

TOWN OF SCITUATE



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Planning Board

December 19, 2023

Ms. Kathleen Gardner, Town Clerk
600 Chief Justice Cushing Highway
Scituate, MA 02066

**RE: Site Plan Administrative Review and Stormwater Permit
Stearns Meadow Water Treatment Plant
453 Chief Justice Cushing Highway, Scituate MA 02066
Assessor's Map/Block/Lot 47-2-26J
Applicant/Owner: Scituate DPW/Town of Scituate**

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TOWN OF SCITUATE
TOWN CLERK

Dear Ms. Gardner,

An application for a Site Plan Administrative Review and Stormwater Permit for a new Stearns Meadow Water Treatment Plant was submitted on August 10, 2023 by the Town of Scituate through its Director of Public Works, Kevin Cafferty (the "Applicant") and filed with the Town Clerk on August 10, 2023. The Stearns Meadow Water Treatment Plant application for a Major Site Plan Review contains: the application, a Traffic Study by Chappell Engineering Associates, Stormwater Management Plan, a Certified Abutters List, a Wetlands and Environmental Permitting Summary, a Water Treatment Process Memorandum, a Cut/Fill Analysis, a Greenhouse Gas Emissions Memorandum, a Deed and Tax Bill, and a set of Site Design Plans entitled Town of Scituate, MA, 453 Chief Justice Cushing Highway, Stearns Meadow Drinking Water Treatment Plant, Site Plan Approval dated August 10, 2023 by Woodard and Curran consisting of 28 plan sheets and architectural plans prepared for Woodard & Curran by Harriman dated 08-08-2023 consisting of Exterior Elevations, Overall, 3D Massing Views and Finishes Board and an Architectural Narrative by Harriman dated July 12, 2023. The site plans were stamped by a registered professional engineer.

The landscape plans, lighting plans and architectural plans were unstamped. The site plans were subsequently reviewed by the Town's consulting engineer, Janet Bernardo, PE of the Horsley Witten Group.

Four public hearings were held on the project. The first public hearing was on September 14, 2023. At that hearing, the Applicant's representative, Steve Robbins of Woodard & Curran, provided a slide show presentation showing the building, layout plan, grading and drainage, site utilities, landscaping and lighting (a copy of which was provided and is part of the submittals). The Town's peer review engineer, Janet Bernardo of Horsley Witten, reviewed some of her comments including the potential height exceedance issue of the building, the incomplete tree survey, the need to determine if the Fire Department has approved the layout, the need to determine if the Board of Health has approved the septic design, the concern that the exterior site light poles are too tall and several concerns with the storm drainage issues including that a waiver will be needed from the Stormwater Regulations for an increase in volume from the site unless the Applicant could redesign the system so that infiltration could be included in the largest basin, eliminating the stormwater volume flow exceedance. Karen Joseph, Town Planner commented that the SWPPP will need to be provided to the Board and the Board will want to see where sedimentation sumps will be located. She indicated that the Board will need to decide if a waiver of the stormwater regulations is appropriate here. The Board asked questions related to employees working at the site, security, PFAS treatment, Fire Department needs, heavy equipment storage, life expectancy of the facility, mechanism of dealing with excessive water in the sand basins, the flat roof portion of the building, construction dewatering, floor drains, containment plan for chemicals, parking maintenance, lights at the loading area, capacity of the plant, building foundations below ground water level requiring dewatering during construction and ongoing permanent pumping of groundwater and water supply source. The Board opined the Applicant should try to control the volume of stormwater as to eliminate excess volume and the need for a variance.

Public comments were taken from Freya Schlegel who asked about water sense fixtures and was told they would be used. Stacey Szklut inquired about truck traffic going to the rear of the building. It was indicated there could be at least one chemical delivery per week. She asked about the oversight when the trees are actually cut. It was indicated a surveyor marks the limit of work and the contractor sets erosion controls to that line. Mr. Robbins indicated that the Town will have a full-time inspector on site to monitor the construction activity. Scott Ciruso asked about the possibility of a wall of evergreens to screen the building from the abutting neighbors in the winter. The Applicant took that under advisement. Michael Gibson said he did not receive notice as an abutter and that is required under the Stormwater Regulations. He complained about sloppiness of the Applicant and asked why the buffer changed from 50 feet to 30 feet for the abutting residences to the west. Mr. Robbins indicated that grading for the stormwater caused the buffer to be less. Mr. Gibson questioned the lagoons and stormwater basin. The Applicant indicated they have separate functions. He also questioned if there would be light pollution. Mr. Robbins indicated the lights would be shielded and dark sky compliant. Mr. Gibson wanted to know who is going to hold Woodard & Curran responsible for changes. The Board indicated they would. Other comments were made on the buffer to Route 3A, overflow from the lagoons, deliveries to the site, stormwater not being contained onsite, volume of water being pulled from the reservoir and solar energy and zero carbon footprint. Mr. Robbins indicated that is a town purchase and policy question. Kevin Cafferty, DPW Director, indicated the town is at 105% credits for renewable energy with the wind turbine and solar array. The Board indicated that the Town should develop a zero-carbon energy plan for the facility in keeping with the Master Plan.

At the second public hearing on October 26, 2023, Steve Robbins of Woodard and Curran provided a PowerPoint presentation which addressed the project background, project objectives, site layout, building overview, septic system, stormwater, construction phase stormwater and dewatering, lighting, landscape plan and parking. Janet Bernardo of the Horsley Witten Group provided a peer

review response for the Town indicating that most engineering items have been addressed including compliance with the MassDEP and Town of Scituate Stormwater requirements. She indicated outstanding issues are: building height to be addressed by the Zoning Board of Appeals; septic system approval to be addressed by the Board of Health; parking, which the Planning Board agreed 19 spaces are sufficient provided that all trucks and heavy equipment storage will be in the garage; the Landscape Plan should be changed to have a variety of evergreen sizes at the edge of the limit of work once the existing trees to remain will be added after the tree survey is completed; and the phasing of the project so open areas are minimized during construction and suitable materials will be reused on site. The site is a net fill site with 61,000 cubic yards of structural fill being brought in.

