

### Office of the New York State Attorney General

Letitia James Attorney General

August 11, 2025

#### **By Email**

Diana L. Quast, Town Clerk Town of Yorktown, New York 363 Underhill Ave. Yorktown Heights, NY 10598 dquast@yorktownny.org

RE: Fieldhome at Catherine Street SWPPP

Dear Town Clerk Quast:

The Office of the New York City Watershed Inspector General (WIG or WIG Office) respectfully submits the attached comments on the Stormwater Pollution Prevention Plan (SWPPP) dated April 23, 2025 and Site Plans last revised July 3, 2025.

The WIG Office appreciates this opportunity to comment on the Fieldhome at Catherine Street SWPPP documentation and looks forward to working with the Town, Watershed regulators, the Project sponsor, and other stakeholders as review of the Project proceeds.

Respectfully submitted,

#### /s/ Charlie Silver

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cc: Maura Weissleder, Town of Yorktown Cynthia Garcia, NYC DEP Matt Giannetta, NYC DEP Tom Snow, NYS DEC David J. Cooper, Zarin & Steinmetz Kevney Moses, Toll Brothers David Lombardi, JMC

# Fieldhome at Catherine Street 2302 Catherine Street Yorktown, Westchester County, NY

#### Review of the Stormwater Pollution Prevention Plan

By: Mary Galasso, P.E.
on behalf of the
Office of the New York City Watershed Inspector General

### August 11, 2025

The technical comments presented below are based on a review of the following documents pertaining to the Fieldhome at Catherine Street project:

- a) Stormwater Pollution Prevention Plan (SWPPP) for Fieldhome at Catherine Street, prepared by JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC (JMC), dated April 23, 2025 (495 pages including Appendices A through H);
- b) Drawings C-010 through C-904 (34 sheets), prepared by JMC, dated April 23, 2025, last revised July 3, 2025;
- c) Drawing entitled "Overall Existing Slope Disturbance and Proposed Grading Plan" prepared by Site Design Consultants Civil Engineers, Land Planners, dated March 3, 2022, last revised August 20, 2024;
- d) Memorandum from JMC to Mr. Kevney D. Moses of Toll Brothers and David Cooper, Esq., of Zarin and Steinmetz, LLP regarding preparation of a pollutant loading analysis for Fieldhome at Catherine Street, dated October 15, 2024.

## **Project Description**

Fieldhome at Catherine Street is a 48.05-acre site located at 2302 Catherine Street in the Town of Yorktown, Westchester County, NY. The Site is predominantly wooded with an existing soccer field located adjacent to Catherine Street on the west side of the property. On the northeast side of the parcel, there are wooded freshwater wetlands that discharge into an unnamed stream that flows just north of the site and eventually into Hunter Brook. The Site is located in the New Croton

Reservoir Watershed which is a terminal reservoir in the New York City Water Supply watershed. The New Croton Reservoir is phosphorus impaired.

The proposed project includes construction of 118 age-restricted townhouse units, a pool, clubhouse, pickleball courts, associated roadways, utilities, and stormwater management facilities. The project will be served by public water and sewer. About 28.5 acres of site disturbance, over 10 acres of new impervious surfaces, and approximately 18 acres of lawn and landscaping are proposed. A 14.24-acre conservation easement supporting the existing freshwater wetlands is proposed on the east side of the property.

### **General Comments**

- 1. All drawings in the plan set are titled "preliminary", indicating revisions to the design appear to be ongoing. The WIG Office anticipates providing additional comments on the project documentation as the plan evolves.
- 2. Steep Slope Disturbance According to page 5-7 of the 2024 New York State Stormwater Management Design Manual (2024 Design Manual):

Development on slopes with a grade of 15% or greater should be avoided, if possible, to limit soil loss, erosion, excessive stormwater runoff and the degradation of surface water. Excessive grading should be avoided on all slopes..., as should the flattening of hills and ridges. Steep slopes should be kept in an undisturbed natural condition to help stabilize hillsides and soils. On steep slopes, new development, re-grading, or stripping of vegetation must be minimized.

We recognize that some of the slopes on the Site are the result of previous disturbances, but the 2024 Design Manual makes no distinction between natural and human-made steep slopes. The re-disturbance of human-made steep slopes presents the same potential for erosion and downstream sedimentation as did prior disturbances. Particularly on this Site within the New York City Watershed, the disturbance of any steep slopes—however and whenever those slopes were created—raises a potential threat to water quality that should be avoided or minimized in accordance with the 2024 Design Manual.

