

## **SECTION S506 – CONCRETE STREET PAVER**

### **S506-1 DESCRIPTION**

Work consists of construction or restoration of an concrete street paver pavement or crosswalk as required in Contract Documents and as directed by Project Manager.

For purposes of this specification, all references are in accordance with *NYSDOT Standard Specifications (US Customary Units dated May 1, 2008)* edition, including any addenda.

### **S506-2 MATERIALS**

#### **S506-2.01 General**

Concrete street pavers are to be precast, and provided in colors as specified within Contract Documents. Contractor is to provide type written certification that concrete street pavers meet or exceed minimum standards, and have passed all required tests.

Color of concrete street pavers must be such that end result of finished product visually provides surface which is uniform in color over entire surface area, and which is an approximate match to specified color designation. Concrete street pavers are to be constructed with required color being uniformly incorporated into and throughout concrete mix during precast process.

For restoration of an existing concrete street paver pavement, replacement concrete street pavers must conform in shape, size and color to existing concrete street pavers.

#### **S506-2.02 Norton Street Stadium District**

##### **A. Concrete Street Paver**

Concrete street pavers are to be interlocking paver as manufactured by Unilock, or approved equivalent. Concrete street paver units are to have nominal thickness of 3-1/8 inches, with units being salmon or grey in color.

##### **B. Edge Restraint**

Edge restraint is to consist of Class A concrete with #4 epoxy coated bar reinforcement in accordance with NYSDOT Sections 555 Structural Concrete and 556 Reinforcing Steel for Concrete Structures.

##### **C. Prime Coat**

Prime coat is to be an asphalt emulsion in accordance with Table 702-9 of NYSDOT Section 702 Bituminous Materials.

#### **S506-2.03 Concrete Street Paver for Crosswalk**

##### **A. Concrete Street Paver for Crosswalk**

Concrete street pavers for crosswalk are to be Unilock Hollandstone heavy-duty paver, Wausau Terra-Lok Holland paver, or approved equivalent. Concrete street pavers for crosswalk are to be 4 inches x 8 inches x 3-1/8 inches thick, with units being terra cotta in color.

Concrete street pavers for crosswalk are to meet or exceed following criteria:

| Test                   | ASTM Test Criteria    | Minimum Acceptable Criteria                                             |
|------------------------|-----------------------|-------------------------------------------------------------------------|
| Compressive Strength   | ASTM C140 – Section 5 | 8,000 psi average with no sample less than 7,200 psi                    |
| Modulus of Rupture     | ASTM C67 – Section 5  | 850 psi average of sample                                               |
| Water Absorption       | ASTM C140 – Section 6 | 5% average with no sample greater than 7%                               |
| Freeze/Thaw Resistance | ASTM C67 – Section 8  | No breakage of any sample less than 1% loss of dry weight of any sample |
| Surface Imperfections  | -                     | Less than 1/8 inch across width of paver                                |

**B. Concrete Cradle**

Concrete cradle is to consist of Class E or Class F concrete in accordance with NYSDOT Sections 501 Portland Cement Concrete - General and 502 Portland Cement Concrete Pavement.

**C. Underdrain Pipe and Underdrain Filter Material**

Underdrain pipe and underdrain filter material is to be in accordance with Section S605 Underdrain, with underdrain pipe being 4 inch corrugated polyethylene.

**D. Concrete Sealer**

Concrete sealer is to be pentane 40 as manufactured by L & M Construction Chemicals, Inc., or approved equivalent.

**E. Joint Backing - Bond Breaker**

Joints are to be backed by round polyurethane foam, closed-cell polyethylene, non-bleeding neoprene or butyl rod under minimum 25 percent compression.

**F. Joint Sealer**

Joint sealer is to be Dymeric 511 as manufactured by Tremco, or approved equivalent. Color of joint sealer is to match color of precast concrete paver.

**S506-2.04 Bedding Sand**

Bedding sand is to be natural or manufactured from crushed rock, clean, non-plastic, free from deleterious or foreign matter, and in accordance with grading requirements of ASTM C 33.

**S506-2.05 Caulking Sealant**

Caulking sealant is to be one component polyurethane self leveling sealant such as Sonneborn Sonolastic SL 1 as manufactured by ChemRex Incorporated, or approved equivalent. Color of caulk is to be such as to blend in with surrounding elements.

