

ITEM 607.96010010 – DECORATIVE TIMBER RAIL

DESCRIPTION:

The Contractor shall furnish and install decorative timber rail as shown in the Contract Documents at the locations shown and where directed by the Engineer.

MATERIALS:

General:

1. *Steel Rails and Hardware.* Steel rails, steel back-up plates, splice plates, and all accessory components and hardware shall be fabricated as shown on the plans. Bolt holes, as necessary, may be enlarged or slotted to permit expansion and contraction and to facilitate erection. The steel rails and steel plates shall be straight and of uniform section.

The steel splice plates shall meet the requirements of ASTM A36 and shall be galvanized. No punching, drilling, cutting or welding will be permitted after galvanizing.

Bolts, nuts, washers, and other miscellaneous fasteners and hardware shall conform to ASTM A325 and shall be galvanized.

Certified copies of the test results conducted by the manufacturer of the base metal for the physical and chemical requirements shall be furnished for all steel in the manner and form requested by the Department.

2. *Timber Rails and Posts.* The timber rail and posts shall conform to AASHTO M168. The timber elements shall be fabricated from dry, well seasoned, and dressed rough sawn Douglas Fir, Southern Pine, or other species having a stress grade of at least 1,500 psi.

The rail and block-out elements shall be treated with any one of the following Waterborne Wood Preservatives meeting the requirements of AASHTO M133: Acid Copper Chromate (ACC), Alkaline Copper Quat (ACQ), or Copper Azole (CA). Treatment shall meet the requirements of the American Wood Protection Association (AWPA) Category UC4A.

The following Waterborne Wood Preservatives meeting AASHTO M133 are also acceptable: Micronized Copper Quaternary, Micronized Copper Azole, and Dispersed Copper Azole Type C. Treatment with these products shall meet the requirements of the International Code Council-Evaluation Service, Inc. - Acceptance Criteria AC326.

Minimum net retention for all Waterborne Wood Preservatives shall be as required for material supplied.

A timber post that has a through check, shake, or end split in the same plane as, or a plane parallel to the bolt hole and extending from the top of the post to within 3 inches of the bolt hole will be rejected

3. *Concrete.* Cast in place concrete shall meet the requirements specified for Class A Concrete in Section 501 "Portland Cement Concrete - General." Precast concrete units shall meet the

ITEM 607.96010010 – DECORATIVE TIMBER RAIL

requirements of Subsection 704-03 "Precast Concrete - General." The requirement for a Department approved, automated concrete batch plant does not apply.

4. *Galvanizing.* Galvanizing shall conform to Subsection 719-01. Galvanizing shall be Type 1, except for hardware which shall be Type 2.

Basis of Acceptance. The Contractor shall supply manufacturer certification that all materials are of the type, quality and treatment level specified.

CONSTRUCTION DETAILS:

Decorative timber rail shall be installed as indicated in the Contract Documents.

Wood posts shall be placed by excavating or by using vibratory driving or impact driving equipment approved by the Engineer. Post driving will be permitted only if alignment and grade tolerances are met and providing no damage is done to the posts during installation. Damaged or misaligned posts shall be removed and replaced by the Contractor as directed by the Engineer. To facilitate driving, the base of the wood posts may be tapered.

Post and anchor excavations shall be backfilled, and backfilled material compacted in accordance with Subsection 203-3.15 "Fill and Backfill at Structures, Culverts, Pipes, Conduits and Direct Burial Cables."

All posts shall be aligned to a tolerance of ¼ inch for plumb and grade line.

The timber rails shall be field cut to produce a fit at the joints as indicated on the plans or working drawings. Treat field cuts with two (2) coats of Waterborne Wood Preservative in accordance with AWP Standards.

Upon completion of the installation of the timber rail components, the Contractor shall restore the area to its original state to the satisfaction of the Engineer.

METHOD OF MEASUREMENT:

The decorative timber rail will be measured by the number of linear feet, measured along the axis of the rail, installed.

BASIS OF PAYMENT:

The unit price bid for the decorative timber rail shall include the cost of all labor, materials, and equipment necessary to complete the work, including paint, concrete, reinforcement, excavation, backfill, and removal and replacement of damaged or misaligned posts.

ITEM 607.41010010 - TEMPORARY PLASTIC BARRIER FENCE

DESCRIPTION

This work shall consist of furnishing, installing, and maintaining Temporary Plastic Barrier Fences of the type and at the locations shown in the plans or where directed by the Engineer.

