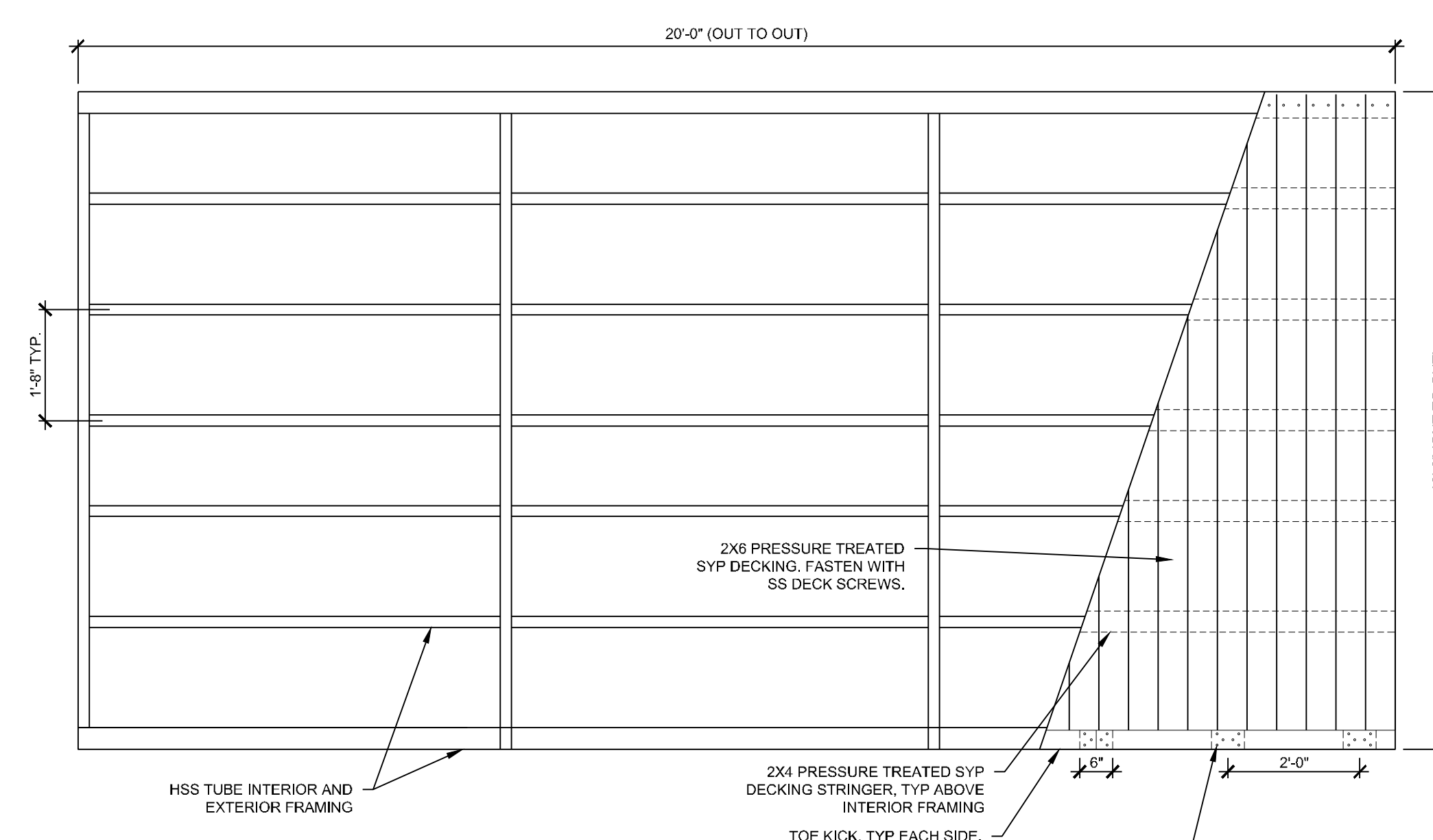
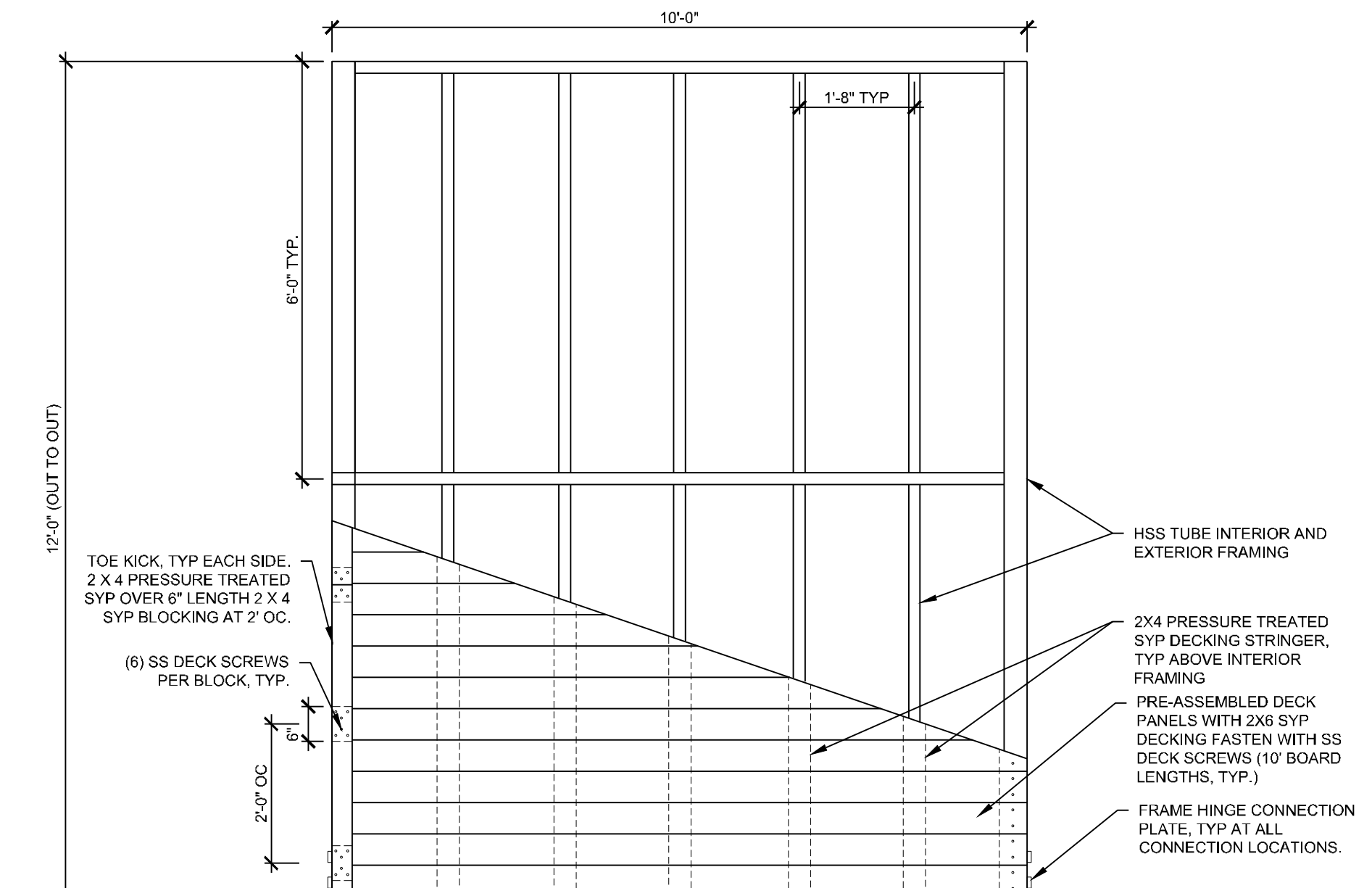
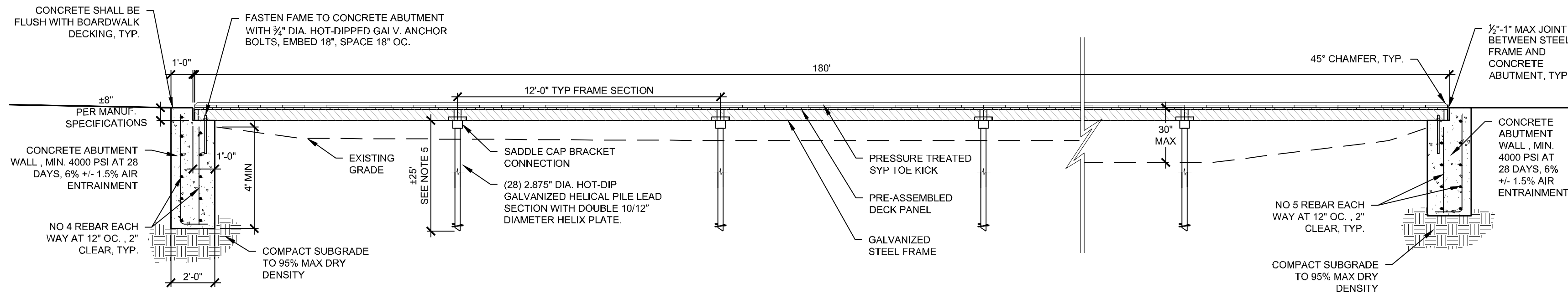
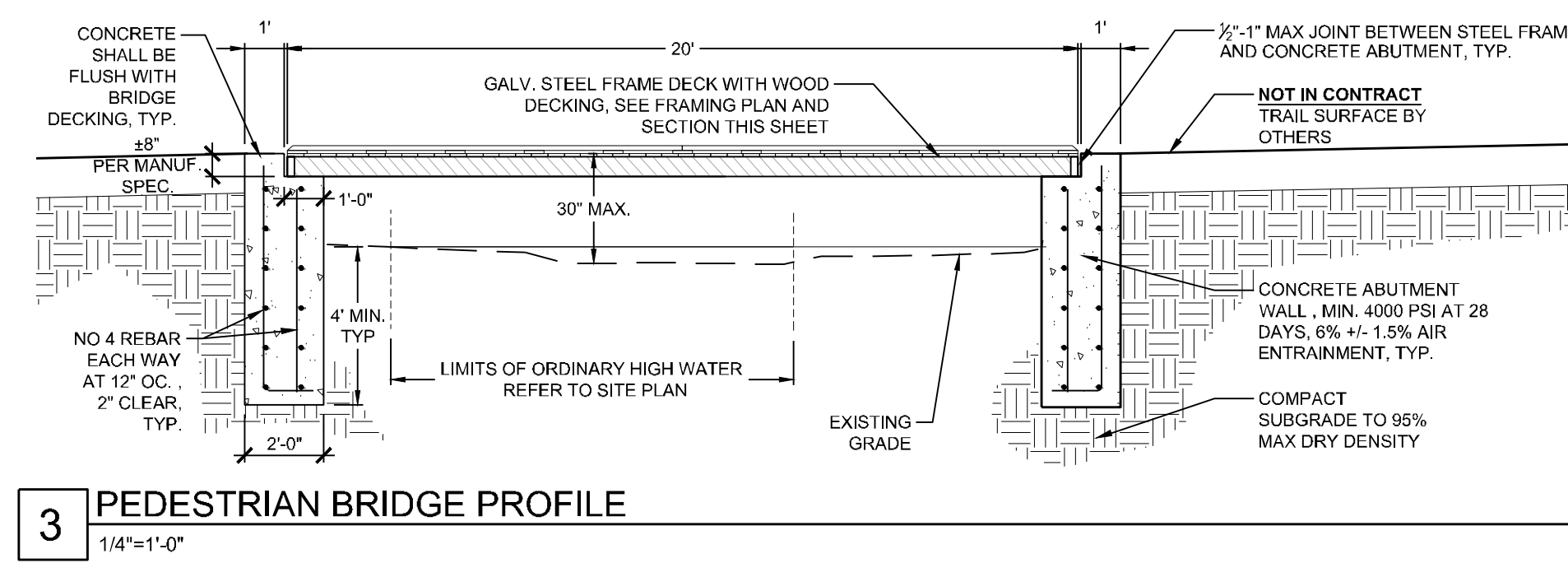
