

Response to Staff Review Comments
Planning & Zoning Applications
Site Plan #469
Special Permit #461
CSP #314
COMMENT #1

Date: April 5, 2019
Address: 75 Eastern Point Road, Electric Boat
Project: South Yard Assembly Building
From: Kristen Solloway, PE, Fuss & O'Neill, Inc.

I. City of Groton Staff Review

Traffic, Parking and Pedestrian Accommodations

1. Parking beyond 500 feet from the principal use is subject to a special permit. The application should be modified to reflect this requirement.

As discussed at the March 14th meeting with the City, no new parking is proposed so a Special Permit for parking is not required.

2. On March 11, 2019, between 10:30am and 12:30PM, staff reviewed the available parking spaces upon EB owned parking facilities as identified on Figure P-MAP. Of the *available* 3,715 spaces, ~29 were vacant ('available' in this analysis omits visitor and Lot S parking as the latter area was under construction and closed). Comparing the parking used to that of the largest 2019 shift (6,600 employees), a parking ratio of ~1.8 employees per one (1) parking space has been determined.

The calculation only utilized the 180 spaces noted for Lot-M on Figure P-MAP, assuming the applicant's omission of the parking balance (440 spaces total) in Lot M will continue to be used for storage of material, equipment and snow and not made available for parking.

If this ~1.8 spaces per employee trend continues for 2029's full employment capacity (8,200 employees), there will be a deficit of ~900 spaces. While the parking requirement of 3:1 as outlined in the Zoning Regulations is achievable, it is questionable whether the actual required parking can be accommodated without having an adverse impacts. Specifically this includes the following 9.4.D Special Permit Criteria:

- a. Overall Neighborhood Compatibility,
- b. Appropriate Improvements,
- c. 8. Long Term Viability, and
- d. 11. Mitigation

NOTES:

- a. Private parking areas as outlined upon Figure P-MAP were at or near capacity, with an overall vacancy rate of ~1%. EB owned parking facilities had an overall vacancy rate of ~0.8%.
- b. During a meeting with applicant's facilities staff, said staff acknowledged a parking 'problem' exists and complaints from staff members have been received in some form of communication to management. Therefore, additional parking is contemplated at Lots E and G. (See comment 9 below)

Electric Boat meets the current City Zoning Regulations for parking of 1 space per 3 employees. Electric Boat is meeting with City staff to discuss their parking concerns outside of this project.

3. Is it the intent of the applicant to continue utilizing Lot-M for storage? If the lot will continued to be used for storage, is the intensity of use anticipated to increase? Is it possible the lot could be closed to parking when snow storage needs are at maximum? Lot M on the P-MAP is noted as having 180 spaces. Staff analysis has determined 440 spaces exists. Explain difference.

No, this parking lot will not be closed should there be a substantial amount of snow. Other provisions will be made for snow removal.

The parking lot is striped for 560 spaces. There are 140 spaces for New London/Kings Highway Employees, 30 spaces for equipment and material storage. The parking map has been adjusted to count 390 available spaces in M-Lot.

4. A portion of Lot M is signed for Pfizer parking only. Explain.

The Pfizer sign is a remnant from a previous agreement with Pfizer. Pfizer no longer uses this lot and the sign has been removed.

5. *Traffic Impact Statement*, page 6, paragraph 1 notes additional parking will be "*located outside the City of Groton.*" Where outside the City of Groton? How many spaces will be provided outside the City of Groton? This has bearing upon:
 - a. Addressing the parking ratio noted above;
 - b. Possible impacts to other local roadways; and
 - c. The need to refer the application to other affected municipalities in accordance with CGS 8-7d.

The traffic study has been revised to reflect that Electric Boat meets the current 1 space per 3 employee parking regulation. No additional parking is proposed, however Electric Boat is pursuing additional parking within the City of Groton and trip generation has been included within the traffic model to account for additional trips on Eastern Point Road.

6. Parking for contractors 'offsite' should be more clearly defined. Locations have bearing upon sites and circulation within the City, included specific permitting requirements. If parking is to be accommodated outside of the City, then referrals to the appropriate municipality is necessary under CGS 8-7d noted above?

Contractor parking will be offsite but within the City of Groton. Electric Boat is reviewing potential locations and it will be secured prior to Building Permit. For the purposes of the traffic the more conservative of the two locations was included in the traffic model.

7. Visitor parking is already at capacity. How will visitor parking be accommodated in the future with the anticipated growth? Provide visitor log information/affidavit attesting to current visitation rates and anticipated increase at full build/occupancy. If an increase is anticipated, how will it be accommodated in conjunction with employee parking?

There will be no changes to the anticipated visitor counts with the addition of the SYAB.

8. Is the number of Handicap parking spaces sufficient? Only fourteen were observed within the visitor lot on Eastern Point Road. How does handicap parking meeting state building code?

There are 50 designated ADA spaces. EB provides shuttles from the shipyard to the parking lots for those employees who needs assistance.

