

## ENGINEERING DEPARTMENT RESPONSIBILITIES

1. Review all building permit applications for compliance with City Standards for storm and sanitary sewers, drainage, flood control, and necessary State and Local Permits.
2. Establish design criteria and standards for public facilities improvements.
3. Review plans for erosion control, parking lots/garages, storm water runoff, and storage, flood hazard zones, utilities, access, pavement, floor elevations, ordinance compliance, driveways, grading, traffic and pavement marking plans, and traffic impact studies for all submittals to Planning and Zoning Commission, Wetlands Commission, ZBA and advise all agencies on technical matters such as inspection, cost estimates for establishing bonds, construction inspection and completion for approval of bond release.
4. Administer the City's Flood Insurance Program. Review cost of renovations for compliance in regulated areas. Protect floodways from encroachment. Review proposals for construction in determined flood hazard zones.
5. Design and construction of public improvement projects, flood control structures and road/intersection construction. This function includes land surveys, feasibility studies, contract documents preparation, specifications, plans, estimates and supervision of construction. Review and comments relative to proposed street scape projects.
6. Advise the City Council on all petitions for public improvements, including street acceptances and design, street abandonment, sidewalks, utility conduits and chambers, and proposed driveway construction agreements
7. Provide Special Committee Reports to the City Council which involve preparation of legal descriptions for layouts, abandonment and established grades for City-accepted streets.
8. Provide line and grade for curb and sidewalk installation within City-accepted right-of-ways. Reference all monuments prior to destruction by planned new construction, and replace as necessary.
9. Maintain permanent records of and provide information relative to City property including maps, field data, vertical and horizontal control, street layouts, sewer records, established grades, abandonment, buildings, bridges, parks, landfill and hazardous waste area.
10. Provide engineering services to other municipal departments as required, including support to the City Attorney's Office with legal records, easements, property descriptions, right-of-way line surveys, fall location determination, act as expert witness, and provide depositions in claims and court disputes, surveys and designs for establishing new parking areas and layouts.
11. Provide consultation, recommendations and record map information to the general public at the service counter, on the average of 500 requests per months.

12. Review for regulation compliance and approve, as applicable, all maps prior to the public's filing of such in the Town Clerk's Office. Update City records with new subdivision map and revision information.
13. Modernize the traffic signal and its surveillance system with state of the art technology, to improve the safety and efficiency of vehicular and pedestrian movement in the City.
14. Manage and coordinate technical effort with outside consulting engineers who are under agreement with the City of Bridgeport for engineering services related to public improvement projects. Insuring that consultants and contractors involved conform to approved plans and City Ordinances.
15. Member of the Water Pollution Control Authority Board of Directors. Review and consult on collections, performance, ordinances, management and budget, sewer extensions, assessments, legal matters and resolution, as necessary.
16. Responsible for issuing all street number addresses, modifying and resolving issues with the Tax Assessor, as necessary.
17. Member of School Building Committee. Review architectural qualifications and interview for design needs. Attend meetings regularly; provide advice and consultation on new school building and renovation issues, site plans, traffic issues and safety concerns, as necessary.
18. Interaction with State of Connecticut Department of Transportation relative to planning, design and effect of State projects on City infrastructure; e.g., I-95 Rehabilitation, State Street and Fairfield Avenue storm/sewer separation, Metro-North Bridge over Fairfield Avenue, North Avenue and Boston Avenue Intersection Improvements, Stratford Avenue Bridge Rehabilitation, etc.
19. Administer and Manage Local Bridge Program: involvements include application for grants, consultant selection and design, contractor bids, construction and inspection.
20. Resolution and field investigation of complaints and requests involving storm water, traffic, parking and traffic calming studies ( $\pm 200$  annually).
21. Assist with GIS Policy and Technical revision as needed.
22. Responsible for on going procurement of multi-million dollar federal funds (15 million dollars since 1993) to modernize the antiquated traffic signals and assembling an adaptable/expandable state-of-the-art traffic operation center, constructing a fiber optic network by employing an innovative approach to communication system, and building a CCTV system from the ground up.
23. Responsible for developing project scope, RFPs, cost estimates, budget preparation, obtain grant funding, administering and managing traffic signal/Intelligent Transportation System and roadway improvement projects.
24. Develop traffic signal hardware and communication standards.

25. Develop traffic signal operation Guidelines.
26. Responsible for all aspects of traffic engineering functions including but not limited to; traffic control signal system and timing updates, signs and pavement markings, on-street parking, on-street Handicapped parking and school safety zone programs.
27. Managing Traffic Signal Program: Perform traffic surveillance, trouble shooting traffic signal hardware and software, assist DPW maintenance crew with maintenance and repairs.
28. Develop engineering plans, detailed specifications, and estimates, review shop drawings/catalog cuts, conduct field and system integration inspections, conduct electrical and fiber optic acceptance testing.
29. Direct involvement with the Greater Bridgeport Regional Council in developing city's Transportation Improvement Program.
30. Serve on technical committees; e.g., Downtown Plan, Greater Bridgeport Regional council, Design Review Committee, and Greater Bridgeport Transit Authority.
31. Maintain Traffic Signal Inventory database.
32. Develop and publish policies and procedures on traffic and parking.
33. Assist Police Department and Board of Police commissioners in review of sign and traffic calming installations within the City Right of Way. Provide recommendation for all BPC applications.
34. Coordinate multi jurisdiction projects that cross within City and State roadways as well as multiple town (Trumbull, Stratford and Fairfield) border projects.
35. Provide technical support to all City Project managers involved in DOT and Federal related projects based on working knowledge of DOT Municipal projects. Informal City Liaison to the Department of Transportation (DOT)
36. Direct project management and administration of large scale infrastructure project (ie. roadway, bridge, sidewalk, dam, traffic signal etc) from planning through construction
37. Serve as Legal Traffic Authority representative to the Office of State Traffic Administration (OSTA).
38. Provide workshops including traffic control system and work zone safety to DPW maintenance staff.
39. Assist various departments with technical oversight and review for various projects throughout the City.
40. Member of School Building Committee. Technical support and plan review of all new school projects.

41. Assist Public Facilities in Capital planning based on Engineering projects which are both federally and locally funded.
42. Assist Zoning Department in review of As built plans for all new construction.
43. City Administrator of the Storm Water Management Manual. Enforcing City ordinance for drainage requirements for new construction and substantial improvements within the City.
44. General Engineering and Traffic related expertise in all aspects of Civil Engineering.