

May 15, 2024

Ms. Susan Kisken, P.E. Coordinator of Site Plan Reviews and Inspections Stamford Government Center 888 Washington Boulevard, 5th Floor Stamford, CT 06901

RE: 800 Long Ridge Road – Long Ridge Road LLC Zoning Application No. 223-28

Dear Ms. Kisken,

We have received your review letter dated February 22, 2024 for the above referenced project and have revised the site plans and Stormwater Management Report based upon your comments. Attached please a revised set of the revised site plans and Stormwater Management Report with a revision date of May 14, 2024. Additionally, we offer the following responses to each of the comments:

- C1) Retaining walls shall be designed by a Connecticut licensed engineer.
 - R1) We concur, structural retaining wall designs will be prepared prior to construction.
- C2) Test pits shall be performed in accordance with the City of Stamford Stormwater Drainage Manual, in the locations of all in-ground infiltration systems and infiltration surface basins. Show all test pit locations and results on the plans.
 - R2) Test pits were completed in the vicinity of the proposed stormwater infiltration areas on March 13 and 14 of this year. The test pit locations and results are shown on Sheets C-2.2 through C-2.4 of the plan set.
- C3) Approval from the Transportation, Traffic and Parking Bureau is required. *R3) We concur*.
- C4) Approval from the State of CT DOT is required.
 - R4) We concur. Any permitting with the DOT will be coordinated by the project's traffic engineer, Mark Vertucci, P.E. of Fuss & O'Neill, Inc.
- C5) A CT DEEP Stormwater Discharge Permit (for construction activities) is required. *R5) We concur, that permit will be obtained prior to construction.*
- C6) Show all existing and proposed easements.
 - R6) All existing easements are show on the Zoning Location Survey that is included in the site plan set. If additional easements are required from any of the utility companies they will be provided accordingly prior to construction.

T 203 266 0778 F 203 266 4759



- C7) All existing storm pipes and structures to be reused must be video inspected and any deficiencies must be corrected. WPCA to determine if sanitary lines also need to be video inspected.
 - R7) Existing storm pipes will be video inspected prior to obtaining a building permit and any deficiencies will be corrected. We will also coordinate with the WPCA on any requirements they may have for inspections.
- C8) Many of the existing pipes are old CMP. Consider replacing these pipes. *R8*) *Refer to response in item #7 above.*
- C9) Verify the conditions of all existing head walls and end walls. Do any of the existing outfalls need additional stabilization?
 - R9) The existing head wall and end wall for the 60" CMP were inspected and the concrete is in good condition with no evidence of cracking or settling. The pipe outfall areas are stable and do not require any additional stabilization at this time.
- C10) Since all stormwater from the property discharges into the southern pond/watercourse, it must function properly. The condition of the pond/watercourse must be determined and some dredging may be necessary to remove accumulated silts and sediments.
 - R10) Sediment build up in the pond is not relevant as pond modeling was done based upon the current water surface and no credit was taken for any volume below the water surface. There will be minor decreases in post development flows to the pond as a result of our on-site detention/infiltration design therefore the pond will continue to function as it does now. If dredging or maintenance of the pond is required in the future it will be done separately from the current project scope and any permits will be obtained accordingly.
- C11) A City Excavation Permit and CT DOT Encroachment Permit will be required if there will be encroachment onto the State Right of Way.

 **R11) We concur.
- C12) Provide a site construction Logistic Plan and Phasing Plan.
 - R12) A construction sequence has been provided on Sheet C-7.1 of the plan set. Staging areas for construction equipment and trailers have been provided in two locations on the site. One for construction in the northern area and one in the southern area of development.
- C13) Identify construction staging areas.

 R13) Construction staging areas are indicated on Sheets C-2.3 and C-2.4 of the plan set.
- C14) Consider increasing width of walks to five (5) feet.
 - R14) Walks within the development site around the proposed buildings range from 6' to 10' in width. The only section of sidewalk that is 4' wide is near the project entrance that that can not be widened due to the area required for vehicular travel lanes. Ralph Blessing confirmed that a 5' sidewalk is not required because that area is not considered a roadway.
- C15) Identify material to be used for all walking paths and provide detail.
 - R15) The walking paths are proposed to be stone dust surface. A detail of the path has been added to drawing C 6.2.
- Professional Park C16) Identify drainage system for proposed playscape area.
 - R16) The playground surface will be a rubberized play surface that will be pitched to a proposed yard drain south of the play area and tie into the existing drainage system. This is a small area of only 1,120 SF.

