S-1 (2104) REMOVE AND REPLACE BITUMINOUS PAVEMENT (ADA)

Always include SP2014-119 (PLANT MIXED ASPHALT PAVEMENT) or SP2014-121 (PLANT MIXED ASPHALT PAVEMENT FOR ALTERNATE BID when using this pay item and select the appropriate mix type.
SP2014-76

This work shall consist of full depth sawing, removing, and replacing the bituminous surface adjacent to the newly constructed curb and gutter in accordance with MnDOT 2104, 2360, other Contract provisions, and the following:

S-1.1 CONSTRUCTION REQUIREMENTS

The Contractor shall provide a full depth bituminous sawcut at a line that is offset 2 feet from the proposed gutter face as shown in the Plans. This bituminous saw cut shall be performed radially as needed to follow the proposed curb radius. The Contractor shall then remove and dispose of the full depth bituminous between the sawcut and existing curb and gutter. The aggregate base shall be compacted to the satisfaction of the Engineer.

Designer must meet with Materials Engineer and Resident Engineer to determine which option the District would like to use and delete the other option.

Full Depth Bituminous: After the curb and gutter has been constructed, the 2 foot wide void between the gutter face and the existing roadway shall be filled with a bituminous mixture of the same thickness as the adjacent pavement and to a compacted level resulting in the edges/joints between the compacted bituminous and the gutter face/existing bituminous roadway are less than ¼ inch vertically.

Concrete Base with Bituminous Overlay: After the curb and gutter has been constructed, the 2 foot wide void between the gutter face and the existing roadway shall be filled with Concrete Mix No. 3A32 from the bottom of the adjacent existing pavement, then consolidated and struck off at a point 2 inches below the finish grade of the roadway. The remaining 2 inches shall be filled with a bituminous mixture to a compacted level resulting in the edge/joint between the compacted bituminous and the gutter face/existing bituminous roadway is less than ¼ inch vertically.

Compaction shall be obtained with mechanical tampers in areas not accessible to conventional rolling equipment. Compaction shall be achieved to the satisfaction of the Engineer.

The surface slope of the bituminous patch in front of the truncated domes must not exceed 5% measured perpendicular to the flow line or edge of roadway.

Additional Minor Pavement Removal and Replacement

If the Engineer determines that additional pavement removal is necessary, this pay item can be utilized to complete additional minor roadway work beyond the initial 2 foot width. This work could consist of replacing damaged pavements or accommodating the construction of minor curb alignment changes in order to complete ADA work. For the area beyond the 2 foot width, the basis of payment will be 1 Linear Foot of removal and replacement for every 2 Square Feet of additional affected roadway area.

S-1.2 METHOD OF MEASUREMENT

Measurement will be by the linear foot at the face of curb.

S-1.3 BASIS OF PAYMENT

Payment will be made under Item 2104.603 (Remove and Replace Bituminous Pavement) at the Contract bid price per linear foot, which shall be compensation in full for all costs of performing the work as specified, including, but not limited to, cleanup and disposal operations.

S-2 (2232) MILL AND PATCH BITUMINOUS PAVEMENT (ADA)

Always include SP2014-119 (PLANT MIXED ASPHALT PAVEMENT) or SP2014-121 (PLANT MIXED ASPHALT PAVEMENT FOR ALTERNATE BID) when using this pay item and select the appropriate mix type.
SP2014-104

This work shall consist of milling and patching the existing bituminous surface adjacent to the newly constructed curb and gutter in accordance with the provisions of MnDOT 2232, 2360, other Contract provisions, and the following:

S-2.1 CONSTRUCTION REQUIREMENTS

The bituminous surface shall be milled to a depth of 2 inches for a width of 2 feet in front of the proposed curb and gutter as shown in the Plans and in conformance with requirements of MnDOT 2232, Mill Pavement Surface. All milling must occur before the new curb and gutter is placed. After the new curb and gutter has been constructed the Contractor shall place bituminous material over the milled surface. The compacted surface shall be at a level resulting in the edges/joints between the surface and the gutter face/existing bituminous roadway are less than ¼ inch vertically. Compaction shall be obtained with mechanical tampers in areas not accessible to conventional rolling equipment. Compaction shall be achieved to the satisfaction of the Engineer.

The surface slope of the bituminous patch in front of the truncated domes must not exceed 5% measured perpendicular to the flow line or edge of roadway.