For the sequence of construction, Mr. Robbins indicated they will clear the site initially, but not grub the site all at once. The stormwater basin will hold stormwater during construction as well as dewatering water from the groundwater pumped for the building construction. The stormwater basin will initially not be dug to its final elevation so that the bottom is not ruined during construction. The volume of the basin contains the required 3,600 cubic feet/acre disturbed as required. The Board wanted confirmation that the stormwater and dewatering volumes can be handled in the basin during construction and that a separate dewatering basin should be considered. Heavy equipment will be kept off infiltration areas during construction. Mr. Robbins indicated no noise will be coming out of the building. He said the emergency generator will be the noisiest feature and it has a noise attenuating feature under 65 dBA at ten meters. It was stated that the building exceeds the energy code where possible.

Public comments were taken from Freya Schlegel who asked if rainwater could be used for the new plantings. It was indicated that rainwater is captured in the stormwater management system and infiltrated back to groundwater to replicate what is happening onsite. Michael Gibson brought up the issue that the Town previously said there would be a 50-foot buffer. He is concerned the Town made misstatements to get the project approved and thinks the Board should hold the Applicant responsible. Mr. Robbins indicated disturbance is minimized; however, they are maintaining the mandatory 30-foot rear building setback for all construction. He said the soils require more space for stormwater treatment and there is replanting of vegetation that will occur. Patricia Butler inquired about depth of excavation and change in pitch of the hill. It was indicated the pitch of the hill would change, but more stormwater is kept internal to the construction area after construction is completed so there is no change in rate or volume of stormwater runoff. Mr. Robbins said stormwater components would be built out prior to paving. Steve Young was concerned about the buffer and setbacks by the septic system. The Applicant agreed to look at this area to see if the grading could be tightened up. Catherine Bulman was also concerned the buffer went from 50-feet to 30-feet. Mr. Robbins said the building was made smaller, but after soil investigations were completed, more room was needed for stormwater management. Dave McCormick asked about the lighting and was concerned the site would be lit all the time. He asked about motion sensors. The Applicant agreed to review. It was indicated the project was within budget.

At the November 16, 2023 public hearing session, Steve Robbins presented a revised site plan to the Board showing the limit of work had been pulled to be 90-feet from the north property line. He said they reviewed the limit of work to the southwest and the grading is not able to be changed as the grade is 4:1 per the requirements of the WRPD. He indicated the area would be revegetated and there is a 40-foot buffer. A separate dewatering sump of approximately 18,300 cubic feet has been added to the plans with the expectation that all dewatering flows would be delivered to the sump via temporary overland piping. The stormwater basin will not be used for dewatering.

The Board asked for an estimate of how much flow is going to the dewatering sump. Mr. Robbins said the sump is designed for settling of solids and is designed to accommodate the flows. The piping conveyance is designed for 1,000 gal/minute peak but flows are expected to be less. After the water leaves the dewatering sump via a point source, it will flow overland and pass through the erosion control barriers. Mr. Robbins said they will be required to monitor the flow daily as a

condition for dewatering and the final design is up to the contractor. The Board requested a level spreader for the outlet of the dewatering sump to dissipate flow. The temporary dewatering sump is located in a future bioretention basin location. The Board asked for more information on dewatering for the next meeting.

Lighting was reviewed. All lighting will be high efficiency LED lights. Light standards will not be higher than 20-feet and will be shielded to be down lighting. Lights will remain on for security purposes and be dimmable to 50%. The Board asked that lighting be experimented with to see if the security lighting levels could be dimmed lower than 50% after occupancy. Fencing was discussed. The Board wants black coated chain link fencing. It will be barbed on top. The Board asked if any slatting was to be used. Mr. Robbins said he would discuss this with the DPW. It was determined no slatting would be used.

Bruce Arbonies asked about the discharge from dewatering. Patricia Butler asked about the entrance location. Michael Gibson asked if the buffer by his home could be increased to 40-feet as he opined the applicant previously stated that there would be no disturbance within 50-feet of the property line. Ms. Joseph indicated she spoke with the Town Administrator who indicated 50-feet was never promised, but indicated the Town would do its best to make the buffer as large as possible. Mr. Gibson expressed concern as water will be pushed to the rear of his property. The Board said there would be conditions about the drainage system functioning as designed and the limit of work will be staked prior to construction. He asked if the basin could be moved 10-feet closer to Route 3A. Mr. Robbins said the slopes would change and not meet the 4:1 slope bylaw requirement. It was indicated the area would be revegetated.

The Board inquired about the process of removing solids from the drying beds. Mr. Robbins said a truck would back up to and onto the basin on an annual basis to remove the dry sediment. Any spilled sediment would be managed to ensure it goes back into the basin.

At the December 14, 2023 hearing session, a presentation was given and the topics discussed were dewatering, groundwater, foundation drains, lighting and landscaping. After the discussion, the Board voted on the Findings of Fact and Conditions.

