

PROJECT NAME: DOLSONTOWN CORRIDOR DEIS COMPLETENESS REVIEW

PROJECT NO.: 22-01

PROJECT LOCATION: Marangi - SBL #6-1-3.31 &3.32

Simon – SBL # 6-1-107 &90.1

RDM #3 /Dewpoint South—SBL# 4-1-50.32 RDM #4 / Dewpoint North — SBL# 4-1-50.2

RDM #5 / Dolsontown East- SBL# 1-1-52.1,1-1-4.2 & 6-1-3.2

REVIEW DATE: 25 JULY 2022

MEETING DATE: N/A

PROJECT REPRESENTATIVE: COLLIERS ENGINEERING

- 1. Recent Webex meetings with NYSDOT regarding the technical review of the document identifies that the alignment of Dolsontown Road and P Kelly Way are skewed in such a manner that the current traffic plan at the intersection is a "non-starter" for NYSDOT. The Applicant's Traffic Concultant's have identified that additional improvements are proposed at James P Kelly Way, revised traffic studies and plans must be prepared identifying the proposed improvements at the intersection.
- 2. Additional DOT comments regarding proposed lanes on Route 17M do not meet their manual of Uniform Traffic Control Devices. Revised layouts of this roadway, including any modifications to the Traffic Studies must be submitted.
- 3. This office continues to have concerns regarding traffic flow during "extreme" traffic events at the car wash facility. Traffic at the intersection is bottle necked during these extreme events such that no traffic can often proceed thru the intersection often requiring State Police intervention for traffic control. The Traffic Study must address these extreme events and how traffic will be managed.
- 4. The Planning Board has had discussion regarding the potential of a new exit ramp at Dolsontown Road east of Mcveigh Road allowing an on-ramp and off-ramp from New York State Route 84 eastbound to Dolsontown Road. This analysis should be incorporated into the Traffic Study and the FEIS.
- 5. The Planning Board proposed an alternative access point at Sunrise Drive. This analysis should be included in the alternative analysis which would relieve traffic from the Dolsontown Road corridor.
- 6. The D GEIS traffic studies were prepared prior to the Town receiving an application for a one million +/- square foot warehouse facility located west on NYS Route 6. That project, which has not had a

SEQRA determination made, is currently proposing traffic mitigation measures at Route 6 and Route 17M and Route 17M and Route 84. The Dolsontown corridor Traffic Study should take into account the proposed Scannell traffic improvements make comprehensive manner. Timing of all traffic improvements should be addressed in the document.

- 7. The methodology for construction of all traffic improvements should be identified in the document. Timing of the traffic improvements and building permits should be identified such that all traffic improvements are in place prior to issuance of a building permit for any of the projects. Additional traffic comments will be provided by the Town's Traffic Consultant, Creighton Manning Engineering.
- 8. The individual Planning Board members provided documentation of significant vehicle cueing on Dolsontown Road westbound. This queuing seems to be longer than that which is identified in the Traffic Studies. Evaluation of the actual queuing which occurs in the field during afternoon peak hours should be provided and Traffic Study adjusted accordingly based on the number of vehicles identified cueing at the intersection.
- 9. The applicant's representatives are requested to evaluate the ability to expand the lanes within the Dolsontown 17M intersection based on the current width of the bridge located at the intersection.
- 10. The NYSDEC had identified that numerous wetlands in the vicinity of the project sites will fall under DEC jurisdiction upon implementation of new wetland mapping for Orange County. The Applicant's representative are requested to evaluate potential impacts to the projects proposed based on DEC's exercising jurisdiction over the areas currently identified as federal wetlands.
- 11. The status of all federal wetland delineations for each of the projects should be addressed. Federal Jurisdiction Wetland approvals must be received in order to confirm the extent of wetlands on each projects. Wetland impacts should be evaluated cumulatively in the document.
- 12. Individual SWPPP technical comments are provided as an attachment to this comment letter.
- 13. Point discharges from numerous Stormwater Management Facilities are identified on the plans.

