Town of West Hartford – Department of Community Development
Planning & Zoning Division
50 South Main Street, Room 214, West Hartford, CT 06107
P: (860) 561-7555 www.westhartfordct.gov

November 14, 2023

Alter & Pearson, LLC
Robin Messier Pearson
701 Hebron Avenue
P.O. Box 1530
Glastonbury, CT 06033

Subject: 1700 Asylum Avenue - IWW #1203
1800 Asylum Avenue –& IWW #1205

Dear Attorney Pearson:

The Planning Division received the above-referenced revised applications and supporting materials, submitted by Weha Development Group, LLC and Weha Development Group East LLC on October 23rd and November 3rd and reviewed all materials for conformance with the Inland Wetlands and Watercourses Regulations and the applicable provisions of the West Hartford Zoning Ordinances for impacts to Special Flood Hazard Areas and the following comments are offered for response and associated plan revisions.

1. The inland wetlands and watercourse applications (applications) shall address the review comments provided by the Engineering Division in the following memos:

   a. Memo Re: - 1800 Asylum Avenue; dated November 3, 2023 from Julie Viera P.E., Civil Engineer II
   b. Memo Re: – 1700 Asylum Avenue; dated November 3, 2023 from Jason D. McCabe, Civil Engineer II

2. The applications shall address the review comments provided by SLR International Corporation (SLR), the Town's Wetland Soil Scientist consultant for technical review assistance in the following memo:

   a. Memo: Wetlands Scientist and Soils Scientist Review, Proposed Wetland Map Amendments and Redevelopment Projects for 1700 and 1800 Asylum Avenue, West Hartford, Connecticut dated November 9, 2023 from Megan Raymond, MS, PWS, CFM.

3. As noted in the prior staff comments, the proposed applications contemplate work within Special Flood Hazard Areas. Work within these areas is also subject to compliance with Section 177-8 Special Flood Hazard Area of the Zoning Ordinances which requires separate application for review (not subject to IWWA). As noted in the issuance of prior staff comments, the "project must be designed to confirm with the existing base flood elevation as provided on the current FEMA map products" and as submitted, the applications do not address the requirements of Section 177-8. To determine compliance, the following items should be addressed or clarified:

   a. Comments 19 & 20 from McCabe memo.

b. Insufficient and/or non-complaint information was provided to determine the following":
    i. Section 177-8E (1)(h), for reference this standard requires: *That the water-holding capacity of the floodplain, except those areas which are tidally influenced, shall not be reduced. Any reduction caused by filling, new construction or substantial improvements involving an increase in footprint to the structure shall be compensated for by deepening and/or widening of the floodplain. Storage shall be provided on-site, unless easements have been gained from adjacent property owners; it shall be provided within the same hydraulic reach and a volume not previously used for flood storage; it shall be hydraulically comparable and incrementally equal to the theoretical volume of floodwater at each elevation, up to and including the 100-year flood elevation, which would be displaced by the proposed project. Such compensatory volume shall have an unrestricted hydraulic connection to the same waterway or water body*.
    ii. Section 177-8E (1)(i), for reference this standard requires: *Equal conveyance. Within the floodplain, except those areas which are tidally influenced as designated on the Flood Insurance Rate Map (FIRM) for the community, encroachments resulting from filling, new construction or substantial improvements involving an increase in footprint of the structure, are prohibited unless the applicant provides certification by a registered professional engineer demonstrating, with supporting hydrologic and hydraulic analyses performed in accordance with standard engineering practice, that such encroachments shall not result in any 0.00 feet increase in flood levels (base flood elevation). Work within the floodplain and the land adjacent to the floodplain, including work to provide compensatory storage shall not be constructed in such a way so as to cause an increase in flood stage or flood velocity.*
    iii. Section 177-8 F (1)(b). Information was not provided to support this specific requirement. i.e. **the submission of a separate companion application as required by the ordinance.**

4. In response to prior staff comments for request for information on any environmental remediation efforts (completed, underway or to be completed), including references to the existing wetlands permits which authorized certain building demolition and limited remediation, BL Companies indicated: *additional testing for the presence of PCBs in soil and hardscape surrounding the buildings and additional testing of pond sediments is required* and *will be completed during the spring and summer of 2023*. In a follow-up staff comments, asking for this testing information, BL Companies noted: "*the results of the samples taken onsite to CTDEEP for review. CTDEEP confirmed receipt and has acknowledged the results are under review but has provided no guidance to date. BL Companies expects response back from CTDEEP this month on guidance related to further testing or potential remediation*." Please submit any correspondence / guidance received from DEEP, particularly, any relevant issues that could impact the proposed wetlands permits (construction sequencing, impacts to regulated recourses, etc.). The environmental remediation efforts should be coordinated and better incorporated into the wetlands plan sets or a clear statement / acknowledgement from the Applicant that this work will be subject to further wetlands permitting and/or modifications in the future.

5. Staff acknowledges that the Applicant updated and enhanced the Alternatives Analysis Section in the Wetlands Assessments Report but encourages further exploration of alternatives. Consistent with prior comments, the Applicant should expect this area of the

report / application(s) to be critically reviewed by the Wetlands Agency in accordance with the requirements of Section 7 and Section 10 of the IWW regulations, particularly in instances were direct or indirect wetlands impacts are proposed.

6. Please verify the trees to be preserved and trees to be removed in the plan set. There are a number of conflicts between the demo plan sheets and the landscape plan sheets. Additionally, once verified, please confirm that the trees to be preserved are not impacted by the proposed grading plans. The areas along Asylum and Lawler Avenue on 1800 Asylum Avenue appear to have both areas of cut and fill (as shown on the Earthwork Exhibit, Sheet SA-1) in the locations of trees to be preserved.

7. Staff acknowledges that the Applicant eliminated and reduced many direct wetlands impacts to wetlands resources throughout both 1700 and 1800 Asylum Avenue, however, further elimination and / or reduction to the following areas should every considered:

    a. The site "internal roadway" alignment for 1800 Asylum Avenue is still shifted westward towards Lincoln Avenue. In the prior iterations of the applications and project design the intersection was aligned as a "four-way" intersection directly across from Fox Meadow Lane. In its current design configuration, direct wetlands impacts to the southernmost extents of Wetlands 1 are still proposed. These impacts are both temporary and permanent and derive from the internal roadway configuration, its associated grading, impacts to the Asylum Avenue r.o.w. and proposed sidewalks.
    b. The location and number of walking paths through the wetlands systems on 1800 Asylum Avenue. Additional opportunities, for alternative pathways placement and/or connections reductions should be explored, including the westernmost pathway and the southwestern trail alignment/configuration.
    c. The concrete box culvert "beneath the trail" at the southwestern corner of 1800 Asylum Avenue. Were alterative crossing designed considered, that would be less impactful to the direct the streambed (spanned bridge for example)?

In addition to the comments noted above, the following comments are offered for consideration. These comments have been raised by staff in prior internal meetings with the applicant's design team and /or have been raised by the Design Review Advisory Committee on earlier iterations of this project. Staff acknowledges that while these may be more appropriate for consideration during potential future zoning related applications, they could impart addition positive site impacts relevant for wetlands considerations.

8. The site "internal roadway" alignment for 1800 Asylum Avenue has shifted a bit eastwards away from Lincoln Avenue but is still not in alignment with Fox Meadow lane. In the prior iterations of the applications and project design the intersection was aligned as a "four-way" intersection directly across from Fox Meadow Lane. This "four-way" alignment presented an overall more favorable site layout which, in staff's opinion, creates a better alignment and reduces impacts to adjacent neighboring properties and allows for opportunities for increased wetlands buffers from both the eastern and western resources.

