

NEW HAVEN CITY PLAN COMMISSION SITE PLAN REVIEW

RE: 141 OGDEN STREET, Inland Wetlands Application to construct Single-Family Residence within Wetlands setback area in a RS-1 Zone (Owner/Applicant: Edith H. Chapman).

REPORT: 1449-06

INLAND WETLAND FINDING: Approval; minimal impact

SITE PLAN: Approval with Conditions

CONDITIONS OF APPROVAL

1. Signoff on final site plans by the City Engineer and City Plan Department in that order shall be obtained prior to issuance of building permit or initiation of site work.
2. The applicant shall record on the City land records an original copy of this Inland Wetlands and Site Plan Review report (to be provided by the City Plan Department) and shall furnish written evidence that the document has been so recorded (showing volume and page number) to the City Plan Department, prior to City Plan signoff on final plans for a building permit or initiation of site work.
3. Any substantive modifications to the Site Plan including the building design and footprint will require City Plan approval.
4. An individual who will monitor the Soil Erosion and Sediment Control Plan on a day-to-day basis shall be named, and such name and contact information shall be provided to the City Plan Department, prior to City Plan sign off on final plans for a building permit or initiation of site work.
5. Site Restoration Bond in an amount of \$5,000 shall be submitted to the City Plan Department, prior to City Plan signoff on final plans for a building permit or initiation of site work.
6. Extreme care shall be taken in protection and preservation of existing trees on the site.
7. Any damaged sidewalk or curb on the perimeter of the site and the driveway apron shall be replaced in accord with standard city details, prior to issuance of Certificate of Occupancy.
8. Any activity within the public right-of-way will require separate permits.
9. Following completion of construction, any City catch basins in the public right-of-way impacted by the project shall be cleaned.
10. As-built site plan shall be filed with City Plan Department, with a copy to the City Engineer, prior to issuance of Certificate of Occupancy. Site Plan shall be submitted in both mylar and digital format [.TIFF file based on the State Plane Coordinates (NAD1983)]. Note version of AutoCAD.

Submission: Development Permit application including Inland Wetlands component and Narrative, fee of \$270.00; List of Adjacent property owners notified within 200'; Soil Science Report 06/09/09 & 6/15/06 by Soil Science and Environmental Services, Inc., Hydrograph Report 01/19/11 rev. 5/11/11 for Sewer design; Site Development Plan rev. 04/04/11 and 05/17/11 with Locator Plan, General Sequence of Construction, Erosion and Sediment Control Notes, Zoning Information, Curtain Drain detail, Retaining Wall detail, Wetlands Remediation Area cross section, Soils Testing; Sheet of Standard City Details, Schematic Floor Plans, Schematic Design Phase Building Elevations by Alan Stadler Architect received 2/14/11. Spec on New England wetland seed mix from New England Wetland Plants Inc.

Additional materials considered: Petition for Intervention under CGS Section 221-19(a) by Allison Schieffelin, 123 Ogden Street received 2/16/11, Letters from Marc Goodin of Meehan & Goodin PC Engineers Surveyors 02/15/11 and 05/4/11, Letter from Attorney Marjorie Shansky requesting further tabling of the matter 4/20/11, Letter from Joy Ford to Attny Shansky 04/21/11, Letter from Attny Shansky dated 05/04/11, Letter from JP Garcia & Associates and Revised Site Plan in response to previous letters 05/16/11.

PROJECT SUMMARY:

Project: Construction of Single-Family house
Address: 141 Ogden Street
Site Size: 15,770 SF (12,791 SF excluding wetlands area)
Zone: RS-1
Financing: Private

Project Cost: not provided

Owner: Edith Houghton Chapman

Phone: 904-874-1078

Agent: John Paul Garcia, PE

Phone: 203-393-3306

Site Engineer: John Paul Garcia & Assoc.

Phone: 203-393-3306

City Lead: City Plan Dept.

Phone: 203-946-6379

Previous actions by the Commission: A site plan filed previously by Michael Kinney was withdrawn (CPC 1395-12, 01/17/09).

Zoning: The Site Plan for the parcel as submitted meets zoning requirements for the RS-1 zone. The total lot area of 15,770 SF has been reduced by the flagged wetlands area (2,979 SF) to provide a 12,791 SF building lot. City Plan Commission staff has determined that the submission is complete and in accord with the administrative standards for Site Plan Review in Sec. 64 f. of the Zoning Ordinance which would be applicable for a single-family residence as well as the latest Inland Wetlands and Watercourses Regulations.