At the final public hearing on December 14, 2023, Patricia Lambert, Chairman, Stephen Pritchard, Ann Burbine, Rebecca Lewis and Robert MacLean being present and voting, the Planning Board voted unanimously to make the following Findings of Fact:

1. The Town of Scituate (The "Applicant") submitted on August 10, 2023 and duly filed with the Town Clerk on the same day an application for a Site Plan Review package with back up data and plans entitled Town of Scituate, MA, 453 Chief Justice Cushing Highway, Stearns Meadow Drinking Water Treatment Plant, Site Plan Approval dated August 10, 2023 by Woodard & Curran consisting of 28 plan sheets and architectural plans prepared for Woodard & Curran by Harriman dated 8-8-2023 consisting of Exterior Elevations, Overall, 3D Massing Views and Finishes Board and an Architectural Narrative by Harriman dated July 12, 2023, Response to Board questions and 3rd Peer Review dated December 1, 2023 Landscape Plan by Halvorsen dated August 2023 with revisions through 12/11/2023.
2. Article 3 of the April 8, 2019 annual town meeting authorized \$4,000,000 by a unanimous vote for design and engineering of a new water treatment plant; Article 20 of the April 12, 2021 annual town meeting authorized the land acquisition of parcels known as 47-2-26A- 47-2-26J for \$1,350,000 by a declared unanimous vote; Article 5 of the April 11, 2022 Special Town Meeting authorized \$50,000,000 for a new water treatment plant with a declared 2/3 vote with the site to be approved at a special town meeting and approved by the residents; Article 1 of the September 19, 2022 Special Town Meeting authorized the siting of the Water Treatment plant by a declared majority vote. The Town supported the funding and siting of the project as evidenced in the

votes above.

3. The site consists of a total area of 15.57 Ac or 678,402 sq. ft. with 14.95 acres of upland and is located on Chief Justice Cushing Highway uphill of Tack Factory Pond. The site is located in the Residence R-1 zoning district as well as in the Water Resource Protection District and the south end of the site is in the Floodplain and Watershed Protection District. The front portion of the site is in the Wireless Communication Overlay District. The property is undeveloped upland woodlands. A utility building and water supply uses are by right uses in the R-1 Zoning District.
4. According to a memorandum dated September 12, 2023 from Woodard & Curran, the average height of the facility meets the requirements for the average height of the facility is 34'-4" and is no more than 35' in the R-1 zone. The maximum height of the proposed facility is 45'-1" which exceeds the maximum height requirement of 40'. This maximum height is required for the water treatment process area. Relief for the exceedance has been sought and granted from the Zoning Board of Appeals for the height requirement.
5. The design of the septic system design has been approved by the Board of Health.
6. Section 770.6.A Site Plan Approval Standard A: Protection of adjoining premises against detrimental and offensive methods of utilizing the site.

Finding: The property off of Chief Justice Cushing Highway has single family residences to the west of the site, a residence to the north, the road and residence beyond it to the east and a residence and Tack Factory Pond beyond the property to the south. The proposed water treatment plant will be located to the north/central part of the property. The full access entry drive comes in to the site from Chief Justice Cushing Highway and goes around the building to come out at an egress only. The entry drive is two-way access providing access to the public visitor parking and for private access for deliveries and fire access around the building. There is a proposed landscape screen to the rear of the building providing screening to the residences to the west and it continues to the north providing screening to the north residence. The Applicant opines the proposed use is compatible with other uses in the area as it is uphill from Tack Factory Pond, a portion of the public water supply. The Board opines that the adjoining premises will be protected, as conditioned, against any detrimental or offensive uses of the site and the site plan meets the standard of review of Scituate Zoning Bylaw Section 770.6 Paragraph A.

7. Section 770.6.B Site Plan Approval Standard B: Traffic safety and ease of access at street and highway entrances and exits of driveways, taking account of traffic volume, grades, sight distances and distances between such driveway entrances, exits and the nearest existing street or highway intersections and times of peak traffic flow.

Finding: The Applicant engaged Chappell Engineering Associates, LLC ("Chappell"), to prepare a Traffic Assessment for the Scituate Drinking Water Treatment Plant. The Board, through its engineering peer review consultant, Horsley Witten Group, found that the assessment noted that both driveways meet or exceed the minimum sight distance and safe operations can be expected. The assessment notes that the proposed traffic increase on Chief Justice Cushing Highway are considered minimal and within safe fluctuations of traffic. The Board determines that the proposed Project provides for traffic safety and ease of access at the street and access driveways, concurs with the identified sight lines and recommendations offered by the Applicant and the Town's consulting engineer, and will not create any undue congestion in the streets and ways abutting the proposed Project or on the road within relevant proximity to the proposed Project.

8. Section 770.6.C Site Plan Approval Standard C: Safety and adequacy of driveway layout, pedestrian safety, off-street parking and loading sites, minimizing glare from headlights and light intrusion, sufficiency of access for service vehicles such as electricity, gas, fuel, telephone, laundry, rubbish removal, water, sewer, fire, police, ambulance or other routine or emergency vehicles.

Finding: The number of parking spaces for a water treatment plant is not specifically called out in the Table of Minimum Requirements under Section 760.6 of the Zoning Bylaw, thus it would fall under “all other uses” and the number of parking spaces should be determined by the Planning Board to accommodate normal demand. The Applicant indicates that a total of 19 parking spaces are proposed with 10 in the front administrative building area plus 1 accessible space in the front administrative building parking area and 8 spaces at the lower garage level which are secured inside the security fence. The 19 parking spaces are based on facility staffing and expected visitors. There are currently 15 staff people anticipated to use the facility. The eight lower parking spaces adjacent to the garage are for parking for personal cars for the distribution crew and superintendent of distribution. The front administrative building parking area will be for the personal vehicles of water treatment staff. There will be two additional parking spaces for visitors and the ADA parking space. If staffing levels increase, additional parking will be required, with the location of the new parking subject to Planning Board review and approval. The Planning Board finds that the proposed parking of 19 spaces appears to be sufficient for the proposed use as conditioned. All trucks and operating equipment will be stored inside the garage portion of the building except under extraordinary circumstances.

The landscape screening to the west of the site minimizes headlight glare to the extent possible. Lights will be cut off fixtures and shielded to minimize glare.