The "Overall Existing Slope Disturbance and Proposed Grading Plan" indicates regrading and building construction on portions of 40 lots disturb slopes greater than 25%, with at least 6 lots on slopes greater than 35%. It is

- recommended these lots be reconfigured to eliminate disturbance of slopes greater than 25%.
- 3. Appendix D of the SWPPP includes the results of the most recent soil testing at the Site. This testing was conducted in August/September of 2024, which is generally the time of year when groundwater is very low. The report references two earlier reports of testing at the Site, dated January 17, 2024 and June 18, 2024. Based on the Natural Resources Conservation Service (NRCS) general descriptions of the on-site soils, high groundwater can be expected at least seasonally. Seasonally high groundwater can significantly impact both cut and fill operations during bulk grading and can cause down-slope sedimentation. Post-construction, seasonally high groundwater discharging from footing drains and weep holes or daylighting on steeply graded slopes can also cause erosion and will contribute additional flow to stormwater management practices that are not accounted for in the stormwater design. All soil testing results, complete with field-recorded information such as date, color variations, etc. need to be included in Appendix D of the SWPPP to fully assess these potential issues.
- 4. The drawings show a dashed line running south to north immediately west of the grading proposed for Detention Basin DB-2 (*See* Drawing C-401). This line appears to be a watercourse flowing into the freshwater wetlands north of the property. Documentation must be provided regarding the status of this watercourse as defined in the "Rules and Regulations for the Protection of the New York City Water Supply and Its Sources" last revised in 2025 (2025 WRR). The symbol used for the watercourse needs to be included in the legend.
- 5. The limits of NRCS soil types must be shown on the plans as required by the New York State Pollution Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity GP-0-25-001 (GP-0-25-001, Part III.B.1.c) and the 2016 edition of New York State Standards and Specifications for Erosion and Sediment Control (2016 Blue Book, page E.1, #7).
- 6. A copy of the draft or final Notice of Intent (NOI) must be included in the SWPPP as required by the 2025 WRR, Section 18-39(d)(1)(ii).
- 7. Drawing C-904 includes a detail for "Grass Pave" which is a permeable grass paver. The plans must clearly indicate all locations where this product will be used. In addition, clarification must be provided regarding how this material was incorporated in the hydrologic model (*See* Appendix B of the SWPPP).

## Erosion and Sediment Control / Construction Sequencing

The 2016 Blue Book referenced in GP-0-25-001, includes "Section 2: Erosion Control Planning and Site Management" that details planning and design steps to control erosion. There are three stages of development in the discussion of large residential development projects - bulk grading, site improvements, and home construction. Each stage is unique with respect to erosion and sediment control. This means that consideration must be given to the physical conditions during each stage of development. The erosion and sediment control plan must address the issues associated with each stage to demonstrate the project can be constructed without causing erosion and sedimentation.

During bulk grading, elevations at many locations throughout the project Site and associated drainage patterns will change. To control erosion and sedimentation during bulk grading, existing topography and proposed changes to the topography are compared to determine where runoff is likely to be directed, and which stormwater controls should be considered for installation. To ensure erosion and sedimentation can be successfully controlled during bulk grading at large projects, it is advisable to divide the total area to be disturbed into smaller separate phases. Separate phases can begin and end where cut and fill sections meet existing grade. Alternatively, interim grading can be used where the proposed elevations will differ significantly from existing grades.

Although there is no specific acreage that will guarantee successful erosion and sediment control, New York State generally supports limiting the amount of disturbance per phase to 5 acres or less. By successfully separating bulk grading into multiple construction phases, once the disturbed area for the first phase is stable, bulk grading can begin on the second or site improvement phase. Required erosion and sediment controls for the installation of utilities, roads, etc. in the Site improvement stage are likely to be different from those required to control erosion and sedimentation during bulk grading. Similarly, during the third or home construction phase, erosion and sediment controls will likely be different from those used during both the bulk grading and site improvement phases.

Drawings C-40 through C-406 detail the erosion controls and construction phasing proposed for the project. Four phases are proposed. Disturbance estimated for each phase is about 6.37 acres for Phase 1A, 6.46 acres for Phase 1B, 6.07 acres for Phase 2, and 9.6 acres for Phase 3. The disturbance area for each phase exceeds the generally supported limit of 5 acres. Further, as cited below, the phases as delineated on the drawings are not realistic. This means that disturbance

associated with any given phase is likely to exceed the amount noted on the drawings. This, in turn, increases the risk of negative impacts to water quality during project construction. The sequencing and associated erosion and sediment controls need to be redesigned to demonstrate that construction can be completed at this Site without adverse impacts to the surrounding environment and to the New York City Water Supply.

