

2013 SPECIFICATIONS
FOR THE
CONSTRUCTION, REPAIR AND REPLACING
OF
SIDEWALKS, CURBS AND DRIVEWAYS
AUTHORITY

CODIFIED ORDINANCES OF THE CITY OF CANTON, OHIO
PART NINE - STREETS, UTILITIES AND PUBLIC SERVICE CODE

CHAPTER 905 - CONSTRUCTION OF SIDEWALKS AND CURBS
CHAPTER 907 - SIDEWALK CONTRACTORS
CHAPTER 911 - DRIVEWAYS
CHAPTER 919 - SIDEWALK AND CURB REPLACEMENT PROGRAM
CHAPTER 921 - CITYSCAPE SIDEWALK AND CURB PROGRAM

**TO ALL CONTRACTORS OR PERSONS ENGAGED IN SUCH WORK IN THE CITY OF
CANTON, OHIO**

THESE SPECIFICATIONS SUPERCEDE THE CITY OF CANTON 2008 SPECIFICATIONS AND
ARE HEREBY ADOPTED UNDER THE AUTHORITY OF THE CANTON CITY ENGINEER.

ADOPTED THIS 1st DAY OF November 2013.

Daniel J. Moeglin
CANTON CITY ENGINEER
DANIEL J. MOEGLIN, P.E.

TABLE OF CONTENTS

100 - GENERAL CONDITIONS		
I	— PURPOSE:	2
II	— SCOPE:	2
III	— DEFINITIONS:	2
IV	— LICENSE:	3
V	— SIDEWALK LAYING, RELAYING AND REPAIRING BOND:	3
VI	— BOND CONDITIONS:	3
VII	— PERMIT:	3-4
VIII	— PERMIT CONDITIONS:	4
200 - CONTROL OF THE WORK		
I	— CONSTRUCTION SITE	4-5
II	— MAINTENANCE OF TRAFFIC AND SAFETY	5
III	— INSPECTION	5
IV	— CONSTRUCTION PROGRESS	6
V	— PAYMENT	6
300 - EXCAVATION / SITE PREPARATION		
I	— DEMOLITION - CITY PERFORMED	6
II	— DEMOLITION - CONTRACTOR PERFORMED	6-7
III	— SUBGRADE PREPARATION	7
IV	— BASE PREPARATION	7-8
400 - CONCRETE WALK, DRIVE AND CURB CONSTRUCTION		
I	— GENERAL CONSTRUCTION AND MATERIALS	
(A)	— CONCRETE WALKS AND DRIVES	8-9
(B)	— CONCRETE CURBS	9-10
II	— GENERAL DIMENSIONAL CRITERIA	
(A)	— CONCRETE WALKS AND DRIVES	10-11
(B)	— CONCRETE CURBS	11-12
500 - HANDICAP RAMPS		
I	— RAMP, CURB AND WALK CONST. AND DIM. CRITERIA	12
600 - SPECIAL CONSTRUCTION		
I	— STORM AND SANITARY SEWER CASTING ADJUSTMENTS	13
II	— CITYSCAPE CONSTRUCTION SPECIFICATIONS	13
APPENDIX		
E-I	STREETSCAPE SIDEWALK STD. DWG.	
E-II	TREE FRAME/GRATE COLLAR STD. DWG.	

100 - GENERAL CONDITIONS

I – PURPOSE:

These specifications shall govern the construction, repair and/or replacement of any curb, sidewalk or drive to be built within the Right-of-Way or Easement for any street, alley, thoroughfare or on other public property of the City of Canton, Ohio in accordance with any applicable City Ordinances in effect or as amended.

II – SCOPE:

The Contractor constructing, repairing or replacing any curb, sidewalk or drive to be built within the Right-of-Way or Easement for any street, alley, thoroughfare or on other public property of the City of Canton shall comply with, furnish materials and workmanship for and perform such other obligations as are provided under these specifications and in strict accordance thereto. The Canton City Standard Drawings are incorporated as part of these specifications. The latest "State of Ohio Department of Transportation Construction and Materials Specifications" (HEREINAFTER REFERRED TO AS ODOT CMS) and ODOT Standard Construction Drawings are incorporated herein for reference purposes and are to be used as directed by the City Engineer. The City Engineer shall decide any and all questions arising as to the quality of and acceptance of any materials furnished or work performed.