MATERIALS

Materials for Temporary Plastic Barrier Fences shall meet the following requirements:

- **Fence:** High-density polyethylene mesh, ultraviolet-stabilized min. 2 years; minimum height 4.0 feet. Color: high-visibility orange or green. When used to protect trees or other vegetation, color shall be high-visibility orange.
- **Posts:** Rigid metal or wood posts, minimum length 6.0 feet.
- **Ties:** Steel wire, #14 gauge or nylon cable ties.
- **Warning signs:** Sheet metal, plastic or other rigid, waterproof material, 1.5 feet by 2.0 feet with 4 inch black letters on a white background. Text shall be: "Protected Site - Keep Out" unless otherwise specified.

CONSTRUCTION DETAILS

Fences shall be erected prior to moving construction equipment onto any area designated for protection.

The line of fences as indicated on the plans shall be staked or marked out on the ground by the Contractor and approved by the Engineer before any fence is installed. Where used for protection of individual trees, fence shall be placed at the drip line (extent of canopy). If not possible, placement shall be as close to the drip line as possible and in no case less than 5.0 feet away from the tree trunk.

On approval of the stakeout, posts shall be securely driven on 6.0 foot-maximum centers, normal to the ground, to a depth 1/3 of the total post length. Plastic barrier fence shall be placed along the side of all posts. Ends of fencing segments shall overlap a distance of at least one half the fence height.

Fencing shall be secured to posts with wire or cable ties at top, middle and bottom of post. Fastener shall be tight enough to prevent the fencing from slipping down. Overlaps shall also be securely fastened.

Barrier fence which is not orange in color shall be flagged at 6.0 foot intervals with red or orange florescent tape. Warning signs shall be mounted on the fence at no more than 100 foot intervals.

Maintenance shall commence immediately after erection of the fence and continue until one week prior to acceptance of the contract, and shall consist of: replacing damaged post(s) and fencing; re-fastening and tightening fencing; and restoring fence to its intended height.

Fencing used for tree or other vegetation protection shall not be temporarily removed to allow equipment access over a protected area, except as required for items of work specifically shown on the plans and approved by the Engineer in writing.

ITEM 607.41010010 - TEMPORARY PLASTIC BARRIER FENCE

METHOD OF MEASUREMENT

The quantity to be measured for payment will be the number of feet of Temporary Plastic Barrier Fence erected, measured along the top, to the nearest whole foot.

BASIS OF PAYMENT

The unit price bid shall include the cost of all labor, materials and equipment necessary to satisfactorily complete the work. Relocation of a fence from one location to another as directed by the Engineer shall be considered as a new location and will be separately paid.

Seventy percent (70%) of the price bid will be paid after satisfactory installation of the fence. The remaining Thirty percent (30%) will be paid after complete removal of the fence.

ITEM 607.92060008 - STOCKADE FENCE 6' HIGH

ITEM 607.92080008 - STOCKADE FENCE 8' HIGH

DESCRIPTION

This work shall consist of furnishing and installing a stockade fence including posts, concrete footings and component parts, as indicated on the plans and as directed by the Engineer.

MATERIALS

The fence shall be made of wood, either northern white cedar (number 1 grade - untreated), southern yellow pine (pressure treated and stained) or spruce (pressure treated and stained) as shown on the plans.

Wood rails, posts and pickets shall be the size specified on the plans and in accordance with Section 712-13 of the Standard Specifications. Wood rails will be doweled into the posts. Wood pickets will be nailed to the rails.

The southern yellow pine and spruce shall be treated in accordance with Section 708-31, Wood Preservative - waterborne, and stained with an approved oil based stain to the satisfaction of the Engineer.

Nails shall be galvanized in accordance with Section 719-01, Galvanized Coating and Repair Methods.

Concrete shall be in accordance with Section 501, Portland Cement Concrete.

CONSTRUCTION DETAILS

All posts shall be set vertically and to the required grade and alignment.

Fence shall generally follow the contour of the ground. Grading shall be performed where necessary to provide a neat appearance.

Posts shall be spaced as shown on the plans or as directed by the Engineer.

The contractor shall submit five copies of Manufacturer's Shop Drawings to the Engineer for approval. These drawings shall be submitted at least ten working days prior to the date the contractor orders materials for the fence. The fence materials shall not be shipped to the job site until the shop drawings are approved.

METHOD OF MEASUREMENT

This work will be measured as the number of linear feet measured along the top of the fence center to center of posts which is satisfactorily installed as indicated on the plans or as directed by the Engineer.

BASIS OF PAYMENT

The unit price bid shall include the cost of furnishing all labor, grading, equipment, concrete footings, footing excavation and materials necessary to complete the work.

ITEM 610.16XXNN24 - TURF ESTABLISHMENT – SEED MIX AS SPECIFIED

DESCRIPTION

This work shall consist of furnishing, placing and establishing a turf seed mix at the locations shown in and in accordance with the contract documents as directed by the Engineer.

