NORWALK on the move!

DEPARTMENT OF PUBLIC WORKS

PUBLIC WORKS COMMITTEE of the COMMON COUNCIL

DATE: Tuesday, January 3, 2017

TIME: 7:00 P.M.

PLACE: Norwalk City Hall, 2nd Floor, Room 225

AGENDA

Public Input

Public input (Guests at Committee meetings may speak to any item on the agenda. Comments shall be limited to no more than three (3) minutes per speaker.)

New Business

1. Approve the Minutes of the Public Works Committee Meeting of Tuesday, December 6, 2016.

2. Public Works Committee of the Norwalk Common Council adoption of the Roadway Standards, as amended January 2017.

Information / Discussion

A. Monthly Solid Waste Report – November 2016

B. Customer Service Report – December 2016

C. Correspondence

Upcoming Projects

Next Meeting: Tuesday, February 7, 2017
7:00 P.M.
Room 225, Norwalk City Hall

125 East Avenue • P.O. Box 5125, NORWALK, CT 06856-5125 • TELEPHONE 203-854-7791 • FAX 203-857-0143

CITY OF NORWALK
PUBLIC WORKS COMMITTEE
December 6, 2016

ATTENDANCE: John Igneri, Chair; Richard Bonenfant; Thomas Livingston; Eloisa Melendez; Michael Corsello; Michelle Maggio (7:20 p.m.); Faye Bowman (7:38 p.m.)

STAFF: Bruce Chimento, Director; Lisa Burns, Principal Engineer; Christopher Torre, Superintendent of Operations

Mr. Igneri called the meeting to order at 7:06 p.m. A quorum was present.

PUBLIC INPUT

There were no members of the public present this evening. Diane CeCe submitted written comments via email to the Public Works Committee.

PUBLIC HEARING

Mr. Igneri opened the public hearing.

PUBLIC HEARING TO HEAR THE FREEHOLDER'S REPORT AND ANY PUBLIC COMMENT ON SAID REPORT FOR THE ABANDONMENT/DISCONTINUANCE OF A PORTION OF HANFORD PLACE ALONG THE NORTHERN BOUNDARY OF THE HANFORD PLACE RIGHT-OF-WAY AT 13 DAY STREET (TAX LOT 2-58-46-0), IDENTIFIED AS PARCEL X-1 CONSISTING OF 92± SQ. FT. ON A MAP ON FILE IN THE DEPARTMENT OF PUBLIC WORKS ENTITLED "PROPERTY SURVEY DEPICTING STREET LINE REVISION & EXTINGUISHMENT OF EASEMENT AT 13 DAY STREET, PREPARED FOR TRINITY WASHINGTON VILLAGE LIMITED PARTNERSHIP AND THE NORWALK HOUSING AUTHORITY, NORWALK, CONNECTICUT," DATED SEPTEMBER 12, 2016. THE PUBLIC HEARING SHALL BE CONDUCTED IN ORDER TO HEAR ALL PARTIES INTERESTED IN COMMENTING ON THE ACCEPTANCE OF SUCH REPORT, DETERMINE IF THE FREEHOLDER'S REPORT IS IN THE BEST INTERESTS OF THE CITY AND TO TAKE SUCH ACTION ON SAID REPORT THAT THE COMMITTEE MAY DEEM ADVISABLE. THE PUBLIC HEARING IS SCHEDULED FOR TUESDAY, DECEMBER 6, 2016 AT 7:00 P.M. IN ROOM 231, 2ND FLOOR IN NORWALK CITY HALL, 125 EAST AVENUE, NORWALK, CT.

There were no members of the public present and Mr. Igneri closed the public hearing.

NEW BUSINESS

1. **APPROVE THE MINUTES OF THE PUBLIC WORKS COMMITTEE MEETING OF TUESDAY, NOVEMBER 1, 2016.**

****MR. LIVINGSTON MOVED THE ITEM**
****MOTION PASSED UNANIMOUSLY**

2. **APPROVE THE 2017 MEETING DATES FOR THE PUBLIC WORKS COMMITTEE.**

A discussion ensued about the 2017 meeting dates for the Public Works Committee.

Mr. Livingston stated that he has a problem with July 5th because it is on the first Wednesday and his other committee meets then.

Several of the committee members mentioned Diane CeCe's email. Ms. Melendez said that Diane CeCe wrote in her comments that if we have the July meeting on the 5th it would have to be special meeting because it would not fall on the first Tuesday of the month.

Meeting times and dates were discussed between the Committee members and Staff.

Mr. Igneri suggested that the Committee leave July 5th the way it is and if need be call a special meeting as the date approaches.

Ms. Burns noted the room change from Room 231 to Room 225 Public Works Conference Room for all future meetings unless the Committee anticipates that a meeting will generate public interest then a different room would be reserved.

Committee agreed to change the November 7, 2017 date to Thursday, November 9, 2017 due to election day.

Mr. Bonenfant stated that the committee cannot discuss anything that is not on the agenda at a special meeting.

Mr. Igneri noted the changes to the 2017 Meeting Dates Schedule. The July meeting will be held on Wednesday, July 5th due to the 4th of July holiday and the November meeting will be held on Thursday, November 9, 2017 due to Election Day.

**** MOTION PASSED UNANIMOUSLY**

3. AUTHORIZE THE PURCHASING AGENT TO ISSUE A PURCHASE ORDER TO CROWLEY FORD, LLC, FOR THE PURCHASE OF ONE (1) 2017 FORD EXPLORER FOR A SUM NOT TO EXCEED $28,613.00

ACCOUNT NO. 0917 4031 5777 C0313

Chris Torre stated that there is a newer car, a 2017 Ford Explorer that is on the State Bid list with the State Bid Number. Each committee member received a revised copy of the resolution.

Mr. Chimento stated that the resolution would have to change the year of the car to 2017. It is the same purchase price and account number.

Mr. Livingston asked what the intended use of the 2017 Ford Explorer is.

Mr. Torre stated that it would be for the Director.

Mr. Corsello inquired if this item was in the budget?

Mr. Chimento answered yes and stated that there is $102,000 in the fleet capital budget for this expenditure. He stated the old vehicle has been around about 10 years with approximately 58,000 miles.

** **MR. LIVINGSTON MOVED AS AMENDED**
** **MOTION PASSED UNANIMOUSLY**

4A. AUTHORIZE THE MAYOR, HARRY W. RILLING TO EXECUTE AN AGREEMENT WITH ADVANCED ALARMS SECURITY SYSTEMS INCORPORATED RFP#3709 FOR THE REPLACEMENT OF THE CCTV SYSTEM AT THE DEPARTMENT OF PUBLIC WORKS OPERATIONS CENTER AND TRANSFER STATION FOR A SUM NOT TO EXCEED $23,601.00

ACCOUNT NO. 0916 7100 5777 C0119

4B. AUTHORIZE THE DIRECTOR OF PUBLIC WORKS TO ISSUE ORDERS ON AGREEMENT TO ADVANCED ALARMS SECURITY SYSTEMS INCORPORATED RFP#3709 FOR THE REPLACEMENT OF THE CCTV SYSTEM AT THE DEPARTMENT OF PUBLIC WORKS OPERATIONS CENTER AND TRANSFER STATION FOR A SUM NOT TO EXCEED $2,360.00

ACCOUNT NO. 0916 7100 5777 C0119

** **MR. CORSELLO MOVED**

Mr. Livingston asked why the cameras were needed.

Mr. Torre stated the half of the current CCTV system does not work and six out of the eight radios, all wireless, do not work. He said it is the only CCTV system they have that the Parks and Rec, DPW Operations Center, and Waste Water Treatment Plant are connected in one complex and at the Transfer Station. He said that these funds would replace outdated cameras with new cameras. The $2,360 are contingency funds just in case they need to replace wires.

Mr. Livingston said that he recalled the committee approving cameras before this request.

Mr. Torre answered yes, it was an approved 2014 capital project. Mr. Torre said that there are two cameras at the Transfer Station and they would like to put six cameras there. That would allow them to see the inside and outside of the Transfer Station. He said the cameras would be split to both servers so that they both record for 60 to 80 days.

Mr. Corsello inquired about the advantages of having more cameras at the Transfer Station so the interior can be monitored.

Mr. Torre replied that someone made a claim that they fell into the compactor last year and there have been three break-ins where they stole computers at the transfer station.

** **MOTION PASSED UNANIMOUSLY**

Ms. Maggio joined the meeting at 7:20p.m.