The following comments provide some examples of design elements that demonstrate how the proposed plan is inadequate.

- The cut and fill estimates included on Drawings C-403 through C-406 specify 8. that Phases 1A and 1B will require fill while Phases 2 and 3 will each have excess material. Typically, if the on-site material can be reused in the bulk grading process, each phase is managed so that the amount of cut and fill is nearly balanced within the phase and the need to import and export material for the project is minimized. If Phases 1A, 1B, 2, and 3 are planned to occur sequentially in that order, material will need to be imported for Phases 1A and 1B and exported from the Site for Phases 2 and 3. This will maximize rather than minimize import/export activities. In addition, although stockpile locations for topsoil are shown, there is no indication where stockpiles for imported material or material to be exported from the Site in later phases can be located. Based on the amount of bulk grading in each phase, it is likely that these stockpiles will need to be located beyond the proposed phase limits, which will result in additional disturbance for each phase. It is recommended that the phasing be redesigned to balance each phase's cut and fill, if the onsite material can be reused rather than exported from the Site. If the material cannot be reused on-site, adequate area for stockpiling import and export material and for circulation of vehicles that will transport the material must be shown on the plans.
- 9. Drawing C-902 includes a temporary sediment basin detail. "Size Design" calculations are included in the detail. However, the basis for the size design is unclear. A figure clearly showing the maximum tributary area to each sediment basin must be provided. In addition, clarify where the runoff computation sheets referenced in the spillway design section of the detail can be found in the SWPPP.
- 10. Drawing C-903 includes a detail for a temporary diversion swale. Many diversion swales are proposed to be used during construction. Sizing calculations for these swales must be provided in accordance with the standards specified in the 2016 Blue Book. Swale dimensions dictated by the

- calculations must be included in the detail. Consider labeling each swale on Drawings C-403 through C-406 and provide a sizing table by label on the detail.
- 11. Verify that all erosion control details are in conformance with the 2016 Blue Book. For example, the maximum side slope for sediment basins specified in the 2016 Blue Book is 2.5:1, while the detail on Drawing C-902 indicates a side slope of 2.0:1.
- 12. Phasing limits are unrealistic throughout the design due to elevation differences at the intersections of various phases. This indicates that interim grading will be required beyond the designated phase limits to accommodate the differences in elevation. Thus, the limits of disturbance will be greater than those estimated for each phase. Some examples of these issues include, but are not limited to:
  - a) Drawing C-401: In approximately the middle of the Site, Phase 1A meets Phase 3 where the existing grade is elevation 459' and the proposed elevation at the completion of Phase 1A is 455'. This is a 4-foot grade cut that will require grading beyond the limit of Phase 1A.
  - b) Drawing C-401: Phase 1A meets Phase 1B near the southeast corner of the proposed area surrounding the pool complex. The existing elevation is 450' and the proposed elevation is 442'. An 8-foot grade cut will require interim grading beyond the limit of Phase 1A.
  - c) Drawing C-401: Where Phase 2 meets Phase 3 between Units 46 and 47, the existing elevation is 520' and the proposed elevation is 502'. An 18-foot grade cut will require interim grading beyond the limits of Phase 2.
  - d) Drawing C-401: Where Phase 1A meets Phase 1B between proposed units 13 and 14, the existing elevation is 416' and the proposed elevation is 430'. Interim grading, needed to accommodate 14 feet of fill, will extend beyond the Phase 1A limits.
  - e) Drawing C-402: Where Phase 2 meets Phase 3 between Units 93 and 105, the existing elevation is 478' and the proposed elevation is 454'. A 24-foot grade cut will require interim grading beyond the limits of Phase 2.
  - f) Drawing C-402: Where Phase 2 meets Phase 3 behind Unit 29, the existing elevation is 430' and the proposed elevation is 450'. Interim grading to accommodate 20 feet of fill will extend beyond the Phase 2 limits.