**S506-2.06 Crushed Stone**

Crushed stone is to be Subbase Course Type 2 in accordance with NYSDOT Section 304 Subbase Course.

**S506-2.07 Curing Compound**

Curing compound is to be West Concrete Floor Treatment as manufactured by West Chemical Products, Incorporated, or Penetryn Company; or Resiweld Bonding Compound #69 as manufactured by H.B. Fuller Company; or approved equivalent.

**S506-2.08 Gravel**

Gravel is to be Subbase Course Type 1 in accordance with NYSDOT Section 304 Subbase Course.

### **S506-2.09 Geotextile Fabric**

Geotextile fabric is to be high density asphalt mastic sandwiched between two layers of nonwoven polyester fabric in accordance with Section R207 Pavement Fabric.

### **S506-2.10 Hardwood Shim**

Hardwood shims are to be made from any species of tree that has very dense heavy wood and specific gravity in excess of 0.60.

### **S506-2.11 Joint Sand**

Joint sand for filling joints is to be Unilock polymeric jointing sand as manufactured by Unilock, or approved equivalent.

### **S506-2.12 Setting Bed**

Setting bed is to be washed 1A coarse aggregate in accordance with NYSDOT Section 703-02 Coarse Aggregate, and after washing is to meet following gradation requirements:

| Screen Size | Percent Passing by Weight |
|-------------|---------------------------|
| 1/2 inch    | 100%                      |
| 1/4 inch    | 90 to 100%                |
| 1/8 inch    | 0%                        |

At least 5 working days prior to placement, submit 5 pound bag of setting bed material to Project Manager and City Street Design Division for approval.

## **S506-3 CONSTRUCTION DETAILS**

### **S506-3.01 General**

Concrete street paver pavement is to be constructed in accordance with required pattern and joints. Concrete street pavers are to be laid in straight courses with hand tight joints. After construction of pavement section, pavement surface is to be level and true to surrounding cross-slope and grade, without any irregularities or low areas that may tend to pond water.

Concrete street pavers are to be handled as carefully as possible during all operations so as to minimize any spalling or other damage from occurring.

Concrete street pavers may be stock piled on site in location that provides level ground surface, and that is relatively safe and secure from accidental damage by Contractor's ongoing operations, and from vandalism, theft or other mishap. Stock pile is to be thoroughly and securely covered as precaution to prevent mud, dirt or other extraneous material from collecting on and adhering to concrete street pavers. If necessary, concrete street pavers are to be thoroughly cleaned of all mud, dirt or other extraneous material immediately before being used in work. Work is to be phased so as to reduce to minimum amount of time concrete street pavers are to be stock piled.

Pavement section is to be constructed such that maximum number of concrete street pavers as possible can be installed as whole pieces. Cutting of concrete street pavers is to be kept to absolute minimum as practical. Cutting straight edges on concrete street pavers is to be done with water cooled radial cut-off type masonry saw to obtain sharp, straight edge. Cutting circular edges on concrete street pavers is to be done with concrete hole saw which produces sharp circular edge.

Concrete street pavers placed adjacent to appurtenances are to be cut such that gap between edge of concrete street paver and appurtenance does not exceed 1/4 inch, with resultant gap being completely filled with joint sand. Continue to replace any cut concrete street pavers that produce gaps greater than 1/4 inch with another cut piece, until required maximum gap of 1/4 inch has been achieved.

Concrete street pavers are not to be laid or grouted when ambient air temperature is under 40°F.

After all concrete street pavers have been installed, all joints and other gaps are to be completely filled with joint sand. As joint sand is polymeric jointing sand material, surface of concrete street pavers must be completely dry as moisture will activate binder agent of polymeric jointing sand material. Cover entire surface area with joint sand. With broom, sweep joint sand over and into all joints and gaps until they are filled solid. Sweep entire surface clean removing all excess joint sand. Compact overall area, repeating process until all joints and gaps are filled solid with joint sand. Lightly moisten joint sand material several times at 5 to 10 minute intervals with water gradually moistening entire depth of joint and gaps.

### **S506-3.02 Existing Concrete Street Paver Pavement Restoration - General**

Existing concrete street pavers that have been removed and are to be reused, must be in good sound condition, solid, without being cracked, chipped, spalled, or have any other form of deterioration.