5. APPROVE THE DISCONTINUANCE AND ABANDONMENT OF A PORTION OF HANFORD PLACE ALONG THE NORTHERN BOUNDARY OF THE HANFORD PLACE RIGHT-OF-WAY AT 13 DAY STREET (TAX LOT 2-58-46-0), IDENTIFIED AS PARCEL X-1 CONSISTING OF 92± SQ. FT. ON A MAP ON FILE IN THE DEPARTMENT OF PUBLIC WORKS ENTITLED "PROPERTY SURVEY DEPICTING STREET LINE REVISION & EXTINGUISHMENT OF EASEMENT AT 13 DAY STREET, PREPARED FOR TRINITY WASHINGTON VILLAGE LIMITED PARTNERSHIP AND THE NORWALK HOUSING AUTHORITY, NORWALK, CONNECTICUT," DATED SEPTEMBER 12, 2016.

** **MR. CORSELLO MOVED THE ITEM**

Ms. Burns discussed the map on file to committee members. She began by stating that the map on file revised the street line on Hanford Place from the orange line to the green line (points to colored lines on map). She said that they need to go through the process of

straightening out all the parcels so they can convey the parcels to the housing authority from the city to build the Washington Village Project. Ms. Burns said in doing so there was the public hearing tonight to hear about the discontinuance of the 92square feet that is currently part of the public right of way which will become part of the parcel. She said the first action is to approve the discontinuance and abandonment of the 92square feet, item 5. She continued saying that item 6a is to authorize the Mayor to execute all documents related to that abandonment and 6b is a quit claim deed on this parcel and then to give this parcel that the city owns back to the ROW that is item 7.

Mr. Livingston asked Ms. Burns to repeat item 7.

Ms. Burns explained that item 7, 13 Day Street, is owned by the city and is going to be conveyed as a quit claim deed to the housing authority and for whatever reason this part of the parcel is going back to the public right of way. This doesn't have to go through the same process as the freeholder's process.

Mr. Corsello inquired if the housing authority was giving the city this land.

Ms. Burns replied no that the city already owns the property and is quit claiming it to the housing authority.

Mr. Chimento said that it is city property and your taking city property and moving it into the right of way, then a quit claim deed will be filed for that piece of property and conveying it to the housing authority.

Mr. Igneri said that he moved item 5 and would like to move 6a, 6b and 7 as well since the committee has discussed.

All agreed with one question from Mr. Bonenfant.

Mr. Bonenfant wanted to know if the city was going to quit claim any property to Trinity.

Ms. Burns replied no and said that it is a 99 year land lease.

Mr. Chimento said that it belongs to the housing authority and will remain such.

6A. AUTHORIZE THE MAYOR, HARRY W. RILLING, TO EXECUTE ANY AND ALL DOCUMENTS IN ORDER TO FINALIZE THE DISCONTINUANCE OF AND TO RELEASE THE CITY'S INTERESTS IN THE DISCONTINUED PORTION OF THE PROPERTY COMPRISING THE ABANDONED PORTION OF HANFORD PLACE ALONG THE NORTHERN BOUNDARY OF THE HANFORD PLACE RIGHT-OF-WAY AT 13 DAY STREET (TAX LOT 2-58-46-0), IDENTIFIED AS PARCEL X-1 CONSISTING OF 92± SQ. FT. ON A MAP ON FILE IN THE DEPARTMENT OF PUBLIC WORKS

ENTITLED "PROPERTY SURVEY DEPICTING STREET LINE REVISION & EXTINGUISHMENT OF EASEMENT AT 13 DAY STREET, PREPARED FOR TRINITY WASHINGTON VILLAGE LIMITED PARTNERSHIP AND THE NORWALK HOUSING AUTHORITY, NORWALK, CONNECTICUT," DATED SEPTEMBER 12, 2016.

6B. AUTHORIZE THE MAYOR HARRY W. RILLING, TO EXECUTE A QUIT CLAIM DEED RELEASING ANY INTERESTS THAT THE CITY MAY HAVE IN PARCEL X-1 IN FAVOR OF THE NORWALK HOUSING AUTHORITY FOR PURPOSES OF THE WASHINGTON VILLAGE HOUSING REDEVELOPMENT PROJECT.

7. AUTHORIZE THE MAYOR, HARRY W. RILLING, TO EXECUTE ANY AND ALL DOCUMENTS FOR THE PURPOSE OF INCORPORATING PARCEL X-2, CONSISTING OF 387± SQ. FT., INTO THE PUBLIC RIGHT OF WAY KNOWN AS HANFORD PLACE, IN ORDER TO WIDEN THE ROADWAY ALONG THE NORTHERN BOUNDARY OF THE HANFORD PLACE RIGHT-OF-WAY AT 13 DAY STREET (TAX LOT 2-58-46-0), AS DEPICTED ON A MAP ON FILE IN THE DEPARTMENT OF PUBLIC WORKS ENTITLED "PROPERTY SURVEY DEPICTING STREET LINE REVISION & EXTINGUISHMENT OF EASEMENT AT 13 DAY STREET, PREPARED FOR TRINITY WASHINGTON VILLAGE LIMITED PARTNERSHIP AND THE NORWALK HOUSING AUTHORITY, NORWALK, CONNECTICUT," DATED SEPTEMBER 12, 2016.

**** MR. IGNERI MADE A MOTION TO PASS ITEM 5, ITEM 6A, ITEM 6B AND ITEM 7**

**** MOTION PASSED UNANIMOUSLY**

8. REFER THE FOLLOWING ORDINANCE UPDATES TO THE ORDINANCE COMMITTEE:

- **a. CHAPTER §91 SEWERS, PUBLIC**
  - **i. §91-2 DEFINITIONS.**
  - **ii. §91-10 PUBLIC SEWER EXTENSIONS.**
  - **iii. §91-11 GRINDER PUMPS AND LOW PRESSURE SEWER SYSTEMS.**
  - **iv. §91-12 VIOLATIONS AND PENALTIES.**
  - **v. §91-13 SEVERABILITY.**

- **b. CHAPTER §95 STREETS AND SIDEWALKS**
  - **i. §95-10 SNOW AND ICE REMOVAL FROM SIDEWALKS AND DRIVEWAYS.**

c. **CHAPTER §96 EXCAVATIONS AND ENCROACHMENTS IN PUBLIC STREETS AND GROUNDS**
   i. **§96-1 PURPOSE.**
   ii. **§96-4 POSTING OF PERMIT; COMMENCEMENT OF WORK; TERM OF PERMIT.**
   iii. **§96-6 EXCAVATIONS AND RESTORATION.**
   iv. **§96-7 BOND REQUIREMENTS.**
   v. **§96-9 RESPONSIBILITIES, AGREEMENTS AND INDEMNIFICATIONS.**
   vi. **§96-14 PROTECTIVE MEASURES.**
   vii. **§96-17 REFUSAL TO ISSUE PERMITS AND PERMISSION.**

d. **CHAPTER §113 WATER POLLUTION CONTROL AUTHORITY**
   i. **§113-2 DEFINITIONS.**
   ii. **§113-9 WPCA PERMIT MAINTENANCE AGREEMENT FOR SHARED LATERALS-LATERALS SHARED BY MULTIPLE PROPERTY OWNERS (MORE THAN TWO (2) OWNERS) AND LATERALS SHARED BY TWO (2) PROPERTY OWNERS.**

** **MR. IGNERI MOVED THE ITEM**

Ms. Burns explained the reasoning for the ordinance updates. She said that she would like to get procedures in place beginning with ordinances to reflect current practice. She said that the ordinances are not new that they are simply housekeeping issues that need updating. These four ordinance in the packet are the ordinances that public works currently operates under.

Ms. Burns continued with the updating of the roadway standards which is a guide document that they use a lot. She said that they already do it for permits and currently give checklist for permits to customers and would like to be able to give other documents/checklists for other things. She also said that she would like to incorporate new standards in the roadway standards. She said that doing this could enable the department to get the best return from the State. They will be coordinating with the city planner in effort to combine standards with other departments. The drainage manual is currently outdated and they will work with the planning department on this as well. She said the drainage manual does not accurately address the low impact development.

Ms. Bowman joined the meeting at 7:38p.m.

Mr. Corsello asked who drafted the ordinances.

Ms. Burns answered staff members.

Mr. Corsello replied that everyone did a good job drafting these ordinances.

