SECTION S415 - TABLED INTERSECTION

S415 GENERAL

For purposes of this specification tabled intersection is an inclusive term that includes main tabled intersection area, raised crosswalks and approach ramps.

S415-1 DESCRIPTION

Work consists of construction of tabled intersection, as required in Contract Documents and as directed by Project Manager.

References to NYSDOT specifications are to be in accordance with latest edition of NYSDOT Standard Specifications (US Customary Units).

S415-2 MATERIALS

S415-2.01 Concrete

A. Finish

Color and/or pattern of concrete will be as required in Contract Documents.

B. Pavement Reconstruction

Concrete is to be Class C or Class F in accordance with NYSDOT Sections 501 Portland Cement Concrete – General and 502 Portland Cement Concrete Pavement.

C. Retrofit - Existing Pavement

Concrete is to be fiber reinforced thin portland cement concrete in accordance with Section S502 Portland Cement Concrete Pavement.

S415-2.02 Premoulded Resilient Joint Filler

Premoulded resilient joint filler is in accordance with NYSDOT Section 705-07 Premoulded Resilient Joint Filler.

S415-2.03 Subbase Course

Subbase course material is to be Type 1 in accordance with NYSDOT Section 304 Subbase Course, with following modification:

Recycled materials, pulverized or recycled portland cement concrete aggregate (RCA) and brick, reclaimed asphalt pavement (RAP), and Corian® are unacceptable for use as subbase course materials, unless specifically authorized in writing by City Engineer.

S415-2.04 Tack Coat

Tack coat is to be diluted or straight tack coat mix in accordance with Section S407 Tack Coat.

S415-2.05 Pavement Marking

Approach ramp directional arrow is to be 65 mils thick 12 inch wide overlaid white plastic preformed permanent pavement marking symbol tape material in accordance NYSDOT Section 727-04 Permanent Pavement Tape.

Crosswalk pavement markings and patterning will be as required in Contract Documents.

S415-2.06 Temporary Signage

Temporary signage is to be W8-1 BUMP temporary warning sign mounted on fixed temporary sign support in accordance with NYSDOT Section 619 Work Zone Traffic Control.

S415-3 CONSTRUCTION DETAILS

S415-3.01 General

Minimum of 5 days prior to commencing construction of tabled intersection, Contractor is to provide written notification of planned work to residents and businesses on intersecting streets up to one block away from intersection, and to Project Manager. Project Manager will in turn notify Office of Emergency Services, local City NSC Office, City School District and any other interested parties that construction of tabled intersection is scheduled to take place.

Notification to residents is to be type written, is to contain information informing residents and businesses of planned work, and is to be approved by Project Manager before distribution. Notification is to be placed in plastic bag with handles that have capability of being hung on door knob, and distributed to all residents and businesses in affected area.

During construction of tabled intersection, maximum of half of intersection can be closed temporarily on daily basis, or longer to allow for adequate curing time of concrete. Except for curing of concrete, intersection is to be re-opened and fully accessible daily to vehicular traffic outside of working hours. Closure is to be done with appropriate traffic control signs and devices required to maintain and protect traffic, as directed by Project Manager and in accordance with NYSDOT Section 619 Work Zone Traffic Control.

Tabled intersections are generally constructed on streets that are classified as an arterial or collector, that generate significant amount of vehicular traffic during peak rush hours. No work is to occur on these type of streets during peak rush hours of 7 am to 9 am, and 4 pm to 6 pm. These streets are to remain open and fully accessible during peak rush hours to maintain adequate vehicular traffic flow, except during curing time of concrete.

Adjacent areas disturbed or damaged during construction are to be restored within 15 working days after construction of tabled intersection is completed.

S415-3.02 Signage

Contractor is to contact MCDOT Monday through Friday, between hours of 9:00AM and 3:00PM, (585) 753-7733, minimum of 6 weeks prior to commencing construction of tabled intersection.

Contractor is to install temporary signage minimum of 10 days prior to commencing construction of tabled intersection. MCDOT will install permanent signage sometime after construction of tabled intersection has been completed.

Temporary signage is to be mounted on temporary sign supports in accordance with NYSDOT Section 619 Work Zone Traffic Control. Temporary signage is to be provided at each corner of tabled intersection, and covered until tabled intersection has been constructed and intersection re-opened to traffic. Temporary signage is to remain in place and be maintained in good condition until permanent signage is installed by MCDOT. After permanent signage has been installed, Contractor is to remove temporary signage.

Sign post sleeves are to be installed in locations where tabled intersection signage will fall within paved area.

S415-3.03 Construction Performance Standards

Cross-section and profile of each approach ramp is to be surveyed to verify that approach ramp has been constructed to required parabolic shape, and that it falls within required tolerance range.