9. The inclusion of, and current configuration of, townhomes along both Asylum Avenue and Lawler Road, should be reevaluated. Staff acknowledges that the townhome alignment has been improved since the last iteration of the plans (by being placed further back from each respective street at the existing building lines), however, the inclusion of new individual site drives / curb cuts, mitigates the setback enhancement and lessens opportunities for further reductions in impervious coverage, and creation of additional green / open space. These

open space areas “front yard areas” can help, in part, to maintain the current look and feel of the historic campus use while providing for a meaningful transition from a proposed more intense use into the surrounding neighborhoods.

10. As discussed in the most recent project meeting with staff, the inclusion of pedestrian sidewalk along the eastside of Trout Brook Drive across the frontage of 1700 Asylum Avenue should be explored for pedestrian connectivity / complete streets considerations.

If you have any questions on the above noted items please contact me at 860.561.7556.

Best Regards,

Todd Dumais
Town Planner and Designated Wetlands Agent

C: Rick Ledwith, Town Manager
Gina Varano, Deputy Corporation Counsel
Duane Martin, Community Development Director

File:u/SDD/AsylumAvenue1700-800_IWW_12003, 1205_PlanningComments_Nov23

SLR International Corporation
195 Church Street, 7th Floor, New Haven, Connecticut, 06510

November 9, 2023

Attention: Mr. Todd Dumais, Town Planner
Town of West Hartford
50 South Main Street, Room 214
West Hartford, CT 06107

SLR Project No.: 141.11197.00054

RE: Wetland Scientist and Soil Scientist Review Proposed Wetland Map Amendments and Redevelopment Projects for 1700 and 1800 Asylum Avenue, West Hartford, Connecticut

Dear Mr. Dumais:

At the request of the West Hartford Town Plan and the Zoning/Inland Wetlands and Watercourse Agency (IWWA) (the "Town"), SLR International Corporation (SLR) continues to review the regulated activity permit applications submitted by WEHA Development Group East, LLC and WEHA Development Group, LLC for 1700 and 1800 Asylum Avenue, respectively, in West Hartford, Connecticut. SLR is providing a technical peer review of the permit applications for each site. SLR's review focuses on an assessment of the potential adverse impacts to wetlands and watercourses, and consistency of the applications with the town requirements. Wetland map amendment applications also reviewed by SLR were approved at the September 6, 2023, public hearing.

SLR previously submitted letters entitled *Wetland Scientist and Soil Scientist Review, Proposed Wetland Map Amendments and Redevelopment Projects for 1700 and 1800 Asylum Avenue, West Hartford, Connecticut* dated June 8, 2023, from Megan B. Raymond, MS, PWS, CFM, and Marlee Antill, MS, WPIT; *Wetland Scientist and Soil Scientist Review, Proposed Wetland Map Amendments and Redevelopment Projects for 1700 and 1800 Asylum Avenue, West Hartford, Connecticut* dated August 7, 2023, from Megan B. Raymond, MS, PWS, CFM; *Wetland Map Amendment for 1700 and 1800 Asylum Avenue, West Hartford, Connecticut* dated September 6, 2023, from Megan B. Raymond, MS, PWS, CFM; and *Wetland Scientist and Soil Scientist Review, Proposed Wetland Map Amendments and Redevelopment Projects for 1700 and 1800 Asylum Avenue, West Hartford, Connecticut* dated September 19, 2023 from Megan B. Raymond, MS, PWS, CFM. SLR's review letter combines each parcel into a full project review and provides one set of comments in this letter.

SLR has reviewed the following materials:

Applicant Documents (*Unless otherwise mentioned, parallel documents for each listed below were reviewed for the "Residential Development at 1700 Asylum Avenue" project and "Oakwood Park – Mixed Use Development at 1800 Asylum Avenue" project*)

- Full Site Plan Set entitled "Land Development Plans Issued for Permitting: West Hartford IWWA Map Amendment & Regulated Activities," prepared by BL Companies, dated June 30, 2023, revised August 21, 2023, October 13, 2023, and October 20, 2023, with the following attached sections (drawn at various scales):

  - "Wetland Map Amendment" (Omitted from October 13, 2023, revision)
  - "ALTA NSPS Land Title Survey"
  - "Existing Conditions Survey"
  - "Demolition Plan"
  - "Site Plan"
  - "Grading Plan"
  - "FEMA Floodplain Computations"
  - "Drainage Plan"
  - "Test Pit Plan"
  - "Sediment and Erosion Control Plan" (including Phases 1 and 2)
  - "Landscape Plan"
  - "Wetland Mitigation Plan"
  - "Lighting Plan"
  - "Truck Turning Plan" (Only applicable to 1800 Asylum Avenue)
  - "Phasing Plan"
- Wetland Assessment Report for Oakwood Park, 1700 and 1800 Asylum Avenue, prepared by All-Points Technology Corporation, P.C. (APT), dated June 30, 2023
- Wetland and Watercourse Delineation Report for Oakwood Park, 1700 and 1800 Asylum Avenue, prepared by APT, dated June 29, 2023
- Stormwater Management Report, prepared by BL Companies, dated June 30, 2023, revised October 20, 2023
- Oakwood Park Neighborhood Outreach Activities Update, prepared by West Hartford 1, LLC, dated June 30, 2023
- Town of West Hartford Permit Application for Inland Wetlands & Watercourses Activity: Regulated Activity, [including Connecticut Department of Energy and Environmental Protection (CT DEEP)] Statewide Inland Wetlands & Watercourses Activity Reporting Form) – IWW #1203 and IWW #1205, received June 30, 2023
- Town of West Hartford Permit Application for Inland Wetlands & Watercourses Activity: Map Amendment – IWW #1202 and IWW #1204, received June 30, 2023
- Narrative Per Section 7.5.f of the Inland Wetlands and Watercourse Regulations of the Town of West Hartford for Regulated Activities Permit Application, prepared by Alter Pearson, LLC, dated June 30, 2023
- Response letter to comments provided by Todd Dumais, West Hartford Town Planner pertaining to 1700 Asylum Avenue – IWW #1194 & IWW #1195 and 1800 Asylum Avenue – IWW #1196 & IWW #1197, prepared by Matthew Bruton of BL Companies and dated June 30, 2023
- Response letter to comments provided by Todd Dumais, West Hartford Town Planner, pertaining to the Wetland Scientist and Soil Scientist Review of 1700 Asylum Avenue & 1800 Asylum Avenue, prepared by Matthew Bruton of BL Companies and dated August 21, 2023
- Federal Emergency Management Agency (FEMA) Floodplain Computations (Sheets C2.620 & C2.610) prepared by BL Companies and dated June 30, 2023
- Site Analysis Plan - Earthwork (Sheet No. SA-1) prepared by BL Companies, dated June 30, 2023, and revised August 21, 2023