9. Additional intersections should be analyzed to confirm no adverse impacts to city streets (refer to Section II comments). The TIS primary focuses upon an OSTA oriented permit. The Special Permit must evaluate impacts to local roadways, which does not come under the primary focus of OSTA.

Additional intersections have been analyzed. See comments 6 from BL Companies

10. Staff is aware that parking expansion at the Van-tran, Bldg. 35 and Lot G is planned and an application is forthcoming. Said application will also require a Special Permit. Applicant is advised to include said parking increases and anticipated traffic generation and parking counts under this application.

If EB decides to move forward with parking on the former Building 135 site and re-stripe part of Lot E it will be under a separate application.

11. Are adequate circulation provisions provided for pedestrians from the parking facilities to the property access gates including lighting, crosswalks, curb ramps and sidewalks?

Sidewalks and lighting are provided from EB parking lots.

12. Material and equipment (gangways, snow, storage containers, etc.) is being stored at Lot-M. Will more material be stored on the Lot?

More material will not be stored in M-Lot.

13. It was brought to the City's attention the Applicant may have purchased 399 Benham Road (aka Avery Market), to address vehicle turning maneuvers. If this anecdotal information is correct, what proposed improvements are planned? If there are planned improvements, they shall be included with this application, including all off-site improvements.

Electric Boat has not purchased the Avery Market parcel.

Utilities

At the time these comments were prepared, Groton Utilities (GU) had not completed their review. However, several questions arose during internal staff meetings, despite the information provided in the Project Narrative. They are as follows:

1. What is the capacity requirements of water, sewer and electric? How will they be provided? What is the source of each and how shall they be routed to the property and through public ROWs? What installation requirements are needed? For instance, what size utility poles and location, is guying required and if so how and on what property? Are easements necessary for any utility to reach the property? Can electric power be installed underground to reduce impacts to neighborhoods? If overhead, what is the visual impact to the neighborhood the utility is routed through?

Service requests have been requested from all utility providers and the design team has been coordinating with all necessary parties. Sanitary sewer, water and gas will be provided underground from Eastern Point Road. Easements are not required for this work. An encroachment permit from the District 2 Connecticut Department of Transportation will be requested by the Contractor performing the work prior to construction. The receiving station will be on EB property to serve the new SYAB (one is for GU and the other for EB). Service from GU to the substation is still being designed by GU's designers. Service is not required for construction and full service to the SYAB will not be required until 2024. GU is responsible for securing any easements for their facilities on private property.

2. Explain electromagnetic frequency levels that may be associated with offsite electric utility improvements.

Offsite improvements utility improvements for service are being designed by Groton Utilities.

3. Are there impacts to the sewer within the south property line sewer easement?

Changes to the sewer easement are not required.

4. The appropriateness of screening at the receiving station cannot be evaluated. More information on the nature of the utilities, size, etc. that will be located here should be provided.
 - a. Is additional screening (i.e. walls) appropriate rather than just landscaping?
 - b. Are generators located in this area?
 - c. What noise levels can be anticipated?
 - d. What are the lighting levels and are they included in the photometric?

The location of the receiving station has been altered to make it less visible from the street. Generators are not located within the receiving station area. Noise levels are anticipated to be minimal and will be included in the preliminary noise study and lighting is limited to standard wallpacks above the doors and lighting levels are included in the revised photometrics.

Construction/Phasing/Stockpile/Storage

1. Review ongoing; comments may follow.

Erosion Control & Earthwork

1. Provide details on how erosion control will be addressed as site phasing and staging changes in response to construction sequencing. For example, where are temp sedimentation traps required, their size and provide necessary calculations and construction details?

Temporary sediment traps are not planned as the existing grading at the site is not conducive to this type of capture system. The basins would also have to be installed down gradient along the river where they would be in conflict with the building foundation pile installations. Movable sediment barriers are called for to treat sheet flow runoff from the site.

2. The ES barrier along the Thames River is a single row of fencing or a silt sock. This single barrier is insufficient. Additional protective measures shall be provided to protect the Thames River.

A double row of silt fence with haybales or silt socks will be provided along the Thames River

3. What is the anticipated cut and fill of earth material, inclusive of rock? What are the quantities and number of trips for import and export for all materials, inclusive of processed base, steel, and other materials?

Deliveries of major materials will be via barge and a construction management plan will be provided upon completion.

4. Blasting Ordinance #105 shall be followed including State of CT blasting regulations Section 29-349-106 through 29-349-378.

All blasting operations will comply with local, state and federal regulations.

5. A blasting permit is required from the Fire Marshal.

A blasting permit will be obtained from the Fire Marshal (CM).

6. What ES measures will be used for the construction of all bulkheads along docks/piers?

The bulkheads will be accordance with the CTDEEP permits.

7. All required Stormwater and Erosion Control third party inspection reports, periodic inspections and after storm events, shall be reported to the City Planner and Zoning Enforcement Officer at time of submission to the applicable state or federal agency.

