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September 16, 2026

Patrick Bono, Interim Borough Manager
Springdale Borough
325 School Street
Springdale, PA 15114

RE: 151 Porter Street, Springdale, PA 15144
Springdale Data Center
Preliminary Land Development Application – Review No. 1

Mr. Bono,

GFT Infrastructure, Inc. has completed a review of the Preliminary Land Development Application for the above-referenced project provided by Civil & Environmental Consultants, Inc. ("CEC").

Project Description

The proposed project involves the redevelopment of the former Cheswick Power Station site into a data center campus, including associated generator and utility yards, circulation, parking, stormwater facilities and public facing site improvements. The property consists of approximately 47.2 acres within the Borough's Industrial ("I") Zoning District.

Previously Granted Zoning Relief (All sections are reference to the Springdale Borough Zoning Ordinance.)

On December 16, 2025, the Applicant received Conditional Use Approval pursuant to Section 490-16C of Chapter 490 of the Springdale Borough Code of Ordinances, Zoning ("Zoning Ordinances"). In addition, on December 6, 2025, the Applicant received approval of the following six (6) dimensional variances:

1. A variance from Section 490 Attachment 1 to allow a maximum building height of up to 60';
2. A variance from Section 490-7 to allow a maximum rooftop structure height of up to 75';
3. A variance from Section 490-23.B(4)(a) to allow a conventional parking stall size of 9' x 18', handicap parking stall size of 13' x 18' and a handicap van parking stall size of 16' x 18';
4. A variance from Section 490-23.B(4)(b) to allow a reduction in parking aisle width from 25' to 24';
5. A variance from Section 490-24.C to allow a reduction to four (4) total off street loading spaces; and
6. A variance from Section 490-21.A(5) of the Zoning Ordinance to allow a maximum fence height of 8'.

Requested Modifications

The Applicant requests the following modifications from the Allegany County's Subdivision & Land Development Ordinance:

1. From §780-517D(2)(d) – To allow an 8' trail width in order to locate proposed trails and sidewalk improvements in locations consistent with the applicable multi-municipal comprehensive plan and trails initiative while avoiding the removal of mature street trees.

2. From §780-512E(2) – To allow the principal parking area to be landscaped only with low-growing vegetation in order to allow the installation of a solar canopy for sustainable lighting.

3. From §780-512F(5)(c) – To allow the location of proposed ADA accessible parking intended to benefit St. Mark's Cemetery adjacent to the cemetery property, but within the required buffer yard, along with site lighting necessary to light said parking and allow the location of certain lighting standards and utilities within the buffer yard along Porter Street.

Zoning: (All sections are reference to the Springdale Borough Zoning Ordinance.)

1. On December 16, 2025, the Applicant received Conditional Use Approval pursuant to Section 490-16C of Chapter 490 of the Springdale Borough Code of Ordinances, Zoning ("Zoning Ordinances") – The Applicant must provide all necessary documents to show compliance with all the consented conditions listed on the approved Condition Use Decision.

2. §490 Attachment 1 – The maximum building height permitted is 45 feet. A variance has been granted to allow a maximum building height of up to 60'.

3. §490 Attachment 1 – A summary table of the proposed impervious surface coverage (i.e. building, parking lot) must be added to the plan.

4. §490-16.C – The applicant has received Conditional Use approval for the proposed redevelopment.

5. §490-17. – The disturbance of any environmentally sensitive area, such as floodplains or steep slopes, must meet the permitted uses and conditional uses of this section.

6. §490-21.A.(5) – Fences, walls or screens shall not exceed seven feet in height, as measured from the ground level at the base of the structure, except as provided in the next subsection. A variance has been granted to allow a maximum fence height of 8 feet.

7. §490-23.B.(4)(a) – The minimum dimensions for a conventional parking space will be 10 feet in width by 20 feet in length, exclusive of curbs and maneuvering space. For handicapped parking space, the size shall be 15 feet in width by 20 feet in length.

8. §490-23.B.(4)(b) – The minimum dimension of interior driveways and parking aisles shall be 25 feet. A variance has been granted to allow a reduction in parking aisle width from 25 feet to 24 feet.

9. §490-23.B.(6) – The lighting system for off-street parking areas and driveways shall be furnished minimally on average of two footcandles during hours of operation, with lighting standards being located not more than 80 feet apart. The Photometric Plan must be revised to meet these requirements and extend the footcandle at minimum to the property line. Lighting fixture details must be revised to be at a legible scale.

10. §490-24.B.(2) – A required off-street loading space shall be 10 feet in width by at least 50 feet in length. The Typical Loading Stall must be updated to on Sheet C801 to reflect the dimensions on Sheet C203.

11. §490-24.C – A variance has been granted to allow a reduction to four (4) total off street loading spaces.

12. §490-25.G – The proposed facility must meet the noise requirements detail in this section for the applicable Zoning District. Applicant to provide updated sound study.