- CT DEEP Statewide Inland Wetlands & Watercourses Activity Reporting Form, dated August 22, 2023
- Stormwater Management Report, prepared by BL Companies, dated June 30, 2023, and revised August 21, 2023
- Path Details and Recreation Program, prepared by Stantec Consulting Services Inc. and dated August 15, 2023
- Bridge Plan and Section, prepared by Stantec Consulting Services Inc. and dated August 18, 2023 (Only applicable to 1800 Asylum Avenue)
- Comparison Plan (Sheet No. EXH-4.1) prepared by BL Companies and dated June 30, 2023, and revised August 21, 2023
- Wetland Assessment Report for Oakwood Park, 1700 and 1800 Asylum Avenue, prepared by APT, dated October 20, 2023
- Oakwood Park Neighborhood Outreach Activities Update, prepared by West Hartford 1, LLC, dated October 20, 2023
- CT DEEP Statewide Inland Wetlands & Watercourses Activity Reporting Forms, revised and received October 23, 2023
- Response letter to comments provided by Jason McCabe, P.E., West Hartford Engineering Division pertaining to 1700 Asylum Avenue – IWW #1194 & IWW #1195, prepared by Matthew Bruton of BL Companies and dated October 20, 2023
- Response letter to comments provided by Julie Viera, P.E., West Hartford Engineering Division pertaining to 1800 Asylum Avenue – IWW #1196 & IWW #1197, prepared by Matthew Bruton of BL Companies and dated October 20, 2023
- Response letter to comments provided by Todd Dumais, West Hartford Town Planner pertaining to 1700 Asylum Avenue – IWW #1203 and 1800 Asylum Avenue – IWW #1205, prepared by Matthew Bruton of BL Companies and dated October 20, 2023
- Response letter to comments provided by Todd Dumais, West Hartford Town Planner pertaining to Wetland Scientist and Soil Scientist Review, Proposed Wetland Map Amendments and Redevelopment Projects for 1700 and 1800 Asylum Avenue, West Hartford, Connecticut, prepared by Matthew Bruton of BL Companies and dated October 20, 2023
- Oakwood Park Wetland Land Stewardship and Management Plan, prepared by Eben Baker of Stantec Consulting Services Inc., dated October 18, 2023

Project Review

The proposed work involves the redevelopment of the former University of Connecticut (UCONN) West Hartford Campus, an approximately 60-acre parcel bisected by Trout Brook Drive. The land consists of a 36-acre western parcel at 1800 Asylum Avenue, and a 24-acre eastern section at 1700 Asylum Avenue. The area is predominantly residential, with municipal baseball fields abutting to the southeast[1]. Two perennial streams – Trout Brook and

[1] The municipal baseball fields east of St. Joseph's Brook is an abutting use but located on the 1700 Asylum Avenue property. No built environment work is proposed east of St. Josephs Brook but riparian enhancements to St. Joseph's Brook are proposed.

St. Joseph's Brook – flow through the sites and confluence in the southwest portion of 1700 Asylum Avenue.

The applications seek to authorize the demolition of existing structures and parking lots, and construct a four-building, multi-story residential development and surrounding parking on 1700 Asylum Avenue; and a mixed commercial/residential redevelopment at 1800 Asylum Avenue, consisting of a grocery store, three mixed-use commercial/residential buildings, a spa, medical office building, and a parking garage. The work constitutes a complete redevelopment of each parcel. Grading, stormwater infrastructure, connection to municipal sewer, parking lots and structures are proposed within wetlands, the 150-foot upland review area (URA), and upland portions of the site. As presented in the application materials, the project will disturb between approximately 0.20 acres of wetlands directly, and approximately 21.15 acres of the 150-acre URA in total across the two parcels. Wetland mitigation is proposed through wetland creation and wetland enhancement over a 10.5-acre area. A previous redevelopment design was submitted for the properties in April 2023, but was subsequently withdrawn. Each application included direct permanent and temporary disturbance to wetlands and the URA (**Table 1** and **Table 2**).

Currently, wetland resources occupy 22 percent of the total site, about 12 acres, and 30.2 acres of the 150-foot URA. These wetlands and watercourses are palustrine systems and are comprised of two perennial stream reaches, two freshwater ponds, lawn wetlands, and forested wetlands. Special flood hazards areas exist on the sites: a 100-year floodplain, regulatory floodway, and 500-year floodplain are mapped per the FEMA panel 09003C0361F (September 26, 2008) for Trout Brook on 1800 Asylum Avenue, and St. Joseph's Brook on 1700 Asylum Avenue. The site is not mapped as critical habitat or for occurrences of state listed flora and fauna per CT DEEP Natural Diversity Database (NDDB).

Table 1 1700 Asylum Avenue[2]

	April 2023 Submittal	July 2023 Submittal	October 2023 Submittal	Change (July to October 2023)
Temporary Wetland Impact	4,869 SF	1,526 SF	639 SF	-887 SF
Permanent Wetland Impact	871 SF	372 SF	116 SF	-256 SF
URA Disturbance	8 ac	7.9 ac	6.8 ac	-1.1 ac
URA Impervious Existing	3.85 ac	3.85 ac	3.85 ac	n/a
URA Impervious Proposed	4.81 ac	4.65 ac	3.99 ac	-0.66 ac
URA Impervious Percent Increase	25%	21%	3.7%	-17.3%

SF = square feet
ac = acres

[2] Table 1 and 2 data are derived from the All-Points Technology Wetland Impact Assessment reports.

Table 2 1800 Asylum Avenue

	April 2023 Submittal	July 2023 Submittal	October 2023 Submittal	Change (July to October 2023)
Temporary Wetland Impact	20,134 SF	16,695 SF	8,252 SF	-8,443 SF
Permanent Wetland Impact	13,620 SF	19,486 SF	8,372 SF	-11,114 SF
URA Disturbance	14.97 ac	15.5 ac	14.35 ac	-1.15 ac
URA Impervious Existing	3.38 ac	3.38 ac	3.38 ac	n/a
URA Impervious Proposed	9.87 ac	9.75 ac	7.86 ac	-1.89 ac
URA Impervious Percent Increase	192%	188%	132.5%	-55.5%

SF = square feet

ac = acres

SLR has reviewed site drawings and provided comments on four occasions over the course of the review by town staff. These comments pertain to the substantial increase in impervious area in the URA, limited wetland buffers, minimal low-impact design components, increase in disturbance up to and within the wetland boundary, a reliance on wetlands for the site's recreational program, and inconsistency or lack of detail on the plan sets. Collectively, these elements did not allow for a complete understanding of the proposed work's potential impacts on the physical characteristics of the wetland and watercourse systems. The applicant's latest submission reduces proposed regulated activities within wetlands and the upland review area. A number of requested plan changes and details from previous comment letters were provided, but many remain outstanding.

Wetland Impact Assessment Comments

C1. The proposed work depicts a limit of disturbance coincident with the wetland boundary along the entirety of the sites, though improvement is noted on the October plan set. Wetland buffers provide a valuable interface to attenuate flow, absorb nutrients, provide screening and wind breaks as well as habitat opportunities. Though much of the existing buffer to wetlands is lawn area, much of the proposed design eliminates this pervious area and any potential for buffer enhancements. It is noted that some buffer enhancement is proposed, primarily on 1800 Asylum Avenue. Overall, the proposed buffer enhancement on both sites accounts for less than 10 percent of the URA. Impervious area is proposed to increase by 133 percent on 1800 Asylum Avenue, and 3.7 percent on 1700 Asylum Avenue.

The increase in impervious area that is largely coincident with the wetland boundary on each site is not balanced by the inclusion of low-impact design (LID) elements. The applicant has noted that infiltration on the site is limited by soil conditions and high groundwater. Understanding this, are there opportunities to eliminate sections curbing and instead shed water to grass lined swales?

The proposed drainage system is dependent on subsurface detention chambers to address peak flow rates, and water quality measures are addressed through

hydrodynamic separators. These elements do not include any opportunities for bio-assimilation or a nature-based approach to water quality renovation.

