Town of East Lyme

P.O. Drawer 519
Town Engineer
Alexander T. Klose, P.E.

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To: Gary Goeschel, Wetlands Enforcement Officer

From: Alex Klose P.E., Town Engineer

Date: September 8, 2022

Re: Atlantis Management Group, Proposed Development
190, 196, 202 Flanders Road
Application for Inland Wetlands Permit Review

Information submitted by the Applicant which was considered in this review:

-Application for Permit, East Lyme Inland Wetlands Agency
-Project Narrative, July 22, 2022, Prepared by: BL Companies
-Wetlands Report, November 11, 2021, Prepared by: Davison Environmental
-Stormwater Management Report, July 22, 2022, Prepared by: BL Companies
-Land Development Plan Set, July 22, 2022, Prepared by: BL Companies

This office has reviewed the above referenced information and provides the following comments:

1. Infiltration systems should be designed at least 3' above groundwater. With the wetlands and floodplain around elev. ±30 I would recommend test pits to verify soil conditions and depth to groundwater prior to construction. Additionally, a rate of 1 in/hr is proposed due to type B soils. The manual recommends a factor of safety of 2 and a min. Rate of 0.15-0.30 in/hr. The soil report provided states the limiting ksat is 0.00-1.98 in/hr. Prior to construction an infiltration test should be performed to verify the proposed conditions.

2. Provide a stage storage table to verify volume infiltrated below the outlet pipe of the subsurface system.

3. An isolator row is recommended for ease of long-term maintenance for the subsurface system.

4. Calculations should be provided for the riprap outlet protection apron.

5. I recommend the design engineer verify that the 12” HDPE pipes can be installed into and out of the chamber system due to the thickness (OD) of the pipes. I also recommend the design engineer verify with the manufacturer that the angle of the pipes at STRC-3 will work for a hydrodynamic separator.

6. Provide grading of the proposed sidewalk ramp at the proposed entrance to the site. Also provide grading at the proposed building entrance for ADA compliance.

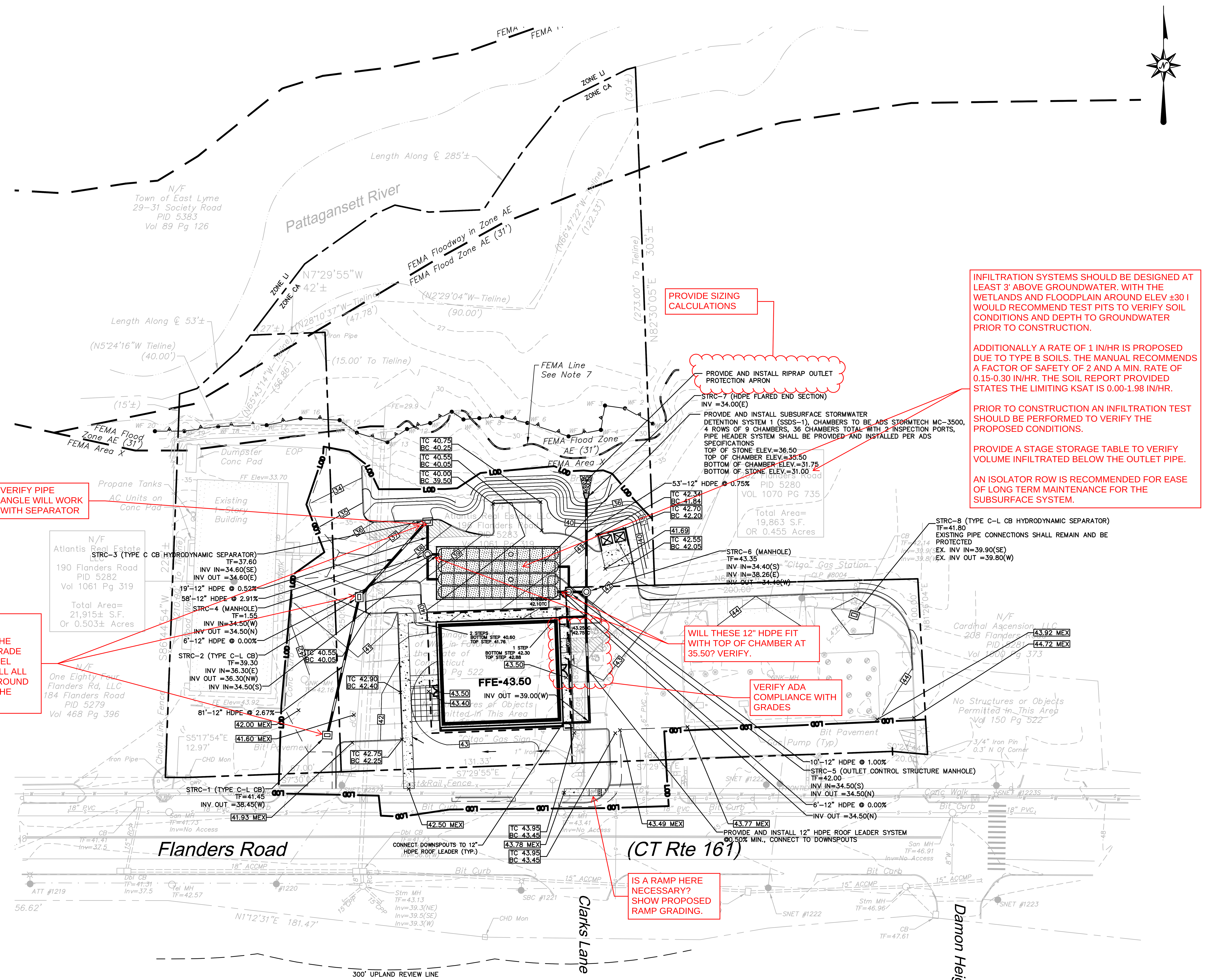
7. Provide hydraulic calculations for the 100-year storm since the catch basins are on-grade and the HydroCAD model assumes this water will all make it to the underground system to attenuate the 100-year storm.