III – DEFINITIONS:

CITY ENGINEER - The Authorized Representative of the City of Canton Appointing Authority and the Canton City Service Director who is responsible for the implementation and enforcement of those sections of CODIFIED ORDINANCES OF CANTON PART NINE - STREETS, UTILITIES AND PUBLIC SERVICES CODE as are the subject of these specifications.

INSPECTOR - The person or persons designated by the City Engineer to perform on site inspections of the construction project and who monitors contractor compliance with Plans Approved by the City Engineer, Directives from the City Engineer and conformance with these Specifications.

CONTRACTOR (aka SIDEWALK CONTRACTOR) - Any person, firm or entity performing the work of constructing, repairing or replacing any curb, sidewalk or drive within the Right-of-Way or Easement for any street, alley or on other public property in the City of Canton who holds a current Permit and current License issued by the City Engineer to perform such construction.

OWNER - The City of Canton or private person, firm or entity or their authorized representative who enters into contract or agreement with a contractor to construct, repair or replace any curb, sidewalk or drive within the Right-of-Way or Easement for any street, alley or on other public property in the City of Canton or who has entered a contract with the City of Canton for any Curb or Sidewalk Program.

IV – LICENSE:

All Contractors, prior to performing the work, as specified in the above scope, shall obtain a License in accordance with applicable sections of the Codified Ordinances of the City of Canton Chapter 907. The Application for the License is to be obtained and returned at the Office of the City Engineer for approval. The License expires annually on October 31. The License is to be approved and renewed annually beginning November 1 of each year. The License shall be Issued by the License Inspector (Clerk for the Engineer) upon approval by the City Engineer, payment of the Annual License Fee of Fifty Dollars (\$50.00) and the posting of a Sidewalk Laying, Relaying and Repairing Bond. Approval of the License shall be at the discretion of the City Engineer based upon the Engineer's review of the Contractor's past history, recommendations and/or testimonials.

V – SIDEWALK LAYING, RELAYING AND REPAIRING BOND:

All contractors shall submit with their License Application a Bond in the amount of Ten Thousand Dollars (\$10,000.00) in accordance with the Codified Ordinances of the City of Canton Chapter 907.03. The Bond is to be submitted by the Surety through its Agent or Company on the City of Canton Form Provided. Only Original Canton City Forms returned directly to the office of the City Engineer will be accepted.

VI – BOND CONDITIONS:

In accordance with Chapter 907.03 - "Prior to being licensed as a Sidewalk Contractor, the applicant shall file a bond in the sum of Ten Thousand Dollars (\$10,000) by a good and reliable surety company to the approval of the Director of Public Service or City Engineer. Such bond shall be conditioned that the City shall be saved harmless from any loss or expenditure in any manner arising from the conduct of the licensee, his agents or employees engaged in sidewalk work and from any loss or damage which may arise by reason of any excavation, obstruction, barriers, guards or other obstruction on material placed or deposited upon the street or sidewalk during the progress of the work, and the cost and expense of removing the same and the cleaning of sidewalk or street or both and from any loss or damage arising from any acts, negligence or default of such licensee, his agents or employees, and conditioned further that the sidewalks so layed, relayed or repaired, shall remain in good condition to the satisfaction of the Director for a full period of one year from the date of the laying, relaying or repairing of such sidewalk. Such Bond shall be further conditioned that such licensee shall immediately, upon the appearance of any defect, disintegration or faults in such sidewalk, and due to any acts, omissions or defaults of the licensee laying the same, repair and restore to good and proper condition to the satisfaction of the Director, if any such defects appear at any time within the full period of one year from the date of laying, relaying or repairing the sidewalk. Such Bond shall cover all of the foregoing matters which may arise or be occasioned at any time within one year after such work is done."

VII – PERMIT:

All Contractors, prior to performing the work, shall obtain a Permit in accordance with applicable sections of the Codified Ordinances of the City of Canton Chapter 907.04. The Permit is to be obtained at the Office of the City Engineer. The City Engineer will issue the Permit upon the submittal of the required project information, approval of any

supplemental plans, sketches or information/specifications as may be requested by the City Engineer, and the payment of the Permit Fee.