The Fire Department has determined that width and road composition of the fire department access road is acceptable.

Access to the water treatment plant is controlled via a security fence with a controlled access to authorized vehicles and personnel only.

The Planning Board opines that the site plan meets the standard of review of Scituate Zoning Bylaw Section 770.6 C. for safety of driveway layout, number of parking spaces, access for service and minimizing headlight glare as conditioned.

9. Section 770.6.D Site Plan Approval Standard D: Adequacy of the methods of disposal for sewage, refuse and other wastes resulting from the uses permitted on the site, safety and adequacy of water supply and distribution, and of firefighting facilities on site.

Finding: The Board of Health has approved the onsite sanitary wastewater absorption system. A dumpster area is provided on the south side of the building on the inside of the security fence/drive. The DPW Water Division has commented that there is adequate water supply for the Water Treatment Plant. There are hydrants located on the north and south side of the building and there will be a hydrant located near the fire department connection. The Fire Department concurs with the access drive width. The Planning Board opines that the site plan meets the standard of review of Scituate Zoning Bylaw Section 770.6 D. for adequacy of methods of waste disposal, adequacy of water supply and fire- fighting facilities on the site.

The site groundwater level varies during the year and varies between a minimum of 28-inches and 15-feet below existing grade. This presents a structural and waterproofing challenge to locate and build the facility in this location, necessitating a requirement to continually pump groundwater from around the foundation to manage the leakage and foundation soil properties

during construction. The Applicant proposes to install a series of groundwater foundation collection sumps that will be designed to pump groundwater to a temporary dewatering settling basin (the “Dewatering Settling Basin”) located to the south end of the site which will discharge overland to Tack Factory Pond. The “Dewatering Settling Basin” is the temporary storage feature directly south of the building footprint that will collect groundwater being pumped from the foundation area via the dewatering sumps during construction. The capacity of the Dewatering Settling Basin is approximately 18,300 cubic feet (approximately 137,000 gallons storage volume). The Settling Basin is designed for a hydraulic capacity of 1,000 gpm (2.3 hours storage volume), with the highest anticipated steady-state groundwater estimated to be 10 gpm (9.5 days storage volume), though higher flows may occur during and following precipitation events. The Applicant states that the construction groundwater pumping system drains do not go to the stormwater system because they are not diverting stormwater, but rather they are diverting untreated ground water which will be discharged overland to the Pond via a temporary level spreader. The management of the groundwater flows during permanent operations is proposed via a series of gravity flow underdrain piping systems from the water treatment building that discharge to two overland direct discharge points to the west and north of the stormwater basin.

10. Section 770.6.E Site Plan Approval Standard E: Adequacy of surface and storm-water drainage and snow-melt runoff within and from the site, including but not limited to all walkways, driveways, buildings, parking and loading areas.

Finding: The site plan and stormwater report were reviewed by the Board’s consulting engineer, Janet Bernardo, P.E. of the Horsley Witten Group. The plans are modified in response to the comments; The Applicant has confirmed that there will be no increase in rate or volume of runoff for the proposed site and that all water quality standards are met. The Water Resource Protection District requirements will be met with recharge of precipitation to the groundwater as the Stormwater Management System is designed to meet stormwater and water quality requirements, including that stormwater quality will be improved by reducing total suspended solids (“TSS”) by at least 90% as required by the Zoning Bylaw. The Stormwater Management System is designed to meet the standards of the MassDEP Stormwater Management Handbook.

Snow storage will be managed as follows: The primary snow storage area is located to the west of the back driveway and loading area. Additional snow storage areas are located to the east of the front parking area to the south of the employee parking on the south side of the building.

The proposed stormwater drainage systems include Best Management Practices (BMP’s) including deep sump catch basins, water quality units, bioretention basins with sediment forebays and an infiltration basin. These BMP’s will provide pretreatment of runoff and capture of oils and sediments while not increasing rate or volume of runoff.

The review of the stormwater management system by the Planning Board’s consulting engineer and their approval of the Site Plan eliminates the requirement for a separate Stormwater Permit under the Stormwater General Bylaw and its regulations for any work that conforms to the plans. The application attests that the drainage system can be expected to result in post-development runoff characteristics (including peak flow, total volume of runoff and water quality of runoff) to be equal or less than pre-development conditions.

The site plan meets the standard of Scituate Zoning Bylaw Section 770.6 E for adequacy of stormwater management in the Water Resource Protection District.

11. Section 770.6.F Site Plan Approval Standard F: If the site is located within the Water Resource Protection District, the adequacy of provisions made to protect against toxic or hazardous

materials or oil discharge or loss resulting from corrosion, accidental damage, spillage or vandalism through measures such as spill control provisions in the vicinity of chemical or fuel delivery points, secured storage areas for toxic or hazardous materials or oil, and indoor storage provisions for corrodible or dissolvable materials.

Finding: The entire site is in the Water Resource Protection District. The proposed stormwater management systems include hooded deep sump catch basins and oil and grit separators placed prior to any conveyance of stormwater runoff from paved areas to the proposed stormwater bioretention basins and an infiltration basin. Two continuous deflective separator units provide for the removal of trash, debris and floatables such as oil and grease and meet the 90% TSS removal requirement. There will be a 5,000-gallon tight tank that has all lab waste directed to, which tank will be pumped out to ensure it does not overflow. The Applicant noted there will be no outdoor storage of chemicals, temporary or otherwise. The proposed building has a garage to allow unloading of materials inside the building to the maximum extent practical. There is a limited amount of piping storage outside. A Technical Memorandum, dated August 10, 2023 details the Stearns Meadow Water Treatment process. The memorandum explains the chemicals to be used in the Water Treatment Plant "WTP", the purpose of the various chemicals, the quantity to be stored and where the chemicals will be stored. The storage includes secondary containment of at least 110% of the bulk chemical volume for each chemical and fire suppression as required for each chemical. There will be no floor drains in the chemical room except for the safety showers which will discharge to the tight tank. Any potential spill will be contained within the secondary containment area and will be manually cleaned and removed from the WTP operators or a specialized chemical cleanup contractor. The WTP will be a zero liquid discharge plant with respect to process waste. There will be an Emergency Spill Cleanup Plan for the site prior to operation of the site. The Site Plan meets the standard of Scituate Zoning Bylaw Section 770.6 F. for adequacy of control of toxic and hazardous materials in the Water Resource Protection District.