Mr. Torre began to discuss the snow ordinance. He stated that shoveling sidewalks is very hard to enforce. He said the police do not have anything in their book to enforce it and then it can become very political to enforce as well. He said they chose to include sidewalks and driveways into the ordinance. He continued saying that they want to make people more accountable for their sidewalk.

Mr. Igneri asked how the snow removal would be enforced.

Mr. Torre responded that there is an ordinance enforcement officer. He said he would like to expand that because he is the only one and works 20 hours per week. He said that the road supervisors including himself are constables for traffic and parking and can enforce and give tickets to those obstructing the snow removal process. He would like to expand so it doesn't take days to enforce through the process currently in place with customer service.

Mr. Torre then proceeded to the driveway section. He said that this is a new section to the ordinance because right now the sidewalk is limited under the old ordinance and there is nothing that says that someone cannot plow all of the snow from their driveway onto the street. He went on to discuss the costs associated with the removal of snow. He stated that it is much more costly during a weekend snow storm. He said that it is about $3,000 an hour for 2 to 3 hours to go back and plow streets we already plowed because people pushing snow into the road and there is absolutely nothing we can do to enforce this. He said that he has photos that are timed stamped when they plow. He stated that adding this language would give the road supervisors authority to inform the people that they cannot do this due to the ordinance and tell them that it is a $250 fine when they see this happening.

Mr. Corsello said that it makes sense and suggested educating the public because sometimes people don't realize and just take the snow blower and blow it to the middle of the street thinking a big plow truck would come and take it away.

Ms. Maggio said that there are other people who are very conscientious and they take their driveway snow and put it on their front yard and then the plow comes by and blocks their whole driveway and they can't get their car out.

Mr. Torre said that on the public works website page there are tips on when to shovel your sidewalk/driveway.

Mr. Igneri thanked the DPW Staff for taking on this task. He commended the staff for looking at it in such detail. He mentioned the sewers and working with planning and zoning to look at other village districts and getting the sidewalks taken care of. He said that some of the sidewalks prevent kids from walking to school safely. He was very appreciative of their efforts

Ms. Burns began to discuss Chapter 96 Excavations. She said that they are not changing anything, it is currently under review. She said they are updating excavations to be reflective of current practices. She said that when people come for a permit they should have a copy of the approved traffic plan, know how road restoration fees are calculated, what their responsibilities are for the permit, and a section on borings has been updated.

Ms. Burns continued with WPCA. She gave an example of how people are sharing laterals so now it is in the ordinance that no more than two can share a lateral. She said that they would need a maintenance agreement between the two. The City could pull the bond if there are more than two and work has to be performed by the City.

** **MR. IGNERI MADE A MOTION TO REFER ITEM 8 TO THE ORDINANCE COMMITTEE**
** **MOTION PASSED UNANIMOUSLY**

Mr. Igneri requested that they take a look at footpaths and someway enforcing snow removal.

Mr. Chimento said that he believes that footpaths are exempt. The ordinance says sidewalks. He said they will take a look at it.

Mr. Igneri moved to Information/Discussion Item D Perry Avenue Bridge.

INFORMATION / DISCUSSION

A. MONTHLY SOLID WASTE REPORT – OCTOBER 2016

There was no discussion on the monthly solid waste report this evening

B. PROJECT STATUS REPORT

There was no discussion on the project status report this evening

C. CUSTOMER SERVICE REPORT – NOVEMBER 2016

There was no discussion on the customer service report this evening

D. UPDATE ON PERRY AVENUE BRIDGE CHANGE ORDER

Ms. Burns stated she is informing the committee of some issues she hopes to have resolved. Perry Avenue Bridge has had a significant change order to support excavation for the bridge abutments. There was a calculation quantity from the AECOM Engineer that didn't have the correct quantity for supportive excavation in the bid documents.

Ms. Burns said that it's 80% federal grant money and 20% local share. She said they have been working through the process with the State program manager who reviews things on behalf of the State. Ms. Burns said that they are now at the $554,000 range now after negotiating with the engineers. She said that their expectation was that they would be responsible for 20% of the $554,000, however, if the State DOT decide to make it a claim against the engineer, the City of Norwalk would be responsible to pay 100% of the $554,000 until the dispute was settled.

Ms. Burns said that it is looking very positive that it will remain a change order not a claim, because we found emails where we told there program manager all about this and their program manager doesn't look like they relayed the information to the State. She said that she wouldn't put absolutes on anything. She said that she is confident that it would become a change order and not a claim. Ms. Burns stated that she was putting everyone on notice, giving everyone the worst case scenario.

Ms. Maggio wanted to know if this had anything to do with the Master Agreement.

Ms. Burns answered no.

E. CORRESPONDENCE

There was no new correspondence to discuss this evening

UPCOMING PROJECTS

There was no new upcoming projects to discuss this evening

Next meeting is scheduled for Tuesday, January 3, 2017 in Room 225.

** **MS. MELENDEZ MOVED TO ADJOURN**
** **MOTION PASSED UNANIMOUSLY**

There was no further business and the meeting was unanimously adjourned at 8:31 p.m.

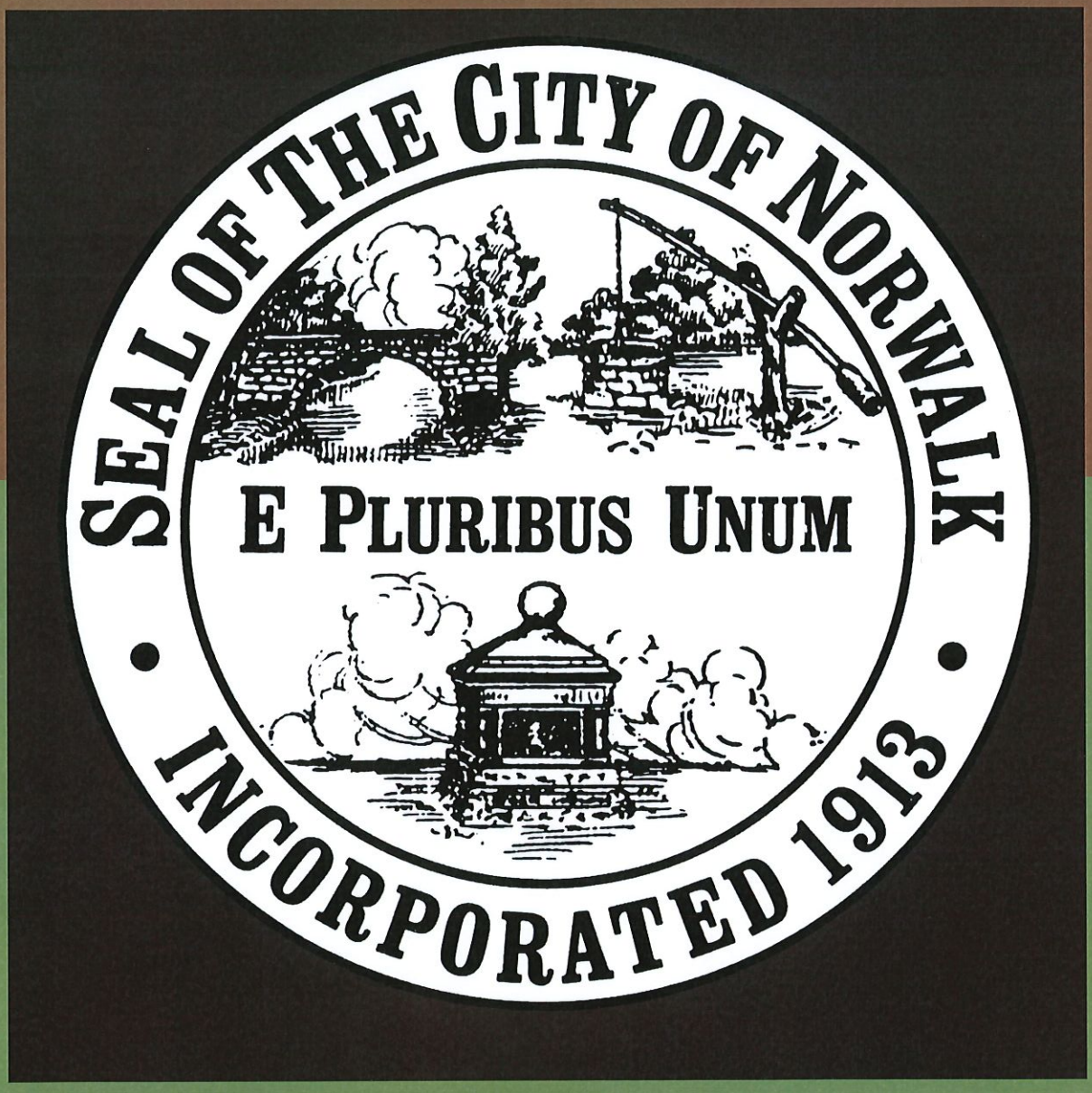
Respectfully submitted,

Monique Cipriano
Executive Assistant
Public Works Department

City of Norwalk

Connecticut

Department of Public Works



Roadway Standards

May 1982 - Amended January 2017

2

CITY OF NORWALK, CONNECTICUT

DEPARTMENT OF PUBLIC WORKS

ROADWAY STANDARDS

DESIGN MANUAL

AND

CONSTRUCTION DETAILS

May 1982

Amended October 1991 and January 2017

Printed on Recycled Paper

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FORWARD

1. This Manual has been prepared to establish guidelines for engineers engaged in the design of roadway and driveways facilities to be constructed or reconstructed in the City of Norwalk. The scope of this Manual is applicable to design generally encountered in roadway and driveway projects carried out by the City of Norwalk, Department of Public Works, as well as for public and private streets, driveways, condominium developments, commercial sites and other projects designed by consulting engineers.