 These point discharges appear to discharge to wetland areas which are not part of the natural water course for Mohegan Brook. Impacts associated with these point discharges to the wetlands which are not to the stream channel should be addressed. Velocities at these point discharges may result in erosion of the wetland areas.

- 14. The SWPPP's performed for the project do not incorporate the linear aspects of the project required for improvements within the Dolsontown Road corridor and the Route 17M intersections. The SWPPP should be expanded to incorporate stormwaqter impacts associated with these proposed improvements once the improvements are modified based on proposed revisions to the Traffic Study.
- 15. The NYSDEC has requested that freshwater wetland MD-19 be flagged by NYSDEC personnel with the appropriate jurisdictional boundary map provided with signatures by the NYSDEC personnel.
- 16. A cumulative assessment of impacts to Threatened or Endangered Species should be provided. Cumulative impacts regarding the removal of vegetation should be provided and may result in a requirement for an NYSDEC Incidental Take Permit.
- 17. The NYSDEC has requested additional information regarding water and sewer extensions. The applicant's representative are requested to address the DEC comments including the water/sewer demand for light industrial users.
- 18. The project is identified as being in an NYSDEC Environmental Justice Area. The documents should address how the applicants propose to address Environmental Justice concerns during the environmental and subsequent Site Plan review and permitting by outside agencies.
- 19. Status of the Marangi Article 7 -Solid Waste Permit should be updated. Numerous notices of incomplete application are identified.
- 20. Improvements to the Town's sanitary sewer pump station should be identified.
- 21. An overall map should be provided in the wetland section identifying existing NYSDEC Regulated Wetlands, potential NYSDEC Regulated Wetlands and Federal Jurisdictional Wetlands. The map should contain a chart identifying the date of each agency's approval for the wetland delineations.
- 22. In the vicinity of Dolsontown and McVeigh roads, impacts regarding noise, visual and access to the trail should be evaluated. Several Planning Board Members commented regarding a potential interconnect between the project corridor (possibly along the Mohegan Brook) to the Rail Trail/Heritage Trail should be evaluated. Pedestrian/bicycle access to the trail extending from the Dolsontown Road 17M corridor to the newly created trail system should be analyzed to allow a pedestrian friendly interconnect between the projects and the Rail Trail.

- 23. The project should evaluate site lighting with regard to potential impacts to protected Bat Species.
- 24. The documents should address the construction of water and sewer main extensions. The timing of the extensions, financing for the extensions as it relates to project schedules, construction phasing. It is unclear which entity will construct the water and sewer main extensions required to serve all parcels addressed in the DGEIS.
- 25. The document should discuss the timing, financial arrangements, and mechanism for construction of the Dolsontown Road and 17M Road improvements.

MHE Engineering, D.P.C.

Patrick J. Hines



PROJECT: DOM MAR TRANSFER AND RECYCLING FACILITY

PROJECT NO.: 20-12

PROJECT LOCATION: SECTION 6, BLOCK 1, LOTS 3.31 & 3.32

REVIEW DATE: 27 APRIL 2022

MEETING DATE: NA

REPRESENTATIVE: ENSOL INC.

