



April 13, 2023

Planning & Development Department

741 Colonel Ledyard Highway
Ledyard, CT 06339-1511

Attn: Juliet Hodge

**RE: Response to Memorandum from Steve Masalin
Gales Ferry Intermodal, Sterling Building
1761 Route 12, Gales Ferry, Connecticut
Commission Number: 45JC2.06**

Dear Ms. Hodge:

We have prepared this letter on behalf of our client, Gales Ferry Intermodal, in response to the comments received on the March 31, 2023 Memorandum by Steve Masalin, Public Works Director/Town Engineer. We have stated Steve's comments below in italic, followed by our response in roman text.

Though (Town of Ledyard Ordinance 300-017) allows increased peak flows for discharge directly to the Thames River (as is the present case), this goes against several other more recent regulations governing stormwater, the requirements of which will be adapted to our local regulations.

The Stormwater Management Report submitted March 8th, 2023, was revised April 12, 2023 to reflect changes in the site layout and proposed stormwater management system, along with updated soils testing values. In this revised Stormwater Management Report, a key update is that there is no longer an increase in total peak flows for the site. All Points of Compliance are assumed to discharge to the Thames River, therefore the total site discharge is functionally what is discharging to the Thames River.

This includes Municipal Storm Separate Storm Sewer (MS4) program requirements to which the Town is subject and for which the Town is undergoing various compliance actions. One example is the disconnecting of impervious areas (i.e., elimination of direct impacts of impervious area runoff through retention, etc.).

“Directly Connected Impervious Area” in the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems is defined as “...impervious area from which stormwater runoff discharges directly to waters of the state or directly to a storm sewer system that discharges to waters of the state. Impervious areas that discharge through a system

Loureiro Engineering Associates, Inc.

100 Northwest Drive • Plainville, CT 06062 • 860.747.6181 • Fax 860.747.8822 • www.Loureiro.com

AN EMPLOYEE-OWNED COMPANY

Affirmative Action / Equal Opportunity Employer



designed to retain the appropriate portion of the Water Quality Volume (pursuant to Section 6(a)(5)(b)(i) or (ii) of this general permit) are not considered DCIA.”

97% of the developed impervious portion of the proposed site is routed to the proposed infiltration system. The system is designed to fully retain and infiltrate captured runoff up to the 100-year storm event. Therefore, the developed impervious portion of the Site is largely disconnected to waters of the state.

Other Low Impact Development Measures that are required through the MS4 are met through use of hydrodynamic separators, infiltrator rows, and hooded catch basins for sediment, floatables, and nutrient removal. Information on these practices is described in Section 4.4 of the Stormwater Management Report and in greater detail below.

Additionally, this project is within a designated Connecticut Coastal Management area. There are several stipulations in the Connecticut Coastal Management Manual that similarly seek practices to mitigate stormwater impacts, e.g., retention, as appropriate.

The following comment was submitted in “Response to Comments from March 28, 2023 Meeting” in response to addressing Coastal Area Management requirements specific to stormwater:

The site has been designed to capture the rooftop and newly paved areas in a dedicated collection system. This system is equipped with both internal and external pollutant removal systems for the full water quality volume (WQV). Two hydrodynamic separators (Contech CDS® units) are provided prior to discharge into the Stormtech® infiltration system. The Stormtech® system is equipped with an isolator row specifically designed for further sediment removal prior to infiltration. The hydrodynamic separators are designed to provide both solids and floatables removal. Further, the new catch basin network is equipped with hooded catch basins thereby providing additional protection against the migration of floatable materials from entering the drainage system. Details associated with the drainage system are presented in the Stormwater Management Report and the related maintenance requirements are included on sheet 2 of 20 (Drawing C-1).

Further, once constructed, this site will be subject to the DEEP General Permit for the Discharge of Stormwater Associated with Industrial Activity (“Industrial Stormwater General Permit”), which permit requires extensive monitoring, sampling of stormwater and reporting under a comprehensive Stormwater Pollution Prevention Plan. This provision by the state will further ensure that best management practices are incorporated throughout the operations at the proposed facility.

The proposal characterizes its measures as the “attenuation and treatment of all stormwater events leaving the Site...” (para. 5). Though the proposed measures are robust toward this end, the applicant should consider implementation of measures and best management practices that go beyond the limits of the ordinance and of the requirements of the 2004 Connecticut Stormwater Quality Manual toward those recommended by the MS4 and CCM provisions, where feasible.



See above comments on MS4 and CCM compliance. Additionally, in accordance with Section 6(a)(5)(b)(v) of the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems, the proposed subsurface sewage disposal system will be approved by local health officials to confirm that any infiltration measures are appropriately sized, located and constructed in a manner consistent with the Connecticut Department of Public Health Code.

Also, the CAM Manual mentions the regulatory role of DEEP concerning stormwater discharges in regulated areas. The applicant should ensure compliance with DEEP requirements.

See above comments on compliance. Section 4.2 and 4.3 of the Revised Stormwater Management Report demonstrates a decrease in peak flow and runoff volume to the Thames River. As previously mentioned, Section 4.4 of the Stormwater Management Report also outlines Water Quality management practices to mitigate impacts to regulated areas.

By way of specific question is the suitability/adequacy of the existing stormwater system to handle the additional flows conveyed to it from the new system. Though there is a natural/convenient connection point for this extension, there is limited information given as to the capacity within the existing system to handle the added flow, though characterized as a "small amount" (para. 3.3).

Under the revised drainage system and Stormwater Management Report, there is no discharge from the infiltration system during a 100-year storm event. This differs from values presented in the original Stormwater Management Report submitted March 8th, 2023. Though the existing stormwater system will receive some additional overland runoff from the eastern undeveloped portion of the site, the small peak flows from this area (1.67 cfs during 100-year storm event) is not expected to negatively impact the existing drainage system.

We hope this response addresses Steve's comments and questions. Please advise if you need any additional information.

Sincerely,

LOUREIRO ENGINEERING ASSOCIATES, INC.

A handwritten signature in blue ink, appearing to read "G. Andrews Jr.", is written over a faint, light blue circular stamp.

George F. Andrews Jr., P.E., L.E.P.
Principal Engineer, Civil Engineering

Cc: Steven Masalin