Site: 141 Ogden Street is a vacant lot to the northeast of the intersection of Ogden Street and Edgehill Road in the East Rock neighborhood in a RS-1 zone. The site is part of a former estate, the main house of which is 123 Edgehill Road, recently renovated as a single family-home. 123 Edgehill Road is the immediate adjacent property to the west. Immediately adjacent to the property to the north is another portion of the estate with a single-family residence at 80 Cliff Street also owned by Ms. Chapman. To its east is 123 Ogden Street, a single-family residence. Surrounding houses are primarily sited on generous lots with off street parking. Ogden Street is one within the East Rock neighborhood where there are traditional and contemporary houses adjacent to one another.

The lot is fairly flat at the street face (elevation 57) and slopes up in the northwest corner to elevation 68. There is an accessory building (carriage house) to 123 Edgehill immediately adjacent to the northwest corner of the lot.

There is a belt of flagged wetlands soils (2,979 SF) approximately 30' wide across the middle of the site running west to east which has been extracted from the lot area. *NB: Wetlands are addressed on pages 3-4 of this report.*

Proposed Activity: The owner/applicant proposes to construct a single-family house on the northern portion of the site within 50' of the inland wetlands soils. A driveway and utility connections are shown to cross the wetlands area. The house footprint is 2,275 SF with an attached garage of 480 SF. Schematic floor plans for the house show living, dining, kitchen, study and breakfast rooms on the 1st floor at elevation 64' and a potential for five bedrooms on the 2nd floor. Schematic design phase building elevations have been provided which also show a 3rd floor although no 3rd floor plan has been submitted. A basement level is at elevation 55'. The attached garage is at elevation 58'.

Utilities: Water, gas and sanitary and storm sewer lines are located within a proposed driveway from Ogden Street with a new driveway apron according to standard city details. Any cracked sidewalk panels will be repaired if damaged during the construction period.

A 6" solid pipe is proposed to capture water from roof runoff and from a footing drain which will run along the rear of the proposed house; the solid PVC pipe will connect out to the back of the catch basin in Ogden Street which connects to the 18" storm sewer. A curtain drain and 6" perforated PVC pipe will capture any additional runoff from the paved driveway, as well as any subterranean water seeping across the site. At 4' in depth, the curtain drain will be fitted with a slight swale at the surface to collect any water and with impermeable material on the east side to further assist in containing seepage. The area to the east of the driveway will be graded slightly to the west so that any remaining surface water will run towards the driveway and not towards the eastern property line. The curtain drain is proposed also to connect into the back of the catch basin connecting to the 18" storm sewer in Ogden Street as approved by the City Engineer. A modular block retaining wall will be installed above the proposed house with a solid footing drain which will connect to the solid 6" pipe running out to connect to the catch basin in Ogden Street.

Soil Erosion and Sediment Control Plan: Approximately 475 CY of material will be removed from the site as it is graded in the rear to prepare for the building foundation. Soil excavated from the wetland area within the driveway location will be placed within a wetland remediation area on the west side of the site. A SESC Plan

shows standard city details for a construction entrance which will be laid where there is an existing curb cut now, and silt fencing which will be applied with staked hay bales along the east property line and also to the south of the proposed building site along the flagged wetland line. John Paul Garcia is named as the individual responsible for monitoring the site to assure there is no soil or runoff entering City catch basins or the storm sewer system. Mr. Garcia shall name an individual who will monitor the SESC Plan on a day to day basis. Such SESC monitor is responsible for assuring there is no dust gravitation off site by controlling dust generated by vehicles and equipment during the construction phase. Soil stockpiles if necessary shall be protected from dust gravitation and soil erosion. All SESC measures are required to be designed and constructed in accordance with the latest Standards and Specifications of the *Connecticut Guidelines for Soil Erosion and Sediment Control*.

Such SESC monitor shall be responsible for determining the appropriate response, should unforeseen erosion or sedimentation problems arise. He is fully responsible for insuring that SESC measures are properly installed, maintained and inspected according to the SESC Plan. Should soil erosion problems develop (either by wind or water) following issuance of permits for site work, the SESC monitor is responsible for notifying the City Engineer within twenty-four hours of any such situation with a plan for immediate corrective action.

Construction Sequence: Soil erosion control measures will be installed prior to any grading on the site. Haybales will be placed around the existing trees to be preserved on site. The site will be rough graded and the house location will be excavated and the house constructed. Utilities will be connected, and the site stabilized. The base course for the drive will be laid, landscaping of the lot will occur, and the final bituminous coat for the driveway installed. Soil erosion measures will be maintained in place until grass is fully established and the site is fully stable. They will be removed when it is determined that the permanent measures (landscaping, etc.) are fully established.