13. §490-25.H – All garbage, trash and rubbish shall be stored in covered, vermin-proof containers, and also shall be screened from public view. The location of the dumpster enclosure must be provided on the plan, if applicable.

14. §490-26. – The plan must show the location all solar energy structures must be shown on the plan.

Subdivision and Land Development: (All sections are reference to the Allegheny County Subdivision and Land Development Ordinance.

1. §780-402A.10 – List any variances or other zoning approvals which are being requested or which have been granted by the municipality. This list of granted variances must be added to the Cover Sheet.

2. §780-402A.11 – List, with supporting evidence for the request, any modifications or waivers of subdivision and land development regulations that are requested. The list of the requested modifications must be provided on the Cover Sheet.

3. §780-402B.5 – Show number, species, size and approximate location of all trees with a DBH 24 inches and over. Any trees to be disturbed as part of the development must be delineated on the plan.

4. §780-402B.10. – Existing streets, roads, alleys, driveways or other means of access located on or within 100 feet of the site. Include name, jurisdiction or ownership, width and location or right-of-way and existing grades. This information must be added to the Existing Conditions Plan.

5. §780-402C.1 – For nonresidential developments show the total square footage or all proposed buildings, percent lot coverage, the number of parking spaces required and the number provided. The building square footage must be provided.

6. §780-402C.2 – All required yards and building setback lines. Show any required buffer yards. The proposed setbacks dimensions must be shown on the plan.

7. §780-402C.6 – Proposed utilities and related easements. Show points of connection to existing utilities. The proposed utility tie-into location to the existing utilities must be shown on the plans.

8. §780-402C.9.b. – Approximate grades on all accessible parking spaces and related accessible routes. Slopes and spot elevations of the ADA parking and accessible route must be added to the plan. All accessible routes must be clearly delineated on the plans.

9. §780-402C.9.c. – Approximate quantity of total excavation in cubic yards. Show approximate location of cut and fill areas and limit of disturbance. Indicate whether or not the earthwork is expected to balance on-site. This information must be added to the plans.

10. §780-402C.10.b. – A map taken from the USGS quadrangle sheet, showing watershed draining to the project site must be added to the Stormwater management report.

11. §780-402C.14 – Preliminary record plat, prepared for the recording to the standards required by the Allegheny County Department of Real Estate must be provided prior to approval.

12. §780-501D. – No application shall be finally approved by the Department or recorded until all required permits and approvals have been obtained, unless the plan for recording includes a notation that specified permits will be obtained prior to issuance of construction permits.

13. §780-502C.3. – New construction in the undeveloped one-hundred-year floodplain should be avoided. Any developments must be in accordance with all applicable state and federal regulations and must be obtained prior to approval.

14. §780-503C.5. – A National Pollution Discharge Elimination System (NPDES) and/or state regulations must be obtained prior to the commencement of grading.

15. §780-503C.7. – The top and bottom edges of cut or fill slopes shall be kept back from property or right-of-way lines three feet plus 1/5 the height of the cut or fill, which total distance need not exceed 10 feet. A dimension must be provided on the plan to show the distance from the cut fill to the property line or right-of-way line.

16. §780-503C.8. – Topsoil stripped from the site in preparation for earth-moving activities shall be stock piled and replaced on the site over all regraded, nondeveloped areas, at a minimum depth of six inches. A note stating a minimum depth of six inches must be added to the plan.

17. §780-503C.11.b. – The maximum steepness of no greater than two horizontal to one vertical slope may be exceeded where a retaining wall, designed and sealed by a registered professional engineer, is constructed to support the face of the slope. A design for the proposed retaining wall signed and sealed by a registered engineer must be provided. The slopes must be added to the plans of any grading exceeding the maximum 2:1 slope.

18. §780-504 – The disturbance for slopes 15% or greater shall meet the standards required in this section. The Slope Analysis Plan must show any moderately steep and steep slopes disturbance. The disturbed area and percentages must be provided on the plan for slopes 25 to 40%. Appendix 9 of the Allegheny County SALDO must be filled out.

19. §780-505B.1. – No grading, cutting, filling, removal of vegetation, or other disturbance of land may take place in the 50 feet set back from the top of the watercourse top of channel bank.

20. §780-505B.3. – Minor earth disturbance and construction within the area of the required setback or easement, required for development in other areas of the site, may be allowed in accordance with all regulations of the Department of Environmental Protection and municipal floodplain regulations. Approval of necessary DEP Permits for floodplain and watercourse disturbance, crossing, and discharge must be provided prior to approval.

21. §780-506A. – Not more than 50% of the total area of mature woodlands and not more than 75% of the total area of woodlands on a development site shall be removed in conjunction with land development. Any woodlands area and mature trees must be delineated on the plans.

22. §780-506B. – Large or unique trees must be preserved in accordance with the requirements in this section. Any trees exceeding 24 inches in DBH or any tree which may be noteworthy because of its, species, age uniqueness, rarity or status as a landmark must be labeled on the plan. Tree replacement calculation must be provided, if applicable.