12. Section 770.6.G Site Plan Approval Standard G: Minimizing the volume of cut and fill, the number of trees of 6" caliper or greater removed, the length of stone walls removed, soil erosion, and destruction of other natural features.

Finding: The Applicant has provided a cut-fill analysis. There is extensive cut and fill on the site. The Applicant indicates there will be a net import of fill of approximately 61,000 cy (assuming reuse of cut material) to the site as they are bringing in more materials than excavated. If the excavated materials are suitable, they will be reused for proposed grading on the site. Much fill will be used to create the slope on the lower part of the infiltration basin with a 4:1 slope on the outside of the basin and 3:1 inside the basin. Cut and fill has been minimized to the extent possible for the proposed site development and building.

A tree survey has been performed and integrated into the Landscape Plan. There is a 50-foot buffer for parking along Chief Justice Cushing Highway. The existing trees in that location will remain undisturbed except to allow for access and egress to the site. The building setback to the west of the site remains fully vegetated for 30 feet except to allow walkway access to the existing cemetery. An extensive Landscape Plan has been developed to mitigate trees cut for the project and provide a landscape screen.

An erosion and sedimentation control plan will be used with staged construction, staged dewatering and a large sedimentation sump and an EPA NPDES Construction General Permit and/or NPDES General Permit for Dewatering and Remediation Discharges and associated Stormwater Pollution Prevention Plan (SWPPP) will also be required. The Site Plan meets the

standard of Scituate Zoning Bylaw Section 770.6 G.

13. Section 770.6.H Site Plan Approval Standard H: Minimize obstruction of scenic views from publicly accessible locations.

Finding: The Site Plan meets the standard of Scituate Zoning Bylaw Section 770.6 H as scenic views from the property to Chief Justice Cushing Highway are preserved to the greatest extent possible with the 50-foot buffer for parking. Viewshed impacts from Tack Factory Pond and the reservoir are minimized.

14. Section 770.6.I Site Plan Approval Standard I: Parking areas shall be adequately buffered and shaded using native vegetation. Parking lots with ten or more spaces shall be planted with at least one shade tree per ten spaces, of a caliper of at least 2 ½ inches dbh, with each tree providing shade to the parking area. Parking areas and visually degrading elements such as dumpsters and loading docks shall be designed to minimize visual intrusion from public ways and residentially owned or zoned areas. In addition, suitable screening of such areas by wood fences and dense, native evergreen hedges of five feet or more at time of planting shall be utilized. The use of chain link fences shall be avoided except in industrial areas. Outdoor lighting, including lighting on the exterior of a building or lighting in parking areas, shall be arranged to minimize glare and light spillover to neighboring properties. No outdoor light shall be located more than twenty feet above the ground.

Finding: A landscape buffer will be created to the west, north and east of the building. It will be largely evergreen with a mixture of deciduous trees. The parking area in front of the building is buffered by the 50-foot parking buffer to Chief Justice Cushing Highway. Shade trees are provided in the parking area or at the edge to provide the required trees for parking space planting at a size of 2 ½” dbh minimum.

The dumpster and loading dock are located to be visually buffered from the public way.

An 8-foot-high chain link fence, with barbed wire top, restricts access to the non-public portions of the site and WTP. No outdoor light is located more than 20 feet above the ground and the LED outdoor lighting will be cut off or shielded to minimize glare to abutting properties including any wall mounted lights (e.g. at the loading dock). The outdoor lights shall also be controlled to reduce the light level to no more than 50% during non-use and overnight hours unless operations are active or otherwise required for security purposes during those periods. The requirements of the Bylaw Section 770.6 I have been met.

15. Section 770.6.J Site Plan Approval Standard J: Safe, functional, and convenient pedestrian, bicycle, and where practical transit access, and continuity of the pedestrian and bicycle network within the property and to nearby pedestrian and bicycle facilities and trip generators.

Finding: There are safe, functional walkways to the front of the building where public access is provided for and expected. There is also a public access walk to the existing cemetery from the public parking area. Bicycle parking is provided in two bicycle racks. The requirements of the Bylaw have been met to the extent practical for a Drinking Water Treatment Plant.

The site plan entitled Town of Scituate, MA, 453 Chief Justice Cushing Highway, Stearns Meadow Drinking Water Treatment Plant, Site Plan Approval dated August 10, 2023 with revisions October 6, 2023, November 15, 2023 and December 1, 2023 by Woodard & Curran consisting of 28 plan sheets meets the requirements of the Town of Scituate Zoning Bylaw Section 770.6, Site Plan

Review Standards of Review to a degree consistent with a reasonable use of the site for the purpose permitted by the regulations of the district in which the land is located.