Before beginning construction, existing concrete street pavers are to be inspected for any obvious pre-existing damage such as being cracked, chipped, spalled, or exhibit any other form of visual deterioration. Project Manager will determine which of existing concrete street pavers are not suitable for reuse, and that must be replaced with new concrete street pavers.

Existing concrete street pavers are to be removed in full pieces only, they are not to be saw cut. If required by Project Manager, existing concrete street pavers are to be redressed to provide for good fit before being reused.

Caution is to be taken when removing existing concrete street pavers so that any negligent damage will be kept to minimum. After removal, existing concrete street pavers are to be cleaned of all extraneous material in such manner as to be non-deleterious to existing concrete street paver. Removal and cleaning of existing precast concrete street pavers is to be done such that overall structural integrity of existing precast concrete street pavers is maintained.

In areas of partial pavement replacement and where pavement section consists of concrete foundation, after existing concrete street pavers have been removed, outer limits of pavement area to be removed are to be saw cut full depth with concrete saw.

### **S506-3.03 Norton Street Stadium District**

Concrete street paver pavement consists of concrete street paver units laid on layer of bedding sand, with underlying prime coat, on successive layers of crushed stone and gravel, all supported by geotextile fabric.

Concrete street pavers are to be laid in herringbone bond pattern, on layer of bedding sand. Bedding sand is to be thoroughly compacted to nominal thickness of 1-7/8 inch after compaction. Bedding sand is to be placed over compacted 8 inch layer of crushed stone, over compacted 14 inch layer of gravel, on top of geotextile fabric. Prime coat of asphalt emulsion is to be placed on top of crushed stone before placing bedding sand. Prime coat is to completely cover and saturate surface of crushed stone.

Existing edge restraint system consists of 6 inch wide Class A concrete with #4 epoxy coated bar reinforcement. For replacement of portion of existing edge restraint system, saw cut existing edge restraint system full depth, remove and properly dispose of excavated materials. New edge restraint is to be constructed of reinforced Class A concrete in accordance with NYSDOT Sections 555 Structural Concrete and 556 Reinforcing Steel for Concrete Structures.

New edge restraint system is to be tied into existing edge restraint with #5 dowels. Pair of dowels is to be provided for each outer edge 9 inches apart, and are to extend 12 inches into both existing and new concrete edge restraint system. Core 7/8 inch diameter hole into existing concrete edge restraint 12 inches deep, install dowel and completely fill any void with non-sag epoxy.

Top of concrete is to be level and true to surrounding pavement cross-slope and grade, un-textured with tooled edges and broom finished. Face of concrete edge restraint abutting concrete street pavers is to be straight and true both horizontally and vertically with no variations greater than 1/8 inch as measured from minimum 10 foot long straightedge being placed along face of concrete.

Longitudinal forms to be used for constructing inner face of concrete edge restraint must be tightly locked and free from any play or movement in any direction. If necessary, cross braces are to be provided every 3 to 5 feet to prevent any movement and springing of forms from occurring due to impact and pressure of concrete. Alignment and grade elevations of forms are to be checked and any corrections made immediately before placing concrete.

#### **S506-3.04 Precast Concrete Paver for Crosswalk**

Crosswalk shall consist of precast concrete paver units laid on a compacted bed of a setting bed material, over a concrete cradle, with weep holes and an underlying underdrain system.

When constructing a crosswalk within an existing pavement section, 2 feet of existing pavement along both sides of crosswalk area shall be removed and replaced. Existing pavement shall be saw cut to depth required for construction of crosswalk, and pavement materials removed and properly disposed of. Base of pavement section shall be restored with Class C concrete to within 2 inches of finished grade, tack coat applied, then resurfaced with 2 inches of asphalt concrete Type 7F top course. Joint between existing pavement section and reconstructed pavement section shall be sealed with NYSDOT Material Designation 702-0700.

After excavation for crosswalk area, subgrade shall be graded and thoroughly compacted to 98 percent of Modified Proctor Density.

Appurtenances (i.e.: manholes, catch basins, valve boxes, handholes, or monument frames and covers) that are encountered within crosswalk area, are to be brought to finished grade and a 9 inch wide concrete collar consisting of either Class E or Class F concrete constructed around appurtenance before commencing construction of crosswalk.