23. §780-510C.1. – A contaminated site shall be considered safe for development when a remediation plan has been completed and approved by PADEP subject to provisions of Subsections C(2) and C(3). The plans must show required notes or details for any soil remediation.

24. §780-512E(2) – Landscaping on the interior of parking areas shall be designed to provide visual and climatic relief from large expanses of paving, to channelize vehicular traffic and to define areas for safe pedestrian circulation. The applicant is requesting a modification to allow the principal parking area to be landscaped only with low-growing vegetation in order to allow the installation of a solar canopy for sustainable lighting.

25. §780-512F(5)(c) – No structure or vehicular use areas, buildings, accessory uses, utilities, light standards, etc., shall be permitted in a buffer yard. The applicant has requested a modification to allow the location of proposed ADA accessible parking intended to benefit St. Mark's Cemetery adjacent to the cemetery property, but within the required buffer yard, along with site lighting necessary to light said parking and allow the location of certain lighting standards and utilities within the buffer yard along Porter Street.

26. §780-514 – No plat shall be finally approved or recorded until the plans and specifications for sanitary sewage facilities have been approved and permits issued, as required, by the Health Department.

27. §780-516B. – Easements for public and private utilities shall comply with the requirements of the utility providers and with the standards of this section. Any utility located on the, property not owned and maintained by the property owner, must have an easement around the utility or the facility. The easement location must be provided prior to approval, where applicable.

28. §780-517D(2)(d) – Dedication or reservation of proposed trails and greenways may be accepted by the Department with a minimum trail width of 10 feet for a single purpose trail. The applicant is requesting a modification to allow an 8' trail width in order to locate proposed trails and sidewalk improvements in locations consistent with the applicable multi-municipal comprehensive plan and trails initiative while avoiding the removal of mature street trees. The proposed trail appears to be located partially in the PennDOT right-of-way where an existing sidewalk is located. The applicant must confirm with PennDOT that the removal and placement of the proposed trail is acceptable and meets their requirements. The Department must confirm that the trail is acceptable to meet the requirements of §780-517C.

29. §780-519B.3. – All proposed connections to existing streets shall be approved by the jurisdiction owning the existing streets. The proposed street connections must be approved PennDOT and a HOP Permit must obtained prior to approval.

30. §780-519B.6. – Where streets continue into abutting municipalities the applicant shall coordinate the design of the street with both municipalities in order to ensure uniform cartway widths, pavement

cross-sections and other public improvements. Coordination must be done with the adjacent municipality for the connecting crosswalks.

31. §780-519H. – Driveway and access drives must meet the requirements of this section. Necessary information must be provided to confirm that all driveways meet these requirements. The PennDOT HOP Permit for the proposed driveway intersecting with Pittsburgh Street must be provided prior to approval.

32. §780-522 – The Photometric Plan must show the requirements for this section in addition to the requirements in the Zoning Ordinance for Springdale.

Erosion & Sedimentation Control:

1. Provide calculations for Erosion and Sedimentation Controls.

2. Provide Construction Sequence and Critical Stages of BMPs installation.

Stormwater Management: (All sections are reference to the Springdale Borough Stormwater Management Ordinance.)

1. §394-13.I - Normally dry, open-top storage facilities should completely drain both the volume control and rate control capacities over a period of time not less than 24 and not more than 72 hours from the end of the design storm. Provide dewatering calculations for all above ground and underground stormwater management facilities.

2. §394-18C.1 - The following items shall be included in the SWM site plan: Provisions for permanent access or maintenance easements for all physical SWM BMPs, such as ponds and infiltration structures, as necessary to implement the operation and maintenance (O&M) plan.

3. §394-18C.2 - The following signature block for the municipality: "[Municipal official or designated plan reviewer, on this date (signature date), has reviewed and hereby certifies that the SWM site plan meets all design standards and criteria of the municipal Ordinance No. (number assigned to ordinance), except where waivers have been granted as noted on the plan. The review is based on a survey and plan prepared by others and assumes that all information is correct and valid as submitted."

4. §394-18C.3.d - Expected project time schedule.

5. §394-18C.3.f. - The effect of the project (in terms of runoff volumes, water quality, and peak flows) on surrounding properties and aquatic features and on any existing stormwater conveyance system that may be affected by the project.

6. §394-18C.3.i. - The SWM site plan shall include an O&M plan for all existing and proposed physical stormwater management facilities. This plan shall address long-term ownership and responsibilities for O&M, including type and schedule/frequency of maintenance activities,

personnel and equipment requirements, estimated annual maintenance costs, and method of financing continuing O&M.

7. §394-14.B - Except as required by Pa. Code Title 25, Chapter 102, the riparian buffer easement shall be required for all streams (as defined in Article II) with a contributing watershed area of greater than 10 acres. The riparian buffer easement shall be measured to be a minimum of 35 feet from the top of the streambank (on each side).