Parabolic shape of approach ramp is to be checked by surveying cross-section of approach ramp every 18 inches across approach ramp, along lines set laterally and starting at 2 feet on each side of centerline of street, thence subsequently every 6 feet until outer edge of approach ramp is reached at curb line.

Parabolic shape of approach ramp will be acceptable only if parabolic shape is within tolerance range of +0.03 and -0.06 feet of required theoretical elevations. Take any steps necessary to correct any deficiencies that fall outside of required tolerance range.

S415-3.04 Tabled Intersection Installation - General

Tabled intersection is to be constructed of concrete, encompass full intersection, from face of curb to face of curb.

Top of main tabled intersection area and raised crosswalks is to be 3 inches above and parallel with theoretical finished grade and cross-slope, approach ramps are to be parabolic in shape.

At minimum, 1/2 inch wide expansion joints are to be provided between existing pavement and approach ramp, between approach ramp and raised crosswalk, and between raised crosswalk and main tabled intersection area.

Use any method necessary to form parabolic shape of approach ramp, and to achieve proper height of tabled intersection.

Proven method for forming parabolic shape of approach ramp is to use profile template constructed from 10 feet long metal channel piece or wooden 2x10, with center portion of bottom of profile template 6 foot wide cut into basic parabolic shape of approach ramp, leaving flat area at each end of profile template. To stiffen and minimize any bending of wooden profile template, attach length of metal channel to top portion of profile template.

Do not finish concrete until proper parabolic shape of approach ramp has been verified in accordance with Subsection S415-3.03 Construction Performance Standards.

Directional arrow pavement marking symbols are to be installed using overlay method in accordance with NYSDOT Section 688 Preformed Reflectorized Pavement Markings, and as recommended by manufacturer.

S415-3.05 Tabled Intersection (New Pavement)

Tabled intersection is to be constructed of 8 inch thick Class C or Class F concrete, on 12 inch thick subbase course type 1 material.

Concrete is to be placed in accordance with NYSDOT Section 502 Portland Cement Concrete Pavement.

Subbase course material is to be placed in accordance with NYSDOT Section 304 Subbase Course.

S415-3.06 Tabled Intersection (Existing Pavement)

Tabled intersection is to be constructed of minimum 4 inch thick fiber reinforced thin portland cement concrete on milled asphalt pavement surface.

Thin portland cement concrete is to be placed in accordance with Section S502 Portland Cement Concrete Pavement.

In area where tabled intersection is to be constructed, mill existing pavement minimum 1 inch deep, thoroughly clean pavement surface, and apply tack coat making sure to completely cover entire surface area.

After milling, remaining asphalt must be an absolute minimum of 3 inches thick. If remaining asphalt is less than 3 inches thick, entire pavement section is to be removed and tabled intersection constructed in accordance with Subsection S415-3.05 Tabled Intersection (New Pavement).

S415-4 METHOD OF MEASUREMENT

Quantity to be measured for payment will be number of square feet of tabled intersection constructed, as measured from outer edge of each approach ramp to outer edge of each approach ramp.

S415-5 BASIS OF PAYMENT

S415-5.01 General All Items

Unit price bid for all items includes cost of: preparation and distribution of written notification; providing plastic bags; notifying and coordinating with MCDOT for signage installation; cleaning pavement; additional pavement preparation; construction of tabled intersection; furnishing and installing concrete; coloring where required; profile template; survey of cross-section and profile to verify parabolic shape of approach ramps for quality control measures; correction of any deficiencies that fall outside of required tolerance range; directional arrow pavement marking symbols; premoulded resilient joint filler material; and furnishing all labor, material and equipment necessary to complete work.

Restoration of adjacent areas disturbed or damaged during construction by Contractor's operations, will be paid for by Contractor.

Furnishing and installing sign post sleeves; patterning main tabled intersection area; crosswalk pavement markings and patterning; and maintenance and protection of traffic will be paid for under separate bid items.

Furnishing, installing, maintaining and removing temporary signage will be paid for under lump sum bid item for Basic Work Zone Traffic Control per NYSDOT Section 619 Work Zone Traffic Control.

S415-5.02 Tabled Intersection (New Pavement)

Unit price bid also includes cost of: furnishing and installing subbase course material.

S415-5.03 Tabled Intersection (Existing Pavement)

Unit price bid also includes cost of: saw cutting; milling; cleaning milled surface; furnishing and installing tack coat.

Payment will be made under:

ITEM NO.	ITEM	PAY UNIT
S415.01	Tabled Intersection (New Pavement)	Square Foot
S415.02	Tabled Intersection (Existing Pavement)	Square Foot