- g) The proposed loop road within the development will be used as an internal construction access road during the work. Similar differences between existing and proposed grades at the intersections of phases are evident indicating that roadway grading will extend beyond phase limits. For example, the grading for the roadway at the intersection of Phases 1B and 2 on Drawing C-401, where the difference in grade is 14 feet (existing elevation 442' to proposed elevation 456').
- 13. Within the limits of each phase there are grade change issues that are not addressed in the plan. For example, the sequencing for Phase 1A on Drawing C-403 states that the area for proposed subsurface infiltration system IS-1B will be cordoned off at the outset of the phase. This area is adjacent to the proposed roadway that will be used as a construction road during the work. Existing grade in the vicinity of the proposed infiltration system is between about 430' and 436', but the proposed grade is between 442' and 444'. It is unclear how this area can be isolated to prevent compaction when the grade change will require 12 feet of fill, and when some fill must be compacted to support the proposed roadway.
- 14. The site plans do not clearly demonstrate how runoff can be safely conveyed to various sediment basins. Examples of these deficiencies are as follows:
  - a) The flow paths of several temporary diversion swales turn sharply midflow. (*See* for example, the temporary swale flow in north from the southern property line on Drawing C-406 that turns at a nearly right angle to the east towards the construction access between Phases 2 and 3).
  - b) On Drawing C-405, there is a temporary diversion swale running north parallel to the pipe from DMH-C2. This swale turns sharply and discharges without protection down a steep slope into Detention Basin DB-2 that will be used as a sediment basin during construction.
- 15. Several permanent piping sections cross phase limits and it is not clear in the sequencing when each section will be constructed or how sections constructed in earlier phases will be protected from grading activities prior to completion of the later sections. The piping section from the yard drain behind Unit 105 that discharges to Bioretention Basin BR-2C on Drawing C-402 can be seen as an example.
- 16. In Phase 1A, the sediment basins will not be constructed until after the phase's bulk grading is complete according to the sequence on Drawing C-403.

This means the only erosion control for over 6 acres of disturbance will be a row of silt fence at the base of the slope. This is unacceptable. Page 5.54 of the 2016 Blue Book specifies maximum slope lengths between silt fence rows based on the silt fence type and the site slopes. For Phase 1A, the slope length of the disturbance is generally over 350 feet and the slope is as steep as 25%. Per page 5.54 of the 2016 Blue Book, maximum slope length between rows of silt fence is 100 feet, providing "super silt fence" is used. If reinforced silt fence is used the maximum slope length between rows is 80 feet. All phases must incorporate sufficient erosion controls to be used until grading of temporary swales, sediment basins, and other mechanisms to control erosion and sedimentation are installed.

- 17. The erosion and sediment control plan, construction sequencing plan, and SWPPP must incorporate the requirements of Part I.E.6. and Part IV.C.2.b of GP-0-25-001 for disturbance greater than 5 acres. These requirements include written authorization from the regulated municipal separate storm sewer system or MS4 (in this case, the Town of Yorktown) and two inspections by a qualified stormwater inspector, as defined in Appendix A of GP-0-25-001, every 7 days.
- 18. Tributary drainage areas for the sediment basins depicted on Drawings C-401 and C-402 must be shown.
- 19. Estimated start and end dates for each phase should be provided to demonstrate when winter stabilization will be required.
- 20. Detail 1 Silt Fence, on Drawing C-900 must state that the detail is for reinforced silt fence.
- 21. Concrete washout areas must be clearly shown on the drawings.

The WIG Office concludes the proposed phasing does not demonstrate the project Site can be adequately protected from erosion and sedimentation during construction. It is recommended that existing and proposed grades be further analyzed so that realistic and manageable limits of disturbance can be established in smaller phases, functional swales and sediment traps/basins can be constructed that minimize excessive disturbance, and achievable phase limits can be defined.

## **Hydrology / Water Quantity**

22. The hydrologic report (HydroCAD) incorporates current Northeast Regional Climate Center (NRCC) rainfall data. To account for future climate change,

the analysis uses the statistical upper confidence limits for the data rather than the average value. It is unclear how these upper confidence limits align with climate change models and whether the rainfall distributions will remain the same with climate change. If upper confidence limits are to be used to model future conditions due to climate change, clarification must be provided as to why these limits are used to model pre-development conditions as well as post-development conditions (pre-development conditions are not subject to climate change if development is imminent).