Surface Correction

If the Engineer determines that additional milling and patching is necessary, this pay item can be utilized to complete additional minor roadway work beyond the initial 2 foot width. This work could consist of correcting surface deterioration, vertical discrepancies, drainage, or similar activities in order to provide an ADA compliant street crossing. For the area beyond the 2 foot width, the basis of payment will be 1 Linear Foot of mill and patch for every 2 Square Feet of additional surface correction area.

S-2.2 METHOD OF MEASUREMENT

Measurement will be by the linear foot at the face of curb.

S-2.3 BASIS OF PAYMENT

Payment will be made under Item 2232.603 (Mill and Patch Bituminous Pavement) at the Contract bid price per linear foot, which shall be compensation in full for all costs of performing the work as specified, including, but not limited to, cleanup and disposal operations.

S-3 (2521) CONCRETE WALK (ADA)

SP2014-163

This work shall consist of constructing Concrete Walk, including necessary Subgrade Preparation, Aggregate Base, and Grading as indicated in the Plan, in accordance with the provisions of MnDOT 2112, 2211, 2521, other Contract provisions, and the following:

S-3.1 CONSTRUCTION REQUIREMENTS

(A) **Concrete Walk** – The walk shall be constructed as detailed in the Plan and conform to the requirements of MnDOT 2521, Walks.

To avoid corner breaks, all walk edges shall be formed and constructed perpendicular to the back of curb and gutter sections and concrete structures for a one foot minimum distance.

All existing signs shall be salvaged and reinstalled as directed by the Engineer or as indicated in the Plan.

(B) **Grading** – If not otherwise detailed in the Plan, all fill sections shall be graded flush with the top of walk for a minimum 18 inches from the edge of walk and then down at a maximum 1:3 slope to existing terrain. The Contractor shall blend in the toe of fill slope and adjacent areas so as not to adversely affect drainage.

(C) **Landings** – An initial landing is the first required landing of a pedestrian ramp. All initial landings required at the top of a ramped sloped surface (>2% longitudinal slope), shall be formed and placed separately in an independent concrete pour. This does not include initial landings placed at roadway grade such as depressed corners, parallel ramps, rural flat landings, or flat cut-throughs. Secondary landings consist of all landings beyond the initial landing. These secondary landings do not require a separate landing pour.

Wet casting or drill and grouting of dowel bars will be required in accordance with the details shown in Standard Plan 5-297.250 Sheet 5 of 5. These bars may be either smooth or deformed and shall be installed with 2" minimum concrete cover.

When not accounted for in the Plan, payment for these bars will be made under Item 2301.602 (Drill & Grout Reinforcement Bar (Epoxy Coated)) by the Each at the Predetermined Price of $ 10.00 per bar furnished and installed. All necessary subgrade preparation and aggregate base placement for the entire ramp construction limit shall be done before the initial landing is constructed at each location.

S-3.2 METHOD OF MEASUREMENT

Measurement of Concrete Walk will be made by top surface area.

S-3.3 BASIS OF PAYMENT

Payment will be made under Item 2521.618 (Concrete Walk) at the Contract bid price per square foot, including the area of walk under the truncated domes, which shall be compensation in full for all costs of furnishing, and installing the required material. In areas where Directional Curb is constructed, the triangular area that is behind the projected back of curb line will be paid for as Concrete Walk at the Contract bid price for Item 2521.618 (Concrete Walk). All excavation or borrow including hauling or disposal that is necessary to meet the walk grades in the Contract shall be incidental unless specifically provided for in the Plan. If common borrow requirements exceed 8 cubic yards (CV) at any individual site/quadrant, than the common borrow required at that location and not specifically accounted for in the Plan will be paid for at $20 per cubic yard (CV).

If the Plan calls for payment of Aggregate Base and/or other Grading items for a pedestrian facility, then payment will only be made for the locations specifically provided for in the Plan. All salvaging and reinstalling of signs as a result of concrete walk construction shall be incidental unless specifically provided for in the Plan.

S-4 (2531) CONCRETE CURB AND GUTTER (ADA)

Include this write-up in all projects that have ADA work. If pay item 2531.603 Concrete Curb and Gutter is not being used delete measurement and payment sections.

SP2014-164

This work shall consist of constructing Concrete Curb and Gutter and the necessary Aggregate Base in accordance with the provisions of MnDOT 2531, other Contract provisions, and the following:

S-4.1 CONSTRUCTION REQUIREMENTS

Concrete Curb and Gutter - The curb and gutter shall be constructed to meet the details in the Plan. The transition from the existing curb and gutter section to the new curb and gutter section should occur within 5-10 feet of the point where the curb and gutter construction begins. The gutter inslope shall be constructed as detailed in the Plans. The gutter inslope transitions shall occur outside of the zero height curb area. The proposed gutter width shall be modified as necessary so as not to protrude into the adjacent travel lane with approval from the Engineer.