2. The Roadway Standards are based on modern civil engineering practice and have been found to be the most applicable in Norwalk, Connecticut. Much of the data presented herein has been adapted from manuals of the American Association of State Highway and Transportation Officials, Connecticut Department of Transportation, Institute of Transportation, Institute of Transportation Engineers, American Public Works Association, Highway Users Federation for Safety and Mobility, American Society of Civil Engineers, National Association of City Transportation Officials, Urban Land Institute, and the National Association of Home Builders.

3. The most important consideration of these Roadway Standards is the safeguarding of public safety, welfare and convenience. Proper regard has been given to other factors which bear upon establishing satisfactory designs.

4. Definitions are provided for important terms used in these Roadway Standards. The purpose for establishing design criteria for specific design features and the criteria themselves are presented. These are followed by tabulations of the Design Standards for each class of street and drawings of standard Construction Details which shall be employed.

5. Existing conditions may indicate modification of these standards. Where a modification is so indicated, the effect of the proposed modification on all other standards should be considered. For example, where design speed is affected by a proposed modification to the standards, all other standards affected by the change in

design speed should be reviewed and the design of the project amended, if necessary, to reflect the new design speed.

6. Related standards for the design of access drives within lots and parking layouts are contained in the Zoning Regulations of the City. Driveways and streets intersecting with State highways must comply with Connecticut Department of Transportation Encroachment Permit Regulations within the State right-of-way. Driveways serving gas stations must comply with the requirements of the Connecticut Department of Motor Vehicles.

7. All street and driveway construction, reconstruction or pavement replacement shall be in compliance with the Roadway Standards, unless approved, in writing, by the Director of Public Works.

8. Any construction affecting City-owned street rights-of-way requires the issuance of a permit in accordance with Chapter 96 of the Norwalk Code, entitled "Excavations and Encroachments in Public Streets and Grounds".

9. The following regulations and standards set forth in the City of Norwalk shall govern:

City of Norwalk, Connecticut - Planning Commission – Subdivision and Re-subdivision Regulations – Approved September 8, 1998 and as amended

City of Norwalk, Connecticut - Department of Public Works Drainage Manual, as amended.

City of Norwalk, Connecticut - Department of Public Works Traffic Calming Guidelines January 24, 2002

City of Norwalk, Connecticut – Department of Public Works – Standard Details

City of Norwalk, Connecticut City Code – Chapter 91 Public Sewers

City of Norwalk, Connecticut City Code – Chapter 95 Street and Sidewalks

City of Norwalk, Connecticut City Code – Chapter 96 Excavation & Encroachments in Public Streets and Grounds

City of Norwalk, Connecticut City Code – Chapter 98 Vehicles and Traffic

City of Norwalk, Connecticut City Code– Chapter 101 – Scenic Roads

INTRODUCTION

The streets of the City of Norwalk have been classified into six systems, each having a specific function and purpose. The seven systems are: major arterial streets; minor arterial streets; collector streets; urban local streets; residential local streets; scenic roads, and design district streets. They are defined in the Street Classification Map depicted on Figure 1.

Driveways are classified into two groupings, major driveways and minor driveways.

Streets and driveways shall be designed and constructed with regard to their functional classification. Streets shall also be designed with regard to their relationship to surrounding land use. "Urban Area Districts," "Business Areas," "Village District s" and "Historic District Areas" are defined in the Design District Standard Location Map attached herein. (Figure 2)

All streets and driveways shall provide for the safe and efficient movement of those types of vehicles for which they are intended, as well as emergency vehicles such as fire apparatus and snow removal equipment.

Streets should be laid out so as to have as many of the adjacent building sites as possible above the elevation of the street and above any proposed or future sidewalks. For residential local streets, curvilinear arrangements shall generally be used in preference to gridiron patterns. Combinations of steep grades, sharp curves and/or intersections shall be avoided.

DEFINITIONS

1. **Expressway System** - That system of highways which provides for the expeditious movement of large volumes of through traffic between areas and across the City. Access is limited to grade-separated interchanges with arterial streets.

2. **Arterial Street System** - That system of streets which is used primarily to carry traffic between communities or large sections of the City.

3. **Collector Street System** - That system of streets which collects traffic from local streets and which carry though traffic from surrounding areas to the arterial system.

4. **Local Street System** - That system of streets which serves, primarily, only those properties having frontage on them, and which does not carry through traffic from surrounding areas.

5. **Scenic Roads** - A scenic road must be free of intensive commercial development and intensive vehicular traffic. The portion of road designated scenic road must be at least one-half (1/2) mile in length and must meet at least one (1) of the following criteria:

   - Unpaved
   - Bordered by mature trees or stone walls
   - Travelled portion may not be more than twenty (20) feet in width
   - Offers scenic views
   - It blends naturally into the surrounding terrain
   - It parallels or crosses over brooks, streams, lakes or ponds

   For a road to be designated as a scenic road, it must meet the requirements set forth in Chapter 101 of the Norwalk City Code.

6. **Design District Streets**- That system of streets which serves, primarily, only those buildings, properties or sites that have been designated by one of several entities on different levels as historically or architecturally significant.

7. **Street** - Any public or private way permanently dedicated to the movement of vehicles and pedestrians and providing the principal means of access to abutting property.

8. **Street Line** - The property line separating a street right-of-way from the abutting properties. For design district streets the property line shall be back of curb.

9. **Street-Right-of-way** - The area between street lines reserved for a street. Included in this area may be the travelled way, shoulder, median, planting strip, footpaths and sidewalks. Right-of-way width shall be measured at right angles to or radial to the center line of the street.

10. **Travelled Way** - The portion of the street reserved for the movement of vehicles, exclusive of shoulders.

11. **Shoulder** - The portion of the street adjacent to the travelled way, on either side, for the accommodation of stopped vehicles, for drainage, for emergency use, and for lateral support of pavement base and surface courses.

12. **Median** - That portion of a divided roadway separating the travelled ways reserved for traffic moving in the opposite directions.

13. **Traffic Lane** - That portion of the travelled way used for the movement of a single line of vehicles.

14. **Auxiliary Lane** - That portion of the travelled way intended for purposes supplementary to through traffic movement.

    (a) Left Turn Lane - An auxiliary lane for left turn movements.

    (b) Right Turn Lane - an auxiliary lane for right turn movements.

    (c) Separate Turning Lane - An auxiliary lane for traffic in one direction which has been physically separated from

through traffic by a traffic island.

15. **Driveway** - The area of public or private property reserved for the movement of vehicles between a street or another driveways shall be classified, major or minor, in accordance with the type and/or volume of traffic which they serve.

a) Major Driveways:

(1) All driveways serving industrial land uses.

(2) Driveways serving commercial uses which require a Special Permit in accordance with the Zoning Regulations.

(3) Driveways serving residential uses which require a Special Permit in accordance with the Zoning Regulations.

b) Minor Driveways: All other driveways.

16. **Intersection** - The crossing or meeting without crossing, of a street or driveway with one or more other streets or driveways.

17. **Sight Distance** - The length of travelled way visible to a driver. There are four different kinds of sight distance:

(a) **Stopping Sight Distance** - The distance required by the driver of a vehicle, travelling at a given speed, to bring the vehicle to a stop before reaching an object on the travelled way, after the object has become visible.