A copy of the E&S reports will be forwarded to the City by the Construction Manager

8. A bond will be required for all erosion control measures. Provide a cost estimate.

An estimate will be provided prior to building permit.

Architectural Design

1. Assembly building exhaust stack shall be shown on elevations and in plans views.

The exhaust stack is on the elevation and plan view.

2. What will be done to reduce the building's massing and height to reduce the overall impact on viewsheds from neighborhoods nearby and beyond. It should be noted the upper portions of the building will be visible from Groton Bank National Register Historic District and Fort Griswold. A viewshed analysis should be provided to understand overall impacts from various vantage points.

Building massing, landscaping and overall impacts to the neighborhood will be discussed during the Public Hearing.

3. Provide an interior building cross section depicting the submarine height and mechanical equipment needs above the hull, supporting the need for the building height and statement provided under Special Permit Narrative, Item 1 Section 4.4.E – Dimensional Standards (Building Height). Depict structural requirements, rigging, cranes, etc.

An interior building cross section will be presented during the Public Hearing.

Drawings & General

4. Boundary survey is not signed or sealed.

A signed and sealed set of property boundary plans has been previously submitted to the City as part of the Enabling projects.

5. Scale of the boundary survey is not correct. The sheet seems to be reduced to fit the typical titleblock.

The above mentioned boundary survey was submitted at full scale.

6. Site Prep Plans depict buildings and improvements to be removed under another permit application. The plans imply these improvements are being requested under this application. It should be clearly noted which improvements are part of past approved applications and which are being requested under this permit application.

The buildings are being removed under previous applications. The foundations shown on the plans will be removed under this permit. A note to clarify has been added to the plans.

7. SY-C-112: A note calls for underground storage tanks to be removed by others. Is this part of the current application or past permits?

The USTs will be removed under a separate permit. A note clarifying this will be added to the plans.

8. Provide details of construction of dock/pier.

A bulkhead detail has been provided on sheet SY-C-506.

9. Is the 24' access drive wide enough for the swing of a trailer truck? How will one truck see the other, are sight lines appropriate from the stop signs?

The trucks cannot pass simultaneously at the bend in the construction access road. Trucks exiting the site will have to stop at the stop sign to allow entering trucks to pass. Sight lines should be sufficient for exiting trucks to determine if an entering truck is approaching. Flaggers can be added if this system is not sufficient.

10. Provide a copy of General Permits in place with CT DEEP.

A copy of the construction stormwater general permit will be provided when completed

Floodplain Permit

2. Provide more details on the industrial gas tank area including how they meet the flood regulations. VE specifications apply.

A standard detail of the industrial gas tank area has been included. The industrial gas tank area is installed at BFE + 1.0 feet in accordance with the VE requirements.

3. Additional review ongoing; comments may follow.

Coastal Area Management

1. This application was referred to CT DEEP on February 19, 2019; at time of these comments no response has been received.
2. Additional review ongoing; comments may follow.

II. Traffic Impact Statement

Peer Review Comments

We offer the following comments based on our review of the Traffic Impact Statement by Fuss & O'Neill (the "Consultant") prepared for this development:

Existing Traffic Counts

1. Raw traffic counts provided in the TIS for Poquonnock Road @ Mitchell Street, Benham Road, and Chicago Avenue do not reflect the counts displayed on Figure 2: 2018 Existing Traffic Conditions. Please clarify how the traffic volumes on Figure 2 were determined from the Raw Traffic Counts.

The raw data provided by the traffic counter did not provide the data as a 5-way intersection. The data had to be manipulated to provide the existing 5-way condition. The higher numbers from the side streets were used to provide a more conservative analysis.

2. It appears that the Thames Street approach has incorrect AM and PM Existing Peak Hour volumes for the right turn movement. Please revise the volumes for the movement.

The peak hour volumes for the Thames Street approach have been verified.

Parking

1. Lot M shown on the P-MAP drawing is across the street from another parcel that is owned by Electric Boat, per City of Groton GIS. There are multiple curb cuts and a crosswalk connecting the two parcels. This appears to be used for overflow parking and there appears to be traffic coming out of the parcel on the raw traffic counts provided. Please clarify if this parcel is used for overflow parking or as a laydown area and provide additional traffic information, as necessary.

This lot is used as a laydown area and not for overflow parking.

2. The P-MAP drawing has two Parking Areas labeled "Parking Lot B." We recommend the Consultant revise the name of the Parking Area along Smith Street to "Parking Lot Annex B."

P-Map has been revised to show the parking area along Smith Street to be "Parking Lot Annex B"

3. The Consultant has two different parking space numbers on the P-MAP drawing. One is for Electric Boat only (3,818 total spaces) and one is for "Third Party" Parking providers (1,128 total spaces). The report is unclear about why this "Third Party" number is provided. Please provide additional information on the need for the "Third Party" number.

