

3225 MAIN STREET • P.O. BOX 226
BARNSTABLE, MASSACHUSETTS 02630



CAPE COD
COMMISSION

(508) 362-3828 • Fax (508) 362-3136 • www.capecodcommission.org

MINOR MODIFICATION TYPE #1

DATE: JANUARY 13, 2016

TO: ATTY. ELIZA Z. COX, NUTTER MCCLENNEN & FISH LLP
1471 IYANNOUGH RD, HYANNIS, MA 02601

PROJECT APPLICANT/
PROPERTY OWNER: REHABILITATION HOSPITAL OF THE CAPE AND ISLANDS CORP.
311 SERVICE ROAD, SANDWICH, MA 02537

PROJECT NUMBER: TR93025

PROJECT: SPAULDING REHABILITATION HOSPITAL CAPE COD
SANDWICH, MA

LOCATION: 311 SERVICE ROAD, SANDWICH, MA 02537

ASSESSORS ID: 33-053

REGISTRY OF DEEDS: BOOK 18972 PAGE 130

SUMMARY

Pursuant to Section 13 of the Cape Cod Commission (Commission) Enabling Regulations (Revised November 2014, with Revised Fee Schedule Effective July 1, 2015), the Development of Regional Impact (DRI) decision dated March 30, 1994 for the above-referenced project is hereby amended, with conditions, as a Minor Modification Type #1 to allow *de minimus* changes to the approved project plans as discussed herein, and to allow for an updated nitrogen loading compliance process for the Project.

DISCUSSION

The Commission issued a DRI decision, with conditions on March 30, 1994 to Rehabilitation Hospital of Cape and Islands Corporation which approved the construction of a 60-bed

rehabilitation hospital. The 1994 DRI decision has been modified four times by decisions dated: November 3, 1994; October 6, 1997; June 5, 2000; and March 2, 2001 (collectively, "Decision").

The Commission received a request from Atty. Eliza Z. Cox on behalf of the Applicant seeking to build an 8403-square-foot addition and 62 additional parking spaces, primarily to accommodate existing out-patient rehabilitation activities, and accordingly, to modify the Decision. The Project is subject to review under the 1991 Regional Policy Plan (RPP), in accordance with the Commission's Enabling Regulations.

The Applicant provided engineering and architectural plan sets for the proposed work; a traffic report showing a *de minimus* increase in daily vehicle trips and safe sight distances at the site drive; an outline of the Project's current TDM activities; an analysis confirming the Project's proposed increase in parking spaces is consistent with ITE parking demand recommendations based on the building's combination of inpatient and outpatient services; and nitrogen loading calculations. The Project previously mitigated the open space requirement for its entire current parcel under the Decision and received an NHESP "No Take" letter (dated 10/29/2015) for the clearing associated with the proposed work. Commission transportation staff conducted a site visit to confirm additional demand for parking and safe sight distances.

The 1991 RPP did not contain minimum standards to address water quality of stormwater runoff. The Sandwich Department of Public Works has conducted an initial review of the proposed stormwater system and provided an opinion on October 9, 2015 that the system is appropriately designed.

The proposed work will result in an increase in wastewater design flows from 12,000 gallons per day (gpd) to 13,250 gpd. The project is located in the Scorton Creek watershed, a Marine Water Recharge Area. According to the Massachusetts Estuaries Project, Scorton Creek is not nitrogen impaired. Treated wastewater effluent generated by the Project is not proposed to be discharged to a Zone II Wellhead Protection Area.

Based on MPS 2.1.2.2 in the 1991 RPP and the 1994 Decision, the Project is limited to 5ppm nitrate in groundwater at the property boundary. The Decision required the installation of monitoring wells and regular monitoring and reporting to ensure that this 5 ppm standard is met. Commission water resources staff noted recent monitoring reports showing elevated nitrogen levels in the monitoring wells in excess of the 5ppm limit. To ensure Project compliance with this standard going forward, the Applicant shall comply with the Compliance Plan for RPP MPS 2.1.2.2 dated 1/13/2016, attached hereto, and incorporated herein.

As conditioned herein, the proposed work will not substantially increase the impacts of the Project on the purposes and values of Section 1 of the Act and therefore represents a *de minimus* change to the Project.

CHANGES TO THE DRI DECISION

The Decision is hereby modified, with conditions, to allow for the proposed work to build an 8403-square-foot addition and 62 additional parking spaces and shall be done in accordance with the following plans which are hereby incorporated by reference into the Decision. Plans listed herein shall control in the event of conflict with those previously approved by the Decision. All findings and conditions to the original decision and subsequent modifications continue to apply except as modified herein.

