## **CLA Engineers**, Inc.

Civil • Structural • Survey

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January 13, 2025

Ms. Stacey Radford, Zoning & Wetland Officer Montville Town Hall 310 Norwich-New London Turnpike Montville, CT 06382

RE: Proposed Trailer Storage Facility 375 Maple Avenue and Route 163 Montville, Connecticut CLA-7767F

Dear Ms. Radford:

CLA Engineers has prepared the attached revised Site Improvement Plans dated December 16, 2024 (Revised January 13, 2025), for a proposed trailer storage facility located at 375 Maple Avenue and Route 163. Revisions have been made to address comments received from the Town on December 24, 2024, from Boundaries, LLC dated January 2, 2025 and Ian Cole, CSS dated January 7, 2025.

Please feel free to call me at our office or email me at <u>dhayward@claengineers.com</u> with any questions or comments.

Very truly yours, CLA Engineers, Inc.

Darren Hayward, P.E.

#### **STAFF TECHNICAL REVIEW COMMENTS:**

- 1. Application (dated December 16, 2024):
  - a. Please add address for Rand-Whitney Realty, LLC
  - b. Please add a signature of 2nd Applicant and provide Authorization from Applicant to whomever they authorize to act on their behalf.

## Response: As discussed, a separate application has been completed for each applicant. Addresses and signatures for each applicant are included on the appropriate application.

- 2. Cover Letter (dated December 16, 2024):
  - a. Please correct the parcel described as "Parcel Route 169" to "Parcel Route 163".
  - b. Provide a copy of Army Corp of Engineers determination.

### **Response:** The Cover Letter has been revised. We shall forward a copy of the ACOE determination once we receive it.

- 3. Wetlands Report letter (dated November 13, 2024):
  - a. Please clarify if the Town of Montville should be considered an Applicant, and if so add it as such.
  - b. Please add 349 Maple Avenue, LLC as 1st Applicant.
  - c. Please correct the name of 2nd Applicant from "Rand-Whitney Recycling, LLC" to "Rand-Whitney Realty, LLC".
  - d. Please provide a Wetland's Report from Joseph R. Theroux, if one was done.
  - e. Please correct, throughout the document, the zoning districts described in letter as "R-45 and Industrial (I)" to "R-40 and Industrial (I)".

#### Response: We do not believe the Town of Montville should be considered as an Applicant. The Wetland's Report from Joseph R. Theroux has been attached. The Wetlands Report Letter has been updated.

- 4. Stormwater Management Plan (dated December 16, 2024):
  - a. Please correct, throughout the document, "Route 169" to "Route 163".
  - b. Please correct, throughout the document, to reflect the correct property owner of Route 163 (Parcel ID: 031-019-000).

#### Response: The Stormwater Management Plan has been revised.

- 5. Site Plan:
  - a. Please correct the property address from "135" to "375" Maple Avenue.
  - b. Please correct/add property owner of Route 163 parcel and/or the Town of Montville.
  - c. Please correct/add Rand Whitney Realty, LLC as an Applicant and/or the Town of Montville.
  - d. Please correct the Title Block on all pages to clarify the position of the Town of Montville and/or list as an Applicant.

e. Please add (under Proposed Development section) the number of acres of disturbance the diversion of the existing 30" storm pipe will entail, removing "XX".

#### Response: The Site Plans have been corrected.

#### <u>COMMENTS FROM TOWN CIVIL ENGINEER (BOUNDARIES LLC) DATED</u> JANUARY 2, 2025

#### General

1. Please submit the CT DEEP Statewide Inland Wetlands & Watercourses Activity Reporting Form.

#### **Response:** The CT DEEP Statewide Form was submitted with the application.

#### **Stormwater Modeling**

2. The stormwater model does not appear to account for the HSG D soils indicated on the soils map. Please update accordingly.

#### Response: The stormwater model has been updated.

3. Please evaluate if Fair Condition Open Space is the correct CN value to use under existing conditions. The majority of the property appears to be densely vegetated and may qualify as having "good" ground coverage.

### **Response:** The CN value for Open Space and Woods have been change to reflect 'Good' cover

4. The CN value used in Watershed 2b may be adjusted per page 58 of the Stormwater Quality Manual to account for the Qualifying Pervious Area downgradient of the access driveway. This may reduce the peak runoff rates in this area. Please update accordingly.

### Response: The CN value for the proposed pavement area draining to the QPA has been reduced from 98 to 77 to reflect Hydrological Soil Group D.

5. Please confirm that the storm distribution curve used for the stormwater modeling is the NOAA Type D storm event. The storm distribution curve is available under the Chapter 5 section of the following website: <u>https://dep.nj.gov/stormwater/bmp-manual</u>.