At the continued public hearing on December 14, 2023, Patricia Lambert, Chairman, Stephen Pritchard, Ann Burbine, Rebecca Lewis and Robert MacLean being present and voting at all public hearing sessions or filed a Mullin form for one session missed, the Planning Board voted by a unanimous vote to approve the site plan for the Stearns Meadow Water Treatment Plant at 453 Chief Justice Cushing Highway subject to the following conditions:

1. The site plan entitled Town of Scituate, MA, 453 Chief Justice Cushing Highway, Stearns Meadow Drinking Water Treatment Plant, Site Plan Approval dated August 10, 2023 with revisions October 6, 2023, November 15, 2023, December 1, 2023 and Civil Details C-904 revised dated 12/12/2023 by Woodard & Curran consisting of 28 plan sheets; Landscape Plan dated August 2023 with revisions through 12/11/2023 by Halvorson/Tighe and Bond Studio consisting of two sheets; Civil Excavation Figures C-2-X by Woodard & Curran dated November 2023 with revisions stamped in December 2023 are approved except that they may be modified if changes are necessary to meet the conditions below.
2. Two reduced sets of 11 x 17 prints of the most current plans and pdf's shall be provided to the Planning Board prior to the pre-construction conference for the files.
3. The building shall meet all pertinent requirements of the Massachusetts state building code.
4. The Applicant shall comply with height requirements in the Scituate Zoning Bylaw except as otherwise relieved by the Zoning Board of Appeals in their approval and subsequent written decision.
5. Materials and details of construction shall meet all pertinent requirements of the DPW, Board of Health, Fire Department, Conservation Commission, Planning Board, Building Department and Commission on Disabilities. Where this Site Plan Administrative Review requires approval, permitting or licensing from any local, state or federal agency, such required approval, permitting or licensing is deemed a condition of the Town of Scituate Planning Board's approval of this site plan. All necessary permits and approvals must be received prior to commencement of construction.
6. No underground irrigation systems shall be allowed to connect to the Town's water distribution system or in any manner use municipal water in accordance with the policy made effective by the Board of Selectmen on October 8, 2014 and reaffirmed by the Scituate Water Commissioners on May 26, 2015. All irrigation systems installed in accordance with the policy must be supplied by on-site sources or private water suppliers at the expense of the property owner.
7. This Site Plan Review/Stormwater Permit must be recorded at the Registry of Deeds with proof furnished to the Planning Office prior to the preconstruction conference. Failure to record the permit is a violation of the permit and subject to fines included in the Town of Scituate General Bylaws.
8. The Town will store the operating equipment for the Water Treatment Plant in the garage portion of the building except under extraordinary circumstances.

Utilities, Parking, Traffic and Erosion Control

9. DPW Curb Cut Permit and MADOT Highway Access Permits shall be provided to the Planning Department prior to issuance of a building permit.

10. Gasoline, oil and chemical abrasives shall not be stored on-site in the Water Resource Protection District except for limited quantities in property stored containers inside the building. No road salt shall be used or stored on-site. No vehicle washing shall occur onsite.
11. As the lot is in the Water Resource Protection District and has rendered more than 15% impervious and a system of artificial recharge is provided, a certification that groundwater is not being degraded shall be provided prior to application for a building permit.
12. The detention basins and infiltration basins are designed and shall be installed to have the bottom elevation a minimum of three feet above seasonal high groundwater elevations. Stormwater during construction, as well as in perpetuity after construction, is not allowed to increase in rate or volume to adjacent properties, the street or offsite. It is the Applicant's responsibility to comply with the specific requirement at all times, particularly during all phases of construction.
13. No clearing beyond the limit of work/limit of clearing as shown on the plan is allowed. The limit of clearing shall be staked in the field prior to construction commencing, inspected by the Town Planner and maintained throughout construction.
14. The Stormwater Management Systems must be retained and maintained as designed both during and after construction. Maintenance must be per the approved Operation and Maintenance (O & M) Plan and is required in perpetuity. To the extent that the approved O & M Plan does not adequately maintain the design performance of the Stormwater Management System, the Applicant shall modify the O & M Plan provisions to meet the design performance and provide an updated copy of the modified plan to the Board.
15. Two signs shall be installed for the fire department vehicle access demarcating emergency vehicle access. The controlled security gate shall have access from the Town of Scituate FOB/badge to ensure the fire department emergency response vehicle can gain immediate access to the secure area inside the security fence.
16. There is a separate sedimentation sump for construction dewatering. It is encouraged that no construction dewatering water is allowed in the Stormwater sedimentation sump. The Town Planner shall be notified in the event dewatering water must be stored in the stormwater sedimentation sump. Any construction dewatering that enters the stormwater basin should be done in dry weather and not impact the efficacy of the Stormwater system. The construction dewatering sump shall not overflow and shall be monitored and alarmed to prevent any such overflowing during all times that construction dewatering pumps are operating.
17. Sizing calculations and flow paths for the temporary sedimentation basins shall be provided to the Town Planner prior to scheduling the preconstruction conference along with the activated NPDES Permits.
18. The final construction dewatering plan shall be submitted to the Town Planner for review and approval prior to issuance of a building permit. Such plan shall address a construction sequence and detailing of the dewatering system operating process including but not limited to the yet-to-be-designed/located temporary foundation underdrains which are to be constructed during the dewatering effort and prior to the foundation being poured. The plan shall include monitoring and reporting as required by permits including groundwater volumes, quality and inspection of the dewatering system to avoid erosion of overland discharge areas.
19. All lighting shall be LED lighting. The exterior lighting shall be down lighting and conform to the lighting plan with a maximum height of 20 feet for light fixtures. The lighting in the

parking lot shall be programmable as to on-off (motion detection) and level of intensity. The lights shall be designed to allow for operation at a non-occupied light level no more than 50% of fixture full lumen output at times when the site is not occupied and during overnight periods. The Applicant shall conduct a testing plan during commissioning to determine if the security light level can be minimized to below 50% and shall thereafter operate the security light levels at that final determined level unless otherwise required for security purposes.