8. §394-14.D - The riparian buffer easement shall be enforceable by the municipality and shall be recorded in the appropriate County Recorder of Deeds office so that it shall run with the land and shall limit the use of the property located therein. The easement shall allow for the continued private ownership and shall count toward the minimum lot area required by zoning, unless otherwise specified in Chapter **490**, Zoning.

9. Provide the DEP Pre-Development Site Characterization Spreadsheet (PDSC) and any infiltration test results that were completed for the project.

10. Complete the DEP Post-Construction Stormwater Management (PCSM) Spreadsheet for all POAs. It does not appear any structural SMCs have been listed in any of the spreadsheets.

11. Provide the Water Quality part of the PCSM Spreadsheet to prove the project meets state water quality requirements.

12. PSCM Spreadsheet for POA 2 lists an infiltration basin but the narrative says it uses a dry extended detention basin. Please recheck and revise.

13. The combined post-development acres (POA 1 + POA 2 + POA 3) listed on the PCSM spreadsheet does not match the pre-development. Please recheck and revise.

14. The total area within the watershed on the General Information sheet on the PCSM Spreadsheet is inconsistent throughout all POAs.

15. Provide a copy of the rainfall amounts from NOAA in the Post-Construction Stormwater Narrative.

16. Provide call outs to all SCMs with IDs on the Post-Construction Stormwater Management Plans.

17. The narrative mentions the use of soil amendments as an SCM, however there are none shown on the plans. Please recheck and revise.

18. PSCM Spreadsheet POA 2 shows the use of Tree Planting Credit. Any trees being used for stormwater volume controls and water quality requirements, shall be shown on the Post Construction Stormwater Management plans.

19. Provide separate table on Landscape Plans and Post Construction Stormwater Management plans for tree plantings related to stormwater controls.

20. Please recheck and revise as necessary all drainage areas in the post development condition as the overall "on site" and "off-site" drainage areas are inconsistent between pre-development and post-development in the PCSM Spreadsheet, HydroCAD model, and Drainage Map Plans. (I am calculating the below values.)

Pre-development on site

- *PCSM spreadsheet – 43.74 acres*
- *Hydrocad model – 43.74 acres*
- *DA map – 43.74 acres*

Pre development off site –

- *Hydracid model – 27.15 acres*
- *DA map – 27.15 acres*

Post-development on site

- *PCSM spreadsheet – 44.00 acres*
- *Hydrocad model – 42.31 acres*
- *DA map – 42.46 acres*

Post development off site –

- *Hydrocad model –27.08 acres*
- *DA map – 27.08 acres*

21. DA-1A identifies 6.40 acres in HydroCAD model and 6.54 acres in the post-Development Drainage map. Please recheck and revise.

22. Provide storm sewer sizing calculations for the proposed drainage network, including all supporting hydrologic and hydraulic analyses. Drainage area maps shall be submitted identifying the contributing drainage area to each inlet, structure, and pipe segment. Additionally, provide hydraulic grade line (HGL) calculations and profiles demonstrating that the storm drainage system functions adequately under the applicable design storm events without surcharging structures, causing adverse flooding.

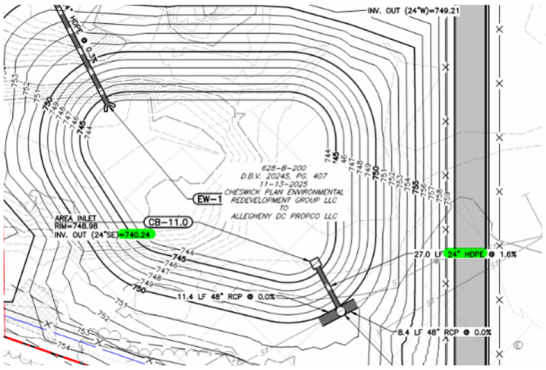
23. Provide hydrologic and hydraulic calculations demonstrating that the proposed stream crossing structure (bridge) has adequate capacity and maintains the required level of service for the applicable design storm events. Submit existing and proposed cross sections of the stream channel and crossing, including water surface elevations, headwater conditions, velocities, and evidence that the structure will not result in adverse upstream flooding, roadway overtopping, or channel instability. Supporting calculations and modeling assumptions shall be included for review.

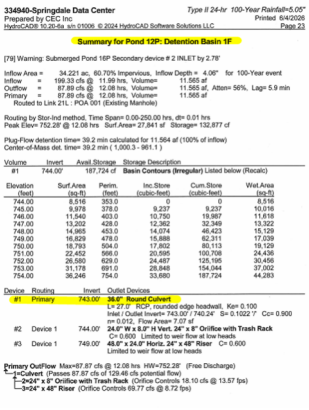
24. Cross-sectional details for the proposed MRC storage systems have not been provided in the submitted civil plan set. Please provide representative cross sections for each storage system, including all pertinent design information such as dimensions, pipe sizes, storage configuration, invert elevations, bedding, cover requirements, and outlet connections. The submitted

information should be sufficient to verify consistency with the HydroCAD model and confirm the storage volumes utilized in the stormwater calculations.