VIII – PERMIT CONDITIONS:

In accordance with Chapter 907.04 –

(a) “Before any person, who is entitled to engage in laying, relaying or repairing sidewalks undertakes to do any sidewalk work, he shall have made application for and procured from the City Engineer a permit for a fee of Five Dollars (\$5.00). The application shall specify the house number, lot number, street name, location between intersection streets, owner’s name, length of walk or curb to be constructed, width of walk and location of walk with reference to curb line. One permit may include the laying, relaying or repairing of a sidewalk or curb in front of two or more adjoining lots provided the same are named in the permit; otherwise, a separate permit must be secured for each lot or part thereof.”

(b) “Before the expiration of Ten (10) days.....” (AS APPLICABLE - See CONTROL OF THE WORK section herein)

(c) “All permits issued under this section shall be void after the expiration of thirty days from the date of such permit”

200 - CONTROL OF THE WORK

I – CONSTRUCTION SITE

The Construction Site is considered to be the immediate area of Grubbing, Clearing, Demolition, Excavation, Embankment and Construction as well as immediately surrounding lands and streets used for such activities and for the storage of construction materials, temporary parking of construction vehicles, staging areas for equipment or material delivery, construction zone signage and barricades.

The Contractor is to maintain the Construction Site at all times in a presentable condition acceptable to the City Engineer until the completion and acceptance of the construction. Remove all rubbish and construction debris immediately. Maintain adjoining streets, sidewalks and drives free of soil, mud and excess construction materials. Broom sweep or wash as needed or directed.

The Contractor is responsible for repairing or replacing damaged utilities, pavements, structures, landscaping, street signs and monuments within the Construction Site caused by the Contractor, Sub Contractor, Suppliers or Workers. Such repair or replacement shall be “in kind” as directed. Protect all work and property within the Construction Site.

The Contractor is to contact the City Engineer’s Office the day prior to any work being performed in the Construction Site in order to provide for Inspection. No concrete installation is to be performed within the Construction Site unless an Inspector confirms that the conditions and requirements of these specifications are being met.

The Contractor shall not create nor cause to remain any hazardous sidewalks or curbs in transition areas adjacent to the new sidewalk or curb construction. Hazardous sidewalks are as defined by Canton City Ordinance Chapter 919 Section 919.03.

The Contractor is to contact the Ohio Utilities Protection Service a minimum of 48 hours in advance of work to be performed within the Construction Site and is responsible for coordinating any relocations or adjustment/replacement of affected utilities and appurtenances.

II – MAINTENANCE OF TRAFFIC AND SAFETY

The Contractor is to provide for safe vehicular and pedestrian passage through the construction site at all times by the use of traffic control devices, barricades, signage, plating, temporary access walks and drives, flagmen or other recognized protective methods.

The Contractor is to contact the City Engineer Traffic Division 72 hours in advance of any proposed road closures in order that the public and safety officials can be notified. The Traffic Division shall be notified of any proposed lane closures noting the anticipated duration of such closure and the traffic control measures to be used.

The Contractor shall take corrective actions for traffic maintenance immediately as directed by the City Engineer.

III – INSPECTION

The Contractor shall notify the City Engineer the day prior to any work to be performed to allow for inspection. No materials are to be placed until the subgrade, base, forms and materials to be placed are approved by the Inspector. All work and materials shall conform to these Specifications, Canton City Standard Drawings, ODOT Construction and Materials Specifications as directed and approved by the City Engineer and City Engineer Approved Construction Plans and Specifications.

All work and materials found to be in nonconformance with the specifications herein and/or unacceptable to the City Engineer shall be removed and replaced at the Contractor's expense. Work performed and materials placed without the Inspector's approval are subject to be removed at the Contractor's expense, as may be directed by the City Engineer.

Inspection is to be performed on Demolition, Subgrade Preparation, Base Placement, Forming and Concrete Placement. Work may be performed on any phase previously inspected and released.

The Contractor shall provide, upon request, Load Tickets from Concrete Suppliers, Aggregate Suppliers or Asphalt Suppliers showing the grading and mix of the materials used. If requested, the Contractor shall provide Material Testing, at its expense, for questionable materials proposed or used in the construction.

The City Engineer will decide questions concerning the quality and acceptability of materials furnished.