- 1. On page 3 of the SWPPP, it states that the development will take place in an archaeologically sensitive area, written confirmation that it will not require a phase 2 assessment to be completed from CRIS should be included in the next SWPPP submission.
- 2. Table 2 of the SWPPP states that several of the on-site soils are moderately well drained, but as they are Hydrologic Soil Group D, this should be revised to show them as being poorly drained.
- **3.** The erosion and sediment control measures section of the SWPPP should be revised to include silt fence or an equivalent.
- **4.** The SWPPP should be revised to include a description of the proposed stormwater management practices.
- **5.** The SWPPP should be revised to include a description of the different storm events, their SMP requirements, and the associated calculations required for them, as per the 2015 SWMDM Chapters 4 &10.
- **6.** As per Chapter 9 of the 2015 SWMDM, redevelopment WQv reductions are only applicable when existing impervious surfaces are disturbed and reconstructed in the same location. Based on the existing and proposed plans, it appears that the majority of the existing impervious that is being removed is in an area that does not contain proposed impervious, and thus this area would not be considered redevelopment. Review and revise accordingly.
- 7. A full set of full sized plans should be included in the subsequent SWPPP submissions for review.
- **8.** The erosion and sediment control plan should be revised to show the proposed improvements and grading for the site to ensure that the controls proposed will adequately control erosion and sediment from leaving the site.
- 9. The erosion and sediment control plan should include proposed soil stockpile locations.
- **10.** Silt fence or compost filter socks should be located parallel with contours in all areas downslope from the proposed improvements to ensure capture of all runoff from the site.
- **11.** The erosion and sediment control plan should include a detail for proposed soil stockpiles, as well as a planting/seeding schedule for stabilizing soils.
- **12.** The pond cross section detail should be revised to include a forebay.
- **13.** Based on the plans, it does not appear that the proposed ponds include adequate aquatic and safety benches as per the 2015 SWMDM Chapter 6.1. Please review and adjust accordingly.
- **14.** The pond cross section detail depicts an emergency overflow weir, this should also be included on the plan sets as well as in the HydroCAD model.
- **15.** A detail for the proposed grass swales should be included in the plans.
- 16. The bioretention basin detail should include an in depth planting schedule as per the 2015 SWMDM.

- **17.** Deep test pits locations and results should be included in subsequent SWPPP submissions to ensure proper separation from bedrock and groundwater for the proposed ponds and bioretention basin.
- **18.** The NOI should be revised to contain all available Owner/Operator Information.
- 19. The start and end disturbance dates in the NOI should be revised.
- **20.** The provided stormwater calculation sheet states that the total WQv available for each pond is the sum of the permanent pool and forebay, while this is not so. These should be revised to show how the 0.21 ac-ft and 0.27 ac-ft values were achieved for the ponds.
- **21.** The included calculation sheets should include the depth of the proposed forebays to ensure they are 4-6 feet deep, as per the 2015 SWMDM.
- **22.** As per the 2015 SWMDM, pocket ponds should contain a max of 50% of their WQv in extended detention. Revise the proposed ponds to ensure this is met.
- **23.** The NOI states that this is completely new development, yet the WQv calculation sheet states it is partially redevelopment. Revise as necessary.
- **24.** As per Chapter 10 of the 2015 SWMDM, in an enhanced phosphorus removal watershed, the WQv should be the total runoff from the 1-year storm event of the proposed condition. By our office's calculations using the proposed HydroCAD report, this would be approximately 0.895 ac-ft. Revise accordingly.
- **25.** As per Chapter 10 of the 2015 SWMDM, the RRv in an enhanced phosphorus removal watershed should be calculated using the 1-year 24 hour storm depth, which according to the provided HydroCAD report is 2.47". Additionally, the RRv uses different variables than the WQv calculation, so multiplying the WQv by 0.2 for the S factor is an improper calculation of the minimum RRv value. Revise accordingly.
- **26.** In the bioretention worksheet, the filter time is listed as 1.67 days, while as per the 2015 SWMDM it should be 2.0 days.
- **27.** In the bioretention worksheet, the average height of ponding is listed as 0.5 ft, but the bioretention basin detail shows the overflow catch basin as being 0.5 ft over the bioretention bed, therefore the average height of ponding would be 0.25 ft. Revise accordingly.
- **28.** As per the 2016 Erosion and Sediment Control Manual, the precipitation values should be gotten from the Cornell Extreme Precipitation database, rather than the NOAA Precipitation Frequency Estimates used. Please revise.
- **29.** Based on the provided pre-development drainage plan and the existing conditions HydroCAD report, it is the opinion of this office that the pre-development time of concentration should be longer than is shown in the HydroCAD report. Please review and revise as necessary.
- **30.** The existing and proposed drainage plans should be revised to include a legend that shows all relevant linetypes, hatches, and objects used in the plan.
- **31.** The existing and proposed drainage plans should be revised to clearly call out all design drainage points being used.
- **32.** Based on the provided HydroCAD reports, the model shows that existing conditions drain to one design point, and then in the proposed conditions, there is a second drainage point that received no drainage in the existing conditions. As per the 2015 SWMDM, the post-development flows for the 1-year, 10-year, and 100-year should be below existing condition flows, so if there was no flow in the existing condition, there should be no flow in the proposed condition. Review and revise as necessary.