Underdrain pipe and filter material shall be installed in accordance with the requirements of Section S605 Underdrain. Underdrain pipe shall be connected to an existing or new underdrain pipe at curb line. If an underdrain pipe does not exist at curb line, and there is an existing catch basin within 30 feet of outer edge of concrete cradle, continue installation of underdrain pipe along curb line and connect to existing catch basin. If there isn't an existing catch basin within designated 30 feet, install underdrain filter material along curb line for a distance of 5 feet either side of outer edge of concrete cradle.

Concrete cradle shall be constructed of either Class E or Class F concrete in accordance with requirements of NYSDOT Sections 501 Portland Cement Concrete - General and 502 Portland Cement Concrete Pavement. Top of concrete cradle shall be level and true to surrounding pavement cross-slope and grade, untextured with tooled edges and broom finished. Face of inner wall of concrete collar shall be straight and true both horizontally and vertically with no variations greater than 1/8 inch as measured from a minimum 10 foot long straightedge being placed along face of inner wall.

Longitudinal forms to be used for constructing inner wall portion of concrete collar must be tightly locked and free from any play or movement in any direction. If necessary, cross braces shall be provided every 3 to 5 feet to prevent any movement and springing of forms from occurring due to impact and pressure of concrete. Alignment and grade elevations of forms shall be checked and any corrections made immediately before placing concrete.

Weep holes shall be provided thru base of concrete cradle and into underdrain filter material, along inner edges of concrete cradle and along curb line. Weep holes shall be 2 inches in diameter, equally spaced between 3 and 4 feet on center, and installed by either coring weep holes after concrete has set up, or installing 2 inch schedule 40 PVC drain pipes prior to pouring concrete. If PVC drain pipes are to be used, PVC drain pipes are to extend thru and above base area of concrete cradle and are to be thoroughly supported so they remain plumb until concrete has set up. After concrete has set up, top of PVC drain pipes shall be cut off flush with base area of concrete cradle. Weep holes are to be thoroughly cleaned out of all cuttings and fines, then flooded with water. After weep holes have been cleaned out, fill completely fill with setting bed material.

Setting bed material shall be placed within concrete cradle and thoroughly compacted to nominal thickness of 3/4 inch after compaction, moist but not saturated, with a uniformly even surface.

Individual precast concrete pavers shall be placed by hand on compacted setting bed material in a herringbone pattern, laid in straight courses with hand tight joints, and after compaction are to be level and true to surrounding pavement cross-slope and grade. Precast concrete pavers shall be tamped down and leveled with mechanical vibrator to be true to grade and free of any movement.

Precast concrete pavers shall be placed in a herringbone pattern, commence by placing a full uncut precast concrete paver unit tightly against outer edge of crosswalk area and immediately adjacent to crown line of pavement. Continue placing successive full uncut precast concrete pavers working inward towards intersection, and outward towards curb line. With exception of placing precast concrete pavers around appurtenances, only final row of precast concrete pavers which are placed adjacent to curb line should be cut.

Final row of precast concrete pavers placed adjacent to curb line shall be cut such that gap between edge of precast concrete pavers and face of curb does not exceed 1/4 inch. Gap between edge of precast concrete pavers and face of curb shall be filled with premoulded joint material. Cut precast concrete pavers which produce a gap larger than 1/4 inch shall be replaced with another cut precast concrete paver that achieves required maximum 1/4 inch gap.

Fill any gap between edge of precast concrete pavers and inner edge of crosswalk area that is 3/4 inch or greater with sawn full length pieces of precast concrete paver. Fill any gap between edge of precast concrete pavers and inner edge of crosswalk area that is less than 3/4 inch with hardwood shims.

Precast concrete pavers adjacent to concrete collar around an appurtenance shall be cut such that gap between edge of precast concrete pavers and edge of concrete collar does not exceed 1/4 inch. Gap between edge of precast concrete pavers and edge of concrete collar shall be filled with joint backing and joint sealer. Cut precast concrete pavers which produce a gap larger than 1/4 inch shall be replaced with another cut precast concrete paver that achieves required maximum 1/4 inch gap.

Cutting straight edges on precast concrete pavers shall be done with a water cooled radial cut-off type masonry saw to obtain a sharp, straight edge. Cutting circular edges on precast concrete pavers shall be done with a concrete hole saw which produces a sharp circular edge.