### Response: The storm distribution curve used for the stormwater modeling is the NOAA Type D storm event.

6. Peak runoff attenuation may be waived when the stormwater discharge is directly to a fourth order river and the development area is less than 5% of the watershed upstream of the development site per page 58 of the Stormwater Quality Manual. Please demonstrate

that Oxoboxo Brook is a fourth order stream so the peak runoff attenuation requirement may be waived as requested.

### Response: Upon investigation, the Oxoboxo Brook has been determined to be a third order stream.

7. As noted in the Stormwater Management Plan, the proposed bottoms of the Stormwater Basins do not meet the recommended minimum separation to seasonal high groundwater. This will likely lead to the basins not providing the storage volume anticipated during periods of seasonal high groundwater resulting in higher-than-expected peak runoff rates. Please evaluate the peak runoff rates assuming the basin does not drain between storm events and certify that the peak runoff rates will not negatively impact downstream properties or wetland resources and that the stormwater standards are met to the maximum extent achievable.

Response: Analysis was performed for back-to-back 10-year storm events for each basin. For each basin, the peak flow and water elevation during the first 10-year storm are 0.0 cfs / 233.3 ft. and 0.09 cfs / 234.0 ft. respectively. Setting the wet pond elevation to these values and re-running the 10-year storm event analysis resulted in the peak flows and water elevation being 0.72 cfs / 234.1 ft. and 2.73 cfs / 234.2 ft.

We believe these flow rates are not excessive and will have no negative impact to downstream properties or wetland resources.

8. Please evaluate the 100-year discharge velocities to ensure that the appropriately sized riprap is specified, especially for the 30-inch drainage discharge.

Response: Flow rates over the basin level spreaders do not exceed 1.5 feet/sec for the 100-year storm event. Table 11.11 of the CTDOT Drainage Manual suggests the use of Modified Riprap for velocities up to 8 feet/sec.

Evaluation of the riprap stone size for the rip-rap apron for the 36" drainage discharge has been included in the Drainage report and dimensions are shown on the plans.

#### **30-inch Drain Relocation**

9. Please provide the inlet invert elevation for the proposed catch basin.

#### **Response:** The invert elevation has been provided.

10. Please ensure that the proposed reduction in slope to the drain do not reduce its capacity from existing conditions and that the Public Works Department finds the flat section of pipe acceptable from a maintenance perspective.

#### Response: Pipe capacity calculations have been added to the Drainage Report.

11. Please provide details for the proposed spread apron including riprap sizing and overall dimensions of apron.

#### Response: Details have been added to the plans and Drainage Report.

12. Please incorporate deep sumps and hoods on the proposed drainage structures to provide some treatment of stormwater prior to discharge.

#### Response: There are no catch basins proposed on site. Only manholes.

#### **Site Plans**

13. Please update the Proposed Development notes on Sheet 4 to include the proposed area of disturbance, correct reference to flood hazard areas on the property, and correct reference to disturbance of inland wetlands on the property.

#### Response: The notes have been updated.

- 14. Please review the proposed grading of the Qualifying Pervious Area to ensure that no fill is placed within the 100-year flood plain or compensatory storage is provided elsewhere. **Response: The grading has been revised to avoid filling the 100-year flood plain.**
- 15. Please evaluate the velocity and freeboard in the perimeter swales to confirm that the correct erosion control blanket is specified. Please specify an erosion control blanket and add the detail referenced in the Grassed Swale Detail.

### **Response:** Details of the erosion control matting for the vegetated swales is included in Section 4 of the Stormwater Report.

16. Please update the Stormwater Manhole Detail to be 5 feet in diameter as called for on the site plans.

#### Response: The detail has been corrected.

17. Please update the Trench Detail: Drainage Culvert to match the Town of Montville Road Standards.

#### **Response: The detail has been corrected**

#### Water Quality Basins

18. Please review proposed grading of the sediment forebays and gabion spillways. The stone fill of the gabion will provide limited filtration of the incoming stormwater. The sediment forebay will be more effective if the stored volume is provided below the bottom of the stone gabion in a permanent wet pool.

#### Response: The gabion berms have been replaced with earthen berms.

19. The proposed gabions match the top of basin elevation. Please lower the top of the gabions to provide 1-foot of freeboard from the top of basin.

### Response: The gabion berms have been replaced by earthen berms which are now set at 1-foot below the top of the basin.