T 203 266 0778 F 203 266 4759



- C17) Provide 6" of crushed stone below cultec units.
 - R17) A 6" crushed stone base is being provided under the cultec units, the details on Sheet C-6.3 have been updated accordingly.
- C18) There shall be no proposed catch basin to catch basin connections.
 - R18) There is an existing storm drainage system in place with some catch basin to catch basin connections that the applicant proposes to maintain. Any newly proposed storm drainage conveyance will be done with catch basins draining to manholes in accordance with the recommendation.
- C19) Provide details of oil separators.
 - R19) Details for the proposed hydrodynamic separators for the storm drainage have been provided and Sheet C-6.5 of the site plans.
- C20) Identify drainage for pool area and any pool overflow.
 - R20) Pool drains and the surface area will drain to the storm drainage system and any pool maintenance of drawdown of pool water will discharge to the sanitary sewer and that will be coordinated with the WPCA.
- C21) All existing catch basins shall be provided with silt sacks during construction.
 - R20) We concur, the erosion control plan calls for silt sacks and a detail is included on sheet C-6.1 of the plan set.
- C22) Install silt fence directly down hill from ANY site disturbance to protect drives, undisturbed areas, and slopes. Additional silt fence is warranted.
 - R22) Silt fence has been added downgradient of any disturbance per the recommendation.
- C23) Show locations of any temporary sediment basins and diversion swales.
 - R23) The location of temporary sediment traps is included on Sheets C-4.1, 4.2 and 4.3 of the plan set.
- C24) Any existing catch basin that does not support a two(2) foot sump and bell trap shall be replaced or modified to comply.
 - R24)We concur, all existing catch basins that are to remain will be inspected and any that do not have a 2' sump will be replaced as needed. Bell traps or hooded outlets will be added to any existing catch basins that are to remain. Notes indicating as such have been added to the plan set on the notes and details and Sheet C-6.4.
- C25) Clearly identify depressed curbs and handicap access.
 - R25) The depressed curbs and handicap access have been clearly identified on Sheets C-2.2 through C-2.4 of the site plans.
- C26) Review pedestrian crossings at all walking trails. Crosswalks and handicap ramps may be warranted.
 - R26) Crosswalks and dropped handicap ramps were added at the trail entrances per the recommendation. These are shown on Sheets C-1.2 through C-1.4 of the plan set.
- Woodbury, CT 06798 C27) Fencing may be warranted around the proposed surface infiltration basins as walking paths are in close proximity to these basins.

T 203 266 0778 F 203 266 4759



- R27) Fencing has been added adjacent to the surface infiltration basin where they are in close proximity to the walking paths.
- C28) Clearly identify existing pipes to be plugged or removed.
 - R28) Existing pipes & structures to be removed have been identified per the recommendation this has been included on Sheet C-2.6 of the site plans.
- C29) Slopes shall not exceed 1 vertical on 3 horizontal.
 - R29) Since this is the redevelopment of an existing site there are areas that will need to be graded out at 1' vertical to 2' horizontal. The only area where a proposed slope will be greater than 10' high will be at the walking path adjacent to the south end of the infiltration basin and that area will be stabilized with erosion control blanket, a detail for the erosion control blanket has been added to Sheet C-6.1 of the plan set. Certification that all slopes are stabilized after construction is complete will be provided by the project engineer.
- C30) Discharges from ANY infiltrating system shall not tie directly into a catch basin.
 - R30) Outlet control structures have been added for all infiltration systems so they do not tie directly into a catch basin.
- C31) Confirm all inverts and provide pipe lengths.
 - R31) All inverts and pipe lengths are labeled on the grading & drainage plan sheets and the storm drainage profiles included in the plan set.
- C32) Are bollards warranted around the proposed transformers and generators?
 - R32) Bollards have been added in the area of the generator and transformers south of building 2 that area adjacent to the access drive on Sheet C-1.3 of the plan set.
- C33) Provide cleanouts at building for all roof leaders.
 - R33) Cleanouts have been provided at the buildings for all roof leaders.
- C34) Provide control outlet structure for control devices for ALL infiltration systems.

