Town of Glastonbury Engineering Division
Development Plan Review Checklist

PROJECT INFORMATION	
Approval Type:	Special Permit Other:
Design Engineer Firm:	
Project Name:	
Project Address:	
Submittal Date:	
Review Date:	
Reviewed By:	

GENERAL PLAN CHECKLIST	
	Maps prepared in accordance with the “Minimum Standards for Surveys and Maps in the State of Connecticut” as adopted by the Connecticut Association of Land Surveyors, Inc. on September 26, 1996, as amended.
	Coordinate System Identified (NAD 83, NAVD 88 required)
	Label NAD83 coordinates and identify control points and bench marks
	Location Plan (1” = 1000’, including outline of property or site area)
	North Arrow, Plan Scale, Date
	Sealed by a CT Licensed Land Surveyor or Professional Engineer as Applicable
	Note indicating Contractor requirement to “Call-Before-You-Dig” prior to any construction
	Complete legend identifying existing and proposed features
	Town Approval block included on all sheets to be filed
	Separate sheet included in plan set for Town approval motions and Department review memos
	Parcel boundary closure check performed by Engineering
	Addresses assigned to any newly created or combined parcels
	Street Names identified for private roads or private drives to be named for addressing purposes
	Standard Inspection Note on all applicable sheets stating: NOTE: THE CONTRACTOR SHALL NOTIFY THE TOWN OF GLASTONBURY ENGINEERING DIVISION 24 HOURS PRIOR TO BEGINNING ANY STORM DRAINAGE, SANITARY SEWER INSTALLATION, ROADWAY PREPARATION, PAVING, SIDEWALK, CURBING, OR ANY EXCAVATION IN THE TOWN RIGHT-OF-WAY TO SCHEDULE INSPECTIONS. THE DIVISION CAN BE REACHED BETWEEN 8:00 AM-4:30 PM MONDAY THRU FRIDAY AT (860) 652-7735.

SITE DEVELOPMENT PLAN CHECKLIST	
	Plans certified by CT Licensed Land Surveyor and Professional Engineer
	Existing structures with indication of protection or removal.
	Existing curb cuts to be closed and restored.
	Wetlands and watercourses with 100' upland review area with Soil Scientist Certification
	FEMA Flood boundary derived from Flood Profile Data from the most current FIS (as applicable)
	Proposed building lines, building footprint, finished floor elevations
	Existing ground contours at 2 foot intervals (or 1 foot intervals in Flood Zone areas) with spot elevations at highpoints and depressions, based on NAVD 1988. Include a minimum of two (2) benchmarks per sheet. Note source of topographic information and limits of field survey.
	Proposed finished ground contours at 2 foot intervals (or 1 foot intervals in Flood Zone areas) with spot elevations at highpoints and depressions, based on NAVD 1988. Depict grading for the entire site.
	Proposed limits of clearing, with specimen trees noted for protection
	Existing and proposed storm drainage facilities, including structure types, pipe size, slopes, materials, invert elevations, and connections to existing drainage systems, wetlands or watercourses, water quality treatment measures per 2004 DEEP Stormwater Quality Manual. **SEE SEPARATE SHEETS FOR ADDITIONAL DRAINAGE REQUIREMENTS**
	Proposed foundation drains showing invert levels of the drain at the building connection and the outlet (piped discharges into the public right-of-way are prohibited by ordinance)
	Existing and proposed water and sanitary sewer facilities, including all bends, valves, manholes, hydrants, and appurtenances with pipe sizes, slopes, materials and invert elevations within structures **SEE SEPARATE SHEET FOR ADDITIONAL SEWER REQUIREMENTS**
	Proposed location of all other utilities (if known) including, but not limited to, natural gas, telephone and electrical (include equipment installation)
	Retaining walls with top and bottom of walls elevations noted. Confirm no grading or impacts on to abutting private property.
	Parking areas, including parking requirements table, appropriate aisle and space dimensions, # ADA spaces
	Sight line adequate (200' minimum) at proposed driveway locations.
	Traffic control devices, pavement markings and signs.
	Sidewalks and sidewalk ramps **Sidewalks continuous through driveways, 8" reinforced sidewalk at new commercial drives. Check for current Town details.**
	Plantings minimum 10 feet away from sidewalks to avoid root intrusion, minimize plant obstruction complaints
	Guide rail and protective fencing as required for grading
	Erosion and Sediment controls per 2002 E&S Control Guidelines (including narrative, area of disturbance in acres, phasing as required, construction entrance, silt fence, sediment basins, etc.).
	Obtain CT DEEP Construction General Permit for projects that disturb 5 acres or more.