**BID DOCUMENTS**

**NOT FOR CONSTRUCTION**

Site Preparation Plan

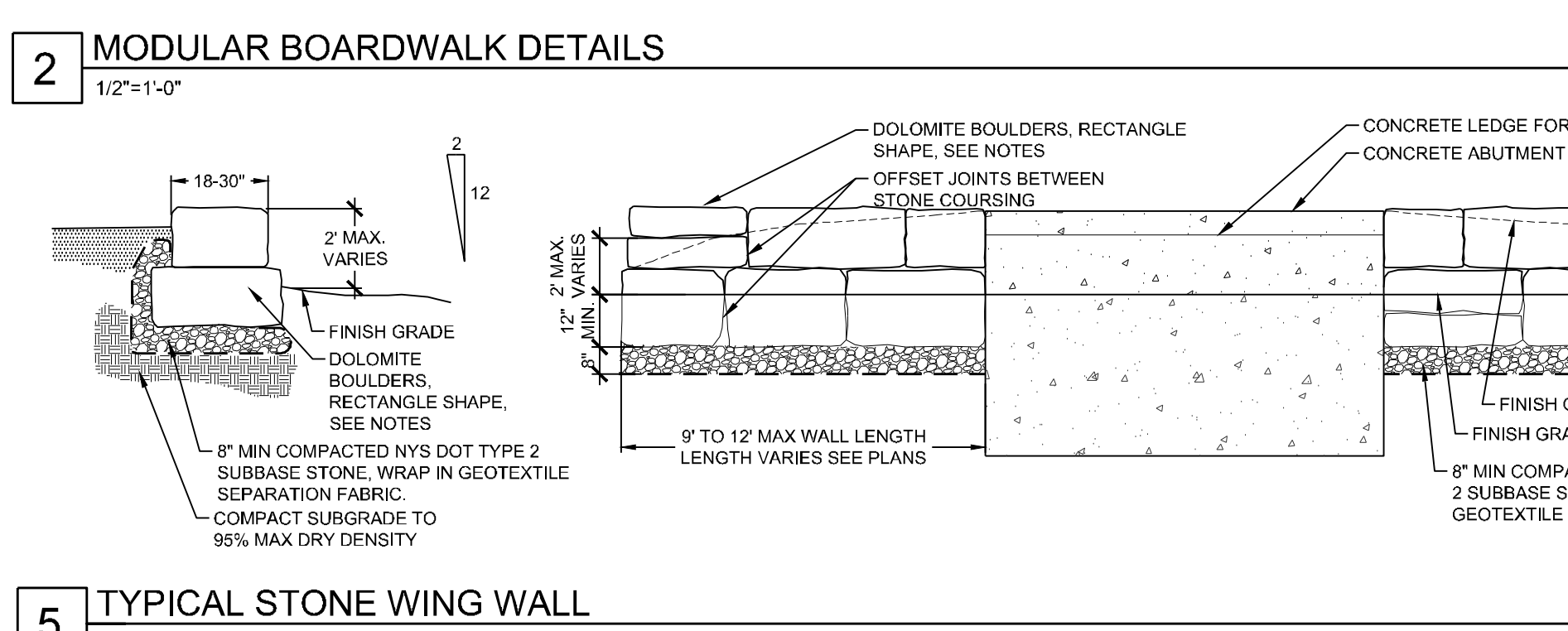
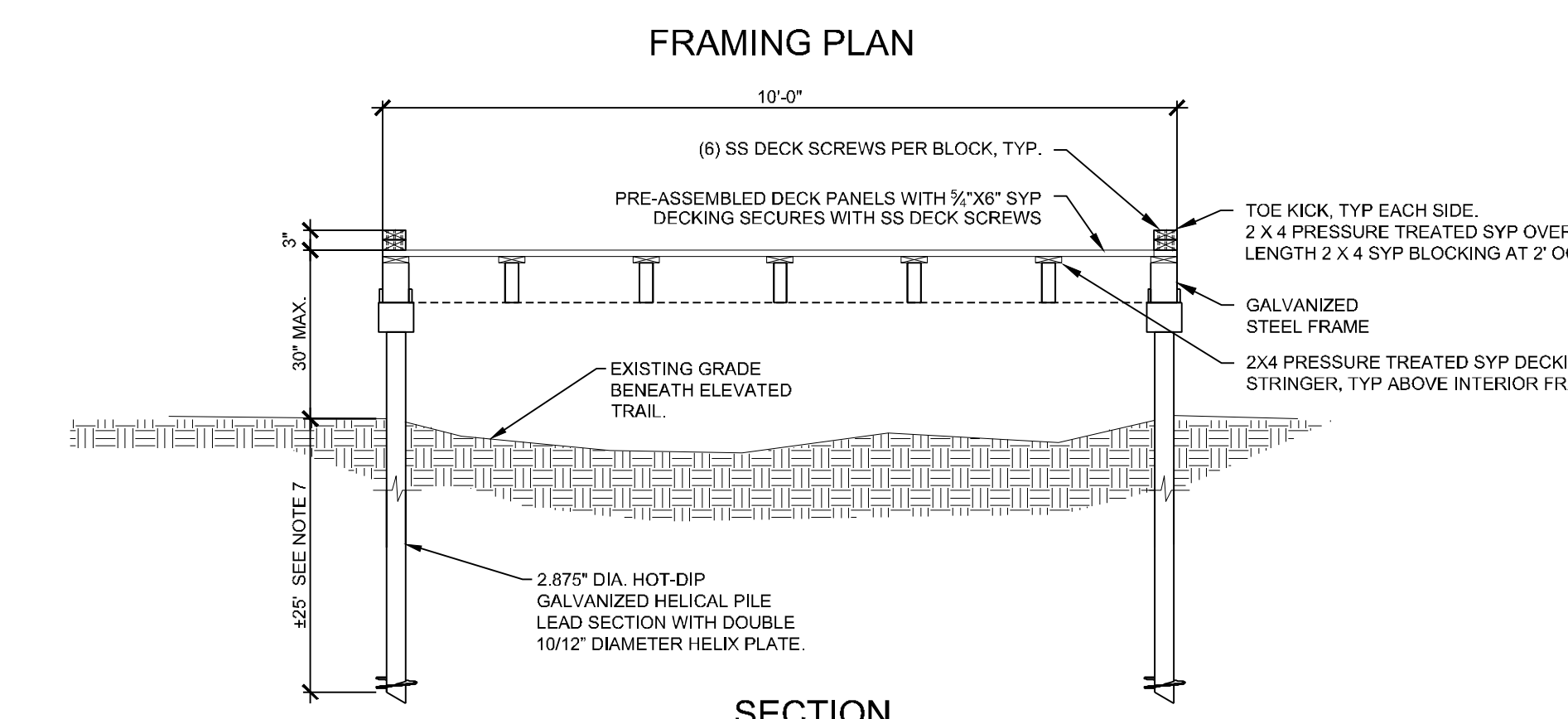
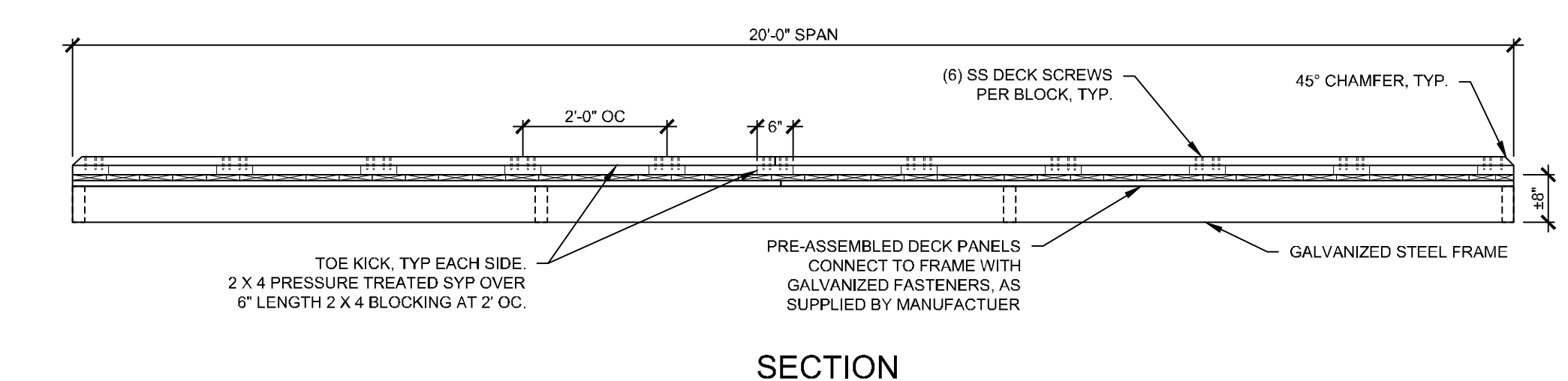
**1.0**





- BOARDWALK AND BRIDGE DESIGN NOTES**
- MODULAR BRIDGE AND BOARDWALK SHALL BE AS MANUFACTURED BY:  
MODULAR TRAIL STRUCTURES  
608-699-9277  
MODULARTRAILSTRUCTURES.COM  
OR APPROVED EQUAL.
  - CONTRACTOR IS RESPONSIBLE FOR SUBMITTING FINAL ENGINEERING DRAWINGS FOR THE BOARDWALK AND HELICAL PILE FOUNDATION AND PEDESTRIAN BRIDGE. FABRICATION DRAWINGS, MUST BE STAMPED BY A LICENSED ENGINEER IN THE STATE OF NEW YORK.
  - ENGINEERED FABRICATION DRAWINGS SHALL MATCH DIMENSIONS AS SHOWN. PROPOSED MODIFICATIONS MUST BE APPROVED.