IV – CONSTRUCTION PROGRESS

The Contractor shall commence work as soon as practicable, but within 10 days, after obtaining the Permit and shall prosecute the project in such a manner that there are no undue delays in its completion. Undue delays in completion or project abandonment by the Contractor through its actions or negligence will be cause for the work to be completed by others at the Contractor's expense as determined by the City Engineer.

Once construction has commenced, if it is necessary to postpone or delay completion for a period of time deemed to be unacceptable by the City Engineer, and the reason for such delay or postponement is not due to the Contractor's actions or negligence, the Contractor shall, to the satisfaction of the City Engineer, remove his materials and equipment from the Right-of-Way, restore the roadway surface and stabilize exposed soil areas to prevent erosion or hazards and insure pedestrian passage thru sidewalk areas. The site is to be left in a neat and safe condition.

V – PAYMENT

The Contractor shall obtain the entire amount of its payment from the owner or from the person, company or entity with whom it has an agreement or contract. No payment of monies of any kind will be made by the City of Canton for any work performed by the Contractor, unless specifically agreed in writing prior to the start of such work, by City Contract or City Purchase Order.

300 - EXCAVATION / SITE PREPARATION

I – DEMOLITION - CITY PERFORMED

For the purposes of these standards and specifications, demolition, to be provided by the City under any Sidewalk and Curb Replacement or Cityscape Sidewalk and Curb program for which an owner has entered into a Contract or Agreement with the City, is limited to the removal of existing concrete sidewalk and concrete/stone curb elements only.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OTHER DEMOLITION ELEMENTS.
(SEE II - DEMOLITION - CONTRACTOR PERFORMED BELOW)

II – DEMOLITION - CONTRACTOR PERFORMED

The Contractor shall saw cut the limits of the walk and curb removal which shall be 1 foot off of the existing face of curb, 1 foot off the existing face of building or structure which is to remain after walk removal, and the limits of the walk removal if not occurring at an existing joint. The saw cut shall be the full depth of the walk or pavement structure including brick or concrete base. Note that for brick surfaced roads, any salvageable bricks are to be removed and stored for re-installation by the Contractor.

The Contractor shall be responsible for clearing and grubbing and the removal of any construction debris remaining above the subgrade elevation per ODOT CMS Items 201 & 202. All subgrade soil disturbed during demolition is to be considered embankment material and is subject to the requirements of ODOT CMS Item 203. No embankment material over 4 inch size will be permitted within the top 8 inches of subgrade embankment. Voids left by stump or root removal or removal of other structures are to be replaced with ODOT CMS 703.11 Structural Backfill Type I or Type III compacted.

The Owner / Contractor is responsible for the abandonment or salvage of any vault or basement areas encountered during demolition. If the vault or basement area is to be salvaged, the owner shall prepare a salvage / reconstruction plan for review by the City Engineer. If the vault or basement area is to be abandoned, demolish the walls to a depth 2 feet below finish grade and perforate the floor slab. The void is to be filled with compacted ODOT CMS Structural Backfill Type I or III or Low Strength Mortar (LSM). All fill materials are to be approved by the City Engineer before placement. See *Canton City Standard Drawing 46*.

III – SUBGRADE PREPARATION

The Contractor shall prepare the subgrade to the proposed line and grade prior to inspection and sidewalk construction. The subgrade preparation is to be according to pertinent sections of ODOT CMS Items 203 (Excavation and Embankment) and 204 (Subgrade Compaction). This includes, among other requirements, the removal and replacement (or drying and compacting) of soft or unsuitable soils to a depth of 6 inches below subgrade as directed by the City Engineer. Use Structural Backfill Type I or III.

ODOT CMS 204 IS MODIFIED AS FOLLOWS: Compaction will be determined by visual inspection by the City Engineering Department. In the event of disagreement of inspection results, the Contractor shall be responsible for testing by an independent testing agency certified by AASHTO Materials Reference Laboratory (AMRL). This includes scheduling and expenses associated with the third party testing.

The Contractor shall pay particular attention to ODOT Item 203.04.A. (Drainage and Maintenance of the Work). The Contractor shall place base materials as soon as practicable after the inspection of the subgrade to prevent subsequent rutting, erosion or water ponding requiring regrading, redrying and recompacting.