STORMWATER MANAGEMENT REPORT CHECKLIST	
	Report signed by CT Licensed Professional Engineer
	Narrative summarizing the proposed project, design methods used, and table of pre- and post–development flows at appropriate downstream locations showing zero net increase in runoff from the site for the 2, 10, 25, 50 and 100-year storm events. Summarize WQV required for the project area and the WQV retained by the proposed improvements.
	Hydrographs and calculations identifying peak runoff, velocities and timing of peak flows from the site at critical locations in the watershed as outlined in the CTDOT Drainage Manual, latest revision. Supporting information for the drainage analysis including, but not limited to, runoff coefficients, time of concentration flow paths, drywell design, etc.
	Confirm use of SCS hydrology methods for proposed detention, including latest NOAA Rainfall rates and Type III rainfall distribution.
	Inventory and evaluation of hydraulic structures both on-site and in the downstream zone of influence (as defined in the Public Improvement Standards) to identify flow capacity, pipe velocities, hydraulic grade line elevations and physical condition
	Identification of drainage structures and watercourses that are inadequate for existing or future conditions
	Hydraulic grade line computations for enclosed drainage systems indicating a minimum headwater clearance of one (1) below top of frame for existing and proposed structures.
	Detention basin design information that includes stage-storage-discharge curves or tables, outlet control data, flood routing calculations, subsurface conditions and maximum water surface elevations
	Outlet protection, riprap sizing, channel sizing, and channel lining calculations
	Gutter flow analysis and ponding calculations for low points (when requested by the Town Engineer)
	Plans with scale not to exceed 1” = 100’ identifying topography, watershed boundaries (for overall site and storm drainage structures), soil types, land use characteristics and time of concentration flow paths with design points and labels corresponding to the drainage calculations for pre- and post-development conditions
	Plans with 100-year flood limits derived from Flood Profile data provided in the latest version of the FEMA Flood Insurance Study (if applicable), inland wetland boundaries, and groundwater protection zones within the project limits
	Computations of the required Water Quality Volume (WQV) to be retained on site for the project area and for the area draining to each proposed treatment system, include pre and post development impervious area and directly connected impervious area (DCIA). For redevelopment of sites that are currently developed with DCIA of 40% or more, **one-half of the WQV** from the site must be retained, **for all other sites the full WQV must be retained**.)
	Computations of the WQV actually retained by the proposed treatment system(s). NOTE: Only storage below the low-flow orifice of an outlet control structure can be considered retained for computation of the WQV. Slow release of the WQV over a 24 to 48 hour period via infiltration or a small diameter orifice will also be considered as retained for the purposes of these computations.
	WQV surface elevations clearly labeled and depicted on appropriate cross sections and details within the plan set. WQV retained by each proposed treatment system labeled on the plans.
	Town of Glastonbury MS4 DCIA tracking table accurately filled out and affixed to the site plan and/or drainage plan sheets within the plan set.

STORM DRAINAGE PLAN CHECKLIST	
	Plans certified by CT Licensed Professional Engineer
	Existing and proposed storm drainage facilities, including structure types, pipe size, slopes, materials, invert elevations, and connections to existing drainage systems, wetlands or watercourses
	Outlet protection properly detailed, labeled with length, width, depth, type of riprap, geotextile, etc.
	Water Quality Volume treatment measures provided in compliance with Town Standards and the Town MS4 Permit.
	Maintenance plan and schedule for all public and private stormwater management facilities **including party responsible for maintenance** shown on the site plan or utility plan as applicable
	Deep sump catch basins for water quality where applicable. 2 foot sump for detention basin outlet structures.
	Channels and swales properly sized, lining specified and computed
	Appropriate details for non-standard structures
	No concentrated stormwater discharges to neighboring properties or public roadway
	Infiltration or subsurface detention facilities properly sized per drainage computations. Include overflow to town system where possible, inspection ports for maintenance, above groundwater elevation per test pits.
	Test pit data shown on plan for infiltration and subsurface detention systems

STORM DRAINAGE STORAGE / TREATMENT PLAN CHECKLIST	
	Basin - Forebay sized for WQV
	Basin - Bottom sloped at 1% toward outlet, Side slopes 4:1 or flatter for ease of maintenance
	Basin - Underdrain to ensure complete emptying of basin in 48 hours
	Basin - Emergency spillway sized properly with stable discharge point
	Underground Storage - detailed layout of proposed system (plan and section views)
	Underground Storage - relevant manufacturer details with storage computations
	Cross sections through basin or chamber depicting WQV and storm event water surface elevations
	2 foot sump for outlet structures, outlet structure details / elevations consistent with drainage computations

SANITARY SEWER CHECKLIST	
	Plans certified by CT Licensed Land Surveyor and Professional Engineer
	Existing and proposed sanitary sewer facilities, including all bends, manholes, appurtenances with pipe sizes, slopes, materials and invert elevations within structures
	Existing sewer laterals identified properly per record drawings
	Minimum cover 4 feet for public sewer
	Sewer laterals properly designed and specified per Town Standards (6-inch PVC minimum, cleanouts as required)
	Sampling manhole provided for all commercial and industrial buildings at street line (unless lateral connects directly to an existing manhole)
	Grease Trap or AGRU for Class III or IV Food Service Establishments (FOG Requirements)
	75 foot separation of pump chamber, septic tanks, or grease trap from wells
	Appropriate sewer easement for Town facilities (25 foot wide). Must provide access to all structures with load bearing surface, grade of 15% or less. Consider need for construction easements.
	Bolted covers noted for off-road public sewer manholes
	Appropriate details for non-standard structures.