20. Please specify the intended stone for the gabion baskets.

#### Response: The gabion berms have been replaced by earthen berms

21. Overflow spillways are recommended to have a minimum width of 8 feet per page 485 of the Stormwater Quality Manual. The proposed stormwater basin outlets are called out as 4 feet wide. Please provide justification for not conforming to the Stormwater Quality Manual recommendations.

#### Response: The basin overflow spillways have been increased to 8-feet wide.

#### **Erosion and Sedimentation Control**

22. Please incorporate a double row of sediment barrier where construction activity is located within 50-feet of the limit of inland wetlands per Section 5(b)(2)(A)(ii) of the DEEP Construction General Permit.

### **Response:** A double row of sediment barrier has been added and a new detail provided on the E&S Plan.

- 23. Please evaluate if the proposed silt fence should be replaced with a check dam immediately downgradient of the proposed sediment trap discharges.
- 24. Please update the elevations called for on the temporary sediment trap sediment marker stakes on Sheet 6.

#### **Response:** The elevations have been corrected.

25. Please coordinate the areas called for in the Sediment Trap Sizing Table and the Legend on Sheet 6.

#### Response: The conflicting areas have been removed from the Legend

#### COMMENTS FROM IAN COLE, LLC DATED JANUARY 7, 2025

1. I have reviewed the wetland boundary as identified and flagged by Mr. Robert Russo and Mr. Jospeh Theroux and I am in general agreement with the regulated boundaries as depicted on the subject site plans. Although the wetland boundary is readily identifiable to most professionals, for the Commission's benefit and for construction purposes, it is suggested before the start of construction that the Project's surveyors stake out the limits of disturbance and re-flag the wetland boundary with new markers, so the wetlands are

clearly marked in the field, as many of the flags were missing or degraded making them difficult to recover at the time of my field visit on 1-3-2025.

### Response: CLA agrees that the wetland boundary should be re-marked prior to construction and will add a note to the E&S plan calling for this.

2. Consideration should be given to additional native shrub plantings between Stormwater Basin #1 and the edge of Rockland Pond. As depicted on the site plans the area would be essentially cleared of vegetation to the ponds edge and replanted with New England Roadside Seed Mix. There is an opportunity to soften the ecotone between the development's edge and the pond which should be evaluated by the applicant.

### Response: CLA has provided additional native shrub plantings between Basin #1 and Rockland Pond.

3. Because the site was previously utilized to stockpile miscellaneous landscaping material including woody debris and other earthy materials, consideration should be given to including an invasive species monitoring plan to ensure no invasive species are propagated along the wetland boundary where they currently do not exist. Notable patches of Knotweed and mugwort were observed intermittently throughout the property and the activity of converting the woods to meadow habitat has the potential to propagate sun-loving invasive plant species as the tree canopy will be removed and replaced with low-growing vegetation.

#### Response: CLA has added an invasive species control plan to the E&S sheet.

4. It is my understanding the Project has formally requested a Jurisdictional Determination (JD) from the United States Army Corps of Engineers (USACE). It has been my experience that the JD process can take upwards of 1 year or more to receive a formal ruling from the USACE. In the interim the Commission should request the Applicant, or their representatives to provide a professional opinion as to the applicability of additional State and/or Federal Jurisdiction over the proposed 9,496 SF of fill to the intermittent watercourse that extends from the 30" Sharp Hill drainage pipe outlet. It is my professional opinion that the subject drainage feature may not be regulated by the USACE, due to its site setting, isolation, ephemeral nature, and origin of creation. For the Commissions understanding and context the subject watercourse has very little stream and bank development and is very shallow in nature. Furthermore, I would expect given the nature of the watercourse, the subject drainageway is likely biologically inert and does not provide any substantial stream habitat due to lack of persistent flow, lack of wetland vegetation, and overall site disturbances.

# Response: CLA concurs with Mr. Cole regarding the nature of the watercourse to be filled and believes that it is probable the USACOE will not take jurisdiction over this area.

5. I concur with the additional erosion and sediment controls recommended by Boundaries which include incorporating a double row of sediment barrier where construction activity

is located within 50-feet of the limit of inland wetlands per the DEEP Construction General Permit.

#### **Response:** No response required.

6. It is my professional opinion based on a review of the proposed activities and the Town of Montville's definition of a "Significant Activity" that the relocation of the Sharp Hill Drainage which will require filling 9,496 SF of a man-made intermittent watercourse is a significant activity, as the proposal is significantly changing the dynamics of the watercourse, albeit one that is man-made. The project is proposing industry standard water quality treatment which can be enhanced based on the additional recommendations of Boundaries LLC and the suggestions provided in this letter report. These additions should be considered to help mitigate a major effect or negative impact to the overall wetland resources and environment.

**Response: CLA concurs. No further response required.**