One of the few forested buffers onsite occurs between an existing parking lot and the inland wetland in the northeastern portion of 1700 Asylum Avenue, identified as wetland 6. The hydrology of the wetland in this area is variable, with standing water inundation throughout the year. The need for a vegetated buffer to this type of wetland is higher than a lawn wetland.

Buffer enhancements are proposed in this area but extending to the rear of building C. Please provide details on how this area will be maintained and the long-term effectiveness of extending the wetland mitigation through the built environment, considering the stated objectives of the mitigation plan.

C2. The applicant provided the requested additional detail regarding tree removal adjacent to wetland 6. Please provide additional detail regarding the total proposed tree removal in the URA across each site, including species and size. Please also provide a comparison of proposed removals to the mitigation plantings to quantify a replacement ratio.

C3. As described in each of SLR's comment letters, the riparian areas of St. Joseph's Brook and Trout Brook are high-value wetland resource areas that would be benefited by a contiguous buffer. Improvement is noted on the 1700 Asylum Avenue side, with work being shifted away from St. Joseph's Brook.

In the September comment letter, SLR noted the potential to exacerbate stream incision with increased stormwater discharges. BL responded in an October 2023 comment letter stating no low potential for adverse impact.

SLR previously noted approaches described in the 2004 *Connecticut Stormwater Manual*, such as over control of the 2-year storm with slow release over 24-hours. The manual suggests a reduction of post construction 2-year peak storm flow rate to less than 50 percent of the existing to minimize stream channel impact. The applicant states several constraints preventing the use of this approach, such as the poor infiltration and addressing floodplain tailwater effects. SLR acknowledges that the test pit data depict poor soil conditions. Though, were permeability tests or percolation tests completed to quantify these conditions? Were other methods to slow down water travel time to the stream such as porous pavement or use of larger diameter pipes considered?

It does not appear that sufficient detail has been provided to verify that that no impairment to stream morphology will result from the project.

C4. The Stormwater Report, prepared by BL Companies, describes the use of check valves on pipes that drain to St. Joseph's Brook. Details of a duckbill is provided but no details are included as to where these features are proposed. During a review call with the applicant, it was stated it would take a 100-year storm for this backflow to occur. Many outlets are below the 100-year flood elevation. Please clarify the use of check valves, where they will be in the stormwater network, and the anticipated mechanics of flow in this area.

C5. BL Companies clarified through the review process that paths through the wetlands will be "at grade". The earthwork table shows 45 cubic yards (CY) of fill proposed for the wetland paths. No grading information or spot elevations are provided. The earthwork plan also depicts the previous wetland trail network. Please clarify.

C6. **Comment previously noted and not clarified.** The walking path details provided do not appear to consider high groundwater or wetland hydrology. Long-term maintenance of

these areas is a consideration. The applicant notes in their comment response that some of these areas may be seasonally inaccessible. Given that most of the direct wetland impact is specific to the trails, an analysis of feasible and prudent alternatives for the trail network is recommended. Per the applicant, approximately 88 percent of direct wetland impacts are specific to the trail network and stream crossings per the October 2023 plan set. Please avoid small incursions into the wetlands for trails when lesser impact alternatives exist.

C7. SLR's previous comment letters noted that though recreation is a recognized wetland value, the wetlands are the sole contributor to the site's recreational program. The applicant responded by removing the wooden sitting areas from wetlands and reducing the wetland trail network, a great improvement. It appears that the central portion of wetland 4 will remain as part of the recreational program.

C8. SLR previously requested a clear Regulated Activities Plan for work in the URA and wetlands and watercourses. This plan would include details (e.g., plan view, dimensions, profile view) of the proposed culvert for the walking trail in wetland 4. The requested plans are not included in the plan set and no details are provided, other than a generic manufacturers detail, for the wetland 4 crossing.

On the wetland 4 crossing, please submit a design with the level of detail needed for the United States Army Corps of Engineers (USACE) and CT DEEP permit. There is no way to verify that the crossing is consistent with USACE *Connecticut General Permit Appendix G* standards without this design.

C9. The proposed activities appear consistent between the State Reporting Form and the APT report. However, a table on the grading sheet would be helpful to clearly depict proposed activities.

C10. Previously requested test pit data were provided but not in the proposed detention gallery locations. Groundwater data is as shallow as 13 inches on the 1700 Asylum Avenue site and 24 inches on the 1800 Asylum Avenue site.

C11. **Comment previously noted and not clarified.** Wetland 3 is a 0.58-acre open water pond system that is currently bisected by a 25-foot walking bridge. The northern lobe of the pond is dominated by cattails (*Typha latifolia*), while the southern area is open water. The plans depict a new 125-foot bridge to span the wetland, while the bridge detail is 110 feet. Please provide a section view through the deck to depict that the proposed work is elevated above the floodplain, and clarify the length of the bridge. It is noted that aeration is proposed in the ponds in the future, but the northern pond contains little to no standing water now.

SLR understands that remediation will be necessary for the northern pond. Incorporating wetland design into the proposed pond restoration is recommended.

C12. An overlay of the proposed work compared to the previous design is requested.

C13. The existing and proposed contour lines on the grading plan are difficult to read. Please darken the proposed grading and ensure that contour labels are visible. On sheet EX4 of 1800 Asylum Avenue, the western portion of the site is quite flat, and the contour labels are not carried though the existing building making it hard to read the plans. Please add contour labels to the eastern edge of wetland 1 existing conditions.

C16. The proposed phasing plan does not include mention of site stabilization, restoration, or mitigation work. Please provide more detail on mitigation phasing into the overall sitework.

C17. Please edit sheet C1.010 on the 1800 Asylum Avenue plan set to depict wetland areas in green, consistent with other plans.

C18. Please move the temporary sediment traps (TST) away from St. Joseph's Brook on the 1700 Asylum Avenue sediment and erosion control plans.

Proposed Mitigation

C19. **Comment previously noted and not clarified.** Please review the proposed mitigation package and provide consistency between the APT report, the proposed mitigation plans and the planting tables in the plan set. Please coordinate the mitigation nomenclature, no "extended wetland buffer" is noted on the APT report. It is unclear what "relocated wetland 6" refers to in the BL Companies plan set. Please clarify what mitigation area the unlabeled table on sheet c6.624 refers to.

C20. SLR provides the following comments on mitigation notes:

- Is mitigation objective note 3 still valid with the revisions to the plan?
- Please add a line to prohibit plastic geotextiles in the mitigation area.
- Avoid using silt fence in the floodplain and use straw wattles instead.
- Please provide a permanent protection instrument for the mitigation areas – see previous comments regarding this and additional comments in this letter.
- Please increase the threshold for wetland creation success to 75 percent or greater hydrophytic vegetation from the present 50 percent.
- Please confirm the 20 percent tolerance for invasive species. What is the existing percentage of non-native plants?
- Please use the cut stump method for herbicide application and avoid foliar spray.

Additional Comments

C21. Permanent protection through a conservation instrument would benefit the long-term stewardship of these properties. A mitigation stewardship plan is included in the submittal but protection in perpetuity requires exploration.

C22. The floodplain graphics are difficult to read and have not fully provided requested information. Please present the floodplain earth work on cross sections that depict the existing and proposed grades along Trout Brook and St. Joesph's Brook. Space the profiles a minimum of 75 feet apart. Please be sure to include the proposed parking lot grading adjacent to St. Joseph's Brook.

C23. Much of the wetland restoration protocol is proposed in plantings and invasive species removal. The applicant stated that opportunities to enhance hydrology are limited by poorly drained soils. Please consider additional measures to enhance wetland systems with comments above or in the Engineering Department comments in terms of vegetated swales or filter strips along the edge of the built environment.