 R34) Outlet control structures have been added for all infiltration systems per the recommendation.
- C35) Additional inspection ports are warranted. Provide at least one at each corner of the system.

 R35) Inspection ports have been added at all corners, inlets and outlets of the cultec units per the recommendation.
- C36) Provide top and bottom elevations of existing and proposed walls.
 - R36) Top and bottom elevations of existing and proposed walls have been added within the limits of construction per the recommendation.
- C37) Identify any proposed wall drains and their outlets.
 - R37) Proposed wall drains and their outlets have been added to the plans per the recommendation.
- T 203 266 0778 F 203 266 4759
- C38) Review drainage pattern on the northerly side of Building 3. Additional drainage may be warranted to intercept runoff.
 - R38) Additional drainage has been added in the low area north of Building 3 per the recommendation.
- C39) Will the existing sanitary lateral heading in the westerly direction be abandoned and removed?



- R39) Yes, a notation indicating as such is included on the site plans. This will be coordinated with the WPCA.
- C40) Provide inverts for sanitary sewer.
 - R40) A profile and inverts of the proposed sanitary sewer line have been added to the plan set as Sheet C-5.5.
- C41) Water service needs to be rerouted around the pool.
 - R41) The water service is proposed to be routed around the pool, the plans have been revised to indicate as such on Sheet C-3.3 of the plan set.
- C42) Are there any fire hydrants proposed near Buildings 3 and 4? Fire Marshall approval is required. R42) The water service plans are being coordinated with Aquarion Water and the Fire Marshall. Additional hydrants will be added as may be required pending their review.
- C43) Will the proposed generator be serviced by gas?
 - R43) The proposed generators will be serviced by gas, the service lines have been added to the plan.
- C44) Show any existing and proposed electrical and communication services.
 - R44) The proposed transformer and generator locations have been shown on the plans. We are coordinating the location of routing of new conduits with the appropriate utility companies. All work will be within the proposed limits of construction and will be included on final construction plans.
- C45) How will the existing drainage pipe under the existing parking garage be protected during construction. This is an old CMP pipe that may warrant replacement. Proposed footings and foundation shall be coordinated, No loads shall transfer to the pipe. As no formal easement exist for this pipe, this pipe shall be included in the Maintenance Agreement
 - R45) So noted, once video inspection has been performed and no load will be transferred, if pipe needs to be replaced or maintained it will be done accordingly.
- C46) There is a fairly large off-site drainage basin that enters the site in the northwesterly corner of the site. How will this runoff be intercepted?
 - R46) There is already a storm drainage system in place in the northwestern area of the site above the existing retaining wall which intercepts the storm drainage and conveys it to the east through a series of 24" pipes. That drainage system will remain in place and be inspected and repaired as necessary in accordance with the response to item #7 above.
- C47) Provide Bench Marks.
 - R47) Benchmarks have been added to the grading & drainage plans per the recommendation. They are located on the grading plans Sheet C-2.2-2.4. Additional benchmarks and control will be added by the surveyor during construction as needed
- C48) Consider increasing the pavement thickness of the main driveway.
 - R48) Duly note, this will be further evaluated prior to construction and the detail modified if necessary.
- C49) Clarify why the existing and proposed drainage areas do not match.
 - R49) The existing and proposed drainage areas do match, the proposed drainage areas were divided into small subdrainage areas due to the addition of new stormwater detention and

T 203 266 0778 F 203 266 4759



infiltration areas that needed to be modeled for the design.