The reference to "Third Party" parking has been removed.

4. Lot M has signage indicating Pfizer parking so not all spaces in lot M are EB spaces. Please clarify parking calculations and "P-MAP." For Lot M. Lot M shows 180 spaces on "P-MAP" but there appears to be additional spaces in the lot. Is this for snow storage/laydown/Pfizer parking?

The parking lot is striped for 560 spaces. There are 140 spaces for New London/Kings Highway Employees, 30 spaces for equipment and material storage. The parking map has been adjusted to count 390 available spaces in M-Lot.

5. The available parking should be broken down by the classifications and their assigned parking lots. Certain lots may be overcapacity if the number of employees assigned to that parking lot exceeds the number of spaces. More detail should be provided and "P-MAP" should be revised.

Parking is not assigned per lot. There is permit only parking however employees with a permit are not required to park in a specific lot. All parking is on a first come first serve basis.

6. The TIS states the increase in the number of employees starting in the year 2024 will be accommodated via additional parking facilities located outside of the City of Groton. Section 7.1.D.2-.4 of the City of Groton Zoning Regulations requires the following:
 - a. The parking spaces required for non-residential uses shall be located on the same lot as the principal use or on a lot which is within 500 feet of the principal use, such distance to be measured along the street lines to the property.
 - b. In industrial zones, if there are special and unusual circumstances that make it impractical to provide all required parking within 500 feet of the principal use, other provisions may be made for the location of parking provided parking is a permitted use in the zone in which it is to be located and subject to Special Permit approval and Site Plan approval by the Commission.
 - c. When required parking spaces are provided on land other than the lot occupied by the principal use for which they are required:
 - i. The land occupied by such spaces must be in the same possession as such principal use.
 - ii. Such land must be bound by a covenant, recorded in the office of the Town Clerk binding such owner and his/her heirs and assigns to maintain the required number of parking spaces for the duration of the use served.

Electric Boat will continue to meet existing parking regulations of 1 space per 3 employees with the full build out of the SYAB. If EB adds additional parking as part of a separate project and it is not within 500 feet of the property line, EB will request a Special Permit from the City.

7. A special permit may be required for parking outside of the 500 foot boundary.

No new parking is required however, if parking is proposed as part of a separate project and it is not within 500 feet of the property line a Special Permit will be requested.

Trip Distribution and Generation

1. The TIS states that employees will be shuttled into the Site creating no net new trips to the Electric Boat Property. This will be creating new trips, just in a different mode of transport than personal passenger vehicle. The Consultant should submit a trip distribution and trip generation for the new transit shuttle trips.

We are no longer proposing parking outside of the City. See updated traffic study.

2. The TIS states that there is currently 6,578 1st shift employees. This number is to increase to 7,036 1st shift employees by 2024, a net increase of 458 employees. This number increases to 8,175 1st shift employees by 2029, a net increase of 1,597 employees. These trips are not accounted for in any peak hour analysis. The consultant should supply a trip distribution and apply this to a 2029 build condition analysis.

See traffic study addendum.

Intersection Analysis

1. In the analysis, the intersection of SR 649 (Rainville Avenue/ Poquonnock Road) @ Poquonnock Road/Old Farm Road was not analyzed in the TIS. However, the rest of the Chester Street/Rainville Avenue corridor from the Site to the intersection and the following intersection east of this intersection SR 649 (Poquonnock Road) @ Electric Boat Parking Lot (Lot M) were analyzed. We recommend the Consultant analyze SR 649 (Rainville Avenue/ Poquonnock Road) @ Poquonnock Road/Old Farm Road.

This intersection has been incorporated into the traffic model.

2. The raw traffic counts provided show pedestrian volumes of 850 people in the peak hour at some intersections. With the use of exclusive pedestrian phases at 4 of the 5 signalized intersections, this will have an impact on traffic signal analysis. We recommend the Consultant analyzes the intersections with the exclusive pedestrian signals included. We also recommend the Consultant adjust the saturation flow rate for the two-way stop controlled intersection at Route 349 and Mumford Avenue. In particular, we recommend the pedestrian blocking factors be adjusted.

The synchro analysis has been updated to include an exclusive pedestrian phase. A review of the Route 349 and Mumford Avenue intersection was performed utilizing SimTraffic. This model indicated that while there are many pedestrians crossing on Route 349 there is a de minimis impact on traffic operations along Route 349.

3. The peak hour factor that are provided on the raw traffic counts sheets are well below the default of 0.92 that is used in the Synchro analysis. We recommend the Consultant adjust peak hour factors to reflect the existing conditions at all intersection analyzed in the TIS.

Peak hour traffic factors will be updated.

4. The intersection of Eastern Point Road @ Thames Street, Smith Street and Poquonnock Road is showing pedestrian timings when there is no pedestrian signalization. We recommend the Consultant remove the timings from the Synchro analysis.

Pedestrian timings have been removed.