(b) **Passing Sight Distance** - The minimum sight distance that must be available to enable the driver of one vehicle to pass another vehicle safely and comfortably on a two-lane street without interfering with the speed of an oncoming vehicle, travelling at the design speed, should the oncoming vehicle come into view after the maneuver is started.

(c) **Intersection Sight Distance** - The minimum sight distance that must be available to the driver of a vehicle stopped on a street or driveway, on the approach to an intersection, in order that the

stopped vehicle may safely enter and proceed through the intersection.

(d) **Driveway Sight Distance** - At a major driveway, intersection sight distance shall be provided in accordance with the Intersection Sight Distance standards contained in subparagraph (c) above. At a minor driveway, no planting or other obstruction in excess of two (2) feet high shall be permitted within a triangle measuring 10 feet along the centerline of the driveway from the edge of the travelled way and 30 feet along the edge of travelled way of the street from the centerline of the driveway, in both directions.

DESIGN FEATURES

Street Right-of-way

Street right-of-way width should be not less than that required for the necessary cross section and drainage elements. Attention should be given to the possibility of future expansion of facilities within the right-of-way, such as the addition of one or more lanes or the installation of sidewalks.

Major and Minor Arterial Streets
Traffic Lanes and Auxiliary Lanes

The number of traffic lanes and auxiliary lanes for major and minor arterial streets shall be determined from traffic engineering analyses of present and future traffic flows and shall be approved by the Director of Public Works.

Major and Minor Arterial Streets - Shoulders

Shoulders are necessary on arterial streets to accommodate stopped or disabled vehicles and permit traffic to pass with minimum encroachment on the opposing, or parallel, traffic lane.

Collector Streets - Minimum Width

For collector streets, the minimum width of pavement is that required to provide free movement in each direction in the presence of stopped vehicles.

Attention should be given to the need for auxiliary lanes on the approaches to intersections and to the need for parking lanes in urban areas.

Urban Local Streets - Minimum Width

For urban local streets, the minimum width of pavement is that required to provide free movement in one traffic lane in each direction of travel and alternating flow in the presence of stopped vehicles.

Attention should be given to the need for auxiliary lanes on the approaches to intersections and to the need for parking lanes. Where trucks or

emergency vehicles are required to maneuver into or out of driveways or other streets, and intersection geometrics cannot be provided in accordance with these Roadway Standards, travelled way width in excess of the minimum may be required.

Residential Local Streets - Minimum Width

For residential local streets the minimum width of pavement is that required to provide free movement in one traffic lane in each direction of travel and alternating flow in the presence of stopped vehicles.

Attention should be given to the need for emergency vehicles and trucks to maneuver into and out of driveways and other streets.

Design District Streets - Minimum Width

For design district streets the minimum width of pavement is that required to provide free movement in one traffic lane in each direction of travel and alternating flow in the presence of stopped vehicles. On-street parking is permitted in designated areas outside the travel way. Raised speed tables are permitted within the street right of way.

Complete Streets

"Complete Street" policies shall be implemented where they can be reasonably implemented without undue hardship in accordance with all City Ordinances, State Statutes and Federal Laws.

Cross Slopes

Minimum cross slopes are necessary in order to provide for drainage. The entire right-of-way shall be designed to drain onto public property in urban areas. For residential local streets, off-street drainage may be permitted, subject to engineering analysis and the approval of the Director of Public Works.

Curbs

Curbs deter vehicles from leaving the pavement, control drainage and aid in the orderly development of the roadside. Curbs shall be provided on all arterial streets; on collector streets; residential local streets; and design

district streets where the slope of the street is five percent or greater; and on collector streets; residential local streets; and design district streets on the side(s) where sidewalks are provided. Curbs on streets may vary in height to not less than 0.5" necessary to comply with American with Disabilities Act standards.

Standard Curb and Sidewalk Materials:

The materials for the curbs and sidewalks within the City of Norwalk shall be in accordance with the requirements of that particular Design/Business/Historic/Village District as indicated below, unless the Director of Public Works authorizes the use of another type of material in writing prior to the installation of those curbs and sidewalks. The boundaries of the districts are defined in the Design District Standard Location Map attached (Figure 2).

Urban Area District – Granite curbs and concrete sidewalks.

Village District – Granite curbs, Brick Paver and Concrete sidewalks and Historic street lights.

Historic District – Granite curbs, Brick Paver and Concrete sidewalks and Historic street lights.

Extensive Business Area – Granite curbs, Brick Paver and Concrete sidewalks and street lights installed by the electric company in that area of the City.

Intensive Business Area – Granite curbs, Brick Paver and Concrete sidewalks and Historic Street lights.

Neighborhood Business Area - Granite curbs, Brick Paver and Concrete sidewalks and Historic Street lights.

Transit-Oriented Development (TOD) Redevelopment Plan Areas – Granite curbs, Brick Paver and Concrete sidewalks and Historic Street lights.

State Roads - Granite curbs, Brick Paver and Concrete sidewalks and street lights installed by the electric company in that area of the City.

Notes:

1. On Residential Local and Urban Local streets where concrete curbs and/or sidewalks currently exist on the street, the Director of Public Works shall have the authority for the purposes of consistency, to require the use of concrete curbs when reconstruction work is being done that would require the replacement of curbs and/or sidewalks.

2. If a particular street, or portion of a street is in a designated "Historic/Village District," the Director of Public Works shall have the authority to require the use of materials for curbs, sidewalks and brick paver sidewalks that would be in accordance with the standards for that particular "Historic/Village District" or portion of that "Historic/Village District."

3. These requirements are based off of guidelines that are set forth in Planning & Zoning Department and Redevelopment Agency documents such as the Norwalk Business District Guidelines dated September 1987, the Norwalk Waterfront Design Guidelines dated April 1988, the Urban Renewal Plan For The Reed Putnam Area, Norwalk, Connecticut, modified October 2015, etc. as amended and applicable.

Guide Rails

The necessity for, and the design of Guide Rails shall be in accordance with the AASHTO Roadside Design Guide and the State of Connecticut Department of Transportation Highway Design Manual, as amended.

Lateral Clearance

Lateral clearance standards are necessary to provide the driver with a safer and more comfortable ride. Signs, poles and other obstacles placed near the roadway may become hazards to vehicles which run off the roadway or which move near to the curb. The minimum lateral clearance shall be one foot six inches on streets with curbs and seven feet on streets without curbs. Clearance shall be measured from face of curb or edge of travelled way to face obstacle.

Notwithstanding the general need for lateral clearance mail boxes may be installed closer to the edge of travelled way than the minimums specified above, provided that they are located in accordance with U. S. Postal

Service Regulations and have supports which will bend or break away upon vehicle impact.

Vertical Clearance

No signs, barriers, decorations, etc., are permitted within 17'-6" of the highest point in the roadway. When they are installed within the City Right-of-Way, even at a height greater than 17'-6", an Encroachment permit is required from the Director of Public Works.

Minimum and Maximum Grade

A minimum longitudinal grade is required to provide for drainage. In selecting greater than minimum grades, optimum rather than maximum conditions should always be considered by the designer. Topography, aesthetics and cost, as well as noise pollution considerations, should be borne in mind.

Horizontal Curvature

Horizontal Curvature is directly related to design speed and has an important effect on safety, driving characteristics, and the appearance of the street. Minimum center line radii are specified for major and minor arterial streets; collector streets; urban local streets and residential local streets. These are related to design speeds, acceptable side friction factors, and to superelevation.

Sight Distance

Control of grade and curvature, and of obstructions in the vicinity of intersections, is necessary to provide adequate sight distance for safe vehicular operation. The three forms of sight distance, passing sight distance, stopping sight distance and intersection sight distance, involve different design considerations.

(a) Stopping sight Distance - This distance shall be calculated on the basis of the driver's ability to see a 2 foot high object when his eye level is assumed to be 3.50 feet above the travelled way surface. Minimum stopping sight distance shall be measured along a line from the center of the lane nearest the right-hand shoulder, curb or edge of travelled way to a point on that lane, at the shoulder, curb or edge of travelled way.

(b) Intersection Sight Distance - This distance shall be measured from the center line of the street or major driveway, at all points up to 15 feet behind the edge of the travelled way of the through street. Minimum intersection sight distance shall extend to a point in the center of the right lane of the through street(s) approaching from the left, and to a point in the center of the lane nearest the center line or median of the through street(s) approaching from the right. Height of the driver's eye is to be assumed to be 3.50 feet and the height of the object to be 3.50 feet.

