



## ***Town of Tyngsborough Conservation Commission***

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### **APPLICATION PLAN GUIDELINES**

The following guidelines are issued to prospective Notice of Intent applicants for submissions to be made under the provisions of Massachusetts General Law Chapter 131, Section 40 Wetlands Protection Act and the Town of Tyngsborough Wetlands Protection Bylaw. The guidelines are prepared to give applicants some insight into the concerns of the Conservation Commission during the review process. The Commission has been charged with reviewing eleven areas of interest: public and private water supply, groundwater supply, flood control, erosion control, storm damage prevention, pollution prevention, protection of land containing shellfish, protection of fisheries, protection of wildlife habitat, recreation, and aesthetics. Applicants should be prepared to discuss all of the appropriate items listed. The list of items included is not inclusive. Each application will be reviewed relative to the individual merits.

These guidelines may be modified from time to time in order to include additional information if applicable.

#### **I. Plan data**

The following plan data information is requested by the Conservation Commission to be depicted upon the submittal plans.

1. Maximum plan size is twenty-four (24) inches by thirty-six (36) inches.
2. The scale for sites containing less than three (3) Lots or three (3) acres is one inch equals twenty (20) feet. For parcels greater than three acres, the minimum scale is one inch equals forty (40) feet.
3. Elevations and plan contours are to be relative to U.S. Geodetic Survey Datum Plane (Mean Sea Level).
4. The benchmark or temporary benchmark shall be supplied on submittal plans.
5. Plans shall include the names and addresses of applicants, owners, and designers.
6. Contours shall be depicted at a two (2) foot contour interval except in flat areas of grades less than three percent where one foot contours are preferred.

7. Physical features such as stone walls, fences, streams, ledge outcrops, and wetland areas shall be depicted.
8. Plan shall depict the 100 foot buffer zone and the 200 foot riverfront area.
9. Proposed developed areas shall depict buildings, walks, recreational facilities, subsurface sewage disposal works, retention and detention areas, edge of proposed and existing tree lines, and wells within 100 feet of the site.
10. If more than one wetland area exists, each area should be coded (W-1, W-2, etc.) for clarification.
11. Plan must depict minimum cellar or basement floor elevations.
12. Property line information (bearings, distances, etc.) shall be depicted with physical monumentation (stone bounds, concrete bounds, iron pipes, iron pins, drill holes, etc.) and the extent of the physical boundary depicting walls, etc. Define how property information was determined i.e. field survey, compiled data from record plan or assessor's office, etc.
13. A legend depicting the specific codes used on the plan to represent data (finish contours, water lines, gas, sewer, etc.).
14. All proposed structures must be depicted.
15. Cross-section details and slopes for all water diversion channels.
16. The location of the 100 year flood event from available information received from the Federal Emergency Management Agency (FEMA), Army Corps of Engineers, available municipal reports or individual submission computations.
17. Wetland areas to be disturbed or altered by proposed development shown in square feet.
18. Show drainage structures along adjacent streets and within proximity to the proposed site.
19. Show environmental controls such as silt fence, haybales, and basins.
20. Location of on-site spoils areas.
21. Location of all underground storage facilities such as gas tanks, oils tanks, etc.
22. All resource areas including riverfront area shall be identified.

23. Notation of Plans:

- a. Plans shall be entitled “Notice of Intent Plan for the Tyngsborough Conservation Commission”.
- b. Plans shall be stamped by a registered professional engineer, registered professional land surveyor, or other certified professional as to their area of responsibility at the Commission’s discretion.
- c. Wetland flagging shall be numbered and noted on the plans. This should include delineation of bordering vegetated wetlands, bordering land subject to flooding, and isolated land subject to flooding.
- d. One set of plans shall be color-coded such that Resource Areas are blue, Buffer Zone is green, Replication Areas are red, and Silt Fences (including haybales) are yellow.