The above comments reflect a detailed, iterative review of the proposed activities at 1700 and 1800 Asylum Avenue, respectively. In the October submission, the applicant has provided a revised design that reduces direct wetland impacts and work in the URA on both sites. The design is improved over previous reviews, but additional detail is requested to verify stormwater management design and fully evaluate direct and indirect wetland impacts.

Thank you for the opportunity to assist you. Should you have any questions about this review, please contact Megan B. Raymond at 203.344.7889 or the email address below.

Regards,

SLR International Corporation

Megan B. Raymond, MS, PWS, CFM
Principal Scientist, Wetlands & Waterways Lead
mraymond@slrconsulting.com

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Town of West Hartford – Department of Community Development
Engineering Division
50 South Main Street, Room 204, West Hartford, CT 06107
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MEMORANDUM

TO: Todd Dumais, Town Planner

FROM: Jason D. McCabe, P.E., Civil Engineer II

RE: 1700 Asylum Ave.
West Hartford, CT
IWW #1203

DATE: November 3, 2023

The Engineering Division (ED) has completed review of documents submitted by WEHA Development Group East, LLC as a response to ED Review Comments provided September 12, 2023, in connection with Permit Application IWW #1203 to perform certain regulated activities within inland wetlands and watercourses and/or associated upland review area for the redevelopment of 1700 Asylum Avenue, former location of the UCONN West Hartford Campus, specifically:

- Land Development Plans Issued for Permitting, Residential Development, 1700 Asylum Ave., West Hartford, Connecticut, prepared for WEHA Development Group East LLC, West Hartford, Connecticut, prepared by BL Companies, Hartford, Connecticut, dated June 30, 2023, last revised October 20, 2023
- Stormwater Management Report, Residential Development, 1700 Asylum Avenue, West Hartford, Connecticut, prepared for WEHA Development Group East, LLC, dated June 30, 2023, last revised October 20, 2023
- Response to Comments letter to Mr. Jason D. McCabe, P.E., Civil Engineer II, Town of West Hartford, dated October 20, 2023

After review of these documents the ED offers the following disposition of comments made in Memorandum dated September 12, 2023, and additional comments based on further review of the submittal documents. Comments previously identified as "Comment addressed." are now noted as "N/A."

<u>WETLAND MAP AMENDMENT (SHEET G1.020)</u>

1. N/A.

<u>ALTA/NSPS LAND TITLE SURVEY</u>

2. N/A.

3. N/A.

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EXISTING CONDITIONS SURVEY

4. N/A.
5. N/A.
6. N/A.
7. N/A.
8. N/A.
9. N/A.

SITE PLANS (SHEETS 1.020 – 1.421)

10. N/A.
11. **Comment addressed. The ED notes a decrease of 33 parking spaces in the recreational parking area served by the southern driveway access and an increase of 1 parking space within the residential portion of the site served by the northern driveway access for a net reduction of 32 spaces. While the reduction is an improvement over the previous proposal the current design does not significantly improve impact to St. Joseph Brook and associated wetland and buffer over the existing condition.**
12. **Comment addressed.**
13. N/A.
14. N/A.
15. N/A.
16. **Comment addressed.**
17. N/A.
18. N/A.
19. N/A.
20. N/A.
21. **Comment addressed.**

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GRADING PLANS (SHEETS 2.020 – 2.023)

22. N/A.

23. N/A.

24. N/A.

25. N/A.

26. N/A.

27. **Comment not addressed. The ED notes the comment is specifically requesting additional grades at the corners of proposed buildings and covered parking. While the applicant has added grades elsewhere throughout the site no grades have been provided where requested.**

28. N/A.

29. N/A.

30. N/A.

31. N/A.

32. **Comment partially addressed. On the Site Plans, the gray dashed linework separating "Zone X" from "Zone X (Shaded)" as well as the associated annotation is acceptable. However, it is missing from the Grading Plans, Drainage Plans, Erosion and Sediment Control Plans, Landscape Plans, Wetland Mitigation Plans, and Lighting Plans. Revise across all sheets for consistency.**

DRAINAGE PLANS (SHEETS C3.020 – 3.522)

See Additional Comments section of this Memorandum for further review of the Drainage Plans.

33. N/A.

34. **Comment addressed.**

35. N/A.

36. N/A.

37. **Comment remains not addressed. The ED notes that the proposed curb cuts and riprap energy dissipation pads collect minimal parking lot runoff (about**

0.13 ac.) for overland release to St. Joseph Brook, so it is unclear what the benefit is. Further, the discharge from the curb cuts will drain over the proposed concrete sidewalk directly east which is not ideal. A more ideal design would be to allow runoff from the parking lot along the length of St. Joseph Brook to sheet flow off the lot, unimpeded by curbing, filtered through a vegetated buffer before ultimately infiltrating into the ground or discharging to St. Joseph Brook. See attached plan markup and excerpt from *Connecticut Stormwater Quality Manual*.

38. **Comment addressed.**

39. N/A.

STORMWATER MANAGEMENT REPORT

See Additional Comments section of this Memorandum for further review of Stormwater Management Report.

40. N/A.

41. N/A.

42. N/A.

43. N/A.

44. N/A.

45. N/A.

46. N/A.

47. N/A.

48. N/A.

49. N/A.

50. N/A.

ADDITIONAL COMMENTS
(September 11, 2023)

ALTA/NSPS LAND TITLE SURVEY (SHEET AL-1)

1. **Comment addressed.**

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EXISTING CONDITIONS SURVEY (SHEETS EX-1 – EX-4)

2. **Comment addressed.**

DEMOLITION PLANS (SHEETS C0.021 – C0.023)

3. **Comment addressed.**

4. **Comment addressed.**

SITE PLANS (SHEETS C1.021 – C1.421)

5. **Comment addressed.**

6. **Comment addressed.**

7. **Comment addressed.**

8. **Comment addressed.**

9. **Comment addressed.**

10. **Comment addressed.**

11. **Comment addressed.**

GRADING PLANS (SHEETS C2.020 – C2.023)

12. **Comment addressed.**

13. **Comment addressed.**

14. **Comment addressed. The ED notes there is a noticeable difference between pdf display on monitor and plotted hard copy. It is easier to read the pdf version. On plotted hard copy, the existing linework is extremely light and the proposed linework is only slightly darker. Our reviews were mostly completed using plotted hard copy of the documents. Moving forward, revising linework to be a shade darker would help during future application reviews.**

15. **Comment addressed.**

16. **Comment not addressed. The ED understands the grading behind Building "C" represents a rain garden with a yard drain to convey storm runoff out of the rain garden. However, this office questions what will happen if the yard drain and/or downstream drainage system fails or if storm intensity is so high the small 24" yard drain does not have the inlet capacity to drain the rain**

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garden fast enough. Except for moving the rain garden further east behind the building, the ED notes the proposed 96 contour still ties into the rear of the building on the west side and has not changed around the northeast corner. In the event of a storm drainage failure or high enough storm intensity, the rain garden will not release runoff until just below elevation 96.0 around the northeast corner of the building. Further, the stored water will be directly against the rear of the building based on the proposed grading. The building's finish floor elevation is set at 96.0. The original comment was made for these reasons. Consider some combination of regrading, adjustment of yard drain top of grate, and/or adjustment of building FFE to provide a rain garden which will release water in a controlled way such that the elevation at release is reasonably below the building FFE and which does not store water directly against the building structure.

