



**TOWN OF NEWBURGH
PLANNING BOARD**

PROJECT NAME: **UNITY PLACE WAREHOUSE SWPPP**
PROJECT NO.: **21-29**
PROJECT LOCATION: **NORTHWEST CORNER OF OLD LITTLE BRITAIN RD. & UNITY WAY
SECTION 97, BLOCK 2, LOT 14.1 , 19.12, 37.2**
REVIEW DATE: **16 MAY 2023**
MEETING DATE: **18 MAY 2023**
PROJECT REPRESENTATIVE: **BROOKER ENGINEERING**

1. The NOI question 34 should be revised to be the sum of the values in 30 and 33a.
2. It should be specified why only 2.72 acres of impervious are considered for the RRv calculation, as opposed to the total 8.78 acres utilized in the WQv calculation.
3. The WQv/Runoff Reduction Summary shows the WQv treated by infiltration as 26,740 ft³, and the WQv reduced by infiltration as 25,496 ft³. The volume reduced should be 90% of the WQv volume treated, or 24,066 ft³.
4. For areas with a time of concentration below 6 minutes, the time calculation should be shown, with an additional line to increase it to 6 minutes so the calculation can be verified.
5. The grate in the existing pond is shown as being higher than the emergency secondary overflow berm. It should be confirmed that this is accurate to the existing pond.

Respectfully submitted,

MHE Engineering, D.P.C.

A handwritten signature in blue ink that reads "Patrick J. Hines".

Patrick J. Hines
Principal
PJH/kbw

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**Unity Place Warehouse
Town of Newburgh Planning Board
Application for Site Plan Approval**

Tree Preservation and Protection Law Review

May 4, 2023

Following is a review of Chapter 172 Tree Preservation and Protection relative to the Unity Place Warehouse Application for Site Plan Approval.

§ 172-3 Scope

Part B. Section 2 indicates that the provisions of this Chapter shall apply to Unity Place Warehouse since the property involves an application for site plan approval where trees would be removed in the buildable area and driveways.

§ 172-4 Tree removal/disturbance thresholds and restrictions

Part C applies for review of "Significant Trees" since the project site is located within the IB Zoning District and sets maximum removal threshold at 75% of the total inches of diameter before reforestation or restitution applies.

Part D applies for review of "Specimen Trees" for removal of any Specimen Tree. Please refer to the Tree Restoration Plan which indicates the locations of the 24 Specimen Trees proposed for removal. Note the locations of subject trees relative to the site development plan proposal:

- a) 5 of the 24 Specimen Trees to be removed are located within parking lot, building footprint and required regrading in front of the building: Tree numbers associated with these removals consist of 30,34, 92, 111 & 112.
- b) Most of the Specimen trees to be removed (19 of 24) are located at the vicinity of the Unity Place driveway which is a critical component of the site plan and the location was controlled by fulfilling site distance requirements and was reviewed with the Planning Board. In addition to the driveway itself some of the trees need to be removed for stormwater mitigation and for required regrading. Tree numbers associated with these removals consist of 57, 70, 74-78, 81, 139, 140, 143, 145, 147, 148, 150, 151, 156, 195, & 200.

Proposed removal of the Specimen Trees is therefore unavoidable to achieve the proposed site development. Reconfiguring, relocating and reducing the proposed site development would create undue hardship and financial expense.

§ 172-5 Application - Tree Survey/Preservation Plan

1. The location, diameter and species of all "Significant" and "Specimen" trees has been identified and surveyed and appear on the attached Tree Preservation Plan. The site has been previously disturbed and a significant part of the existing condition of the property consists of grass which is reflected by the tree mapping. Note that no "Protected" Trees exist on the subject property.
2. The Tree Preservation Plan indicates which Significant and Specimen trees will remain, which will be removed; trees found to be in poor and very poor condition have been exempted from the calculation.
3. The tree table indicates trees found to be in poor and very poor condition.

4. Because areas proposed to be protected and preserved are relatively small, they have not been designated as "Natural Preserves" on the Tree Preservation Plan.
5. No disturbance zones have been hatched in grey.
6. The location of building areas, driveway and parking areas and grading have been superimposed on the Tree Preservation Plan.
7. No vernal pools have been identified at the subject property.
8. The location and details for tree protection fencing are indicated on the plans along with a note referencing no activity or other activity.
9. Calculations for the percent disturbed specimen and significant trees are indicated on the tree preservation plan.

§ 172-6 Reforestation/Restitution Requirement

The Tree Preservation Plan provides the calculation for the number of inches of Significant and Specimen Tree removal that exceeds the threshold for Significant Trees specified in § 174-4. C. The Planting Table on the Planting Plan includes a column that tabulates the number of inches of proposed trees that offsets the tree removal. For deciduous trees a range of caliper is provided in the planting table and the planting calculation used the low end of the range in all cases. Coniferous trees are not typically specified by caliper and an approximate caliper was associated for the proposed coniferous trees based upon field observation and was conservatively estimated to be between two and three inches depending upon the species of 8-foot-high coniferous tree. The Tree Preservation Plan provides detailed calculations of the proposed tree removals compared to the maximum removal threshold, and then compares the removals with the proposed planting. The conclusion is that the extensive level of proposed planting exceeds the required planting and that no restitution is required.