25. Cross-sectional details for the proposed detention basins have not been provided in the submitted civil drawings. Additionally, detailed plans for the associated outlet control structures are not included in the plan set. Please provide representative basin cross sections and complete outlet structure details, including dimensions, invert elevations, outlet configurations, control devices, emergency spillway information (as applicable), and other pertinent design information necessary to verify consistency with the HydroCAD model and stormwater management calculations.

26. Provide a representative cross section for Detention Basin 1F and detailed plans for the associated outlet control structure, including all pertinent dimensions, invert elevations, outlet configurations, and control devices. Based on the submitted information, the civil plans do not appear to be consistent with the HydroCAD model inputs. Please review and reconcile the plans and hydraulic model and revise as necessary to ensure a coordinated and internally consistent submission.





334940-Springdale Data Center — *Type II 24-hr 100-Year Rainfall=5.05"*
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Summary for Pond 12P: Detention Basin 1F

[79] Warning: Submerged Pond 16P Secondary device # 2 INLET by 2.78'

Inflow Area = 34.221 ac, 60.70% Impervious, Inflow Depth = 4.06" for 100-Year event
Inflow = 199.33 cfs @ 11.99 hrs, Volume= 11.565 af
Outflow = 87.89 cfs @ 12.08 hrs, Volume= 11.565 af, Atten= 56%, Lag= 5.9 min
Primary = 87.89 cfs @ 12.08 hrs, Volume= 11.565 af
Routed to Link 21L : POA 001 (Existing Manhole)

Routing by Stor-Ind method, Time Span= 0.00-250.00 hrs, dt= 0.01 hrs
Peak Elev= 752.28' @ 12.08 hrs Surf.Area= 27,841 sf Storage= 132,877 cf

Plug-Flow detention time= 39.2 min calculated for 11.564 af (100% of inflow)
Center-of-Mass det. time= 39.2 min (1,000.3 - 961.1)

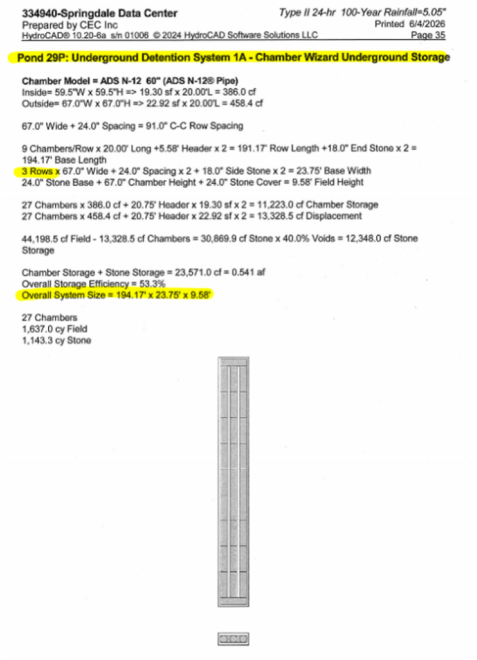
Volume	Invert	Avail.Storage	Storage Description
#1	744.00'	187,724 cf	**Basin Contours (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
744.00	8,516	353.0	0	0	8,516
745.00	9,976	378.0	9,237	9,237	10,016
746.00	11,540	403.0	10,750	19,987	11,618
747.00	13,202	428.0	12,362	32,349	13,322
748.00	14,965	453.0	14,074	46,423	15,129
749.00	16,829	478.0	15,888	62,311	17,039
750.00	18,793	504.0	17,802	80,113	19,129
751.00	22,452	566.0	20,595	100,708	24,436
752.00	26,580	629.0	24,487	125,195	30,456
753.00	31,178	691.0	28,848	154,044	37,002
754.00	36,246	754.0	33,680	187,724	44,283

Device	Routing	Invert	Outlet Devices
#1	Primary	743.00'	**36.0" Round Culvert** L= 27.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 743.00' / 740.24' S= 0.1022 '/' Cc= 0.900 n= 0.012, Flow Area= 7.07 sf
#2	Device 1	744.00'	**24.0" W x 8.0" H Vert. 24" x 8" Orifice with Trash Rack** C= 0.600 Limited to weir flow at low heads
#3	Device 1	749.00'	**48.0" x 24.0" Horiz. 24" x 48" Riser** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=87.87 cfs @ 12.08 hrs HW=752.28' (Free Discharge)
└1=**Culvert** (Passes 87.87 cfs of 129.46 cfs potential flow)
└2=**24" x 8" Orifice with Trash Rack** (Orifice Controls 18.10 cfs @ 13.57 fps)
└3=**24" x 48" Riser** (Orifice Controls 69.77 cfs @ 8.72 fps)

27. Underground Detention System 1A: The HydroCAD model inputs for Underground Detention System 1A do not appear to be consistent with the details shown on the civil drawings. Please review the model parameters, including storage geometry, invert elevations, outlet structure configuration, and other applicable inputs, and revise as necessary to ensure consistency between the design calculations and the plan set. See screenshots below for reference.