Project timeline: The owner intends to sell the lot and anticipates construction will start soon after property is sold. Approximate 3-4 months construction period is anticipated.

INLAND WETLANDS REVIEW

Determination of Classification: The application was submitted as an Inland Wetlands application due to the fact there is excavation with the flagged wetlands area for utilities, a driveway and a curtain drain. The Commission has reviewed the options for classification, as stated in Sections 4 and 5 of the Regulations and has determined that the wetland application qualifies as a Class B Application. The activity proposed will not have substantial adverse effect on the regulated area or any other part of the inland wetlands and watercourses system. The current Inland Wetlands application was received by the Inland Wetlands Commission at its meeting of February 16, 2011. The applicant consented to a 30-day extension on April 20, 2011 to May 20, 2011.

Application Evaluation Criteria:

In reviewing a Class B Application, the Commission must consider the following environmental impact criteria in its evaluation, as stated in Sections 7.2 and 7.3 of the City's Inland Wetlands and Watercourses regulations:

- The ability of the regulated area to continue to absorb, store or purify water or to prevent flooding.
- Increased erosion problems resulting from changes in grades, ground cover, or drainage features.
- The extent of additional siltation or leaching and its effect on water quality and aquatic life.
- Changes in the volume, temperature, or course of a waterway and their resulting effects on plant, animal and aquatic life.
- Natural, historic, or economic features that might be destroyed, rendered inaccessible or otherwise affected by the proposed activity.
- Changes in suitability of the area for recreational and aesthetic enjoyment.
- Existing encroachment lines, flood plain and stream belt zoning and requirements for dam construction.
- Any change in the water effecting aquatic organisms or other wildlife, water supply and quality, or recreational and aesthetic enjoyment.
- The existing and desired quality and use of the water in and near the affected area.
- Reports from other City agencies and commissions not limited to the Environmental Advisory Council, Building Official, and City Engineer.
- The importance of the regulated area as a potential surface or ground water supply, a recharge area or purifier or surface or ground waters, a part of the natural drainage system for the watershed, a natural wildlife feeding or breeding area, its existing and potential use for recreational purposes, existence of rare or unusual concentrations of botanical species, availability of other open spaces in the surrounding area, or its value for flood control.

The Commission must consider the following **additional** criteria:

- Any evidence and testimony presented at a public hearing, should one be held.
- Alternatives which might enhance environmental quality or have a less detrimental effect, without increasing basic project costs.

- Short versus long term impacts.
- Potential loss of irrevocable resources or property impairment.
- Suitability of action for area.
- Mitigation measures which may be imposed as conditions.

Required Findings for a Class B Application:

The Commission must make the following findings for a Class B Application:

1. There is no preferable location on the subject parcel or no other available location could reasonably be required;
2. No further technical improvements in the plan or safeguards for its implementation are possible, or taking into account the resources of the applicant, could reasonably be required; and
3. The activity and its conduct will result in little if any reduction of the natural capacity of the wetlands or watercourses to support desirable biological life, prevent flooding, supply water, facilitate drainage, and provide recreation and open space.

INLAND WETLAND CONSIDERATIONS

In a letter to the owner/applicant dated 06/09/09, Thomas W. Pietras, professional wetland and soil scientist of Soil Science and Environmental Services, Inc., reported on his site inspection to verify whether Inland Wetlands flagged on 05/18/05 were still present on the parcel. The adjacent owner at 123 Edgehill Road had installed a drainage system relating to a pond on the abutting site potentially changing the hydrology in the area. Mr. Pietras dug a number of test pits throughout 141 Ogden Street to find that the soils in all 12 pits were wetland soils with the previous wetland determination being substantially correct. One of the 12 pits had some soil saturation within 12 inches of the surface (this pit in the western half of the site just upslope of the metal cover plate that accesses a subsurface drain pipe. Soils in the other 11 test pits contained moist soils but not saturated. Mr. Pietras concluded that "the lack of saturated soils and near complete absence of wetland vegetation on the wetland soil provide evidence that the soils have been drained and the water table has been lowered." Soil types consist of Raynham Silt loam, a poorly drained soil, with approximately 20" of overlying fill which does not change the soil type. Soil coloration patterns that develop in poorly drained soils such as Raynham Silt loam can persist for many years following artificial drainage. The presence of diagnostic coloration patterns in the soils at 141 Ogden Street still classifies them as wetlands.