5. Vehicle extensions throughout the Synchro analysis is set to the default 3.0 seconds. We recommend the Consultant set the vehicle extensions to their correct timings based on the available signal plans.

The timings have been updated based on the signal plans provided by Groton Utilities.

6. The TIS routes traffic directly to Route 349 (Clarence B Sharp Highway). The City observes that significant traffic uses Route 349 (Eastern Point Road) and Mitchell Street to access I-95 at Bridge Street. Intersections to the north of the Site should be included in the analysis. We recommend the following intersections should be included:
 - a. Mitchell Street/North Street at Meridian Street
 - b. North Street at Broad Street
 - c. North Street at Bridge Street and I-95 On-Off Ramps

The three requested intersection have been counted and are included in the traffic study.

Construction Management Plan

1. Construction activities will have a significant impact on the local street network. Please provide a construction management plan that includes the following:
 - a. Routing of vehicles, particularly concrete deliveries.

Deliveries that cannot be made via barge will utilize State Road via I-95 and Route 349.

- b. Water for dust control
Dust control will be minimal as earth work will be limited to the construction road, utility connection and the site work related to the receiving station. It should be noted that the revised receiving station will be on piles.
- c. Noise control; provide noise study when completed.

The noise study will be submitted upon completion

- d. Contractor laydown areas, if not on site.

Contractor laydown areas will be on site.

- e. Contractor employee parking and plans for getting contractor employees to work site. When location is determined agreements for off-site parking should be provided to the city and plan for employee trips to the worksite should be determined.

Contractor parking locations will be provided when it is secured by the Construction Manager. If construction parking is locally to the site the traffic study will updated appropriately.

III. Site/Civil Review

Stormwater Management Report, February 2019

1. There is no WQ device at Outfall 33B. Please confirm that there are no surface inlets at RR Drains 33B-1,2, & 3. SY-C-141 Construction Road Profile sheet indicates that these structures are to be yard drains.

A water quality device has been added at Outfall 33B

2. Provide documentation demonstrating the effective treatment flow rates for each CDS WQ unit specified, as well as maximum hydraulic bypass.

Specification sheets will be provided for each CDS WQ unit is included in the stormwater management report.

3. Provide sediment storage information for each CDS unit specified.

Specification sheets will be provided for each CDS WQ unit in the stormwater management report.

4. The proposed HDS at CB-33C-1 is proposed to have a Type C inlet. Is this configuration acceptable to the manufacturer?

Yes, a Type C inlet is possible with this unit.

5. The Existing & Proposed Watershed Results table on Page 5 indicate that there is an increase in peak flow rate at existing outlet #34. Please confirm that the existing 30" ACCMP downstream of this outlet can safely convey the increased flows.

The capacity of the 30" ACCMP has been verified and it can convey the increased flows.

6. Please confirm that there will be no tidal influence at outfalls?

All outlets are at elevation 5.8 feet EBFDF, above the mean high water elevation of 3.55 feet EBFDF

7. Section 5 Post-Construction Stormwater Management notes "the majority of the project area in the south yard has very shallow bedrock. The shallow bedrock prevents the use of subsurface infiltration to treat stormwater runoff". However, the Executive Summary of the Preliminary Geotechnical Recommendations Report prepared by GEI, dated December 2017, states that "The subsurface conditions on land portions of the South Yard generally consisted of 10 to 54 feet of fill over bedrock". This statement is supported by the boring logs and profiles. Please provide rationale for why primary infiltration is not feasible.

Infiltration at this site is problematic. The industrial site is congested with existing and proposed infrastructure and utilities. The area with sufficient space for an infiltration system is located further to the east where bedrock is shallow. The boring logs referenced in the geotechnical report are located closer to the edge of the river where the depth to bedrock does increase. However, this area is along the edge of the river where the assembly building and bulkheads are proposed. As a result, secondary treatment methods are proposed consisting of hydrodynamic separators.

8. Roof discharge under building? How will this be handled? What elevation? Will splash pads be provided under the building?

Roof discharge locations under the building are shown on the drainage plan. These locations discharge directly over the river

9. Will north & south decks contain outside storage of hazardous materials?

No hazardous materials will be stored on the north and south decks (GDEB).

10. Provide maintenance data for Flexstorm deck drains. What pollutants do they filter out? How often should they be inspected and cleaned?

Maintenance data for the CleanWays catch basin filtration units in have been included. The units will treat stormwater for oil and grit. They will be inspected monthly and changed in accordance with the manufacturer's specifications.

11. How will bulkhead be constructed by CB-33A-13? This corner appears to have work below the CJL, but the silt fence shown on the E&S plan is at the top of the rip-rap slope.

The bulkhead will be constructed with Z sheeting and soldier piles. The area behind the wall will then be backfilled. Work below the CJL is covered under the joint permit application submitted to CT DEEP and USACE.