Spaulding Rehabilitation Hospital Cape Cod, Sandwich Facility Building Addition, prepared by Margulies Perruzzi Architects, dated 9/18/2015

Sheet C-100: *Layout & Materials Plan*, dated 9/18/2015
Sheet C-101: *Grading & Drainage Plan*, dated 9/18/2015
Sheet C-102: *Erosion & Sediment Control Plan*, dated 9/18/2015
Sheet C-200: *Construction Details – 1 of 2*, dated 9/18/2015
Sheet C-201: *Construction Details – 2 of 2*, dated 9/18/2015
Sheet AE-101: *Existing First Floor Plan*, dated 8/24/2015
Sheet AE-102: *Existing Second Floor Plan*, dated 8/24/2015
Sheet A-100: *Basement Floor Plan General and Dimensions*, dated 8/24/2015
Sheet A-101A: *First Floor Plan Sector A - General*, dated 8/24/2015
Sheet A-102A: *Second Floor Plan Sector A - General*, dated 8/24/2015
Sheet A-110: *Roof Plan*, dated 8/24/2015
Sheet A-401: *Exterior Building Elevations – New Addition South Elevation*, dated 8/24/2015
Sheet A-402: *Exterior Building Elevations – New Addition East Elevation*, dated 8/24/2015
Sheet A-403: *Exterior Building Elevations – New Addition West Elevation*, dated 8/24/2015

Spaulding Rehab Hospital – Summary of Traffic Findings, prepared by BSC Group, dated 9/22/2015

Nitrogen Loading Calculations ... Spaulding Rehabilitation Hospital – Cape Cod, prepared by CHA Companies, dated 10/26/2015

Compliance Plan for RPP MPS 2.1.2.2, prepared by CHA Companies, dated 1/13/2016

Stormwater calculations, prepared by BSC Group, dated 9/22/2015

CONDITIONS

1. The Applicant shall have two years from the date of this decision to obtain local permits to perform the proposed work described herein.

2. Prior to issuance of a Certificate of Occupancy by the Town of Sandwich for the proposed addition, the Applicant shall obtain a Certificate of Compliance from the Commission to affirm that all conditions of this decision have been met.

3. The proposed work shall be performed consistent with the above-referenced plans. The Applicant hereby authorizes a site visit, upon reasonable notice to the Applicant and at a reasonable time, to confirm that the proposed work has been completed in accordance with the plans referenced above.

3. The Project, including building and site modifications authorized herein, shall be subject to the Compliance Plan for RPP MPS 2.1.2.2 dated 1/13/2016, attached hereto, and incorporated herein. To the extent there is conflict or ambiguity between this Plan and existing provisions of the Decision, this Plan shall control. Prior to issuance of a Certificate of Compliance, the Applicant shall provide Commission staff evidence of compliance with the Compliance Plan for RPP MPS 2.1.2.2. In the event Commission staff finds the Applicant cannot evidence compliance with MPS 2.1.2.2, the Applicant hereby agrees to perform the upgrades to the Project's wastewater treatment facility as outlined in the Plan.

SIGNATURES

Executed this 13th day of January 2016.

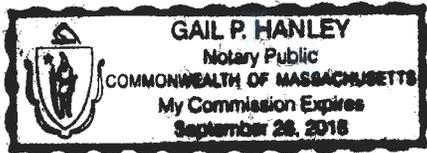

Signature

Paul Niedzwiecki, Executive Director
Print Name and Title

COMMONWEALTH OF MASSACHUSETTS

Barnstable, ss January 13, 2016

Before me, the undersigned notary public, personally appeared Paul Niedzwiecki,
in his/her capacity as Executive Director of the Cape Cod Commission, whose name
is signed on the preceding document, and such person acknowledged to me that he/she
signed such document voluntarily for its stated purpose. The identity of such person
was proved to me through satisfactory evidence of identification, which was []
photographic identification with signature issued by a federal or state governmental
agency, [] oath or affirmation of a credible witness, or [] personal knowledge of the
undersigned.