- To provide a comprehensive analysis of the impacts the project may have on Site drainage, both pre- and post-development drainage areas need to be accurately defined using existing and proposed topography. Property lines are not the limits of a drainage area unless supported by topographical features. Drawings EDA-1 and PDA-1 in Appendix H of the SWPPP define the southern limits of the drainage areas as the southern property line, although the contours on the drawings indicate otherwise. For example, the contours along the southeastern section of Drainage Area EDA-2 indicate that additional land beyond the property boundary, as shown on Drawing EDA-1, is tributary to Design Point 2. To limit the size of the area to be analyzed, it is recommended this drainage area and associated post-development drainage areas be subdivided into smaller drainage areas tributary to either Design Point 2 or to short design lines closer to the area to be developed. Similarly, contouring indicates that the southern portion of Drainage Area EDA-1 and the associated post-development drainage area are not tributary to Design Point 1, but discharge into Catherine Street.
- 24. Drainage Area PDA-1B includes several areas that appear to belong to Drainage Area PDA-2C or Drainage Area PDA-2A. The areas between Units 87 and 88, between 90 and 91, and between 53 and 54 are examples. Drainage areas and the hydrologic model must be revised to accurately model all drainage areas.
- 25. The time of concentration (T<sub>c</sub>) is defined as the time required for a drop of water to travel from the most hydrologically remote point in a drainage area to the design point. It is calculated by computing travel times for three different flow regimes: sheet flow, shallow concentrated flow, and channel flow. These travel times are added together for the T<sub>c</sub>. An accurate T<sub>c</sub> is necessary to assure that excessive or erosive flows do not impact downstream reaches. A T<sub>c</sub> flow path does not necessarily correspond to the path of the physically most distant point to the design point. The sheet flow portion of flow typically

generates the longest time of flow. Since sheet flow typically generates the longest length of time for the  $T_c$ , the time it takes for a drop of rain falling in a flat area to reach a design point may be longer than in a steeper area, even if the flat area is physically closer to the design point. It appears that at least in Drainage Area EDA-2, there is a flatter area on the west side of the drainage area that needs to be investigated, as sheet flow beginning in this location may generate a longer  $T_c$ .

- 26. T<sub>c</sub> flow paths are modeled perpendicular to contours because water typically does not flow cross-slope. All T<sub>c</sub> flow paths must be verified. For example, the T<sub>c</sub> flow paths for post-development drainage areas PDA-1A, PDA-1C, and PDA-2A have sections that are not perpendicular to the contours.
- 27. Sections 4.6, 4.7 and 4.8 of the 2024 Design Manual state that post-development sheet flow lengths are limited to 100 feet. The hydrologic model in Appendix B of the SWPPP indicates that sheet flow lengths used for several of the T<sub>c</sub> exceed the 100-foot limit. For example, PDA-1A includes 134 feet of sheet flow, PDA-1B includes 150 feet of sheet flow, PDA-1C includes 150 feet of sheet flow, and PDA-2C includes 122 feet of sheet flow. All post-development sheet flow portions longer than 100 feet must be revised. Note also that sheet flow lengths less than 100 feet in some post-development drainage areas may be appropriate, based on grading and land coverage.
- 28. The post-development hydrologic analysis in Appendix B of the SWPPP models several sheet flow portions of the T<sub>c</sub> as flowing through woods. While the landscaping plans indicate that some trees will be planted, the number and spacing of trees cannot realistically justify the use of a "woods" category for the purpose of hydrologic modeling. Land coverages used to model all sections of the T<sub>c</sub> flow paths must be based on realistic conditions.
- 29. Shallow concentrated sections of T<sub>c</sub> are modeled as "unpaved." While a velocity factor (Kv) for unpaved surfaces can be used in HydroCAD, the model also provides Kv for specific unpaved surfaces such as woodland, grass pasture, etc. These Kv values vary significantly from the Kv for the unpaved category and will provide a more reasonable model of shallow concentrated flow. Kv for each section of shallow concentrated flow must be revised.
- 30. Curve numbers (CN) used in the hydrologic model need to be re-evaluated to verify that the land use (vegetative coverage) values used in the model are defensible. For example, post-development drainage areas that will be fully developed are modeled as having small areas of woods. While the landscaping

- plan does indicate that some trees will be planted, the area where these trees will be planted are minimal and linear. These cannot be considered woods for the purposes of hydrological modeling.
- 31. Locations of all footing drain and roof leader outlets, wall drain outlets (weep holes), etc. must be shown on the plans.