Before applying polymeric jointing sand material, surface of concrete pavers must be completely dry as moisture will activate binder agent of polymeric jointing sand. Cover area with polymeric jointing sand. With broom, sweep polymeric jointing sand over and into all joints until joints are filled solid. Sweep entire surface clean removing all excess polymeric jointing sand material. Compact overall area, repeating process until joints are filled solid with polymeric jointing sand. Lightly moisten polymeric jointing sand material several times at a 5 to 10 minute interval with water gradually moistening entire depth of joint.

A 12 inch wide white overlaid pavement stripe shall be installed along both sides of outer edge of concrete cradle.

*Performance Standards.* After precast concrete pavers have been installed and compacted, overall level of entire top of crosswalk area shall be checked for proper alignment. Place straightedge which is at least 10 feet long across top of precast concrete pavers resting both ends on top of concrete cradle. Any portion of top of precast concrete pavers shall not vary by more than 1/4 inch from bottom edge of straightedge. Any area that exceeds required 1/4 inch tolerance range, is to be removed and reconstructed until entire crosswalk area is within required 1/4 inch tolerance.

#### **S506-3.05 Replace Existing Precast Concrete Paver for Crosswalk**

Existing precast concrete pavers that are to be replaced shall be removed and properly disposed of.

If required, existing setting bed material shall be redressed, with additional setting bed material added to fill in any low areas.

New precast concrete pavers shall be installed according to the requirements of Subsection S506-3.11 Precast Concrete Paver for Crosswalk.

### **S506-3.06 Reset Existing Precast Concrete Paver for Crosswalk**

Caution shall be taken in removing existing precast concrete pavers so that there shall be no breakage. Removed precast concrete pavers shall be cleaned of all foreign or extraneous matter. Removal and cleaning of existing precast concrete pavers is to be done such that overall structural integrity of existing precast concrete pavers is maintained. Existing precast concrete pavers shall be stored at a location that is safe from damage, and shall be placed on level ground which will provide even bearing across precast concrete paver surface. Work shall be phased so as to reduce to a minimum the amount of time existing precast concrete pavers are to be stored.

If required, after existing precast concrete pavers have been removed, existing setting bed material and/or concrete cradle shall be removed and properly disposed of, and new setting bed material and/or concrete cradle constructed.

Existing precast concrete pavers shall be reinstalled according to the requirements of Subsection S506-3.11 Precast Concrete Paver for Crosswalk.

### **S506-3.07 Salvage Existing Concrete Street Paver**

Existing concrete street pavers that are to be salvaged, must be in good sound condition, solid, without being cracked, chipped, spalled, or otherwise have any other form of deterioration.

Existing concrete street pavers are to be removed in full pieces only, they are not to be saw cut. Caution is to be taken when removing existing concrete street pavers so that any negligent damage will be kept to minimum. After removal, existing concrete street pavers are to be cleaned of all extraneous material in such manner as to be non-deleterious to existing concrete street paver. Removal and cleaning of existing precast concrete street pavers is to be done such that overall structural integrity of existing precast concrete street pavers is maintained.

Salvaged concrete street pavers are to be delivered to City's Street Maintenance Division, 945 Mt. Read Blvd., Rochester, New York, (585) 428-7479. Before delivery, City Street Maintenance Division is to be notified at least 2 working days in advance.

When delivered, salvaged concrete street pavers are to be stacked neatly and orderly at location designated by City's Street Maintenance Division. Successive layers of stacked concrete street pavers are to be separated into with 2 by 2 wooden sticker strips.

If required, after existing concrete street pavers have been removed, existing underlying pavement section materials are to be removed and properly disposed of

### **S506-3.08 Setting Bed Material**

Setting bed material is to be placed and thoroughly compacted to required thickness after compaction, moist but not saturated, with uniformly even surface.

### **S506-3.09 Replace Existing Setting Bed Material**

After existing concrete street pavers have been removed, existing setting bed material is to be removed and properly disposed of. If necessary, re-grade existing subgrade. New setting bed material is to be placed and thoroughly compacted to required thickness after compaction, moist but not saturated, with uniformly even surface.

## **S506-4 METHOD OF MEASUREMENT**

### **S506-4.01 Concrete Street Paver**

Quantity to be measured for payment will be number of square feet of concrete street paver pavement or concrete crosswalk paver constructed or restored, or existing concrete street pavers replaced, reset or salvaged.