All trench construction for the repair / replacement or installation of public utilities, repair / replacement or installation of sanitary and storm sewers and drains or the placement of conduits and foundations for electrical circuits and lighting shall be performed prior to the placement of the base materials. The trench construction shall be per *Canton City Standard Drawing 19*. No insitu materials are to be used for backfill material unless approved by the City Engineer.

IV – BASE PREPARATION

Aggregate base materials are to be placed according to the gradation and compaction requirements of ODOT CMS Item 304 except as follows:

No Open Hearth Basic Oxygen Steel or Granular Slag shall be used. (OH), (GS)

No Foundry Sand or Air Cooled Blast Furnace Slag shall be used. (FS), (ACBFS)

Under certain circumstances, No. 57 or 67 angular stone may be used if approved in advance by the City Engineer.

The Contractor shall protect the base material, prior to inspection and walk installation, according to ODOT CMS Item 203.04.A.

400 - CONCRETE WALK, DRIVE AND CURB CONSTRUCTION

I – GENERAL CONSTRUCTION AND MATERIALS

- (A) - The Contractor shall construct all concrete walks and drives according to the requirements of ODOT CMS Item 608 except as follows:

No wooden forms are permitted unless required for corner roundings or as otherwise approved by the City Engineer.

Expansion joint filler is not permitted between walk/drive and curb unless approved by the City Engineer. (See *Canton City Standard Drawing 27,28, and 29*).

Concrete mix aggregate shall be No. 57 or 67, limestone only.

Concrete shall be Class C. With approval by the City Engineer Class C Option 1 (Cement and Fly Ash) may be used between April 1 and October 15.

Cold weather practices shall be submitted to the City Engineer for approval. Contractor shall place and protect all concrete in accordance with the latest edition of ACI 306.

Asphalt or crushed aggregate walks are only permitted for temporary repairs over trench construction as directed and approved by the City Engineer. Walks that need repaired or replaced are to be of concrete construction only and according to these Standards and Specifications.

The Contractor shall provide for the reconnection of existing roof drains discovered or damaged during excavation or as directed by the City Engineer. The drain is to be replaced through the walk area to the curb or existing drainage structure using 3 inch PVC Schedule 40 Drain Pipe. Use appropriate Fernco or other manufactured connectors and adaptors as directed and approved by the City Engineer. See *Canton City Standard Drawings 22 and 23*.

A transverse contraction joint shall be placed over the PVC pipe when used.

Alternatively the Contractor may use Neenah Foundry R-4996-B2 (Heavy Duty Type M Trench Frame with Solid Cover) or equal as approved by the City Engineer.

Roof drains are not permitted to discharge directly onto or over sidewalk areas.

The Contractor shall, as soon as practicable after walk construction, repair disturbed lawn and lawn strip areas with backfill, topsoil, seed and mulch and/or sod. Disturbed pavement areas are to be repaired "in kind" as directed by the City Engineer.

- (B) - The Contractor shall construct all concrete curbs according to the requirements of ODOT CMS Item 609 except as follows:

Concrete mix aggregate shall be No. 57 or 67, limestone only.

Concrete shall be Class C. With approval by the City Engineer Class C Option 1 (Cement and Fly Ash) may be used between April 1 and October 15.

Cold weather practices shall be submitted to the City Engineer for approval. Contractor shall place and protect all concrete in accordance with the latest edition of ACI 306.

Construction joints for *Canton City Standard Drawing 30* or ODOT Standard Type 6 curb shall be dowelled. Dowels shall be 2 (Two) No. 5 smooth bars 18" in length equally spaced.

Curb shall be cored or sleeved 3-1/2 inch for 3 inch drain outlets as determined by the City Engineer or shown on approved construction plans. Notch cutting of curb is prohibited.

The Contractor shall construct all curbs and drop curbs and combined curb and walks as shown in *Canton City Standard Drawings 27, 28, and 29* using 6 X 6 No. 10 wire mesh or No. 3 deformed bars 2 feet on center and 3 inches below surface in lieu of the keyway as shown. Keyways are not permitted unless approved by the City Engineer prior to construction.

Backfill for the curb shall be compacted ODOT CMS Item 304 or No. 57 angular stone aggregates.