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Pond 29P: Underground Detention System 1A - Chamber Wizard Underground Storage

Chamber Model = ADS N-12 60" (ADS N-12® Pipe)
Inside= 59.5"W x 59.5"H => 19.30 sf x 20.00'L = 386.0 cf
Outside= 67.0"W x 67.0"H => 22.92 sf x 20.00'L = 458.4 cf

67.0" Wide + 24.0" Spacing = 91.0" C-C Row Spacing

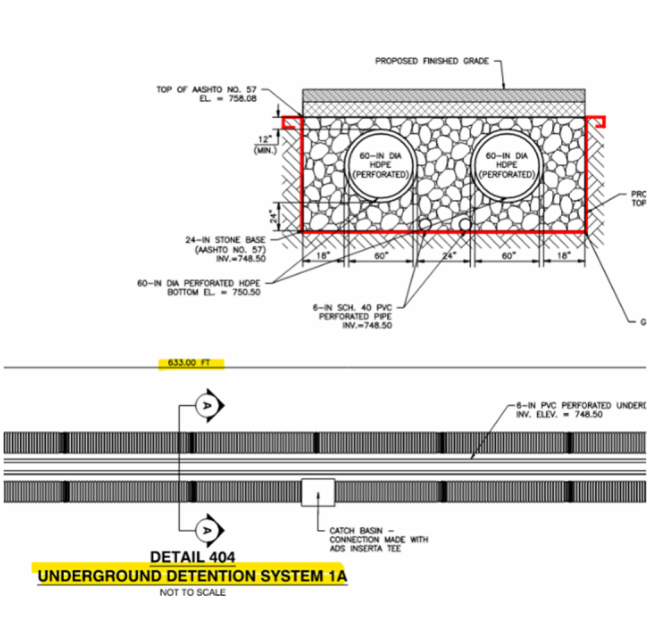
9 Chambers/Row x 20.00' Long +5.58' Header x 2 = 191.17' Row Length +18.0" End Stone x 2 = 194.17' Base Length
3 Rows x 67.0" Wide + 24.0" Spacing x 2 + 18.0" Side Stone x 2 = 23.75' Base Width
24.0" Stone Base + 67.0" Chamber Height + 24.0" Stone Cover = 9.58' Field Height

27 Chambers x 386.0 cf + 20.75' Header x 19.30 sf x 2 = 11,223.0 cf Chamber Storage
27 Chambers x 458.4 cf + 20.75' Header x 22.92 sf x 2 = 13,328.5 cf Displacement

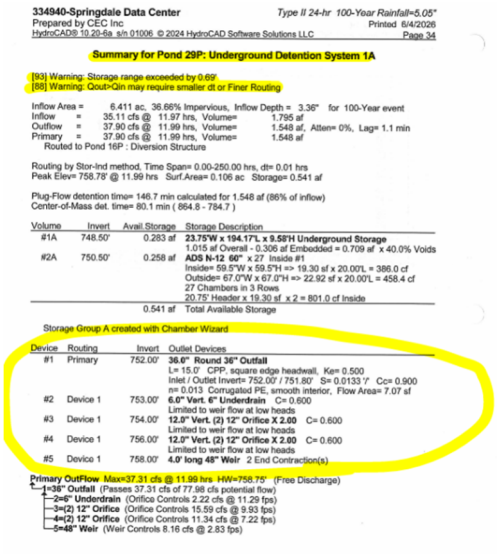
44,198.5 cf Field - 13,328.5 cf Chambers = 30,869.9 cf Stone x 40.0% Voids = 12,348.0 cf Stone Storage

Chamber Storage + Stone Storage = 23,571.0 cf = 0.541 af
Overall Storage Efficiency = 53.3%
Overall System Size = 194.17' x 23.75' x 9.58'

27 Chambers
1,637.0 cy Field
1,143.3 cy Stone



DETAIL 404
UNDERGROUND DETENTION SYSTEM 1A
NOT TO SCALE



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Summary for Pond 29P: Underground Detention System 1A

[93] Warning: Storage range exceeded by 0.69'
[88] Warning: Qout>Qin may require smaller dt or Finer Routing

Inflow Area = 6.411 ac, 36.66% Impervious, Inflow Depth = 3.36" for 100-Year event
Inflow = 35.11 cfs @ 11.97 hrs, Volume= 1.795 af
Outflow = 37.90 cfs @ 11.99 hrs, Volume= 1.548 af, Atten= 0%, Lag= 1.1 min
Primary = 37.90 cfs @ 11.99 hrs, Volume= 1.548 af
Routed to Pond 16P : Diversion Structure