Vertical Curvature

A minimum length of vertical curve is necessary to ensure that adequate stopping sight distance is provided and to assure satisfactory drainage of the travelled way.

Parabolic curves shall be used to connect vertical tangents. A length of transition vertical curve shall be constructed where the change in grade equals or exceeds 0.5 percent. Parabolic curves are defined through 'K' values for crest and sag curves. The 'K' value is to be multiplied by the algebraic difference in grades to produce the length of vertical curve to be provided. Where the change in grade is less than 0.8 percent the transition area may be roll graded in the field.

Superelevation

Superelevation is necessary to counteract outward drift on curves and to improve passenger comfort. It shall be calculated according to horizontal curvature, side friction factors and design speed. To prevent inward drift by slower moving vehicles the maximum level of superelevation specified shall not be exceeded.

Corner Geometry

To provide safe vehicular and pedestrian movement at intersections, intersecting streets shall be laid out with tangents at right angles to each other for a distance of at least 50 feet, measured along the center line from the right-of-way line of the intersected street. For a distance of at least 30 feet, measured in the same way, the approach gradient shall not exceed three percent, up or down.

A minimum curb or edge-of-travelled way radius shall be provided at street intersections in accordance with the classification of the major street, as follows:

Arterial	-	25 feet
Collector	-	20 feet
Local	-	15 feet

Along bus routes, a 30 foot radius shall be provided where buses make right turns.

At the corners of street intersections, street right-of-way lines shall be so located as to provide for continuity of required cross section and drainage elements included in the right-of-way of both streets. The right-of-way at each corner shall be so graded and landscaped as to provide adequate intersection sight distance. If necessary, additional land shall be included in the street right-of-way at the intersection to permit such grading and landscaping.

Bicycle Facilities

Bicycle Facilities shall be designed in accordance with Guide for the Development of Bicycle Facilities as published by the American Association of State Highway and Transportation Officials, as amended and the Connecticut Department of Transportation Highway Design Manual, as amended.

Sidewalks and Footpaths

Sidewalks are necessary to accommodate pedestrians safely along both sides of all streets in urban areas, along walking routes to schools and wherever large numbers of pedestrians may be expected to use the street, such as in the vicinity of parks, beaches, churches, local business, industrial plants, etc.

Walks to schools in residential areas may be provided by footpaths. Foot paths are walks which may depart from the alignment of the roadway to avoid trees or topographical features, or to make shortcuts. Footpaths shall be paved in asphalt and shall have a minimum unobstructed width of three feet.

In extensive business areas (see Figure 2); sidewalks shall have a minimum width of seven feet and shall extend from curb to street line. They shall be paved in concrete. In intensive business areas, sidewalks shall have a minimum width of seven feet and shall extend from curb to face of building. In historic areas, sidewalk width and paving material shall conform to an overall plan for the historic area and shall be approved by the Director of Public Works. Elsewhere sidewalks shall have a minimum of four feet from the face of curb to provide for overhead utilities, snow storage and, where appropriate, landscaping.

The snow strip, between the curb and the sidewalk, shall generally be grassed in residential areas and paved to match the sidewalk in urban areas. In urban areas sidewalks shall be concrete. In residential areas they may be asphalt or concrete.

Driveway Location and Size

No minor driveway shall be located within twenty-five (25) feet of the intersection of two (2) or more streets, measured from the street line of the nearest intersected street to the center line of the driveway, along the street line of the street entered by the driveway. No major driveway shall be located within fifty (50) feet of the intersection of two (2) or more streets, measured in the same way.

(a) Where more than one (1) driveway is constructed serving the same premises, the minimum distance between the center lines of minor driveways shall be fifty (50) feet, and the minimum distance between major driveways shall be seventy-five (75) feet.

(b) The minimum widths of driveways, measured at the street line, shall be the following:

Type	**One-Way** (feet)	**Two-Way** (feet)
Minor driveway	10	12
Major driveway	16	22

(c) The maximum widths of driveways, measured at the street line, shall be the following:

Type	**One-Way** (feet)	**Two-Way** (feet)

Minor driveway	12	20
Major driveway	24	40

The right is reserved by the Director of Public Works to require changes, additions and relocations as, in his opinion, may be necessary for the relocation, reconstruction, widening or maintenance of the roadway or to provide protection to life and property on or adjacent to the roadway.

Shared Driveway Standards:

One driveway can only provide access to/serve a maximum of two building lots (different parcels) of the size permitted in the zone wherein the driveway and building lots are located. Once a single driveway provides access to/serves three building lots (different parcels) or more, that driveway is classified as a Private Road and shall be constructed in conformity with City Roadway Standards and specifications that are in effect at the time that the work thereon commenced. Acceptance of that Private Road as a City Street shall have to be mutually agreed upon by both the City and the residents of that Private Road.

Dead End Streets and Cul-de-Sacs

All dead end streets shall be provided with a turnaround, to permit maneuvering of emergency vehicles and snow removal equipment.

For dead end streets constructed or extended after the date of adoption of these Roadway Standards, turnarounds shall be in the form of rotary with a minimum outside radius of 50 feet. The pavement shall have a crown along the center line to facilitate drainage.

Dead end streets approved for construction prior to the date of adoption of these Roadway Standards may have alternative provision for turnarounds, subject to traffic engineering analysis.

When dead end streets are extended, the previously existing turnaround shall be removed and that portion of the roadway reconstructed in accordance with these Roadway Standards.

The width of any cul-de sac shall not be less than 24 feet.

Utility Structures in Public Highways

All utilities, both public and private, proposed new installations and relocations within the street right-of-way shall be constructed at a location approved by the Director of Public Works.

In order to facilitate maintenance, new underground utility structures should be constructed within the travelled way.

Where existing underground utility structures are located outside of a curbed travelled way excluding sidewalks, all modifications thereto shall be designed to carry passenger car and light truck loads. Structures located in other areas shall be designed to carry street loading, with allowance for impact. All structures within the City Right-of-Way shall be designed to carry HS20 Truck Loads.

All underground utility structures located in sidewalk areas, including sidewalk reserve areas, shall be constructed to prevent differential frost heave between sidewalk and structure.

Street Acceptance and Construction

In accordance with the Norwalk Code, § 95-23, no newly constructed highway, road or street, together with any curbs and sidewalks adjacent thereto and the drainage systems, guardrails and street signs installed in conjunction therewith, shall be laid out, altered, enlarged, changed or constructed, except in conformance with the standards set forth in the City of Norwalk, Department of Public Works, Roadway Standards, and Standard Construction Specifications, Drainage Manual, and zoning subdivision requirements as approved and amended by the Public Works Committee to the Common Council.

Any street, highway, or road, or any curb or sidewalk adjacent thereto, or any drainage system, guardrail or street sign installed in conjunction therewith that shall be in whole or in part or manner, laid out, altered, changed or constructed other than in accordance with the standards set forth in the above paragraph in the determination of the Director of Public Works, shall not be accepted as a public street of the city.

Street Lighting

Illumination standards for artificially lit streets shall conform to all applicable standards of the Connecticut Department of Transportation and the Federal Highway Administration. In certain circumstances, street lights shall be installed on building faces at a height, frequency and location which provides the necessary illumination at the surface of the roadway. In no circumstance shall the bottom of any fixture be placed less than 8'-6" above the existing grade or sidewalk.

Signage

All regulatory signs shall meet the requirements of the Manual of Uniform Traffic Control Devices (MUTCD), with respect to color, format, size, mounting, reflectorization, height of verbiage. Materials other aluminum sheet may be allowed. The proper function of any regulatory sign shall take precedence over any other consideration.

Fences and Walls on Residential Property

1. Height

(a) Fences may be installed by homeowners or their agents, up to a maximum nominal height of six (6) feet above lowest adjacent ground level without a Building Permit.

(b) Masonry walls (stone, brick or concrete) may be installed up to a maximum nominal height or four (4) feet above lowest adjacent ground level without a Building Permit.

(c) For any new or replacement fence taller than 6 feet, or masonry wall taller than 4 feet, a Building Permit must be obtained from the Code Enforcement Department. SEE NUMBER 5 UNDER THIS SECTION.

(d) No portion of any new or replacement fence or wall shall block the required light and ventilation of any residential building window. If there is a question regarding this you should check with the Building Official for the proper requirements. This requirement does not apply to fence distances from detached accessory structures such as sheds, free-standing garages and swimming

pools, etc.