8. If the applicant wants the Alternate Stormwater Plan to be considered the corresponding stormwater management calculations will need to be submitted.

9. I recommend that the engineer of record (or a qualified agent) witness the installation of the subsurface elements of the stormwater management system and that the design engineer certify that it has been installed as intended by the design.

GRADING AND DRAINAGE PLAN LEGEND

- PROPERTY LINE
- LIMIT OF DISTURBANCE LINE AND CONTRACT LIMIT LINE — LOD
- PROPOSED CONTOUR LINE — 228
- PROPOSED SPOT GRADE — x 100.00
- ABBREVIATIONS
  - TC=TOP OF CURB
  - BC=BOTTOM OF CURB
  - TW=TOP OF WALL
  - BW=BOTTOM OF WALL
  - x TC=100.00 / BC=99.50
  - x TW=108.00 / BW=100.00
- PROPOSED SURFACE SLOPE — 2%
- STORM LINE
- CATCH BASIN
- STORM MANHOLE
- END WALL OR HEADWALL
- BORING LOCATION — B-1
- TEST PIT LOCATION — TP-1
- PROPOSED CONTOUR LINE — 228
- PROPOSED SPOT GRADE — x 100.00
- ELECTRIC LINE — E
- ELECTRIC AND TELECOMMUNICATIONS LINES — E/T
- GAS LINE — G
- WATER LINE — W
- SANITARY SEWER LINE — S
- SANITARY SEWER FORCE MAIN — SFM
- OVERHEAD LINE — OH
- TRANSFORMER — T
- HYDRANT
- UTILITY POLE
- SANITARY/STORM MANHOLE
- SANITARY/STORM CLEANOUT — CO
- WATER VALVE — WV
- GATE VALVE — GV
- THRUST BLOCK
- GREASE TRAP



FOR PERMITTING PURPOSES ONLY
NOT RELEASED FOR CONSTRUCTION

REFER TO SHEET GN-1 FOR SITE WORK GENERAL NOTES

GRAPHIC SCALE: 30 15 0 30 — SCALE IN FEET

Architecture
Engineering
Environmental
Land Surveying
BL Companies
355 Research Parkway
Meriden, CT 06450
(203) 630-1406
(203) 630-2615 Fax

PROPOSED COMMERCIAL DEVELOPMENT
190, 196 & 202 FLANDERS ROAD
EAST LYME, CONNECTICUT

REVISIONS — No. Date Desc.

Designed	X.X.X.
Drawn	X.X.X.
Reviewed	
Scale	1"=30'
Project No.	2101751
Date	07/22/2022
CAD File:	GD210175101

Title
GRADING AND DRAINAGE PLAN

Sheet No.
GD-1

Xref (s): : XC210175101 ; XY210175101 ; BD210175101 ; XC210175102 ; XC210175103 ; XC210175104