- **33.** All drainage piping should be included in the proposed HydroCAD model to ensure that their sizing and slope are enough to adequately convey the stormwater off of the site.
- **34.** As per the 2016 E&SC Manual, grassed waterways should be either parabolic or trapezoidal to prevent erosion. Review the specifications for grassed waterways in the 2016 E&SC Manual and revise the proposed swales as necessary.
- **35.** The Proposed Detention Pond 2 should be modeled to show the permanent pool volume. As per the 2015 SWMDM, for Pocket Ponds, at least 50% of the WQv should be stored in the permanent pool, with less than 50% being extended detention. As currently modeled, it appears that 100% of the WQv is extended detention.
- **36.** Detention Pond 2's primary outlet should be lowered below the elevation of the permanent pool and should have an emergency drain in case the entire pond needs to be drained. The current outlet is set at the top elevation of the permanent pool.
- **37.** Detention Pond 2's volume should be modeled with a surface area at every 1-foot interval to ensure an accurate representation of the provided volume with safety and aquatic benches.
- **38.** The broad-crested weir should be modeled as a "Device 1" in Detention Pond 2 to accurately represent it exiting the pond through the proposed culvert.
- **39.** Detention Pond 2 should have an outlet representing the emergency overflow weir for large storm events.
- **40.** The HydroCAD report should be revised to include hydrographs for each node.
- **41.** The proposed bioretention basin shows an outlet device of discarded exfiltration. The filtration through the filter bed should be modeled with Darcy's Law using coefficients provided in the 2015 SWMDM, similarly to the calculation used to determine the required area of the practice. This ensure's that the filtration is modeled correctly with the head above the filter bed being the driving force of the water through the media. Additionally, the exfiltration should be modeled as a "Device 1", since the proposed bioretention basin has a liner, the filtered water will enter the perforated pipe and exit through the main culvert, rather than exfiltrating into native soils.
- **42.** The proposed bioretention basin should model the space provided within the filter media with a 40% porosity value to ensure accuracy of the storage capacity of the model.
- **43.** For the 1-year storm, the bioretention practice should have no flow exit through the orifice/grate, as the 1-year storm acts as the WQv due to the phosphorus removal standards for this project. All of the WQV (1-year storm in this case) should be properly filtered and treated before exiting the practice. Revise as necessary.
- **44.** The Proposed Detention Pond 1 should be modeled to show the permanent pool volume. As per the 2015 SWMDM, for Pocket Ponds, at least 50% of the WQv should be stored in the permanent pool, with less than 50% being extended detention. As currently modeled, it appears that 100% of the WQv is extended detention.
- **45.** Detention Pond 1's primary outlet should be lowered below the elevation of the permanent pool and should have an emergency drain in case the entire pond needs to be drained. The current outlet is set at the top elevation of the permanent pool.
- **46.** Detention Pond 1's volume should be modeled with a surface area at every 1-foot interval to ensure an accurate representation of the provided volume with safety and aquatic benches.
- **47.** The proposed overflow weir in Detention Pond 1 should be made larger to ensure non-erosive velocities in large storm events. Additionally, the overflow weir should be modeled as a "Primary" or

- "Secondary" outlet rather than a "Device 1", as it does not exit the pond through the proposed culvert.
- **48.** The contributing area to Detention Pond 1 is 5.223 acres, which is larger than than the recommended flow to a pocket pond, but smaller than the proposed contributing areas for all other ponds. Review and revise as necessary.
- **49.** The Maintenance Agreement and Easement should be included in subsequent SWPPP submissions.