Construction

20. A pre-construction conference will be required prior to the start of construction which conference shall include representatives of the DPW, the site contractor, Owner's Project Manager (OPM), the Town Planner and Conservation and Natural Resource Officer and any other Town departments as necessary or required by the Town Planner.
21. Prior to scheduling the pre-construction conference, a commitment to cover funding for inspections by the consulting engineer for stormwater and dewatering shall be provided to the Planning Board, a schedule of construction activities shall be given to the Town Planner along with the Storm Water Pollution Prevention Plan (SWPPP) and NPDES Permit. The Construction General Permit, General Permit for Dewatering and Remediation Discharges and SWPPP shall be provided to the Town Planner for review and approval fourteen days prior to submission to the EPA and scheduling the preconstruction conference. All operators shall be advised that SWPPP and Stormwater Permit must be adhered to during construction.
22. Inspections and observations made according to the SWPPP shall be submitted weekly to the Board.
23. An Illicit Discharge Statement shall be signed by the property Owner and submitted to the Town Planner prior to the preconstruction conference.
24. All work within the Right of Way ("ROW") of Chief Justice Cushing Highway shall be coordinated with the DPW and MassDOT. The DPW shall be notified prior to the start of work within the ROW of Chief Justice Cushing Highway. Other than as required by the necessary work in the ROW, there shall be no parking or idling of vehicles on Chief Justice Cushing Highway during construction.
25. Stormwater control measures shall be maintained by the Applicant according to the Stormwater Management System Operation and Maintenance Plan submitted for the project and the Storm Water Pollution Prevention Plan (SWPPP). All clearing and earth moving operations shall only occur while erosion and sedimentation control measures are in place. A stand alone copy of the Operation and Maintenance Plan including its appendices, signed by the property owner, shall be provided prior to the preconstruction meeting.
26. If the drainage system is not performing as designed and conditioned or if stormwater is observed going to abutting properties or the street, the Applicant shall cease work and immediately implement all necessary mitigation to permanently remedy the situation. This condition applies to all construction activities and survives the issuance of a Certificate of Completion to apply during all on-going operations of the building or site.
27. No sediment (including silty water) shall be allowed to leave the site during construction.

28. The Property lines of the subject Property and limit of work shall be marked or flagged in the field under the direction of a surveyor and notification given to the Town Planner and design engineer a minimum of three days prior to commencement of construction. The property line is to remain staked at all times during construction.
29. **A crushed stone construction entrance as detailed on the plans is required and shall be installed prior commencement of construction. The stabilized construction entrance shall be maintained throughout construction to prevent dirt from tracking on to the road.** Water and sediment shall not be discharged into the infiltration basin until the site is fully stabilized.
30. Prior to any land disturbance, erosion control shall be installed and inspected by the Town Planner or approved agent. At that time the site shall also be staked to show the building and drainage improvements. All stockpiles shall be surrounded by an erosion control barrier. Additional erosion control, such as silt fence, silt sock and/or haybales placed **prior** to a precipitation event, may be needed to prevent sediment from reaching the road or adjacent properties during construction. **All erosion control shall be installed per the plan and shall be maintained in good working condition throughout construction.** The Applicant is responsible for maintaining and managing stormwater on-site throughout the construction period and during the transition to fully functional operations and maintenance. Construction approval in no way relieves the Applicant from its obligation to ensure stormwater does not impact the abutting properties and the Applicant shall take all necessary steps to prevent such occurrences.
31. The Town Planner is to be notified when the stabilized construction entrance and erosion control measures are in place, when construction begins and when construction is completed for site inspections. If deemed necessary by the Town Planner in consultation with the DPW Engineering staff, temporary sedimentation basins, check dams, silt socks and or noise and dust control may be required in addition to the erosion control measures shown on the plan. All erosion control measures shall remain until the Town Planner and, as necessary, the Conservation Agent determines that the danger of erosion or sedimentation no longer exists. Request for inspections require 48 hours minimum notice.
32. Construction shall proceed according to the construction phasing plans.
33. All connections to Town water shall be performed according to the specifications of the Scituate DPW.
34. Construction work shall not begin prior to 7 AM weekdays and 8 AM on Saturday and shall cease no later than 7 PM or sunset whichever is earlier. No construction shall take place on Sunday or legal state or federal holidays unless written approval is granted by the Town Planner prior to the work occurring. The Applicant shall manage construction lights so they shall not be a nuisance to the neighbors.
35. No on-street parking or loading or unloading of construction equipment or vehicles shall be permitted during construction unless a police detail is provided if warranted as determined by the Police Department. No trucks shall idle on public roads and no equipment shall idle on site prior to 7:00 AM on weekdays, 8:00 AM on Saturdays.
36. All construction parking shall be on site unless otherwise approved by the Planning Board.
37. The Applicant shall provide the Town with the routes construction traffic will use so that if a

safety hazard or material disruption of the public way impedes safe passage, a Police detail would be obtained by the Applicant at its expense.

38. All disturbed areas not receiving any other specialized treatment shall be loamed and seeded with 6" of clean loam.
39. No staging or stockpiling is allowed in any component of the stormwater system.
40. Inspection of the bottom of all infiltration systems must be performed by the Planning Board's consulting engineer and the design engineer prior to any backfill or system component installation to confirm suitability of soils.
41. In an effort to reduce noise levels, the Applicant shall keep all equipment that emanates sound from the structure or site in proper working order through regular maintenance, especially dewatering equipment during overnight hours.
42. Site noise levels shall conform to the MassDEP's Division of Air Quality Control Noise Policy. Applicant shall provide noise readings at multiple locations around the building to demonstrate conformance to no more than 65 dBA one meter from the building.
43. The emergency generator will be in a noise suppression enclosure that will control sound to 65 dBA at ten meters. This shall be tested and demonstrated and test results submitted to the Board as part of testing required to demonstrate conformance.
44. The Applicant shall follow all regulations under the Massachusetts Department of Environmental Protection, 310 CMR 7.00: Air Pollution Control, 7.01 General Regulations to Prevent Air Pollution and 310 CMR 7.09 U Dust, Odor, Construction and Demolition. Per 310 CMR 7.09 U Dust, Odor, Construction, and Demolition water must be used to prevent excessive emission of particulate matter throughout the construction Project.
45. Construction activities shall be conducted in a workman like manner at all times. Blowing dust or debris shall be controlled by the Applicant through stabilization, wetting down or other proper storage and disposal methods.
46. Up to 15 additional white pines or other approved evergreens 8-10 feet tall may be added by the Planning Board under the direction of the Town Planner to enhance the west buffer.
47. The buffer to the west of the building shall be replanted as soon as possible within appropriate growing seasons. Plants must be watered and monitored for three years from time of planting with a documented survival rate of 90% provided to the Board at the end of the period.