#### **S506-4.02 Edge Restraint and Concrete Cradle**

Quantity to be measured for payment will be number of linear feet or cubic yards of edge restraint installed or replaced.

#### **S506-4.03 Bedding Sand and Setting Bed Material**

Quantity to be measured for payment will be number of cubic yards of bedding sand or setting bed material installed or replaced.

Measurement will be based on number of cubic yards of material placed and compacted, as measured in completed work within payment lines.

### **S506-5 BASIS OF PAYMENT**

#### **S506-5.01 General All Items**

Unit price bid for all items includes cost of: protection of work from damage, vandalism or other mishap; preparation of subgrade; water; saw cutting; furnishing, installing and maintaining barricades; site cleanup; and furnishing all labor, material and equipment necessary to complete work.

Unless otherwise noted under specific Basis of Payment requirements, cost of all excavation will be paid for under separate bid items.

Furnishing and placing of temporary pavement, crushed stone and gravel subbase materials, restoration of adjacent areas, and adjustment of all existing utility appurtenances will be paid for under separate bid items.

Restoration of adjacent areas; adjustment of all existing or new appurtenances such as areaway/vault frames and covers, areaway/vault frames and hatchway doors, window well frames and grates, monument frames and covers, utility valve box frames and covers, utility manhole/handhole/pullbox frames and covers, et cetera; shall be paid for under separate bid items.

#### **S506-5.02 Existing Concrete Street Paver Pavement Restoration**

Unit price bid also includes cost of: pre-construction inspection of condition of existing concrete street pavers; removing, salvaging, storing, redressing, cutting, cleaning, and resetting concrete street pavers; replacement of existing concrete street pavers damaged by Contractor's operations; joint sand; bedding sand; prime coat; geotextile fabric; and installing new concrete street pavers.

Furnishing new concrete street pavers for replacement of existing concrete street pavers that have pre-construction damage, will be paid for under separate bid items.

Removal of existing edge restraint system, furnishing and installing new edge restraint system will be paid for under separate bid items.

#### **S506-5.03 Replace Existing Edge Restraint – Norton Street Stadium District**

Unit price bid also includes cost of: removing and disposing existing edge restraint system; furnishing and installing new edge restraint system; concrete; epoxy coated bar reinforcement; dowels; coring; and non-sag epoxy;

#### **S506-5.04 Replace Existing Concrete Street Paver**

Unit price bid also includes cost of: furnishing new concrete street pavers for replacement of existing concrete street pavers that have pre-construction damage.

Installation of new concrete street pavers for replacement of existing concrete street pavers that have pre-construction damage, will be paid for under separate bid items.



#### **S506-5.05 Precast Concrete Paver for Crosswalk**

The unit price bid shall also include the cost of: excavation; grading and compacting subgrade; furnishing and installing precast concrete pavers, setting bed material, concrete cradle, cored or PVC weep holes, underdrain pipe, underdrain filter material, polymeric jointing sand; cutting precast concrete pavers; cleaning, flooding and filling weep holes; finishing concrete, forms, curing compounds, brooming, polyethylene or curing blankets, concrete sealer, joint backing - bond breaker, joint sealer, premoulded bituminous joint filler, hardwood shims; caulking sealant; joints; patterning; quality control; and furnishing, placing, maintaining and removing temporary access.

Removal and replacement of adjacent pavement section when constructing precast concrete paver crosswalk within an existing pavement section, including excavation and full depth pavement saw cutting, shall be included in the unit price bid for Item S506.43 Precast Concrete Paver for Crosswalk (Existing Pavement).

Adjustment of all existing appurtenances, including construction of concrete collar, shall be paid for under separate bid items.

Furnishing and installation of pavement striping shall be paid for under separate bid items.

Furnishing, installing and connecting additional underdrain pipe and/or underdrain filter material along curb line shall be paid for under separate bid items.

Removal and replacement of existing pavement section that is required for additional installation of underdrain pipe and/or underdrain filter material along curb line and outside of the crosswalk area, including excavation and full depth pavement saw cutting, shall be paid for under separate bid items.

Excavation that is included in the pay item does not include rock excavation. Rock excavation will be paid for under separate bid item.