The Contractor shall, as soon as practicable after curb construction, repair disturbed lawn strip areas with backfill, 4" topsoil, seed and mulch and/or sod.

Between the road pavement sawcut and face of curb use compacted ODOT CMS Item 304 aggregate or Class C Concrete with expansion joint. Fill to a level 3 inches below finished pavement elevation or as directed by the City Engineer.

In areas where the street section includes brick with asphalt overlay, the Contractor shall use a minimum of 6 inches of Class C Concrete to the top of the adjacent brick.

The Contractor shall repair/replace asphalt with ODOT CMS 448 Type 1 and/or 2 unless the City has agreed to replace the pavement by Cityscape or Sidewalk Replacement Contracts. Seal all asphalt joints with ODOT CMS 409 Asphalt Cement.

In areas where the street section is brick surfaced, the Contractor shall use a minimum 6 inch Class C Concrete base to within 1 inch below the bottom of the final brick replacement elevation. The Contractor shall replace the brick surface course on 1 inch compacted sand mortar setting bed, broom sweep and tamp Polymeric Sand Techni Seal or Equal into joints as directed by the City Engineer. Use salvaged brick removed with demolition. The City may provide the Contractor access to obtain re-cycled paving brick. See *Canton City Standard Drawing 41*.

The replaced surface brick is to be toothed into adjoining surface brick.

II – GENERAL DIMENSIONAL CRITERIA

- (A) - All walks and drives are to be constructed according to the dimensions as shown in the Canton City Standard Drawings and/or Construction Plans and Specifications as submitted to, reviewed by and approved by the City Engineer.

All positional layout of line and grade including the location of pedestrian ramps, drive approaches and walk alignment is the responsibility of the Contractor subject to inspection and the approval of the City Engineer.

The following dimensional criteria shall be used. Exceptions or variances shall be approved by the City Engineer prior to construction.

1. **Concrete walks in residential areas shall be 4 inches thick.** Drive and approach areas are to be 6 inches thick. Increased thickness is subject to the approval of the City Engineer.
2. **Concrete walks in commercial areas shall be 5 inches thick.** Drive and approach areas are to be 7 inches thick. Increased thickness is subject to the approval of the City Engineer.
3. **The minimum width of sidewalk is to be 5 feet** unless otherwise approved by the City Engineer. Repair of individual sections of sidewalks can conform to existing walk width.
4. Contraction control joints in sidewalks are to be placed at 5 foot intervals unless indicated otherwise by approved plans and the City Engineer.

5. Expansion joints (1/2 inch) are to be placed at a maximum of 60 foot intervals and at existing walks and drives. Expansion joints for repair walk sections are to be placed as needed or as directed by the City Engineer.
 6. Sidewalk repair or replacement is to be performed at a minimum of 25 square feet or entire block section widths and lengths as approved by the City Engineer. The intent being that an existing section of concrete should not be divided into two or more sections as a result of the work.
 7. **Cross slope for sidewalks is to be 1/4 inch per foot** standard from back of curb to back of walk. The City Engineer may approve a variance to this specification (i.e. to conform to existing walks and at intersections). Any variance shall be obtained prior to walk construction. Longitudinal slope shall follow the curb or edge of pavement, unless otherwise approved by the City Engineer.
 8. The location of new drive connections to the public right-of-way must be approved by the City Engineer prior to construction.
 9. The Standard Minimum Width for a Residential Drive Approach is 14 feet plus tapered curbs, resulting in an 8 foot wide private drive. The Maximum Width for a residential Drive Approach is 24 feet plus tapered curbs, resulting in an 18 foot wide private drive. Wider residential drive widths must be approved by the City Engineer prior to approach construction. See *Canton City Standard Drawing 27 and 28*.
 10. The Standard Maximum Width for a Commercial Drive Approach is 36 feet plus tapered curbs, resulting in an 30 foot wide private drive (see *Canton City Standard Drawing 27 and 28*). There shall be a minimum of 10 feet between drive approaches in a commercial area. Any deviation from this standard must be approved in advance by the City Engineer prior to approach construction.
 11. See *Canton City Standard Drawing 27 and 28* for Typical Walk & Drive Approach Sections. Deviations from this standard must be approved by the City Engineer prior to construction.
- (B) - All curbs and drop curbs are to be constructed according to the dimensions as shown in the Canton City Standard Drawings and/or Construction Plans and Specifications as submitted to, reviewed by and approved by the City Engineer.