MHE Engineering, D.P.C.

Patrick J. Hines
Principal

PJH/kbw



PROJECT: SIMON (RDM GROUP)

PROJECT NO.: 22-01

PROJECT LOCATION: SECTION 6, BLOCK 1, LOTS 107 & 90.1

REVIEW DATE: 25 APRIL 2022

MEETING DATE: NA

- **1.** Table 3 in the SWPPP should be revised to contain the total area of each drainage area.
- 2. In the WQv section of the SWPPP, it mentions pre-treatment practices counting for WQv treatment, but pre-treatment practices can not be counted towards the provided WQv volume.
- **3.** If the grass filter strips are not being provided, an alternate pre-treatment practice should be provided, such as a sedimentation basin, pea gravel diaphragm, etc. to ensure that the incoming water does not have an excessive amount of sediment and debris.
- **4.** The existing watershed map uses the pasture land cover for the portion of the time of concentration within the wetland, which appears inaccurate. Revise accordingly.
- **5.** The proposed watershed map should be included in Appendix 1.
- **6.** The existing HydroCAD report uses Meadow as a land cover, which appears inaccurate. Revise accordingly.
- 7. The existing and proposed HydroCAD reports have a time of concentration line with a slope close to zero within the wetland. In TR-55, reservoirs and lakes should be modeled as having a duration of travel of zero minutes. As this particular portion of the proposed time of concentration is the wetland with close to zero slope, it is the opinion of this office that the travel time for this section should be zero.
- 8. The Bioretention basins are designed in HydroCAD as having no primary culvert outlets. They should be revised to include all catch basin and culvert outlet structures as shown in the plans. Additionally, it is recommended by this office to add in exfiltration as a primary device rather than to be discarded, to represent the flow of water through the filter to ensure that the WQv is properly filtered without existing the basin via the catch basin outlet. The exfiltration rate should be calculated via Darcy's Law with values given in the 2015 SWMDM.
- **9.** Deep tests should be performed before the next SWPPP submission to verify required separations of bedrock and groundwater for the bioretention basins.
- **10.** The proposed HydroCAD report should include the WQv rainfall event to ensure that the proposed SMPs can properly treat the WQv without the water exiting the practice untreated.
- **11.** The NYSDEC worksheets for the bioretention basins show an average height of ponding as 0.5 ft, but since the lowest outlet is 0.5 ft above the bottom of the basin, the average height of ponding should be half of that, or 0.25 ft. Revise accordingly.
- **12.** The filled out NOI, NOT, and MS4 Acceptance Forms should be included on subsequent SWPPP submissions.
- **13.** Subsequent submissions should be revised to include a hydraulic analysis of the proposed pipe conveyance system to ensure the pipes are adequately sized to pass the 100-year storm event flow.

Simon (RDM Group) 25 April 2022

14. The grading plan should be revised to ensure that all proposed contours match up with existing contours.

- **15.** The underdrain elevations for the bioretention practices shown on the grading plans are incorrect and should be revised.
- **16.** The grading and utility plan should be revised to show all overflow weir elevations and all outlet structure elevations for the proposed stormwater practices.

Respectfully submitted,

MHE Engineering, D.P.C.

Patrick J. Hines



PROJECT: DEWPOINT SOUTH (RDM GROUP)