After Construction

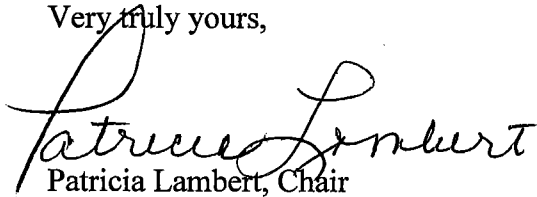
48. A set of As-Built Plans stamped by a registered surveyor and reviewed by the registered professional engineer who designed the system shall be submitted to the Planning Board within 90 days of substantial completion of the work. This plan shall include the construction conditions of the stormwater management system, the permanent dewatering system, utilities, grading, building, site amenities and driveways. The As-Built Plan must be submitted and such plans must be found in compliance with the approved permit prior to obtaining a Certificate of Occupancy. All grading and landscaping must be complete prior to the as-built submittal.
49. If signage identifying the building other than for entrance/exit, directions, or safety purposes is incorporated at a later stage of the project's design, it shall be reviewed by the Planning Board prior to application for a sign permit.

50. No outdoor storage of chemicals is allowed. The proposed building has a garage to allow unloading of materials inside the building to the maximum extent practical. There is a limited amount of pipe storage outside. A Technical Memorandum, dated August 10, 2023 details the Stearns Meadow Water Treatment process. The memorandum explains the chemicals to be used in the Water Treatment Plant "WTP", the purpose of the various chemicals, the quantity to be stored and where the chemicals will be stored. The storage includes secondary containment of at least 110% of the bulk chemical volume for each chemical and fire suppression as required for each chemical. There will be no floor drains in the chemical room except for the safety showers which will discharge to the tight tank. Any potential spill will be contained within the secondary containment area and will be manually cleaned and removed by the WTP operators or a specialized chemical cleanup contractor. The WTP will be a zero liquid discharge plant with respect to process waste. There will be an Emergency Spill Cleanup Plan for the site prior to operation of the site. The Technical Memorandum shall be followed and Emergency Spill Cleanup Plan provided to the Owner, Operator and Planning Board prior to operations.
51. All lab sinks-and emergency eye wash stations shall discharge to the tight tank.
52. Refilling of the fuel oil for the emergency generator and any pumps used for dewatering and construction operations and construction vehicles shall be done with filling procedures that includes safeguards to prevent fuel oil spills. Emergency Spill supplies shall be kept onsite in accordance with an Emergency Spill Clean Up Plan.
53. Removal of solids from the drying basins shall only be done during the daylight hours of the day shift Monday through Friday. The Owner shall have a Solids Removal Plan that ensures that the removal process does not result in any solids entering the stormwater system and it shall be provided as an appendix to the Stormwater Operation and Maintenance Plan. All solids shall be legally disposed of offsite with no stockpile areas onsite. Decant water from the Drying Basins shall not go to the stormwater system at any time, but shall be recycled to the input lines of the water treatment plant.
54. The under-basin water system on the drying basins shall be designed to ensure that a loss of power to or the use of the collection sump does not result in overflows of the sump or at any time result in recycle water entering the stormwater system.
55. The septic system shall only be used for sanitary waste-water. No lab waste or other lab wastewater shall be put in the septic system and shall only be disposed of to the tight tank.
56. If any future facility expansion is required, any such expansion plans shall be submitted to and shall require the review and approval of the Planning Board.
57. The Applicant shall make every effort to develop and implement a plan to have a zero-carbon facility and shall report annually on such performance to the Town Planner with a copy to the Planning Board. The Applicant shall submit the initial plan prior to obtaining a Certificate of Occupancy.
58. An 8-foot-high chain link fence with barbed wire on top shall be black vinyl coated steel chain link fence.
59. The Landscape Plan shall be adhered to as approved herein. A revised plan shall be provided prior to application for a building permit showing the decreased limit of work for the wetland mitigation. No substitutions shall be allowed without the approval of the Town Planner. All plants shall be maintained. Plants must be monitored and watered for three years from the time

of planting with a documented survival rate of 90% provided to the Board at the end of the period.

60. A revised set of plans shall be submitted to the Planning Board prior to a Building Permit application to show correct rims/inverts/outlet elevations for underdrains, the revised limit of work for the wetland mitigation area and a revised Operation and Maintenance Plan if necessary.
61. The Applicant shall evaluate the performance of the dewatering system to make sure there are no overland impacts to neighboring properties.

Very truly yours,



Patricia Lambert, Chair

PL/kj

cc: James Boudreau, Town Administrator
Kevin Cafferty, DPW Director
Sean McCarthy, DPW Engineering
Eric Langlan, Water Superintendent
Renee Lanza, Woodard & Curran
Steve Robbins, Woodard & Curran
Robert Vogel, Building Commissioner
Planning Board
Janet Bernardo, Horsley Witten