17. **Comment partially addressed. The ED notes the applicant's response acknowledges poor soil and groundwater conditions not conducive for rain gardens. Is this true regarding the proposed rain garden behind Building "C" and will this rain garden provide any level of water quality treatment? Are there other benefits this rain garden can provide?**

18. **Comment partially addressed. Will the rain garden retain any runoff or will 100% of the runoff captured be conveyed to the storm drainage system via the 24" yard drain? Are there other benefits this rain garden can provide?**

FEMA FLOODPLAIN COMPUTATIONS (SHEET C2.620)

19. **Comment addressed; however, after further review the ED has the following comments regarding the boundary for each elevation depicted:**

    i. **For each elevation color, existing and proposed, why doesn't the boundary extend across St. Joseph Brook to the corresponding base flood elevation contour on the other side of the brook? For each elevation depicted, this side of the boundary is not consistent.**

    ii. **For each elevation color, existing and proposed, why does the colored shading extend further downstream than the base flood elevation line? For example, shouldn't the Elevation 90 analysis truncate at the cross-section line labeled "BFE 90"? This comment applies to all the analysis areas.**

    iii. **Revis analysis and update volume computations.**

20. **Comment addressed.**

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DRAINAGE PLANS (SHEETS C3.020 – C3.522)

21. **Comment addressed.**
22. **Comment addressed.**
23. **Comment addressed.**
24. **Comment addressed.**
25. **Comment addressed.**
26. **Comment addressed.**
27. **Comment addressed.**
28. **Comment not addressed. STRC-407 could not be found in the current submission.**
29. **Comment addressed.**
30. **Comment addressed.**
31. **Comment addressed.**
32. **Comment partially addressed. Given the poor soil and groundwater conditions conducive for rain gardens, will the areas called out for "Rain Garden Seed Mix" on the Landscape Plans provide some level of water quality treatment? Will there be any retention of runoff or will 100% of the runoff captured be conveyed to the storm drainage system? Are there other benefits this rain garden can provide?**
33. **Comment partially addressed. See Comment #32.**
34. **Comment addressed.**
35. **Comment partially addressed. Sheet C3.522 has a detail "Subsurface Detention System Outlet Control Structure". This detail and the Stormwater Management Report suggest there are outlet controls proposed to control the outflows from the subsurface detention system. However, it is unclear how the connection between the circular manhole section containing the weir wall**

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and orifice opening will be made to the rectangular shaped Stormtrap modules which make up the subsurface detention system.

36. **Comment partially addressed. The plans do not identify where the check valves will be placed nor which size check valve. For example, for the two existing outfalls which are to be remain will the check valves be installed at the outlet or inside the upstream manhole? For the proposed new outfall will the check valve be installed at the endwall? Will a check valve be required for the drainage system discharging to Trout Brook Drive?**

37. **To clarify comment, when we plotted a hard copy of the plan set the yard drain detail on Sheet C3.523 did not plot completely. There was a blank rectangular strip through the middle of the detail. The pdf used to plot the hard copy showed a complete detail on monitor. This also occurred on detail sheets provided for 1800 Asylum Avenue.**

STORMWATER MANAGEMENT REPORT

38. **Comment addressed. See Additional Comments (November 3, 2023).**

39. **Comment addressed.**

40. **Comment partially addressed. Given the poor soil and groundwater conditions conducive for rain gardens, will the areas called out for "Rain Garden Seed Mix" on the Landscape Plans provide some level of water quality treatment? Will there be any retention of runoff or will 100% of the runoff captured be conveyed to the storm drainage system?**

41. **Comment addressed. See Additional Comments (November 3, 2023).**

42. **Comment addressed.**

43. **Comment addressed.**

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ADDITIONAL COMMENTS
(November 3, 2023)

1. HydroCAD analysis should be limited to only the area associated with the proposed improvements on the property (1700 Asylum Avenue). Design points should be chosen appropriately to quantify runoff generated by the site. For example, PDA-140, PDA-150, and PDA-210 include portions of Lawler Drive and Trout Brook Drive which are not changing under the proposed improvements. Revisit. Coordinate any changes associated with similar revisions to 1800 Asylum Avenue.
2. HEC-RAS analysis does not include St. Joseph Brook. Revise.
3. STRC-18 and STRC-19 are not included in PDA-313 on the proposed watershed map. Revise.
4. On Sheet C2.021, within Trout Brook Drive the proposed “95” contours extend well beyond the sawcut line for the widening along the eastern side of the road. Do the proposed improvements include work associated with these proposed contours? Revisit.
5. On Sheet C1.421, revise parking information table to reflect actual number of parking spaces within the residential and recreational areas.
6. The survey point numbers depicted for the existing trees clutters the drawing unnecessarily. Consider turning these off for readability.
7. Turn on tree symbols on Site Plans.
8. CB-408 does not appear to have a 4’ sump on StormCAD HGL profiles.
9. STRC-302 and STRC-303 are not included in the StormCAD model. This represents the discharge side of SSDS-202 and should be included in the model to confirm pipe design and HGL profiles. Revise model.
10. Verify pipe lengths and diameters in StormCAD model. There are several pipes in the StormCAD model which do not match the data given in the storm pipe charts in the Drainage Plans.
11. Verify T.F. elevation for STRC-406 in the plans and StormCAD model.
12. Verify T.F. elevation for STRC-408, STRC-105, and EX. STRC-202 in the plans.
13. Why not make STRC-212 be hydrodynamic separator (HDS) instead of STRC-209 and STRC-101?
14. STRC-203 should be evaluated as an HDS.

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15. Why was the higher tailwater only imposed on the storm drainage systems discharging at EX. STRC-21 and EX. STRC-202?

16. Verify header information throughout the drainage report. Some sections reference an unrelated project.

Please provide written responses to these comments with the next submission, including any updated or new documents that may be required for this office to complete review.

Cc: Greg Sommer, P.E., Town Engineer

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NOT RELEASED FOR CONSTRUCTION

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STATE OF CONNECTICUT
MATTHEW J BRUTON
No. 33358
LICENSED
PROFESSIONAL ENGINEER

RESIDENTIAL DEVELOPMENT 1700 ASYLUM AVE WEST HARTFORD, CONNECTICUT

REVISIONS

No.	Date	Desc.
1	08/21/2023	REVISED PER TOWN COMMENTS
2	10/13/2023	REVISED PER TOWN COMMENTS
3	10/20/2023	REVISED PER TOWN COMMENTS

Designed	S.E.C.
Drawn	G.A.W.
Reviewed	J.A.B.
Scale	1" = 80'
Project No.	2100543
Date	06/30/2023