All information indicated in this specification as being "...as specified in the contract documents" will be contained in a special note titled, "*Turf Establishment – Seed Mix As Specified*" in the contract documents.

MATERIALS

The following sections of the standard specifications shall apply:

Turf Establishment 610-2.03

with the following exceptions:

- the seed mix shall be as specified in the contract documents.

CONSTRUCTION DETAILS

The following sections of the standard specifications shall apply:

Turf Establishment 610-3.03

with the following qualifications:

- The application rate of the seed mix shall be as specified in the contract documents.
- Initial watering shall be a minimum 1" depth of water applied over all seeded areas.
- The acceptance criteria shall be indicated in the contract documents as one of the following:
 - §610-3.03 A. **Turf Establishment – Roadside**, or
 - §610-3.03 B. **Turf Establishment – Lawns**, or
 - **Turf Establishment – Mowing not Included**. Areas will be accepted when:
 - free from thin or bare ground greater than one foot in diameter,
 - ground surface is covered with established specified permanent turf species at a uniform density of at least eighty percent (80%),
 - turf growth height of at least eight inches (8"), and
 - turf exhibits healthy green color.
 - **Turf Establishment – Permit Requirements**. Areas will be accepted when:
 - free from thin or bare ground greater than one foot in diameter or compliant with permit requirements,
 - the ground surface is covered with established specified permanent vegetative species at a uniform density of at least eight percent (8%), or compliant with permit requirements,
 - compliant with permit conditions not listed here, and
 - determined healthy (visual inspection) as indicated by color and vigorous growth.

ITEM 610.16XXNN24 - TURF ESTABLISHMENT – SEED MIX AS SPECIFIED

METHOD OF MEASUREMENT

The work will be measured as the number of square yards on slope to the nearest whole square yard on slope of turf seed mix furnished, placed and established.

BASIS OF PAYMENT

The unit price bid for turf establishment - seed mix as specified shall include the cost of all labor, materials and equipment including initial water, mulch and mulch anchorage as necessary to satisfactorily complete the work.

Where:

XX indicates the region using the specification (e.g. 05 for Region 5; 10 for Region 10), and NN is a serialization for each unique turf seed mix established using this specification.

ITEM 615.1001NN08 - KIOSK STRUCTURE (NOT MANUFACTURED)

DESCRIPTION

This work shall consist of furnishing materials for, assembling and installing a kiosk structure in accordance with the contract documents and as directed by the Engineer.

Material and construction detail specifications for the kiosk structure are included in the contract documents.

“Not Manufactured” means that the material and construction specifications do not include a listing of, or any reference to, kiosk manufacturers (one or multiple), proprietary products or proprietary construction methods in any contract notes, the kiosk details, or in any other location(s) in the contract documents.

MATERIALS

All materials shall conform to the specifications indicated in the contract documents.

CONSTRUCTION DETAILS

Kiosk Structures shall be constructed according to, and at the locations shown in, the contract documents.

Shop Drawings:

Appropriate kiosk shop drawings shall include, but be not limited to, details on the kiosk structure, foundation, hardware, fastening and signage. The shop drawings shall meet the specifications (material and construction) in the contract documents.

Kiosk shop drawings shall be submitted for approval **at least fourteen (14) days BEFORE** the Contractor begins constructing the kiosk, unless otherwise specified

Written approval is required prior commencing work on the kiosk.

METHOD OF MEASUREMENT

This work will be measured as the number of each kiosk structure satisfactorily constructed in accordance with the contract documents.

BASIS OF PAYMENT

The unit price bid shall include the cost of furnishing all labor, materials, and equipment necessary to satisfactorily complete the work.

The message board cabinet (if specified) and all associated connection hardware will be paid for separately.

ITEM 615.1001NN08 - KIOSK STRUCTURE (NOT MANUFACTURED)

Where NN is the serialization of unique kiosks installed per contract. For example, a contract with three unique types of kiosks would contain the following pay item numbers:

<u>PAY ITEM</u>	<u>ITEM DESCRIPTION</u>	<u>PAY UNIT</u>
615.10010108	Kiosk (Not Manufactured) – Type 1	EACH
615.10010208	Kiosk (Not Manufactured) – Type 2	EACH
615.10010308	Kiosk (Not Manufactured) – Type 3	EACH

Quantities for each pay item (Kiosk) may exceed one (1) in the same contract (i.e. when multiple kiosks of one type are required). The serialization is used to distinguish between different kiosk types, which may impact acquisition and installation costs.