  - DESIGN LOADS:  
4.1. PEDESTRIAN LIVE LOAD: 100LB/SF  
4.2. LATERAL WIND LOAD: 90 MPH WIND SPEED  
4.3. MAX DEFLECTION: 1/360
  - HELICAL PILES:  
5.1. PILE LOCATIONS SHALL BE MARKED FOR APPROVAL PRIOR TO INSTALLATION.  
5.2. SWAMP MATS ARE REQUIRED FOR ANY EQUIPMENT ENTERING THE WETLANDS.  
5.3. HELICAL PILES SHALL BE DRIVEN TO THE POINT OF REFUSAL DEPTH. REFER TO SOIL REPORT FOR SUBSURFACE SOIL CONDITIONS.  
5.4. PILES SHALL BE AS MANUFACTURED BY:  
IDEAL GROUP (585-872-7190)  
OR APPROVED EQUAL.  
5.5. SHAFT SHALL MEET OR EXCEED REQUIREMENTS OF ASTM A500, 60KSI  
5.6. HELIX TO MEET OR EXCEED REQUIREMENTS OF ASTM A572/A1018/A656, 50KSI  
5.7. LEADING EDGE OF HELICES SHALL BE TAPERED.  
5.8. ALL WELDING SHALL BE PERFORMED BY SHOP QUALIFIED WELDERS TO AWS D1.1 STRUCTURAL WELDING CODE - STEEL.  
5.9. PILES SHALL BE HOT DIP GALVANIZED PER ASTM A153/ASTM A123
  - SADDLE BRACKET  
6.1. STEEL SADDLE BRACKET CONNECTS BOARDWALK FRAME TO HELICAL PILE.  
6.2. BRACKET SHALL HAVE A MINIMUM TOLERANCE OF 5" LONGITUDINALLY AND ±1/2" WIDTH WISE  
6.3. BRACKET TO BE FASTENED WITH HOT DIP GALVANIZED BOLTS PER MANUFACTURER SPECIFICATION BASED ON DESIGN LOAD.
  - FRAME  
7.1. FRAME SHALL BE FABRICATED WITH STRUCTURAL STEEL.  
7.2. BEAM SIZE SHALL BE DETERMINED BY ENGINEER BASED ON DESIGN LOADS.  
7.3. FRAME LENGTH AND WIDTH, AS NOTED. ALL WELDING SHALL BE PERFORMED BY SHOP QUALIFIED WELDERS TO AWS D1.1 STRUCTURAL WELDING CODE - STEEL.  
7.4. FRAME TO BE HOT DIPPED GALVANIZED.
  - FRAME HINGE CONNECTION  
8.1. HINGE SHALL BE LOAD BEARING  
8.2. HINGE SHALL BE CONCEALED AND NOT VISIBLE AFTER INSTALLATION TO PREVENT VANDALISM
  - DECKING  
9.1. DECKING MATERIAL SHALL BE AS SPECIFIED  
9.2. ALL LUMBER SHALL BE KILN DRIED #1 PRESSURE TREATED SOUTHERN YELLOW PINE.  
9.3. DECKING MODULES SHALL ARRIVE AT INSTALLATION SITE PREFABRICATED IN ONE PIECE.  
9.4. NO DECK BOARD SHALL BE INSTALLED ON SITE.
  - CONTRACTOR SHALL PROVIDE PROJECT RECORD DOCUMENTS TO OWNER UPON COMPLETION.

**4 PEDESTRIAN BRIDGE DETAILS**  
1/2"=1'-0"



- NOTES:**
- STONE MATERIALS SHALL BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO DELIVERY TO SITE.
  - BOULDER DIMENSIONS SHALL BE  
WIDTH 18-30"  
LENGTH 36-60"  
HEIGHT 18-24"
- CONSTRUCTION NOTES:**
- MASON SHALL USE LARGEST STONES AS FOUNDATION STONES AT THE BASE OF THE WALLS.
  - STONES SHALL BE SET WITH THE LENGTH OF THE STONE PERPENDICULAR TO THE WALL, EXPOSING STONE ENDS.
  - INTERIOR GAPS IN EACH WALL COURSE SHALL BE FILLED WITH SMALLER STONES BEFORE BEGINNING THE NEXT COURSE.
  - VERTICAL JOINTS SHALL BE STAGGERED, NOT RUNNING OR STACKED ALONG THE FACE OF THE WALL.
  - FACE OF WALL SHALL HAVE MIN BATTER OF 2:12