In the current application cycle, at the recommendation of the City Engineer, the applicant dug five deep test pits (TP locations and soil profiles are shown on the current site plan) at the site on 03/31/11, at a time of year when ground water and moisture levels are traditionally high. Four of these test pits (A, B & D in line with each other along the driveway path and C within the wetland area) showed similar composition - 10-18" of topsoil, over 20"-40" of silty red brown fine sand, over 2-4' of coarse sand and gravel. Seeping groundwater was encountered in these holes at depths ranging from 30" to 68". The fifth pit (E) was dug in the location of the proposed house where no ground water was observed.

Mitigation for wetlands intrusion: As remediation for the crossing of utilities and a driveway through the eastern portion of the wetlands soils, the applicant has proposed a mitigation area on site. It is proposed that approximately 24" of existing non-wetlands soils be removed from a 1,010 SF area adjacent to the western property line which abuts the wetlands flagged area, and the soils replaced with 8" of relocated wetlands soils being excavated from the area where the utilities and driveway will be located. This area will be topped with a layer (4") of topsoil and planted out with a wetland seed mix ("New England Wetmix"); the area may take on the characteristics of the adjacent wetlands soils, and mitigate any adverse effects the excavation and placement of utilities might conceivably cause. Additionally the area to the northwest of the proposed house will be regraded slightly to direct water to flow to the west of the house towards the mitigation area. A portion of the roof runoff will be directly via splash pad to this area as well.

Conclusion: The conclusion of the civil engineer (with the concurrence of the City Engineer) from observation of the test pits is that the proposed drainage system will capture most all of the runoff generated by the roofs and will conduct it via a 6" solid PVC pipe to the back of the existing catch basin in Ogden Street for up to a 100

year storm. Driveway runoff and other overland flow will be captured and conducted via a 6" perforated PVC pipe to the back of the same catch basin. The proposed 4' curtain drain will lower the ground water level by an estimated 4 to 5'. The depth of the outlet pipe in the existing catch basin controls the depth at which the curtain drain can be installed. Seeping ground water should be captured by the curtain drain and transit to the east will be minimized. Any residual surface water to the east of the drive and on the drive should flow to the west due to the grading in that area.

Although an area of 141 Ogden Street was identified as containing wetland soil, there is little evidence of the wetland today. The property at 123 Edgehill Road has taken advantage of the seeping water channeling it into a garden pond. Overflow from the pond goes into a yard drain on that property and flows out to the storm sewer in Ogden Street. While a minimal amount of water may flow to a manhole on this property, its outlet to the Ogden Street storm sewer has been plugged with concrete. As a result, the wetlands on the subject property provide minimal functional wetlands value. The value is further diminished by its small size, presence of shallow fill and isolated location within a densely developed residential neighborhood. It is a wetland which pre-existed the residential development uphill of the site between Reservoir Street and Edgehill Road, as well as downhill toward Whitney Avenue, including the site of the house at 123 Ogden Street. If the wetlands boundaries were extended to the east, one likely would find that 123 Ogden and the houses further to the east were constructed within the same wetland soils.

Once it becomes established, the wetland mitigation area could eventually develop the characteristics of wetlands soils and become a flagged wetland itself adding to the remaining wetlands soils on the site.

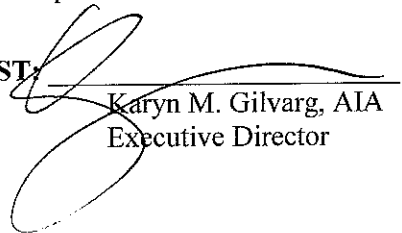
INLAND WETLANDS FINDING

The Commission has reviewed the application in context with the evaluation criteria and Class B required findings and believes that there is no preferable location of the proposed activity on the site, nor are there further technical improvements required in the plans. The applicant has made numerous technical changes to the site plan which have improved drainage, facilitated water absorption, and which may actually increase the size of the inland wetlands on site.

Construction of a residential structure in the location where it is proposed on the lot will not interfere with the wetlands soils on the site. The addition of a curtain drain along the east property line should assist in reducing seepage of water through the site and runoff from the additional roof and impervious surface area should be fully captured by the proposed drainage system and remediation area. The wetlands restoration plan of creating a slight depression adjacent to the west property line and adding wetlands soil and seed mix may create additional storage area for overland runoff. The project should result in little if any reduction in the natural capacity of the wetland, such as it is, to support desirable biological life, prevent flooding, supply water, facilitate drainage, and provide recreation and open space.

The Commission believes that all of the required findings for a Class B application have been satisfied. The Inland Wetland application is hereby approved, in accord with the submitted plans and the Conditions as stated on page 1.

ADOPTED: May 18, 2011
Edward Mattison
Chair

ATTEST: 
Karyn M. Gilvarg, AIA
Executive Director