All positional layout of line and grade including the location of pedestrian ramps and drive approaches is the responsibility of the Contractor subject to Inspection and the approval of the City Engineer. The City Engineer will assist the Contractor in establishing grade elevations for curb construction when plan grades have not been established.

The following dimensional criteria shall be used. Exceptions or variances shall be approved by the City Engineer prior to construction.

Stand up curbs are to be 6"W X 18"H per *Canton City Standard Drawing 30* or, if approved, ODOT Type 6 or Type 2.

Contraction control joints are to be placed at 10 ft intervals along curbs. Expansion joints (1/2 inch) are to be placed a maximum of 60 feet between joints.

If curbs are constructed using slip form methods, expansion joints are not required, however, the new curb and existing curb shall be dowelled as stated above and connected by curb sections of a minimum 6 foot in length.

Combination curb and gutter is to be 6 inch curb with 2 foot gutter per *Canton City Standard Drawing 30* with gutter being sloped to the curb at 1 inch per foot.

Curb removal for repair or construction shall be such that the remaining section is not less than 4 feet. It is preferred that curb is replaced in full 10 foot sections.

Drive approaches shall be a minimum of 1-1/2 inch to 2 inches above the adjoining pavement or gutter grade or as approved by the City Engineer.

Drop Curbs for Handicap Ramps shall be located per *Canton City Standard Drawing 33* or as directed by the City Engineer.

500 - HANDICAP RAMPS

I – RAMP, CURB AND WALK CONSTRUCTION AND DIMENSIONAL CRITERIA

All Handicap Ramps must conform to the Americans with Disabilities Act (ADA).

Handicap Ramps shall be constructed per *Canton City Standard Drawing 33* (ODOT SCD # BP-7.1 Modified) except as follows:

No expansion joint is to be placed between the curb and ramp. The curb and ramp is to be connected with 6 X 6 No. 10 mesh or No. 3 Deformed Bars 9 inches in length, 2 feet O.C. and 3 inches below top of concrete.

Concrete walks and curbs within Handicap Ramp Areas are to be constructed to the material and construction standards for walks and curbs previously stated.

Cross slope for the ramp is to be per ADA Standards as incorporated in *Canton City Standard Drawing 33*.

The standard truncated dome mat must be a replaceable truncated dome panel/s set in wet concrete. Alternate materials such as truncated dome bricks or adhesive mats are subject to the City Engineer's approval. See *Canton City Standard Drawing 33, sheet 4 of 4*. The City Engineer has the final decision as to the detectable warning system used.

600 - SPECIAL CONSTRUCTION

I – STORM AND SANITARY SEWER CASTING ADJUSTMENTS

The Contractor shall adjust storm and sanitary sewer castings to new curb and sidewalk grades if the castings are within the work areas.

Prior to construction, the Contractor shall make arrangements with the City Engineer to inspect the structures and castings to determine if reconstruction or adjustment is necessary. If the catch basin or manhole needs reconstruction, such reconstruction will be performed by City crews or under contract / purchase order with the Contractor or other private contractor. If the catch basin or manhole castings are City owned and need replacement, the City will provide the castings for the Contractor to install.

II – CITYSCAPE CONSTRUCTION SPECIFICATIONS

Sections 921.01 and 921.02 of Chapter 921 of the Codified Ordinances of Canton state, in part, that “All sidewalk projects within the eligible areas/corridors are **REQUIRED** to incorporate Cityscape Elements as deemed appropriate by the Director of Public Service and the City Engineer.”

Prior to obtaining a permit, it will be determined if the subject project lies within the Cityscape Program area, and if so, the City Engineer will require a Proposed Site Plan to be submitted by the Owner. The City Engineer will provide Construction Detail Standard Drawings and assist the Owner or his representative in developing an appropriate Cityscape Plan. The plan must be prepared by an Architect or Engineer.

For the purposes of these specifications, attached are sample Canton City Standard Drawings showing the General Construction Standards and Specifications for the placement of the Brick Panels and Tree Frame and Grate.

Construction and Material Specifications for Walks and Curbs shall be the same as stated in previous sections.