2. Location

(a) The entire fence or wall, including posts, braces or pilasters, must be located entirely on owner's side of property line. No minimum setback distance from the property line is specified in City Code. SEE NOTE 2d AND 3a BELOW.

(b) Two abutting neighbors can agree in writing through an agreement to place a fence or wall directly on the property line between them if that written agreement is filed on the Land Records for both abutting neighbors at the Town Clerk's Office, together with updated Class A-2 Surveys of the involved properties. SEE NOTE 2d and 3a BELOW.

(c) Any new or replacement fence or wall that will extend along the side of a property near a driveway must either terminate ten (10) feet from the edge of the roadway; or any section of such fence or wall within ten (10) feet of the edge of the roadway cannot exceed a height of thirty (30) inches above that driveway surface, in order to ensure adequate sightline for a motorist backing out of that driveway. SEE NOTE 3a BELOW.

(d) A current Class A-2 Survey of your premises (which must be prepared by a Connecticut-licensed Land Surveyor) is the accepted reference standard for accurately determining the location of property lines.

3. Street side Fencing and Walls

(a) All fencing or walls to be constructed by homeowners or their agents along the street front face(s) of their properties must be situated entirely behind the legal property line.

NOTE: The City's legal right-of-way along a street usually extends beyond the street edge or curbing and sidewalks. Owner should follow his/her Class A-2 Survey prior to installing any street side fence or wall.

The City maintains the legal right to remove any fence or wall built within its street right-of-way, at the expense of the Owner.

(b). On any residential property situated at the corner of two streets, no portion of a street side fence or wall within thirty (30) feet of that lot's street corner can exceed thirty (30) inches in height, in order to ensure adequate sightlines for motorists approaching that intersection.

4. Fence Style

(a) No fence on residential property is allowed to be electrified, nor can any fence or wall be fitted with barbed wire or razor ribbon.

(b) In the case of a picket or stockade fence, the owner can arrange to so-called "good side" to face whichever direction he or she chooses.

5. Fence and Wall Permits

For any new or replacement fence taller than 6 feet or masonry wall taller than 4 feet, owner or owner's contractor must provide a design drawing or such proposed fence or wall installation to the code enforcement for a Building Permit. This drawing must bear the seal and signature of a Connecticut registered Architect or Licensed Professional Civil Engineer, and must include calculations proving structural resistance to wind loads mandated by the State Building Code.

This requirement may be waived by the Chief Building Official if he feels the detailed drawings and calculations meet the requirements of the State Building Code.

Alleys

Alleys provide for accessibility and service to each individual land parcel. They are characterized by a narrow right-of-way and range in width from 16 to 20 ft in residential areas and up to 30 ft in industrial areas.

Alleys should be aligned parallel to or concentric with the street property lines. It is desirable to situate alleys in such a manner that both ends of the alley are connected either to streets or to other alleys. Where two alleys intersect, a triangular corner cutoff of not less than 10 ft along each alley property line should be provided. Dead-end alleys should be provided with a

turning area in accordance with Figure V-3.

Curb return radii at street intersections may range from 5 ft in residentially zoned areas to 10 ft in industrial and commercial areas where large numbers of trucks are expected.

Alleys should have grades established to meet as closely as possible the existing grades of the abutting land parcels. The longitudinal grade should not be less than 0.20.

Alley cross sections may be V-shaped with transverse slopes of 2.5 percent toward a center V gutter. Runoff is thereby directed to a catch basin in the alley or to connecting street gutters.

CONSTRUCTION STANDARDS

Specifications

Construction shall conform to the Standard Specifications established by the Department of Public Works.

Where no Standard Specification is applicable, or where special conditions exist, elements of construction shall conform to sound engineering practice and shall be approved in writing by the Director of Public Works.

Standard Construction Details

All designs for roadway and driveway construction, reconstruction or pavement placement shall be in accordance with the Construction Details contained in this Manual.

Drainage

The design of roadway and driveway drainage shall conform to the Norwalk Drainage Manual and shall have the written approval of the Director of Public Works.

Sanitary Sewers

The design and construction of sanitary sewers shall conform with the Design and Construction of Sanitary and Storm Sewers, ASCE - Manuals and Reports on Engineering Practice No. 37, WPCD Manual of Practice No. 9, prepared by a joint committee of the American Society of Civil Engineers and the Water Pollution Control Federation, as amended and TR-16 Guidelines For The Design Of Wastewater Treatment Works, as amended. Construction shall conform to the Standard Specifications established by the Department of Public Works, and the regulations of the Norwalk Water Pollution Control Authority (WPCA).

DESIGN STANDARDS

DESIGN STANDARDS: DESIGN DISTRICT STREETS

DESIGN SPEED		30 MPH
POSTED SPEED		25 MPH
PAVEMENT WIDTH	WITH CURBS	26.0 FT (MIN)
	WITHOUT CURBS	24.0 FT (MIN)
CURB HEIGHT		0.5 FT
LATERAL CLEARANCE	WITH CURBS	1.5 FT (MIN)
	WITHOUT CURBS	6.0 FT (MIN)
LONGITUDINAL GRADES	MINIMUM	0.5%
	MAXIMUM URBAN	11.0%
	MAXIMUM RESIDENTIAL	11.0%
CROSS SLOPE	PAVED AREAS	¼ IN/FT (MIN)
SUPERELEVATION		NONE
HORIZONTAL CURVATURE (RADIUS)		375 FT (MIN)
STOPPING SIGHT DISTANCE		200 FT (MIN)
INTERSECTION SIGHT DISTANCE		335 FT (MIN)
VERTICAL CURVATURE	'K' FACTOR – SAG	37
	'K' FACTOR - CREST	19
	MINIMUM LENGTH	90 FT
MAXIMUM EARTH SLOPE	HORIZONTAL : VERTICAL	2:1

DESIGN STANDARDS: URBAN AND RESIDENTIAL LOCAL STREETS

DESIGN SPEED		35MPH
POSTED SPEED		25 MPH
PAVEMENT WIDTH	URBAN WITH CURBS	26.0 FT (MIN)
	URBAN WITHOUT CURBS	24.0 FT (MIN)
	RESIDENTIAL WITH CURBS	22.0 FT (MIN)
	RESIDENTIAL WITHOUT CURBS	20.0 FT (MIN)
CURB HEIGHT		0.5 FT
LATERAL CLEARANCE	WITH CURBS	1.5 FT (MIN)
	WITHOUT CURBS	6.0 FT (MIN)
LONGITUDINAL GRADES	MINIMUM	0.5%
	MAXIMUM URBAN	11.0%
	MAXIMUM RESIDENTIAL	11.0%
CROSS SLOPE	PAVED AREAS	¼ IN/FT (MIN)
SUPERELEVATION		NONE
HORIZONTAL CURVATURE (RADIUS)		530 FT (MIN)
STOPPING SIGHT DISTANCE		250 FT (MIN)
INTERSECTION SIGHT DISTANCE		390 FT (MIN)
VERTICAL CURVATURE	'K' FACTOR – SAG	49
	'K' FACTOR - CREST	29
	MINIMUM LENGTH	105 FT
MAXIMUM EARTH SLOPE	HORIZONTAL : VERTICAL	2:1

DESIGN STANDARDS: COLLECTOR STREETS

DESIGN SPEED		40 MPH
POSTED SPEED		30 MPH
PAVEMENT WIDTH	WITH CURBS	26.0 FT (MIN)
	WITHOUT CURBS	24.0 FT (MIN)
CURB HEIGHT		0.5 FT
LATERAL CLEARANCE	WITH CURBS	1.5 FT (MIN)
	WITHOUT CURBS	6.0 FT (MIN)
LONGITUDINAL GRADES	MINIMUM	0.5%
	MAXIMUM URBAN	11.0%
CROSS SLOPE	PAVED AREAS	¼ IN/FT (MIN)
SUPERELEVATION		¾ IN/FT (MAX)
HORIZONTAL CURVATURE (RADIUS)	WITHOUT SUPERELEVATION	715 FT (MIN)
	WITH MAXIMUM SUPERELEVATION	510 FT (MIN)
STOPPING SIGHT DISTANCE		305 FT (MIN)
INTERSECTION SIGHT DISTANCE		445 FT (MIN)
VERTICAL CURVATURE	'K' FACTOR – SAG	64
	'K' FACTOR – CREST	44
	MINIMUM LENGTH	120 FT
MAXIMUM EARTH SLOPE	HORIZONTAL : VERTICAL	2:1