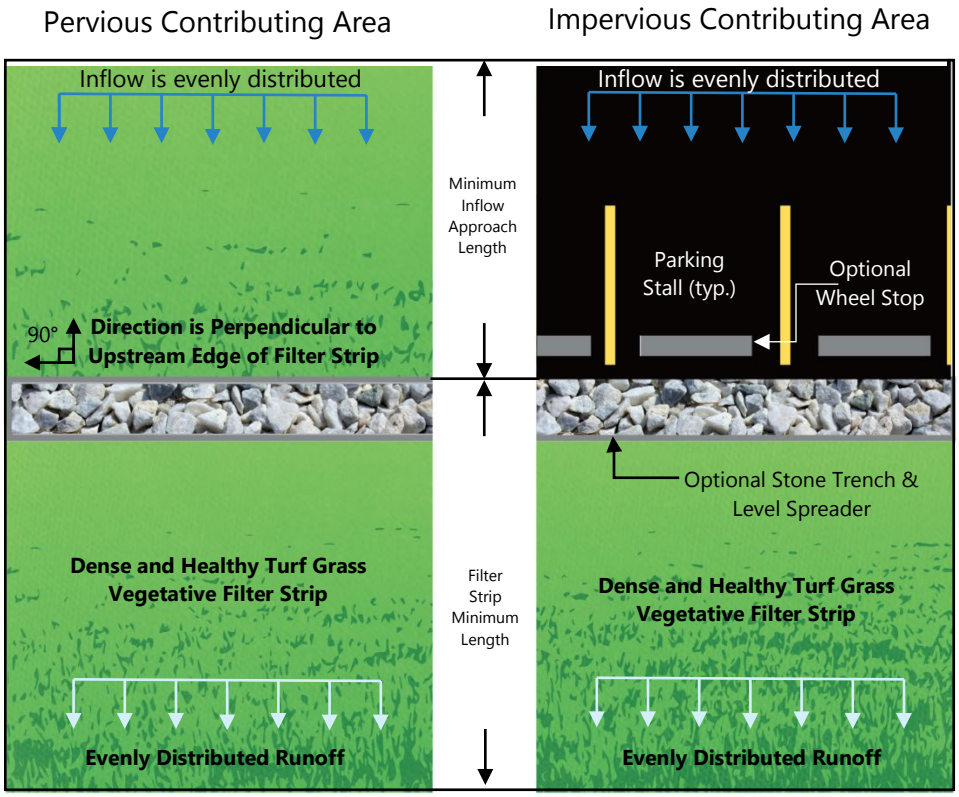
CAD File:
C210054303

Title
OVERALL DRAINAGE PLAN

Sheet No.
C3.020

Xref (s): : BD210054301 ; XC210054307 ; XY210054301 ; XC210054301 ; XC2100543011 ; XC2100543021 ; XC2100543012 ; XC2100543022 ; XC2100543013 ; XC2100543023

Figure 13-2. Pretreatment Vegetated Filter Strip Schematic



Source: Adapted from New Jersey Stormwater Best Management Practices Manual (2021)

Siting Considerations

- Applicable to small drainage areas and when trying to manage sheet flow.
- Best located in wide, uniformly sloped areas with ample space and mild slopes between the pollutant source and the downstream stormwater BMP.
- Locate where:
  - Area is not subject to excessive fertilizer application or excessive irrigation.
  - Site conditions promote a dense vegetative growth.
  - Site use and aesthetic considerations allow for infrequent mowing (2-4 times a year).
  - Filter strip slopes between the pollutant source and downstream BMPs are between 2% and 4%.
  - Sheet flow should be maintained across the length and width of the filter strip.
  - There is at least 18 inches of separation to seasonal high groundwater.
  - Contributing watersheds have low sediment and floatable loads.

Design Recommendations

Inlet

- The pretreatment vegetated filter strip should receive evenly distributed sheet flow.
- If runoff directed to a pretreatment vegetated filter strip is concentrated or could become concentrated, design the filter strip to include a level spreader in accordance with the Inlet and Outlet Controls section of Chapter 13.
- The velocity of the sheet flow should be non-erosive (less than 3 feet per second).
- Contributing upstream area should not have a slope in the direction perpendicular to flow that exceeds 2%, and a slope in the direction parallel to flow that exceeds 5%.
- The top of the filter strip (or the level spreader if using a stone-filled trench) should be set 2 inches below the adjacent pavement so that sediment and debris accumulated at the edge of the strip does not prevent runoff from exiting the pavement surface.

Sizing and Dimensions

- Length (direction of flow). Refer to Table 13-4.

Table 13-1. Pretreatment Vegetated Filter Strip Sizing Guidelines

Parameter	Impervious Contributing Area				Pervious Contributing Area			
Maximum Inflow Approach Length (feet)	35		75		75		150	
Filter Strip Slope (%)	<2	2-4	<2	2-4	<2	2-4	<2	2-4
Filter Strip Minimum Length (feet)	10	15	20	25	10	12	15	18

- Width (perpendicular to direction of flow)
  - Set width equal to or greater than the width of the upgradient contributing area.
- Slope
  - Minimum Slope: 2%; slopes less than 2% may result in ponding and other nuisances
  - Maximum Slope: 4%; slopes greater than 4% may results in concentrated flow and erosion
  - Maximum velocity for water quality storm: 1 foot per second
  - Maximum velocity for 10-year, 24-hour design storm: 3 feet per second

- If velocities are greater than the maximum velocities listed above, provide turf reinforcement matting (TRM).
- Slopes may be between 4% and 6% if TRM is provided.

- Vegetation
  - Vegetation should consist of 100% ground cover and be selected with guidance of Appendix F of this Manual based on site-specific conditions.
  - Use non-erosive vegetation that can withstand relatively high velocity flows, and both wet and dry conditions.
  - Some woody vegetation is acceptable. However, to maximize pretreatment effectiveness, most of the area should be grassed. Woody vegetation is more susceptible to re-concentration of flow than turf and other herbaceous species.
  - Manage vegetation to be thick and vigorous. Clumping vegetation should be avoided.

Maintenance Needs

- Regular maintenance is critical for the effectiveness of vegetated filter strips, especially to ensure that concentrated flow does not short-circuit the system. Early detection and maintenance of erosion and/or head cuts is key to long-term performance.

- Inspect the vegetated filter strip and any level spreaders twice a year. Measure the depth of accumulated sediment and inspect the vegetation for erosion, bare spots, and overall health.

- Remove sediment and debris from the filter strip and level spreader, and re-seed bare spots as necessary.

- Regular, frequent mowing of the grass to a height of 3 to 4 inches is recommended.

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MEMORANDUM

TO: Todd Dumais, Town Planner

FROM: Julie A. Viera, P.E., Civil Engineer II

RE: IWW #1196 and IWW #1197
1800 Asylum Avenue
West Hartford, CT

DATE: August 11, 2023
September 8, 2023
November 3, 2023

The Engineering Division reviewed the revised submittal of the Application, Wetland Report, Stormwater Report, and Site Plans entitled "Land Development Plans Issued for Permitting West Hartford IWWA Map Amendment & Regulated Activities Submitted 06/30/2023 Oakwood Park 1800 Asylum Avenue West Hartford, Connecticut" received October 23, 2023 in regard to previous outstanding comments, and offer the following comments:

Sheet No C2.012

52. Add spot elevations along gutter across the driveway.

Remains Not Addressed

Sheet No C2.014

64. Please provide information and details on the trail crossing the water course.

Not Addressed

Response: The proposed crossing will be a 15' span precast box culvert which will be embedded 1-2' below the bottom of the existing streambed. A detail has been add to sheet C3.513.

What is the elevation of the crown of the box culvert and the finished grade of the trail?

C: Greg Sommer, P.E., Town Engineer

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TO: Todd Dumais, Town Planner

FROM: Julie A. Viera, P.E., Civil Engineer II

RE: IWW #1196 and IWW #1197
1800 Asylum Avenue
West Hartford, CT

DATE: August 11, 2023
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November 3, 2023

The Engineering Division reviewed the revised submittal of the Application, Wetland Report, Stormwater Report, and Site Plans entitled "Land Development Plans Issued for Permitting West Hartford IWWA Map Amendment & Regulated Activities Submitted 06/30/2023 Oakwood Park 1800 Asylum Avenue West Hartford, Connecticut" received October 23, 2023 in regard to previous outstanding comments and offer the following comments:

Continuation of comments.

Sheet No C3.010

71. What is the purpose of discharging some storm drainage systems into depressed areas? Will the water infiltrate? Please provide the infiltration rate. What is the purpose of the storm drainage manhole in the depressed area?