PROJECT NO.: 21-21

PROJECT LOCATION: SECTION 4, BLOCK 1, LOT 50.32

REVIEW DATE: 13 APRIL 2022

MEETING DATE: NA

- 1. Table 3 in the SWPPP should be revised to contain the total area of each drainage area.
- 2. Page 16 of the SWPPP references Chapter 9.4 of the 2015 NYSSWMDM as support that the Hydrodynamic Separator is applicable to this project, however Chapter 9 of the SWMDM is only referencing redevelopment projects, and thus the Hydrodynamic Separator is not an applicable stormwater practice. It may still be used as a pre-treatment practice to the hotspot areas.
- **3.** Diversion manholes should be considered for large flows being diverted to the Hydrodynamic Separators for the larger storm events, or confirmation should be included that they can adequately bypass the flows reaching them in large storm events.
- 4. The Bioretention basins are designed in HydroCAD as having no outlets other than the emergency overflow weirs. They should be revised to include another catch basin outlet structure as shown in the plans. Additionally, it is recommended by this office to add in exfiltration as a primary device rather than to be discarded, to represent the flow of water through the filter to ensure that the WQv is properly filtered without existing the basin via the catch basin outlet. The exfiltration rate should be calculated via Darcy's Law with values given in the 2015 SWMDM.
- 5. The pre-treatment isolator rows should not be included in the storage capacity or the exfiltration rate for the infiltration chambers, as their purpose is to settle out sediment and slow the flow of water, rather than exfiltration. Additionally, the pre-treament volume is a minimum of 25% of the WQv depending on the infiltration rate, so with 8 regular rows, there should be a minimum of 2 isolator rows of the same size.
- **6.** Deep tests and infiltration tests should be performed before the next SWPPP submission to verify required separations of bedrock and groundwater for the infiltration chambers and bioretention basins, and to verify the infiltration rate of the soils.
- **7.** The broad-crested overflow weir for the infiltration chambers is missing from the plans, revise accordingly.
- **8.** The SMPs should be sized so that there is no water exiting without being filtered or exfiltrated in the WQv level storm. As per the HydroCAD report, BIO-1D and the SUBS are releasing untreated water in the WQv at current sizing.
- **9.** The filled out NOI, NOT, and MS4 Acceptance Forms should be included on subsequent SWPPP submissions.
- **10.** All erosion and sediment control practices should be within the proposed limit of disturbance area.

MHE Engineering, D.P.C.

Patrick J. Himes



PROJECT: DEWPOINT NORTH (RDM GROUP)

PROJECT NO.: 21-22

PROJECT LOCATION: SECTION 4, BLOCK 1, LOT 50.32

REVIEW DATE: 14 APRIL 2022

MEETING DATE: NA

- 1. Table 3 in the SWPPP should be revised to contain the total area of each drainage area.
- 2. Page 16 of the SWPPP references Chapter 9.4 of the 2015 NYSSWMDM as support that the Hydrodynamic Separator is applicable to this project, however Chapter 9 of the SWMDM is only referencing redevelopment projects, and thus the Hydrodynamic Separator is not an applicable stormwater practice. It may still be used as a pre-treatment practice to the hotspot areas.
- **3.** The existing watershed map's time of concentration appears as though it should be longer, revise as necessary to ensure that it is the length of time that it takes for water with the slowest route to reach the design point.
- 4. The Bioretention basins are designed in HydroCAD as having no primary culvert outlets. They should be revised to include all catch basin and culvert outlet structures as shown in the plans. Additionally, it is recommended by this office to add in exfiltration as a primary device rather than to be discarded, to represent the flow of water through the filter to ensure that the WQv is properly filtered without existing the basin via the catch basin outlet. The exfiltration rate should be calculated via Darcy's Law with values given in the 2015 SWMDM.
- 5. The pre-treatment isolator rows should not be included in the storage capacity or the exfiltration rate for the infiltration chambers, as their purpose is to settle out sediment and slow the flow of water, rather than exfiltration. Additionally, the pre-treament volume is a minimum of 25% of the WQv depending on the infiltration rate, so with 8 regular rows, there should be a minimum of 2 isolator rows of the same size.
- **6.** Deep tests and infiltration tests should be performed before the next SWPPP submission to verify required separations of bedrock and groundwater for the infiltration chambers and bioretention basins, and to verify the infiltration rate of the soils.
- **7.** The broad-crested overflow weir for the infiltration chambers are missing from the plans, revise accordingly.
- **8.** The SMPs should be sized so that there is no water exiting without being filtered or exfiltrated in the WQv level storm. As per the HydroCAD report, BIO-1B, BIO-1C, BIO-1D, BIO-1G and the SUB are releasing untreated water in the WQv at current sizing.
- **9.** The filled out NOI, NOT, and MS4 Acceptance Forms should be included on subsequent SWPPP submissions.
- **10.** All erosion and sediment control practices should be within the proposed limit of disturbance area.
- 11. A detail for the proposed silt sock should be include with the erosion & sediment control details.