DESIGN STANDARDS: MINOR ARTERIAL STREETS

DESIGN SPEED		40 MPH
POSTED SPEED		30 MPH
LANE WIDTH		12.0 FT
PAVED SHOULDER WIDTHS	WITH PARKING	8.0 FT
	WITHOUT PARKING	2.0 FT
CURB HEIGHT		0.5 FT
LATERAL CLEARANCE		1.5 FT (MIN)
LONGITUDINAL GRADES	MINIMUM	0.5%
	MAXIMUM	8%
CROSS SLOPE	PAVED AREAS	¼ IN/FT (MIN)
SUPERELEVATION		¾ IN/FT (MAX)
HORIZONTAL CURVATURE (RADIUS)	WITHOUT SUPERELEVATION	715 FT (MIN)
	WITH MAXIMUM SUPERELEVATION	510 FT (MIN)
STOPPING SIGHT DISTANCE		305 FT (MIN)
INTERSECTION SIGHT DISTANCE		445 FT (MIN)
VERITICAL CURVATURE	'K' FACTOR – SAG	64
	'K' FACTOR – CREST	44
	MINIMUM LENGTH	120 FT
MAXIMUM EARTH SLOPE	HORIZONTAL : VERTICAL	2:1

DESIGN STANDARDS: MAJOR ARTERIAL STREETS

DESIGN SPEED		40 MPH
POSTED SPEED		30 MPH
LANE WIDTH		12.0 FT
		8.0 FT
PAVED SHOULDER WIDTHS	WITH PARKING	
	WITHOUT PARKING	4.0 FT
CURB HEIGHT		0.5 FT
LATERAL CLEARANCE		1.5 FT (MIN)
LONGITUDINAL GRADES	MINIMUM	0.5%
	MAXIMUM	8%
CROSS SLOPE	PAVED AREAS	¼ IN/FT (MIN)
SUPERELEVATION		¾ IN/FT (MAX)
HORIZONTAL CURVATURE (RADIUS)	WITHOUT SUPERELEVATION	715 FT (MIN)
	WITH MAXIMUM SUPERELEVATION	510 FT (MIN)
STOPPING SIGHT DISTANCE		305 FT (MIN)
INTERSECTION SIGHT DISTANCE		445 FT (MIN)
VERITICAL CURVATURE	'K' FACTOR – SAG	64
	'K' FACTOR – CREST	44
	MINIMUM LENGTH	120 FT
MAXIMUM EARTH SLOPE	HORIZONTAL : VERTICAL	2:1

NOTES

1 Rock Ledge – Slope to be determined by engineering analysis

2 Earth Slope - Slope to original ground surface. Where disturbed slope extends beyond R.O. W. line, retaining walls shall be required unless slope rights are obtained.

3 Desirable

4 Sidewalks:

Bituminous Concrete

2" Class 2 for sidewalks and minor driveways
3" for major driveways
6" Processed Aggregate Base

Portland Cement Concrete

5" Class "C" Concrete
6" For Driveways
6" Processed Aggregate Base
Expansion Joints Approximately 12'-0"

5 1 ½" HMA S0.375" Level 2 Surface Course
1 ½" HMA S0.375" Level 2 Binder Course

6 12" Processed Aggregate Base
18" in Rock Cut
Must be inspected and approved by Department of Public Works

7 6" Topsoil and seed

8 Guide Rail

9 Rock Excavation Line

10 Varies according to Drainage Requirements

* See Superpave Design Level Information

Superpave Level shall be as indicated unless directed otherwise by the Director of Public Works.

11 Underdrainage as Required by Department of Public Works

12 1 ½"HMA S0.375" Level 2 Surface Course
1 ½" HMA S0.375" Level 2 Binder Course

13 6" HMA S1.0" Level 3 Base Course

14 12" Processed Aggregate Base
18" in Rock Cut

15 2" HMA S0.50" Level 3 Surface Course
2" HMA S0.50" Level 3 Binder Course

16 14" Processed Aggregate base
18" in Rock Cut

17 Shoulder to be constructed to arc of circle average cross slope ½"/FT.

18 Minimum cross slope ½"/FT otherwise continuous roadway cross slope.

19 Shoulder at high side of superelevated section must be at least 4'-0 wide.

20 Minimum Median Width – 4'0"
Minimum Turf Median Width – 6'0"
Maximum Turf Median Width – 10'0"

21 Bituminous Concrete Curbing

22 Granite or Concrete Curb

23 1 1/2" HMA S0.375" Level 2 Surface Course
2" HMA S0.50" Level 2 Binder Course

24 3" HMA S1.0" Level 2 Base Course

* See Superpave Design Level Information

Superpave Level shall be as indicated unless directed otherwise by the Director of Public Works.

CONSTRUCTION DETAILS

Recycle for a green tomorrow NORWALK on the move

DEPARTMENT OF PUBLIC WORKS
PUBLIC WORKS CENTER

MEMORANDUM

To: Bruce Chimento, Director of Public Works
Lisa Burns, Principal Engineer
Kathryn Hebert, DPW Administrative Services Manager
Robert Barron, Director of Management & Budgets
Chris Torre, Superintendant of Operations
Dilene Byrd, Administrative Assistant

From: Jessica C. Paladino, Waste Programs Manager

Date: December 9, 2016

Re: MSW and Recycling Report – November 2016

	MSW Collection and Disposal			
Municipal Solid Waste (MSW)	**Previous FY: Nov-15**	**Current FY: Nov-16**	**Change**	**FY 16/17 Cumulative**
Curbside tonnage	1,172.71	1,251.10	6.7%	6,211.76
MSW tonnage out	1,817.54	1,910.15	5.1%	9,607.18
Transfer station operating fee	$64,400.00	$65,625.00	1.9%	$328,125.00
Transport and disposal fee	$154,490.90	$166,183.05	7.6%	$835,824.66
Curbside collection fee	$87,430.25	$90,053.17	3.0%	$450,265.85
Total operating costs (less curbside)	$218,890.90	$231,808.05	5.9%	$1,163,949.66

MSW Consolidated Budget	
FY 16/17 Budget	$3,856,888.00
Amount expended	$1,614,215.51
Percent remaining	58.1%

	Recycling Collection			
Recycling Collection	**Previous FY: Nov-15**	**Current FY: Nov-16**	**Change**	**FY 16/17 Cumulative**
Curbside tonnage	661.33	742.56	12.3%	3,529.85
Transfer station tonnage	39.8	41.65	4.6%	212.04
Total monthly tonnage	701.13	784.21	11.8%	3,741.89
Curbside collection fee	$84,872.08	$87,418.17	3.0%	$437,090.83

Recycling Budget	
FY 16/17 Budget	$1,049,018.00
Amount expended	$437,090.83
Percent Remaining	58.3%

	MSW and Recycling Revenues			
MSW and Recycling Revenues	**Previous FY: Nov-15**	**Current FY: Nov-16**	**Change**	**FY 16/17 Cumulative**
Transfer station tip fees	$32,770.10	$35,589.60	8.6%	$171,419.65
Recycling revenue (curbside)	$11,573.28	$12,994.80	12.3%	$61,772.38
Recycling revenue (T.S.)	$696.50	$728.88	4.6%	$3,710.70
Total revenues	$45,039.88	$49,313.28	9.5%	$236,902.73

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NORWALK
The Sound of Connecticut
DEPARTMENT OF PUBLIC WORKS

TO: Public Work Committee

FROM: Connie Blair, Customer Service Manager

Cc: Bruce Chimento, Director of Public Works

SUBJECT: Customer Service Calls and Requests December 1st – December 28th
DATE: December 29, 2016

The Customer Service Center received 375 service request calls with 400 requests for service related to Public Works. Listed are amounts of requests received in each Public Works category, what number of service request remain in progress, and the number of requests completed.

Category:	**In Progress**	**Completed**	**Total**
Drainage Catch basin cleaning, and repair, culvert maintenance	*4*	10	14
Engineering Contractor trench, permit Inspections, paving	*21*	5	25
Landscaping Tree inspection and removal, tree pruning and cutbacks	*6*	9	15
Ordinance Enforcement Officer Illegal dumping, illegal signs, sidewalk litter	*18*	13	31
Road Potholes, curbing, and sidewalk repair	*4*	32	36
Solid Waste Recycling, garbage, stickered carts, recycling and garbage	*1*	102	103
Traffic Signals, signs, sightlines issues	*27*	20	47
		Public Work Total Request	**271**

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