12. Is there a Stormwater Pollution Control Plan? (SWPCP) Please provide.

A SWPCP will be generated as part of the construction stormwater general permit application. A copy will be forwarded to the City when completed.

13. Is there a long-term Operation & Maintenance Plan for all elements of the stormwater system? Please provide. Please provide all forms and include a note that the City of Groton shall be copied on yearly inspection reports.

A long-term O&M plan for the stormwater systems is on sheet SY-C-513

14. Stormwater Management report page 6 notes that silt fence backed by haybales will be installed around the perimeter of on-site soil stockpiles. The silt fence detail on sheet

The silt fence detail has been updated to include hay bales

15. Existing Conditions Watershed Drainage Map DRA-01, references Large EPR Offsite Area E-29A (60.83 Ac.) and Small EPR Offsite area E-29B (14.00 Ac.), but does not provide a plan depicting the limits. Please provide watershed plans for both areas.

An off-site watershed plan has been added to the stormwater management report.

Sheet SY-C-000 Cover Sheet - No Comment

Sheet SY-C-001 General Civil Notes

1. Parking Summary Chart notes "ADA spaces (2%)". Code requires that for lots containing in excess of 1001 parking spaces, 20 ADA spaces plus 1 for each 100 over 1000 are required. 3,818 spaces requires 49 ADA compliant spaces, where the chart shows 37 spaces. The chart indicates that 51 ADA compliant spaces are provided.

Previous parking counts did include in-yard parking to be conservative. We are now including in-yard parking in the overall parking count. There are 50 ADA available

spaces and which meets the current ADA regulations. Per EB policy employees/visitors requiring accessible access are picked up at a designated location and driven to their required location.

2. Please indicate number of van accessible parking spaces.

There are 6 van spaces.

3. Has an ADA accessible route to the building served been identified? If so, please indicate location.

Per EB policy employees/visitors requiring accessible access are picked up at a designated location and driven to their required location.

Sheet SY-C-010-012 Property Boundary Survey

1. Please provide survey signed and sealed by the Connecticut Licensed Land Surveyor.

A signed and sealed set of property boundary plans has been previously submitted to the City as part of the Enabling Projects.

2. CJL elevation is shown as elevation 2.0 NAVD88. It should be elevation 2.1 NAVD88.

A signed and sealed set of property boundary plans has been previously submitted to the City as part of the Enabling Projects.

3. Please explain "Remove Water Perimeter" note.

The "Remove water perimeter" note is shown on the site preparation plan. An existing water perimeter which is part of the secure perimeter for the submarines will be removed to allow for installation of the assembly building and bulkheads.

4. Note on sheet SY-C-112 says "Clean out water course to restore proper flow capacity". Please explain, is all vegetation to be removed? To what elevation?

The water course has become overgrown and partially filled with sediment. We propose to conduct routine maintenance of the water course including limited trimming of existing growth and removal of accumulated sediment to ensure the water course capacity is preserved.

Sheet SY-C-100 Site Layout Key Plan - No Comment

Sheet SY-C-101-104 Topographic Survey - No comment

Sheet SY-C-110 Wetlands Plan

1. No inland wetlands flags are shown on plan along inland wetland line type.

Wetland flags and numbers will be added to the plan.

2. Please add note indicating the registered soil scientist who delineated the inland wetlands and the date of the delineation.

A note indicating the soil scientist and date has been added to the plan.

3. Please add a note indicated who located the inland wetland flags.

A note indicating who surveyed the wetlands has been added to the plan.

Sheet SY-C-111-114 Site Preparation Plan

1. The hatch pattern designated as “remove all improvements in this area unless otherwise noted” covers the stone revetment along the shoreline and the hatch extends beyond the CJL line but stops short of the water line. Confirm this is correct.

For the purposes of this permit application, the hatch has been revised to extend to the CJL. Work water ward of the CJL is covered by the joint permit application to CT DEEP and USACE.

Sheet SY-C-121-124 Erosion and Sediment Control Plan (501-502)

1. Stormwater Management report page 6 notes that silt fence backed by haybales will be installed around the perimeter of on-site soil stockpiles. Please add a sediment stockpile detail to the detail sheet and a detail for silt fence backed by haybales.
Sediment stockpile and silt fence backed by hay bales details have been added to the plans
2. Note #7 on sheet SY-C-501 indicates that stockpiles shall be encircled with a “hay bale or silt fence barrier”. Correct note to say “silt fence backed by haybales”.
The note has been revised to indicate silt fence backed by hay bales.
3. No temporary sediment stockpile is show on the plans. Please provide proposed location and size.
A stockpile location has been added to the plans.
4. There is a Temporary Sediment Trap detail on sheet SY-C-501. No Temporary Sediment Trap is show on the plans. Please provide proposed locations and sizing calculations.
A temporary sediment trap detail was provided in case it is needed during the project; however, none are planned at this time.
5. The plans callout several areas to receive “erosion control mat”. Please specify the mat to be used, and provide a detail for installation.
An erosion control mat detail will be added to the plans.
6. What is the slope of grades due south of the proposed receiving station? Should this area receive an erosion control mat?
An erosion control mat detail will be added to the plans.
7. Please provide a double row of silt fence at all proposed flared end storm drain outlets.
A double row of silt fence will be added at flared outlets where possible.
8. Please add an anti-tracking apron to the driveway at the proposed receiving station.
An anti-tracking pad has been added at the receiving station.
9. Where will the site construction entrance be located? Please provide an anti-tracking apron. (Prior to the construction of the permanent access road?)
The site construction entrance will be located at the end of the construction access road. An anti-tracking pad has been added.
10. How will overwater work be completed? Will a floating boom be utilized?