Routing by Stor-Ind method, Time Span= 0.00-250.00 hrs, dt= 0.01 hrs
Peak Elev= 758.75' @ 11.99 hrs Surf.Area= 0.106 ac Storage= 0.541 af

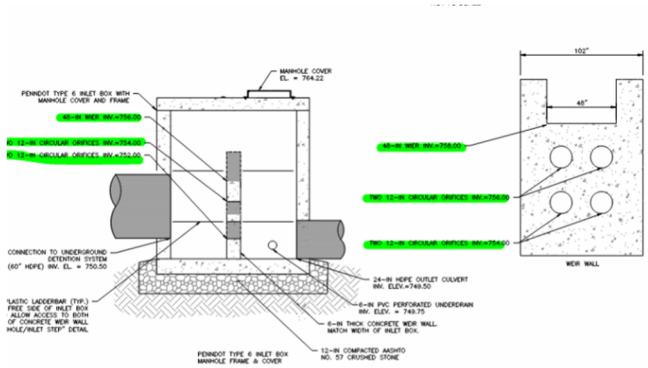
Plug-Flow detention time= 146.7 min calculated for 1.548 af (86% of inflow)
Center-of-Mass det. time= 80.1 min (864.8 - 784.7)

Volume	Invert	Avail.Storage	Storage Description
#1A	748.50'	0.283 af	**23.75'W x 194.17'L x 9.58'H Underground Storage** 1.015 af Overall - 0.306 af Embedded = 0.709 af x 40.0% Voids
#2A	750.50'	0.258 af	**ADS N-12 60" x 27** Inside #1 Inside= 59.5"W x 59.5"H => 19.30 sf x 20.00'L = 386.0 cf Outside= 67.0"W x 67.0"H => 22.92 sf x 20.00'L = 458.4 cf 27 Chambers in 3 Rows 20.75' Header x 19.30 sf x 2 = 801.0 cf Inside
		0.541 af	Total Available Storage

Storage Group A created with Chamber Wizard

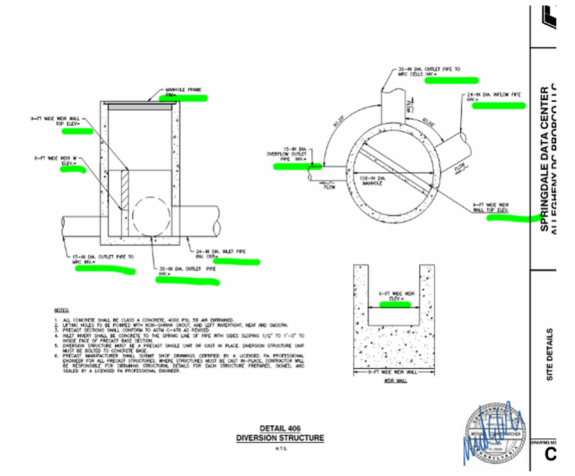
Device	Routing	Invert	Outlet Devices
#1	Primary	752.00'	**36.0" Round 36" Outfall** L= 15.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 752.00' / 751.80' S= 0.0133 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 7.07 sf
#2	Device 1	753.00'	**6.0" Vert. 6" Underdrain** C= 0.600 Limited to weir flow at low heads
#3	Device 1	754.00'	**12.0" Vert. (2) 12" Orifice X 2.00** C= 0.600 Limited to weir flow at low heads
#4	Device 1	756.00'	**12.0" Vert. (2) 12" Orifice X 2.00** C= 0.600 Limited to weir flow at low heads
#5	Device 1	758.00'	**4.0' long 48" Weir** 2 End Contraction(s)

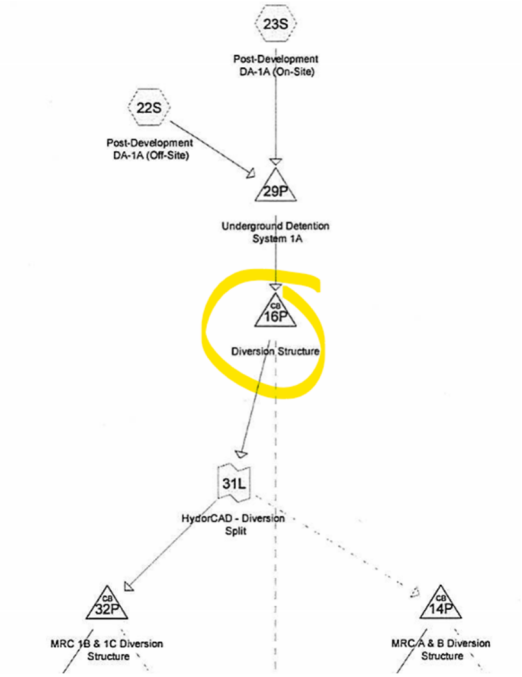
Primary OutFlow Max=37.31 cfs @ 11.99 hrs HW=758.75' (Free Discharge)
└1=36" Outfall (Passes 37.31 cfs of 77.98 cfs potential flow)
├2=6" Underdrain (Orifice Controls 2.22 cfs @ 11.29 fps)
├3=(2) 12" Orifice (Orifice Controls 15.59 cfs @ 9.93 fps)
├4=(2) 12" Orifice (Orifice Controls 11.34 cfs @ 7.22 fps)
└5=48" Weir (Weir Controls 8.16 cfs @ 2.83 fps)