MHE Engineering, D.P.C.

Patrick J. Hines



PROJECT: DOLSONTOWN EAST (RDM GROUP)

PROJECT NO.: 21-22

PROJECT LOCATION: SECTION 1, BLOCK 1, LOT 52.1 & 4.2, AND SECTION 6, BLOCK 1, LOT 3.2

REVIEW DATE: 15 APRIL 2022

MEETING DATE: NA

- 1. Table 3 in the SWPPP should be revised to contain the total area of each drainage area.
- **2.** Page 16 of the SWPPP references Chapter 9.4 of the 2015 NYSSWMDM as support that the Hydrodynamic Separator is applicable to this project, however Chapter 9 of the SWMDM is only referencing redevelopment projects, and thus the Hydrodynamic Separator is not an applicable stormwater practice. It may still be used as a pre-treatment practice to the hotspot areas.
- **3.** The time of concentration shown for existing conditions on the watershed map and the HydroCAD report do not match, revise as necessary.
- 4. The Bioretention basins are designed in HydroCAD as having no primary culvert outlets. They should be revised to include all catch basin and culvert outlet structures as shown in the plans. Additionally, it is recommended by this office to add in exfiltration as a primary device rather than to be discarded, to represent the flow of water through the filter to ensure that the WQv is properly filtered without existing the basin via the catch basin outlet. The exfiltration rate should be calculated via Darcy's Law with values given in the 2015 SWMDM.
- **5.** Finer routing should be used on INFIL 1E HydroCAD output to ensure the exfiltration rates are accurate.
- **6.** The pre-treatment isolator rows should not be included in the storage capacity or the exfiltration rate for the infiltration chambers, as their purpose is to settle out sediment and slow the flow of water, rather than exfiltration. Additionally, the pre-treament volume is a minimum of 25% of the WQv depending on the infiltration rate, so with 4 regular rows, there should be a minimum of 1 isolator rows of the same size.
- 7. Deep tests and infiltration tests should be performed before the next SWPPP submission to verify required separations of bedrock and groundwater for the infiltration chambers, infiltration basins, and bioretention basins, and to verify the infiltration rate of the soils.
- **8.** The SMPs should be sized so that there is no water exiting without being filtered or exfiltrated in the WQv level storm. As per the HydroCAD report, BIO 1A and BIO 2C are releasing untreated water in the WQv at current sizing.
- **9.** The NYSDEC worksheets for INFIL 1BE and INFIL 2A state that the basal area is too small to exfiltrate the entire WQv. Revise as necessary.
- **10.** As per the 2015 SWMDM, the maximum contributing area for infiltration basins should be 5.0 acres, unless the soil has an infiltration rate of 5.0 in/hr or higher. Revise as necessary.
- **11.** The filled out NOI, NOT, and MS4 Acceptance Forms should be included on subsequent SWPPP submissions.
- 12. Subsequent submissions should be revised to include a hydraulic analysis of the proposed pipe

conveyance system to ensure the pipes are adequately sized to pass the 100-year storm event flow.

- **13.** The grading and utility plan should be revised to show all overflow weirs for the proposed stormwater practices.
- **14.** All plans should include a legend containing all relevant linetypes, objects, and hatches.
- **15.** The Swirl separator H-2 appears to be approximately 20 feet deep. Additional guidelines should be included to ensure proper installation, maintenance, and access are provided.
- **16.** All erosion and sediment control practices should be within the proposed limit of disturbance area.

Respectfully submitted,

MHE Engineering, D.P.C.

Patrick J. Hires