Work waterward of the CJL is covered by the joint permit application to CT DEEP and USACE.

11. Per the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, Chapter 3, Part III, Please identify an agent or agents who have responsible authority for the implementation, operation, monitoring and maintenance of E&S measures, including phone number. Please provide a narrative description of the project and any proposed phasing or sequencing. Please provide the planned start and completion dates for each phase. Please provide information and procedures to address emergency situations and the failure of E&S measures.

The erosion control notes have been updated to identify the responsible authority for the implementation, operation, monitoring and maintenance of E&S measures, including phone number. Phasing is being contemplated by the Construction Manager.

12. Phasing plans should be considered due to expected construction duration and sequence.
Electric Boat is working with the Construction Manager to determine phasing for the project.
13. Please provide drainage calculations to support size of spreader pads and rip-rap size.
Drainage calculation are included in the stormwater report and a rip rap detail has been added to the SY-C-515.
14. Which erosion controls are to be in place during demolition activities?
All erosion controls will be installed at the start of the project prior to demolition activities.
15. Please provide erosion controls at existing watercourse/drainage ditch below proposed wall construction.
Erosion control measures will be added at the outlet of the water course. The proposed wall will be constructed with no or minimal disturbance to the watercourse itself.
16. Extend silt fencing along west side of RR tracks and fencing to eliminate the gap. Sheet SY-C-124.
The “gap” in silt fence is along the base of a rock cut face. Silt fence will not be extended
17. Add inlet protection as needed for work in Eastern Point Road.
Inlet control will be added to structures in Eastern Point Road as needed.
18. Please provide total area of disturbance.
Total disturbance area is shown on wetlands table on sheet SY-C-111.

Sheet SY-C-130 Site Security Fence Plan

1. Position of gate at top of south driveway may present problem for exiting vehicles who must stop on 9.3% grade. Consider alternate location of gate.

The entrance gate to the construction road will remain open throughout the work day, and closed only at night when the site is shut down.

2. Indicate location of fencing with barbed wire and fencing without barbed wire.

All security fencing will have barbed wire.

Sheet SY-C-131-134 Site Layout Plan

1. Provide callouts for where curbing type begins and ends.

Curb callouts has been added to the plans.

2. Add Metal Beam Rail along Eastern Point Road opposite Chapman Street for added protection of electrical receiving station and equipment.

Vehicular bollards are currently called for vehicular protection.

3. Add vehicle protection at gravel drive maneuvering area west and south side of receiving station adjacent to slope.

The layout for the receiving station and vehicular access has been revised and vehicle protection is no longer required.

4. Add MBR at south parking area by Building 83 and dumpster enclosure at top of slope.

MBR has been added to parking and dumpster area by Building 83.

5. What is "2000 gallon ecology AST"?

A 2,000-gallon ecology AST is an above ground hold tank utilized to accumulate wastewater from the submarines for testing prior to disposal.

6. Please indicate location of snow storage areas.

Snow removal will continue to be removed from the site as it is today.

Sheet SY-C-141 Construction Road Profile

1. Indicate limits of curbing.

The limits of curbing have been noted.

2. Position of gate (SY-C-130) at top of south driveway may present problem for exiting vehicles who must stop on 9.3% grade. Consider alternate location of gate.

Entrance gate to construction road will remain open throughout the work day, and closed only at night when the site is shut down

Sheet SY-C-142-144 Vehicle Maneuvering Plan

1. Confirm that fire truck vehicle shown is acceptable to City of Groton Fire Marshall.

The fire truck used for this plan is larger than a City of Groton fire truck.

2. Utility truck "DL-23" may not be appropriate size vehicle to model turning radii. Consider using SU-30 design vehicle.

The driveway has been designed for a standard utility vehicle.

Sheet SY-C-151-154 Site Grading Plan

1. Indicate top of bulkhead elevations at SE side of proposed assembly building.

Spot elevations have been added.

2. Consider fence at top of retaining wall adjacent to south access driveway.

Fence is shown just north of the top of wall.

3. Show proposed top of bulkhead/sheet pile elevations adjacent to floating drydock pier and on bulkhead return.

Spot elevations have been added.