At all locations where new curb and gutter meets existing curb and gutter, place saw cut to leave a minimum 3 feet of in place curb and gutter between an existing joint and the proposed saw cut. If the 3 foot minimum cannot be maintained, place the saw cut over the existing joint. At this saw cut location the Contractor shall drill and grout 2 No. 4 x 12 inch long reinforcement bars (Epoxy coated). Reinforcement bars shall be placed a minimum of 3 inches from face and back of gutter section. When not accounted for in the Plan, payment for these bars will be made under Item 2301.602 (Drill & Grout Reinforcement Bar (Epoxy Coated)) by the Each at the Predetermined Price of $ 10.00 per bar furnished and installed.

The Contractor must form, at a minimum, the top 1.5 inches of the gutter face. The Contractor shall not use the existing roadway edge as a form for the top 1.5 inches of the gutter face unless approved by the Engineer.

If the gutter flow line in front of the proposed curb ramps exceeds 2.0% slope, the flow line should be adjusted to allow a flatter slope in front of the curb ramps, but still provide positive drainage. The bituminous patch in front of the truncated domes must not exceed 5% measured perpendicular to the flow line. In no case shall a newly constructed curb and gutter flow line exceed 8% unless the roadway profile exceeds 8%.

The Contractor shall not alter any existing drainage patterns unless called for in the plans or approved by the Engineer.

The Contractor shall construct a contraction joint through the curb and gutter section at the bottom of the curb height transitions where the curb height equals zero inches. If any curb and gutter joints fall within the PAR, they shall meet MnDOT 2521.3C.

When constructing directional curb where truncated domes are placed perpendicular to the path of travel, the concrete between the grade break/edge of truncated domes and the gutter toe shall be constructed integral.

S-4.2 METHOD OF MEASUREMENT

Measurement of Concrete Curb and Gutter will be by the linear foot measured at the face of the curb.

S-4.3 BASIS OF PAYMENT

Payment will be made under Item 2531.603 (Concrete Curb and Gutter) at the Contract bid price per linear foot, which shall be compensation in full for all costs of furnishing and installing the required material including Aggregate Base.

S-5 (2531) CONCRETE CURB DESIGN V (ADA)

SP2014-165

This work shall consist of constructing Concrete Curb Design V of varying heights up to 8 inches as detailed in the Plan and in accordance with the provisions of MnDOT 2531, other Contract provisions, and the following:

S-5.1 CONSTRUCTION REQUIREMENTS

The Concrete Curb Design V shall be constructed as detailed in the Plan. Concrete Curb Design V may be constructed independent of or integral to the adjacent sidewalk. The bottom elevation of the Concrete Curb Design V shall match the bottom elevation of the adjacent sidewalk slab. When the Concrete Curb Design V is constructed independent of the sidewalk, the portion of the Concrete Curb Design V that will have new concrete walk placed against it shall be clean so as to maximize bonding between the walk and Concrete Curb Design V. The joint locations in the curb shall align with the joint locations in the adjacent concrete walk.

The locations requiring the use of Concrete Curb Design V will solely be determined in the Plans or in the field by the Engineer. Any Concrete Curb Design V that is constructed without pre approval of the Engineer will be considered unauthorized work for which no compensation will be made and may be removed at the Engineer's discretion. The height and length of the Concrete Curb Design V to be constructed shall be recommended by the Contractor and approved by the Engineer before the Concrete Curb Design V is constructed.

S-5.2 METHOD OF MEASUREMENT

Measurement will be by the linear foot of Concrete Curb Design V constructed measured at the face of curb. Curb height shall be measured from the top of the adjacent concrete walk to the top of the curb.

S-5.3 BASIS OF PAYMENT

Payment will be made under Item 2531.603 (Concrete Curb Design V) at the Contract bid price per linear foot, which shall be compensation in full for all costs of performing the work as specified. All concrete approach noses will be paid as 2 feet of Concrete Curb Design V and 2 feet of roadway curb and gutter design adjacent to the approach nose. Any additional Concrete Curb Design V beyond the quantity provided in the Plan, will be paid for at $20 per linear foot. Lengths of Concrete Curb Design V that never reach 3 inch height will be paid for as Concrete Walk.