Not Addressed – the depressed areas are still on the plans.

Response: The proposed depressed areas are included to provide some stormwater features to promote groundwater infiltration if at all possible. The infiltration will be minimal based on the existing soil types and high groundwater. Since minimal to no infiltration is anticipated, proposed depressed areas were not included as part of the stormwater management system that is attenuating peak flows. The manhole is an outlet control structure to capture the flow to this area.

Please callout and detail what type of inlet is proposed for the manhole.

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1854

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Sheet No C3.511

72. Please include details for detention system, hydrodynamic separators, outlet control structures, etc.

Not Addressed

Response: Details have been added to the drainage details sheets.

Are the inlet and outlet structures the only access to the detention system for cleaning and inspection? The Subsurface Detention System (SSDS) Outlet Control Structure detail on sheet 3.512 shows that the detention system will not drain between storms. Please revise. Is the SSDS detail shown on 3.512 the same structure that would be used for the inlet, minus the wall? It is referenced that way on StormCAD.

Stormwater Management

83. There should be separate pre and post development calculations: one for 1700 and one for 1800 Asylum.

As 1700 and 1800 are two separate properties, they should be analyzed as two separate properties. There should be pre and post development calculations for each property. The stormwater calculations do not show this. Why is the road included? Does it flow overland to either property? Review and revise.

Response: The stormwater management report has been revised to split the HydroCAD model by parcel while utilizing the same discharge points. 1700 Asylum and 1800 Asylum are separate properties but the discharge from each parcel converges in the streams and roadways. The existing conditions were modeled to reflect existing drainage patterns which includes stormwater from each of the parcels flowing overland to the road which then drains to Trout Brook on both the 1800 and 1700 parcel.

Remains not addressed. There is still overland flow from 1700 that is included in the calculations for 1800.

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MEMORANDUM

TO: Todd Dumais, Town Planner

FROM: Julie A. Viera, P.E., Civil Engineer II

RE: IWW #1196 and IWW #1197
1800 Asylum Avenue
West Hartford, CT

DATE: August 11, 2023
September 8, 2023
November 3, 2023

The Engineering Division did a review in regards to previous outstanding comments to the revised submittal of the Application, Wetland Report, Stormwater Report, and Site Plans entitled "Land Development Plans Issued for Permitting West Hartford IWWA Map Amendment & Regulated Activities Oakwood Park 1800 Asylum Avenue West Hartford, Connecticut submitted 06/30/2023" received October 23 2023 and offer the following comments.

Comments 1-9 Addressed

Additional Comments (August 11, 2023)

Sheet No. C1.012

2. 1.9 (Asphalt Trail) is called out for the stone dust path. Review and revise.

3. 2.8 (2' wide detectable strip) is called out to be installed on the stone dust path. Is that correct?

4. Will access to the wetland decks be mowed?

Did not review Site Plans as there is no callouts or dimensions. There also was substantial design change from last submission.

Additional comments (September 8, 2023)

4. Please include details of all the outlet control structures.

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Response: An outlet control structure detail has been added to the drainage details sheet.

There is just one generic one on sheet 3.512 and as shown the underground detention systems do not drain completely. Please include a detail for the outlet control structure for the rain garden.

7. In regard to detention system 102, the outlet pipe in detention calculations does not correspond with the plans. Review and revise. Also, the tailwater elevation is proposed at 93, even though the 10-year storm pipe calculations show a HGL greater than 93. Review and revise.

8. In regard to detention system 104, the outlet pipe in the detention calculations does not correspond with the plans. Review and revise.

9. In regard to detention system 106, the proposed tailwater elevation is 89.8 and the HGL in the outlet pipe is 91.53. Review and revise.

In regards to comments 7-9 and all detention systems. All of the outlet pipes have been removed from StormCAD. Please add them back in.

13. On Profile Report sheet STRC-823 out to STRC 926, should the 926 be 826?

Response: Due to layout revisions. Several structures have been relocated or renamed. Calculations have been revised accordingly.

There are two profiles runs: STRC-823 to STRC-826 and STRC-823 to STRC-926. Please review and revise.

14. For STRC-812, where does the rim elevation come from?

Response: The rim elevations on the SSDS outlet and inlet nodes do not signify anything as these points are not structures. These nodes are included in the structure chart as to provide the structure name and invert. A note has been added to the plans clarifying such.

Is that correct? I thought the detail on sheet C3.512 for Subsurface Detention System Outlet Control Structure was, at a minimum, the outlet control structure and possibly the inlet structure as well, just needing modification? Please clarify.

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16. Existing pipe run x12 to x13 has a negative pipe run. Why isn't this being fixed?

Response: This existing pipe is proposed to be utilized as is in order to prevent any additional wetland impacts associated with this pipe replacement.

If the existing pipe has a negative slope and it is not proposed to be changed, then don't change the inverts on it in StormCAD. Suggest consider fixing it as approximately only half of the pipe run is in the wetlands, the pipe is existing and would be replaced in kind with, I assume, the same downstream invert and adjusting the upstream invert.

C: Greg Sommer, P.E., Town Engineer

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MEMORANDUM

TO: Todd Dumais, Town Planner

FROM: Julie A. Viera, P.E., Civil Engineer II

RE: IWW #1196 and IWW #1197
1800 Asylum Avenue
West Hartford, CT

DATE: November 3, 2023

The Engineering Division did a preliminary review of the submittal of the Application, Wetland Report, Stormwater Report, and Site Plans entitled "Land Development Plans Issued for Permitting West Hartford IWWA Map Amendment & Regulated Activities Oakwood Park 1800 Asylum Avenue West Hartford, Connecticut submitted 06/30/2023" received October 23, 2023 and offer the following comments.

1. On the 2023 10 18 Land stewardship and Management Plan, under background and under 1700 Asylum, the amenity of the extension of the Trout Brook Trail should be under 1800 Asylum Avenue.

2. In the stormwater management report, fix the header on some of the appendix sheets. They reference a project in Weston.

3. The Earthwork Analysis does not have the latest layout.

4. Provide calculations for the culvert crossing for the Trout Brook Trail.

5. What is the 10-year flood elevation at each of the pipe discharges into Trout Brook?

Sheet No. C2.011 and C2.014

6. Add spots on the driveways for the townhouse. Are the driveways curbed? Some are graded as curbed and some are graded as if they are not curbed. The driveways are drawn as curbed with the double line.

Sheet No. C2.011 – 2.014

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7. In general, the grades between the buildings appears very flat. Please included additional spot elevations.

8. Please show where the roof leaders are connected.

9. Is there a drainage area map that goes along with the StormCAD calculations?

Sheet No. C3.411

10. Review and revise the charts. There are incorrect top of frames and inverts, missing information and pipe and structures that are no longer being used that are still included.

Sheet No. C2.6.10

11. I realize the two ponds are not included in the compensatory storage as the flood plain is not being encroached upon. Please review the 93 contour on the west side of the south pond. It appears to go under the proposed wall.

Sheet No. C6.014

12. Suggest not planting a tree (AF) over detention system #104.

13. Does the rain garden seed mix get mowed?

Storm Drainage Calculations

14. Review and revise the StormCAD calculations. Some of the HDS structures have sumps and others do not. The HDS detail shows a 2-foot sump. Some of the yard drains have a 4-foot sump and some have a 2-foot sump. The yard drain detail shows 2-foot sump.

15. Review and revise StormCAD in relation to the charts on C3.411. There is conflicting information.

C: Greg Sommer, P.E., Town Engineer