Sheet SY-C-161-164 Site Drainage Plan

1. Provide callout to reference location of internal building roof drains.

Roof leader drains are noted on the plan within the southern footprint of the building.

2. Provide scour protection at outfall #27A and 33A.

Scour protection is not required, the areas are over the river or onto solid rock outcrop.

3. Access for maintenance at HDS 27A appears to be restricted.

Access to HDS 27A provided from the north deck. A walkway with a 4x4 level landing has been added.

4. Confirm diameter of MH structure 33C-3 behind retaining wall. This structure will be over 15-ft deep.

Manhole MH 33C-3 will be a 5 foot diameter manhole.

5. The north deck has includes proposed inlets with treatment units, yet this deck is over dry land. Why aren't these drains tied together with one treatment unit and one outlet. What is the thickness of the deck? Will there be a crawl space between the bottom of the deck and the land?

Grade beams under deck are 5 feet deep and cannot be penetrated by drain piping. A crawl space will be present, and the ground surface below will be armored with riprap.

Sheet SY-C-171-175 Site Utility Plan

1. Are generators gas or diesel powered? Consider adding bollard protection.

The generators are diesel powered. Bollards will be added as necessary

2. Will sanitary pump station be on generator power during power outage? If not provide 1-day emergency storage.

The pump station will be on generator power.

3. Fire hydrant locations shall be reviewed and approved by City of Groton Fire Marshall.

Fire hydrant locations will be approved by the City of Groton Fire Marshal.

Sheet SY-C-182 Site Landscape Plan

1. Please provide a lawn seed mix.

A lawn seed mix has been added to the plans.

2. Add a note to the landscape plan specifying 6-inch depth of topsoil.

A note indicating 6-inches of topsoil has been added to the plan.

3. The Landscape Plan does not provide information for final treatment at the proposed site access road embankments (both sides of road). Please provide.

Turf restoration and or stone surface treatment has been added to the construction road plans.

4. The Landscape Plan does not provide information for final treatment east of the RR tracks where inland wetlands are proposed to be filled. Please provide.

Turf establishment has been added to the plan.

5. There is proposed grading and a slope depicted to the NW of the RR tracks, roadway Sta. 100+00. What will be the final treatment at this slope?

This is a rock outcrop. Erosion control matting is proposed as needed. Disturbed soil area will include turf establishment.

6. There is a hatch pattern show in the drainage ditch/wetland swale. What does this pattern represent?

The hatch pattern has been removed.

7. What will be the ground treatment at the proposed row of evergreens to the west and north of Parking Lot J?

Mulch bed is proposed.

Sheet SY-C-185-186 Cross Sections

1. Sheet SY-C-185 is missing from the plan set.

This plan has been removed from the plan set.

Sheet SY-C-200 Pump Station Plan and Section - No comment

Sheet SY-C-300 Receiving Station General Notes - No comment

Sheet SY-C-310 Receiving Station Medium Voltage One-Line - No comment

Sheet SY-C-311 Receiving Station Layout Plan - No comment

Sheet SY-C-500 General Notes

1. Pavement Note #1 says to construct accessible routes, parking spaces, ramps, sidewalks and walkways in conformance with the Federal Americans with Disabilities Act, yet there are no ADA spaces or accessible routes depicted on the plans. Please provide.

Per EB policy employees/visitors required accessible access are picked up at a designated location and driven to their required location

Sheet SY-C-501-502 Erosion & Sediment Control Details

1. Refer to previous comments.

Sheet SY-C-503-510 Site Details

1. Provide detail for fencing/railing at top/edge of bulkhead.

Security fence is proposed. See sheets SY-C-507-510.

2. Provide additional details for hydrodynamic separators.
Specification sheets are provided for the various treatment units. A standard detail is provided on sheet SY-C-513.
3. Headwall detail shows inlet grate with a note to “see detail”. Provide detail for grate.
An inlet grate has been provided.
4. Provide detail for thrust block at the bottom of vertical drain pipe.
A thrust block detail has been added.
5. Deck drain detail indicates “rip-rap over land”. What size rip-rap? How large is the splash pad and what depth?
Riprap will armor land surface under deck. Sizing calculations will be provided.

Sheet SY-C-511 Railroad Details - No comment

Sheet SY-C-512-515 Storm Drainage Details - No comment

Sheet SY-C-519-520 Sanitary Sewer Details - No comment

Sheet SY-C-521-522 Utility Details - No comment

Sheet SY-C-101P-107P Floor Plans - No comment

Sheet SY-C-201P-202P Elevations - Please provide area of building signage.

Sheet SY-ES-100P Site Lighting Plan - No comment

Sheet SY-E-113P First Floor Lighting Plan - No comment

Sheet SY-E-115P Utility Building Lighting Plan – No comment

Sheet SY-E-LTG-P Site Lighting Photometrics

1. Is any lighting proposed at the receiving station? If so please provide photometrics.

Sheet SY-E-602P Luminaire Schedule - No comment