II. Other Areas of Interest to be addressed within the Notice of Intent or Accompanying Data.

1. Earth Removal – Amount of fills or cut (in cubic feet or cubic yards) within the resource area.
2. Method of fill/slope stabilization.
3. Copies any permit or variance obtained from other local, state or federal agency shall be submitted along with the Notice of Intent.
4. Notification of the Massachusetts Natural Heritage and Endangered Species Program to see if any proposed work would alter a resource area identified on the most recent Estimated Habitat Map for Rare or Endangered Species.
5. Protection of public or private groundwater supplies including the following:
  - a. Location of underground storage tanks.
  - b. Storage of hazardous waste materials defined within Chapter 21E, MGL.
  - c. Facilities to wash or clean engines or other mechanical devices.
  - d. Use of salts within known aquifers areas.
  - e. Research facilities – waste and storage.
  - f. On-site disposal system exceeding 15,000 gallons per day.
  - g. Elevations of bottom of proposed subsurface sewage disposal within 100 feet of resource areas.
  - h. Excavations within five (5) feet of ground water determination within the wettest period of the year (December 1 to May 1)
  - i. Use of pesticides, herbicides and fertilizers
  - j. Gutters and dry wells for roof run-off for all new single family homes in the buffer zone.
6. Storm damage prevention and flood control

- a. Hydrologic and hydraulic evaluations to provide protection for on-site and adjacent off-site inhabitants and their property.
- b. Peak runoff discharges for 10, 50, and 100 year recurrence interval storm. Computations will be based on the USDA Soil Conservation Service Technical Release 55 (TR-55). A registered professional civil engineer or other professional competent in such matters shall prepare computations.
- c. Design computations with controls such that post developed peak runoffs do not exceed pre-development peak runoffs for the 10 and 100 year recurrence interval storms.
- d. Lost volumes within the 100 year recurrence interval storm area shall be compensated on a one to one basis within the same volumetric area.
- e. Design criteria for the 100 year event is found with 310 CMR Section 10.57 (2) (a) 3.a
- f. Flooding occurring upon adjacent properties will require additional topography over the area affected. Building units, dwellings or structures of any type within proximity to the 100 year elevation line must be evaluated for potential storm related damage.

7. Prevention of pollution

- a. Groundwater protection – see #5 above.
- b. Seasonal high water levels and the 100 year storm elevation shown.
- c. On-site sewage disposal systems shall be 100 feet from the edge of bordering vegetated wetland (See Board of Health regulations).
- d. Erosion controls shown on plans
- e. Chemical processing wastes discharged to the wetlands or other resource areas must be addressed.
- f. Use of grease traps within catch basins within environmentally sensitive areas (aquifers, etc.) is recommended.

8. Protection of fisheries and land containing shellfish

- a. Cover areas (embankment along streams, rivers, or ponds).
- b. Fish runs
- c. Channels, ditches, or brooks leading into ponds and rivers that are known to support aquatic life.
- d. Channel, creek, brook, or river realignment
- e. Sewage treatment facilities located in close proximity to possible aquatic life.

9. Protection of wildlife habitat

- a. Rare or endangered species – see #4 above.
- b. The vegetative composition and structure, soil composition, hydrologic regime, topography and water quality of land under water bodies that are

known to provide important food, shelter, migratory and over winter areas, and breeding areas for wildlife.

- c. Vernal pool habitat located anywhere on the 100 year floodplain or isolated land subject to flooding that provide important wildlife habitat functions defined under 310 CMR 10.60 (2) (c).
- d. Lower floodplains extending only to areas on the 10 year floodplain or within 100 feet of the bank or bordering vegetated wetland (whichever is further) as outlined under 310 CMR 10.57 (1) (a) 3 and (2) (a) 4 that provide important wildlife habitat functions defined under 310 CMR 10.60 (2) (c).
- e. A list of potential wildlife species that may possibly use the wetland resource areas located on site should be prepared, followed by an evaluation of the importance existing wildlife habitat relative to food, shelter, migratory or over-wintering areas and breeding areas.
- f. Alterations of wildlife habitat characteristics beyond permissible thresholds may be restored on an one to one basis within the same general area provided the replicated area is similar to the lost area as necessary to support wildlife function of the existing area as outlined under 310 CMR 10.60 (3)
- g. Use of approved DEP erosion and sedimentation control procedures such as staked haybales, filter fabric, and the revegetation of disturbed areas as soon as possible.

#### 10. Miscellaneous concerns

- a. All utilities shall be placed in the bed of the road when installed in a resource area, or its buffer zone, unless proven to the Commission to be in conflict with other regulations.
- b. Silt fences shall be in place for all saw cuts on roads, when in a resources area or buffer zone.