Gail P. Hanley
Notary Public

My Commission Expires: 9-28-18

SEAL

**TR93025 - Spaulding Rehabilitation Hospital Cape Cod
Compliance Plan for RPP MPS 2.1.2.2
January 13, 2016**

1. Effective January 4, 2016, Spaulding agrees to commence with daily operations (Monday through Friday excluding holidays) of the Wastewater Treatment Plant. The goal is to provide daily oversight of the plant in order to fine-tune the treatment process with the specific goal of minimizing Total Nitrogen (TN) fluctuations in the effluent. Spaulding shall continue to submit copies of the Monthly Discharge Monitoring Reports to the Commission in accordance with scheduled MADEP filing requirements under the Groundwater Discharge Permit.
2. To inform the potential need to adjust proposed new monitoring well locations (see *Figure 4A – Proposed Additional Compliance Monitoring Well Locations*, prepared by GeoHydroCycle Inc., dated 12/14/2015), updated water-level contours in the vicinity of the wastewater leaching facility shall be provided to the Commission for staff approval on a satellite overlay showing existing structures prior to the installation of the additional wells. Tabulated surveyed measurement-point elevations, well depths, and water levels measured at the existing wells shall be provided to the Commission prior to the installation of the additional wells. Water-level contours shall be determined from water-level measurements in existing site wells. Specifications for the proposed monitoring wells - e.g. proposed drilling method, riser/screen materials, screen lengths/slot sizes, etc. - shall be provided to the Commission for staff approval prior to the installation of the new additional monitoring wells. The new monitoring well locations and specs shall be approved by Commission staff and installed and commissioned no later than March 18, 2016, unless winter weather conditions prevent installation or commissioning, in which case the new wells shall be installed as soon as reasonably practicable thereafter.
3. Upon completion of installation and commissioning of the new monitoring wells, the wells shall be surveyed, surveyed measurement-point elevations established, and boring and well completion logs for the new wells shall be prepared and provided to the Commission prior to commencement of sampling. Commencing no later than 30 days following well commissioning, Spaulding shall proceed with monthly groundwater sampling for parameters and analytes identified in DRI conditions #11 and #13 within the two (2) existing downgradient wells, including MW-2 and MW- 4, a potential new down-gradient well, and as well as within the two (2) potential new up-gradient wells. Water levels shall be measured when the wells are sampled for water quality. The monitoring schedule outlined in condition #11 – quarterly sampling schedule for the first year, bi-annual sampling for the next four years, and annual sampling thereafter - shall be re-set following the first year of monthly monitoring under this protocol contingent upon compliance with RPP MPS 2.1.2.2. Water level and monitoring well sampling results shall be tabulated and submitted to the Commission within one month of sample collection. Monitoring well sampling results shall be plotted on a single graph as a time series. Existing Monitoring Wells MW-1 & MW-3 shall remain in place, but will not be sampled since they are not directly aligned with the existing leach field.

4. DRI condition #14 shall be modified as follows:

If the analytical results of the groundwater samples from any of the down-gradient monitoring wells exceeds 5 mg/l NO₃-N, additional sampling of that monitoring well must be conducted within one month of the previous sample and the results of said additional sampling shall be tabulated and graphed as set forth above and forwarded to the Commission Water Resources staff. Updated water-level contours in the vicinity of the wastewater leaching facility using additional information from the new wells shall be provided on a satellite overlay showing existing structures. If the results of three consecutive samples from any down-gradient well exceed 5 mg-NO₃-N/L above baseline concentrations, Spaulding shall be deemed to be non-compliant with RPP MPS 2.1.2.2. Compliance shall be determined by Commission staff in consideration of NO₃-N concentrations in reported in groundwater and wastewater effluent and recent water-level measurements/groundwater flow direction. Groundwater flow direction and estimated travel times determined from the water-level contours in the vicinity of the wastewater leaching facility shall be used to identify up-gradient monitoring wells from which baseline concentrations will be determined. Baseline up-gradient wells shall consist of new staff-approved up-gradient monitoring wells (per #2 and #3 above) closest to the groundwater flow path intersecting each respective down-gradient well as determined from the water-level contours.

5. If the project is determined to be non-compliant, as defined in Paragraph 4 above, Spaulding shall upgrade the existing Wastewater Treatment Plant to reduce nitrogen concentrations in the wastewater treatment facility effluent. Those upgrades shall include:

- Installation of an Amphidrome Plus™ denitrification polishing filter. This filter would be added after the current clear well. According to FR Mahoney, it would require a 5 ft. diameter filter with 6 feet of media and a new clear well with a minimum working volume of 3700 gallons along with associated backwash pumps.
- Install new Plus™ feed pumps in the existing clear well.
- Relocate the existing effluent pumps to the new clear well.
- Addition of a new carbon feed pump and associated accessories
- Addition of a solenoid valve to the air manifold in the building for the Plus™ reactor.
- Upgrade the existing control panel to current standard with touch screen and incorporate new equipment.
- Install additional piping and tanks & equipment to complete the system upgrades
- In the alternative, any other technology/improvements that Spaulding identifies, provided the same is approved by Commission staff

6. Upon a return to compliance, the water-quality monitoring schedule shall be re-set beginning with quarterly monitoring and ending with annual monitoring in accordance with Paragraph 3 herein. If the facility becomes non-compliant following upgrade of the wastewater treatment facility, Spaulding shall submit a return-to-compliance plan to the Commission for staff approval.