ITEM 623.12010001 – CRUSHED STONE STABILIZATION COURSE FOR POROUS ASPHALT
ITEM 623.12020001 – CRUSHED STONE RESERVOIR COURSE FOR POROUS ASPHALT

DESCRIPTION:

The work shall consist of providing and placing, in accordance with the contract documents, clean, washed, uniformly graded crushed stone.

MATERIALS:

Materials shall consist of Crushed Stone that meets the requirements of Section 703-02 COARSE AGGREGATE in the NYSDOT Standard Specifications. The source must be listed under “stone” on the current Approved List of Fine and Coarse Aggregates, which is published on the NYSDOT web site. Material shall consist of clean, washed, durable, sharp-angled fragments of rock of uniform quality and size.

GRADATION:

Material shall be graded in accordance with size designations shown in Table 703-4 from the NYSDOT Standard Specifications.

Stabilization Course – Size Designation No. 2

Reservoir Course - Size Designation No. 4A

TABLE 703-4⁽¹⁾ SIZES OF STONE, GRAVEL AND SLAG											
Size Designation	Screen Sizes										
	4 in	3 in	2 1/2 in	2 in	1 1/2 in	1 in	1/2 in	1/4 in	1/8 in	# 80	#200⁽³⁾
Screenings ⁽²⁾	-	-	-	-	-	-	100	90-100	-	-	0-1.0
1B	-	-	-	-	-	-	-	100	90-100	0-15	0-1.0
1A	-	-	-	-	-	-	100	90-100	0-15	-	0-1.0
1ST	-	-	-	-	-	-	100	0-15	-	-	0-1.0
1	-	-	-	-	-	100	90-100	0-15	-	-	0-1.0
2	-	-	-	-	100	90-100	0-15	-	-	-	0-1.0
3A	-	-	-	100	90-100	0-15	-	-	-	-	0-0.7
3	-	-	100	90-100	35-70	0-15	-	-	-	-	0-0.7
4A	-	100	90-100	-	0-20	-	-	-	-	-	0-0.7
4	100	90-100	-	0-15	-	-	-	-	-	-	0-0.7
5	90-100	0-15	-	-	-	-	-	-	-	-	0-0.7

(1)Percentage by weight passing the following square openings.

(2)Screenings shall include all of the fine material passing a 1/4 in. screen.

ITEM 623.12010001 – CRUSHED STONE STABILIZATION COURSE FOR POROUS ASPHALT
ITEM 623.12020001 – CRUSHED STONE RESERVOIR COURSE FOR POROUS ASPHALT

CONSTRUCTION DETAILS:

Material shall be placed in locations and thickness identified in the plans, uniformly leveled and moderately compacted in lifts not greater than 8” with a non-vibratory “dirt roller” only to properly orientate the stone. Only minor vibratory compaction using a plate tamper is allowed after a minimum of 8” of stone is placed and with prior approval from the engineer.

Material must be smooth and level prior to asphalt course or reservoir stone overlay. If the stone becomes displaced or rutted, a non-vibratory “dirt roller” may be used to level the stone layer prior to asphalt placement or to smooth ruts that may be made by asphalt delivery vehicles loading the paver or other construction vehicles.

METHOD OF MEASUREMENT:

The quantity shall be the number of cubic yards of material, placed and compacted in its final position, computed from payment lines shown on the plans, or where changes have been ordered, from payment lines established in writing by the Engineer.

BASIS OF PAYMENT:

The unit price bid for this work shall include the cost of furnishing all labor, material and equipment necessary to complete the work.

**ITEM 675.0100023 - TRACK REMOVAL, MATERIAL RETAINED BY
CONTRACTOR/RAILROAD**

Description:

The work shall consist of dismantling and removing the existing track structure where indicated in the contract documents or where directed by the Engineer. The materials removed shall become or remain the property of either the Contractor or Railroad as indicated on the plans or in the proposal.

Material

None required.

Construction Details

The Contractor shall dismantle the track in an efficient and workmanlike manner. Care shall be taken so as not to damage any other track structure not designated for removal.

Material to be dismantled includes: anchors, spikes and all other rail fastening devices, bolts/nuts/washers, joint bars, rail, tie plates and cross ties.

Materials dismantled under this item to remain the property of the Railroad shall be neatly stored in piles by component parts at locations designated for future pickup by Railroad forces.

Materials dismantled under this item not indicated to remain property of the Railroad, shall become the property of the Contractor and be disposed of properly off the project site.

Method of Measurement

This work will be measured as the actual number of linear feet of track removed and disposed of. Measurement will be taken along centerline of tracks.

Basis of Payment

The unit price bid per linear foot shall include the cost of all labor, material and equipment necessary to complete the work.