S-6 (2531) TRUNCATED DOMES

SP2014-167

This work consists of furnishing and installing Truncated Dome Systems (detectable warning surfaces) at pedestrian curb ramps in compliance with the Public Rights-of-Way Accessibility Guidelines (PROWAG). This work shall be performed in accordance with the applicable MnDOT Standard Specifications, these Special Provisions, the details in the Plan, and the following:

S-6.1 CONSTRUCTION REQUIREMENTS

The Contractor shall select a truncated dome product from the approved products list at http://www.dot.state.mn.us/products/miscmaterials/truncateddomes.html. The truncated domes shall be placed in concrete and shall be pressed firmly into the concrete to the point that concrete fills the vent holes on the truncated dome plates. No cutting of truncated domes will be allowed unless approved by the Engineer. Any swelling of the concrete that occurs around the truncated domes must be screeded off and the surrounding concrete shall be finished flush with the truncated dome plate edge. To ensure that the truncated domes are well seated in concrete, the Contractor should provide a 3 inch minimum border around the edges of the truncated domes.

The Contractor will be allowed to interchange 9 foot 5 inch and 10 foot radial truncated domes when either is called for in the Plan. If the Contractor does make a substitution, the Contractor will be required to modify the curb line radius to match the truncated domes and meet the detectable edge requirements shown on Standard Plan Sheet No. 5-297.250 (Sheet 4 of 5). The Contractor will be allowed to adjust plan locations of zero inch height curb up to 6 inches laterally to make field fit adjustments for radial truncated domes placement.

S-6.2 METHOD OF MEASUREMENT

Square or rectangular truncated dome area will be measured by the square foot. Radial Truncated domes will be measured along the long cord and multiplied by 2 feet to compute S.F.

S-6.3 BASIS OF PAYMENT

Payment will be made under Item 2531.618 (Truncated Domes) at the Contract bid price per square foot, which shall be compensation in full for furnishing and installation of truncated domes. If additional radial domes are required and not called for in the plans they will be paid for at 4 square feet per each additional plate.

S-7 (2575) SITE RESTORATION (ADA)

Designer to choose whether sodding or seeding is to be used where noted in this writeup.

SP2014-217

This work consists of site grading adjacent to pedestrian facilities and the establishment of a perennial vegetative cover as detailed in the Plans and in accordance with the provisions of MnDOT 2575 and ***Designer select either*** 3876 ***(if design specifies seed) or*** 3878 ***(if design specifies sod)***. Site restoration shall also include the re-establishment of turf in all areas disturbed by Contractor operations and any cleanup of eroded soil. This provision only pertains to grading, topsoil, and turf establishment operations.

This Special Provision is intended for areas where pedestrian ramps are being constructed, thus resulting in multiple site specific disturbed areas throughout the project corridor, typically in a quadrant of two intersecting roadways.

S-7.1 CONSTRUCTION REQUIREMENTS

(A) Site Grading – All areas adjacent to newly constructed walk and top of curb shall be graded flush with the top of walk and top of curb. All stockpiled topsoil must be replaced within the same quadrant from which it was stripped. The minimum depth of topsoil shall be 4 inches which shall be achieved using select topsoil borrow if necessary.

If not otherwise detailed in the Plan, all cut section side slopes shall be finished graded flush from the top of concrete surface at a maximum 1:6 slope up to 5 feet from the edge of walk or back of curb, or straight graded to the existing ground elevation 5 feet from the edge of the walk or back of curb. At the Engineer's sole discretion, Concrete Curb Design V may be utilized along with the above stated grading techniques to reduce excessive ground slopes and better match adjacent surface terrain within the 5 foot incidental grading area.

All sites shall be restored to as good or better condition than the pre-construction condition.

(B) Turf Establishment – All areas that are disturbed as a result of concrete walk and curb and gutter construction including but not limited to curb ramp, curb and gutter, and sidewalk/trail construction shall be ***Designer choose either*** seeded ***or*** sodded and stabilized in accordance with the Plans, Specifications, and Special Provisions. Each site must be stabilized in accordance with the requirements of MnDOT 1717. Seed bed preparation shall be performed in accordance with MnDOT 2574 utilizing appropriate methods, to include handwork as necessary.

S-7.2 METHOD OF MEASUREMENT

Measurement will be made by each site that is restored in accordance with the Plans, Specifications, and Special Provisions. Each site consists of the area that is disturbed as a result of the adjacent walk, trail and/or curb and gutter construction.

S-7.3 BASIS OF PAYMENT

Payment will be made under Item 2575.602 (Site Restoration) at the Contract bid price per EACH, which shall be compensation in full for all work described in this Special Provision. Any topsoil borrow that is required and not accounted for in the Plan shall be screened and pulverized Select Topsoil Borrow paid at $40/CY (LV).