#### **S506-5.06 Replace Existing Precast Concrete Paver for Crosswalk**

The unit price bid shall also include the cost of: removing and disposing existing precast concrete pavers; furnishing, cutting and installing new precast concrete pavers; redressing existing bedding material; polymeric jointing sand; joint backing - bond breaker, joint sealer, premoulded bituminous joint filler, hardwood shims; caulking sealant; joints; patterning; quality control; and furnishing, placing, maintaining and removing temporary access.

Removal and replacement of existing bedding material and/or foundation shall be paid for under separate bid items.

#### **S506-5.07 Reset Existing Precast Concrete Paver for Crosswalk**

The unit price bid shall also include the cost of: removing, cleaning, storing, cutting and resetting existing precast concrete pavers; cleaning; redressing existing bedding material; polymeric jointing sand; joint backing - bond breaker, joint sealer, premoulded bituminous joint filler; hardwood shims; caulking sealant; joints; patterning; quality control; and furnishing, placing, maintaining and removing temporary access.

Removal and replacement of existing bedding material and/or foundation shall be paid for under separate bid items.

#### **S506-5.08 Setting Bed Material**

The unit price bid shall also include the cost of: furnishing, placing and compacting new setting bed material.

#### **S506-5.09 Replace Existing Setting Bed Material**

The unit price bid shall also include the cost of: removing and disposing existing bedding material; preparing existing subgrade; furnishing, placing and compacting new setting bed material.

Payment will be made under:

| ITEM NO.  | ITEM                                                                                                                                            | PAY UNIT    |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| S506.0101 | New Concrete Street Paver Pavement                                                                                                              | Square Foot |
| S506.0102 | Existing Concrete Street Paver Pavement Restoration                                                                                             | Square Foot |
| S506.0103 | Existing Concrete Street Paver Pavement Restoration -<br>with Replacement Concrete Street Paver (Furnished)                                     | Square Foot |
| S506.0104 | Replace Existing Concrete Street Paver for Pavement                                                                                             | Square Foot |
| S506.0105 | Replace Existing Concrete Street Paver for Pavement (Furnished)                                                                                 | Square Foot |
| S506.0106 | Reset Existing Concrete Street Paver for Pavement                                                                                               | Square Foot |
| S506.0107 | New Edge Restraint for Concrete Street Paver Pavement                                                                                           | Linear Foot |
| S506.0108 | Replace Existing Edge Restraint for Concrete Street Paver<br>Pavement                                                                           | Linear Foot |
| S506.0201 | Existing Concrete Street Paver Pavement Restoration -<br>Norton Street Stadium District                                                         | Square Foot |
| S506.0202 | Existing Concrete Street Paver Pavement Restoration -<br>with Replacement Concrete Street Paver (Furnished) -<br>Norton Street Stadium District | Square Foot |
| S506.0203 | Replace Existing Edge Restraint – Norton Street Stadium District                                                                                | Linear Foot |
| S506.1001 | New Concrete Street Paver Crosswalk (New Pavement)                                                                                              | Square Foot |
| S506.1002 | New Concrete Street Paver Crosswalk (Existing Pavement)                                                                                         | Square Foot |
| S506.1003 | Existing Concrete Street Paver Crosswalk Restoration                                                                                            | Square Foot |
| S506.1004 | Existing Concrete Street Paver Crosswalk Restoration -<br>with Replacement Concrete Street Paver (Furnished)                                    | Square Foot |
| S506.1005 | Replace Existing Concrete Street Paver for Crosswalk                                                                                            | Square Foot |
| S506.1006 | Replace Existing Concrete Street Paver for Crosswalk (Furnished)                                                                                | Square Foot |
| S506.1007 | Reset Existing Concrete Street Paver for Crosswalk                                                                                              | Square Foot |
| S506.11   | Salvage Existing Concrete Street Paver                                                                                                          | Square Foot |
| S506.1201 | Bedding Sand Material                                                                                                                           | Cubic Yard  |
| S506.1202 | Replace Existing Bedding Sand Material                                                                                                          | Cubic Yard  |
| S506.1301 | Setting Bed Material                                                                                                                            | Cubic Yard  |
| S506.1302 | Replace Existing Setting Bed Material                                                                                                           | Cubic Yard  |

REVISED March 3, 2015