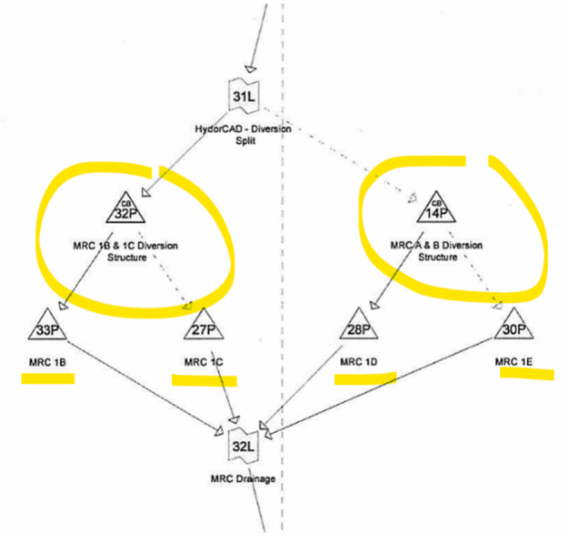
DETAIL 404A
UNDERGROUND DETENTION SYSTEM 1A OUTLET CONTROL STRUCTURE
(OCS-1A)
NOT TO SCALE

28. Diversion Structure (Pond 16P): The diversion structure represented as Pond 16P in the HydroCAD model does not appear to be reflected in the submitted civil plans. Sheet C805 includes a generic diversion structure detail; however, the necessary invert elevations and other design-specific information have not been provided. Please clarify whether Pond 16P is part of the proposed design and revise the plans and/or HydroCAD model as necessary to ensure consistency between the calculations and the plan set. If the structure is proposed, provide complete design details, including all relevant invert elevations. See screenshots below for reference.





29. Detailed plans for the diversion structures represented as Pond 32P and Pond 14P in the HydroCAD model, as well as the outlet control structures associated with MRC 1B (Pond 33P), MRC 1C (Pond 27P), MRC 1D (Pond 28P), and MRC 1E (Pond 30P), have not been provided in the submitted civil plan set. Please provide plan, profile, and detail views, including all pertinent design information such as structure dimensions, invert elevations, outlet configurations, and control devices, to support the hydraulic modeling and verify consistency between the HydroCAD analysis and the proposed design.



30. General Comment: The HydroCAD model inputs appear to be inconsistent with the information presented on the civil drawings. Please review the model assumptions and revise as necessary to ensure consistency between the submitted calculations and plan set. Also, please clearly call out all outlet control structure and diversion structures on the plan views.

31. Review and address all warning messages generated by the HydroCAD model. Revise the model as necessary to eliminate the warnings or provide a technical justification demonstrating why the warnings do not adversely affect the validity of the analysis or the proposed design.

32. Revise the grading design for Detention Basin 1 and 2 to provide an adequate berm width and embankment side slopes not exceeding 2H:1V.

33. An emergency spillway which is capable of conveying the spillway design flood (usually equal to the 100-year design flood). The basin should have a minimum freeboard of 1 foot above the SDF elevation.

34. The lowest elevation within an extended dry detention basin should be at least 2 feet above the seasonal high-water table. Please provide results showing this requirement is being met.

General:

1. The applicant has acknowledged that Duquesne Light Company has granted authorization to apply for Preliminary Land Development approval and noted and a lot consolidation will be requested via subsequent application. A Lot Consolidation Plan must be provided prior to the Final Land Development approval.

2. The Site Data Table on Sheet C200 must be revised to change all the values in the "Required" column to state the requirements per the Zoning Ordinance.

3. Parking count calculations must be added to the plan for conventional, loading areas, and ADA parking.

4. All comments for the Traffic Study must be addressed prior to approval.

5. Provide calculations for required potable water demands (domestic and fire) and sanitary sewer demands. Provide water meter detail on plans.

6. Provide traffic control plan that meets the requirements of Condition No. 6 in the Conditional Use Consented Conditions prior to final plan approval.

The above items must be adequately addressed to the satisfaction of Springdale Borough or made a condition of any consideration for approval.

If you have any questions or require any additional information, please contact Ben Briston at bbriston@gftinc.com; (412) 503-9152 or Ashley Hetrick at ahetrick@gftinc.com; (717) 886-5914.

Very truly yours,

GFT Infrastructure, Inc.
Ben Briston, P.E.
Borough Engineer
Ashley Hetrick, P.E.
Project Engineer