## Water Quality and Pollutant Loading

- 32. Section 18-39 (c) (3) of the 2025 WRR requires that the SWPPP include measures to capture and treat the greater volume generated by the 1-year, 24-hour storm or the Water Quality Volume as determined in Section 4.2 of the 2015 Design Manual (generally referred to as the 90% storm). A comparison of these volumes needs to be calculated to verify which is larger, and the larger volume needs to be the basis for design.
- 33. Cross sections of the proposed underground infiltration systems and the bioretention practices must be provided. The cross-sections of these practices as well as the cross-sections of the detention basins currently provided on Drawing C-904 must show existing grades as well as proposed grades.
- 34. Infiltration testing in the vicinity of Infiltration System IS-1B was conducted at elevations 434.0' and 432.0' (See SWPPP Appendix D.) Based on the hydrologic analysis in Appendix B of the SWPPP, the invert of this infiltration practice is at elevation 432.5'. Appendix D of the 2024 Design Manual states that field permeability testing (infiltration testing) shall be performed at a depth of two feet below the bottom of the proposed practice. As the testing was performed at elevations at or above the bottom of the practice, additional testing at the appropriate depth is required. This is particularly important due to the potentially confining layer of cemented sand that was observed at elevations 430.3' and 427.5' in the associated test pits.
- 35. Test pits B-18 and B-19 in the vicinity of Infiltration System IS-2B indicated bedrock and/or large boulder at elevations 448.6' and 450.3' (See SWPPP Appendix D). Infiltration testing associated with these test pits was performed at elevation 448', which is at a depth below the bedrock and/or boulder. If the locations of the infiltration tests were near the locations of the test pits, it is unlikely the infiltration testing could have been conducted at the depth noted due to the presence of rock. The plans must show the individual locations of all infiltration testing performed.

- 36. Bioretention BR-2C has no emergency spillway and will be located in a depression where the elevations are higher on all surrounding sides (a 'bowl'). Clarification must be provided regarding how stormwater can be managed in the event of clogging during a large storm event.
- 37. The hydrologic analysis indicates that a small amount of the runoff from the 1-year, 24-hour storm will flow into the outlet structure and therefore bypass filtration in each bioretention basin. Therefore, the goal of treating the entire treatment volume is not met. The design must be revised to treat the entire treatment volume.
- 38. Clarification must be provided as to why exfiltration is modeled in cubic feet per second for Infiltration System IS-1B, but in inches per hour in Infiltration System IS-2B.
- 39. Drainage Area PDA-1C is 33% impervious and Drainage Area PDA-2D is 51% impervious. Both are tributary to bioretention practices for treatment. Section 18-39 (c) (6) of the 2025 WRR requires drainage areas that are 20% or more impervious be treated by two different types of stormwater management practices in series unless, among other things, they are located in an East of Hudson Designated Main Street Area (DMSA). Neither bioretention practice is followed or preceded by a stormwater management practice as defined in Section 18-16 (123) of the 2025 WRR. Additional treatment must be provided in series for these drainage areas.
- 40. The New Croton Reservoir is a terminal reservoir in the New York City Water Supply watershed. An analysis of coliform runoff before and after land disturbance activity must be provided in accordance with Section 18-39 (c) (1) of the 2025 WRR.
- 41. The project is located within the New Croton Reservoir Basin. Table 2 of the June 2000 "Phase II Phosphorus Total Maximum Daily Loads for Reservoirs in the New York City Water Supply Watershed (Delaware, Dutchess, Greene, Putnam, Schoharie, Sullivan, Ulster, and Westchester Counties)" establishes New Croton Reservoir as phosphorus impaired. The June 2000 phosphorus load for New Croton Reservoir is 11,189 kilograms per year (kg/yr) and the available phosphorus load is 8,758 kg/yr. Since the current phosphorus load in the New Croton Reservoir exceeds the available phosphorus load, it must be reduced. At the very least, new development within the reservoir basin must not exceed current total phosphorus (TP) discharges in stormwater leaving the project site in the post-development condition. Note that meeting the design

criteria specified in the 2024 Design Manual and the 2016 Blue Book does not guarantee that the project will not result in an increase in the TP load discharges from the property post-development.

The December 3, 2024 Memorandum from JMC stated that a pollutant loading analysis would be performed for the project, but no such analysis is included in the documentation reviewed to date. Please provide a pollutant loading analysis to estimate the existing and proposed TP load for the project site. Post-development analysis must estimate the TP both before considering TP reductions based on RRv and treatment practices, and after considering those reductions. Treatment practice results published in more recent sources should be consulted to provide a more reasonable estimate of pollutant removal efficiency.