- C50) Clarify dimensions of existing weir at twin 24" pond outlet.
 - R50) There is no existing weir at the 2-24" outlet pipes from the existing pond. There is a concrete headwall with metal trash grates over at the inlets of the 2-24" pipes.
- C51) The design proposes retaining and infiltrating 100% of the water quality volume. Review the City of Stamford Stormwater Drainage Manual flow chart on page 5 for compliance. Flow chart requires retaining and infiltrating 50% of the water quality volume.
 - R51) DICA is defined in the Stamford Drainage Manual as "the part of the total impervious area that is directly connected to the City of Stamford MS4 system...DCIA does not include isolated impervious areas where runoff is allowed to infiltrate before reaching the MS4." For this project all of the existing impervious area on the site is directly connected to the MS4 as there are no infiltration measures currently on the site. Therefore, the DCIA is 100% under current conditions. Additionally, the area of the site that is proposed for redevelopment is 574,239 SF and the current DCIA is 359,806 SF therefore the percentage of DCIA for the redevelopment area is 62.6%. Since the site's existing DCIA is greater than 40% we are required to retain 50% of the WQV based on the flow chart on page 5 of the Stamford Drainage Manual.

We have redesigned the storm drainage system to retain and infiltrate over 50% of the water quality volume from the development area in accordance with the Stamford Stormwater Drainage Manual. The WQV calculations and a summary spreadsheet are located in Appendix E of the Stormwater Management Report.

- C52) Exfiltration shall not be considered. Remove from Pond model. *R52*) *Exfiltration has been removed from the HydroCAD modeling per the recommendation*.
- C53) INFIL 1B2 states 248 Cultec units and the plan reads 240 Cultec units. Clarify. *R53*) *The number of cultec units has been corrected on the drawings to 248 units.*
- C54) INFL Basin B4. Identify on plan weir high overflow. *R54*) Basin B4 has been eliminated from the design plans.
- C55) UG INFIL Roof 2, 3, and 4 need to be updated with the correct elevations matching the plan view. R55) The underground cultec infiltrators for the roof leaders have been deleted from the current design based upon soil testing results in those areas showing the soils were unsuitable for infiltration practices.
- C56) Updated Water Quality Calculations with correct drainage areas and impervious coverage.

 R56) The drainage area numbering and impervious area in the Water Quality Volume calculations included in Appendix E matches the labeling on the Drainage Area Mapping and the HydroCAD calculations in Appendix D.
- C57) Revised DCIA form. There should be no increase in DCIA.
 - R57) The DCIA form has been revised. The DCIA for the project will decrease from 359,806 SF to 173,369 SF as a result of the stormwater management design.
- C58) Provide details for berms, weirs, emergency spillways, and scour outlets.

 R58) The requested details have been provided on Sheets C-2.5 of the site plan set. Outlet control structure details have been included on Sheet C-6.5 of the site plan set.

T 203 266 0778 F 203 266 4759



- C59) Are there any proposed building underdrains or footing drains. If so, show on plan. R59) Footing drain locations have been added to the grading and drainage plans. Footing elevations will be similar to the lower elevations of the existing buildings on site and the permeability rates of the existing soils were slow to moderate therefore the footing drains are not expected to generate significant outflows.
- C60) Stormwater Management Report shall be signed and sealed by a Connecticut licensed engineer. *R60*) We concur. The signature and seal have been added to the cover sheet of the Stormwater Management Plam.
- C61) Model spillway from INFIL Basin B3 to INFIL Basin B4.
 - R61) Modeling of the spillway from basin B3 to the open area north of the basin is included in the HydroCAD model of the Stormwater Management Report (Appendix D). The spillway will only receive flow in a 100 year storm at a depth of 0.23' with a flow of 3.24 CFS and a velocity of 1.13 FPS.
- C62) Provide documentation of time for each infiltration system to empty. System shall drain within 72 hours.
 - R62) Calculations showing the proposed draining time for each infiltration bed and the infiltration basin have been included on the Water Quality Volume spreadsheets in Appendix E of the Stormwater Management Report. All of the proposed infiltration measures will drain within 72 hours.
- C63) Provide City of Stamford standard notes on plans.

 R63) The City of Stamford standard notes have been added to the cover sheet of the plan set.
- C64) Review grading on the westerly side of Buildings 1 and 2, as grades appear flat.

 R64) Additional spot grades and slopes have been added to clarify the pitch and grading west of buildings 1 and 2.
- C65) The Engineering Department reserves the right to make additional comments. *R65) We concur*.

Please feel free to contact us if you have any further questions.

Sincerely,

CIVIL 1

Brian J. Baker, P.E.

T 203 266 0778 Cc:

Cc: William Buckley, P.E. Lisa L. Fienberg, Esquire John D Freeman, Esquire.