§ 172-7 Reforestation Plan

In the case of a Site Plan like Unity Warehouse a "reforestation plan" is not applicable and instead a Planting Plan has been provided to accomplish planting beautification and restoration. The Planting Plan indicates the location of all proposed trees, the caliper is indicated for deciduous trees and height is indicated for the coniferous trees. The minimum caliper for deciduous trees proposed is 2-1/2 inches and the minimum height for coniferous is 8 feet.



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**Unity Place Warehouse
Town of Newburgh Planning Board
Application for Site Plan Approval**

Planting Plan Comment Review

May 4, 2023

Following are Brooker Engineering's responses to the 12/29/22 review Memorandum from Karen Arent, Landscape Architect Items 1,2,4-12. Attached please find Anderson Design Group's response to Items 3, 13-15.

1. **Comment:** Section 172-5 of the new Tree Preservation and Protection Local Law requires a tree survey for the entire site showing location, diameter, and species of all Significant trees on the site, and an identification of all Specimen Trees and Protected Trees. It also requires identification of which Significant Trees and Specimen Trees are to be protected, preserved, or undisturbed, to be removed or disturbed, and exempt from the calculation. Trees which are dead, diseased, or have been damaged must also be identified.
Response: A Tree Preservation Plan that complies with § 172-5 has been added to the Site Plan drawing set. Please refer to the separately provided Tree Preservation and Protection Law Review.
2. **Comment:** Trees that are inventoried should be tagged with metal tags and numbered according to the inventory. Numbered trees and corresponding inventory must be shown on the site plan.
Response: Tree inventory requirements have been incorporated into the Tree Preservation Plan. Trees have been tagged with 3/4" x 3" metal tags.
3. **Comment:** The proposed warehouse development is in an area where no warehouses exist and is out of character with the streetscape to the east and north of the proposed project. Commercial uses including Home Depot and Kohl's exist to the west. The loading docks for Home Depot are completely screened from views along Old Little Britain Road. The landscape around the Kohl's building and parking area soften views from the road and help create an aesthetically pleasing streetscape. Views of the service yard for Kohl's are completely screened from the adjacent residential properties by wooded areas that were preserved and landscaping that was planted when the site was developed.
Response: Response from Anderson Design Group (ADG) is attached.
4. **Comment:** Existing landscaping along Unity Place creates an aesthetically pleasing streetscape. Views of large buildings are softened with street trees and the preservation of existing wooded areas. Landscaping screens views of large parking areas from Unity Place.
Response: Comment noted; the Unity Place Planting Plan will also create an aesthetically pleasing streetscape with views of the building and parking areas softened with additional street trees and evergreens. The spacing of formerly proposed Linden, Red Maple and Oak has been tightened and supplemented with White Spruce and Colorado Spruce evergreens effectively doubling the number of trees that will provide screening along Unity Place.

5. **Comment:** Article V, Section 185-21 gives the planning board authority to require reasonable screening of parking and service areas from public points of view and nearby residences. To be in keeping with nearby commercial projects and the streetscapes on both streets, we recommend dense screen planting of the proposed warehouse from Old Little Britain Road and Unity Place.

Response: The Planting Plan now features dense screen planting of the warehouse from Old Little Britain Road and Unity Place. Specific Planting Plan improvements that have been made along Unity Place are reviewed in our Comment 4 response above. Specific Planting Plan improvements that have been made along Old Little Britain Road are reviewed in our Comment 6 & 8 responses below.

6. **Comment:** The stone wall along Unity Place will help screen views of the parking area, however, views of the building will not be screened at all. Plans should include details of the stone wall. Medium sized shrubs, spaced 15' apart (it will take at least a decade for them to grow together in optimal conditions) are proposed in a straight line between the stone wall and bioretention facility. They should be spaced a minimum of 5' apart and street trees, spaced 40' on center, should be shown. Street trees, spaced 40' on center, should continue along Unity Place.

Response:

- a) The Fieldstone parapet wall detail is provided on Detail Sheet 6.
- b) The spacing of medium sized shrubs has been decreased to 5 feet on center.
- c) Street trees and evergreens have been indicated along Unity Place at a maximum spacing of 40 feet on center depending upon the species. Specific details of the revised street tree and evergreen planting along Unity Place is indicated in our response to Comment 4 above.

7. **Comment:** Screening and softening of the view of the building can be accomplished by densely planting large growing deciduous trees in the bio-retention facility. They can be spaced to allow cleaning of the bioretention basin.

Response: Red Maples and Swamp Red Oaks have been indicated within the bioretention feature. They have been situated near the perimeter where the proposed ground elevation will slope up. They have been carefully situated to not conflict with the proposed subsurface underdrain manifold.

8. **Comment:** Planting between the building and the parking area should be provided, however, no space is allocated for this. This should be discussed as the building will likely be unsightly and not screened.

Response: The elevations of the Building have been presented to the Planning Board. Architectural features incorporated into the elevations that are intended to soften the view of the warehouse and create a modern and attractive facility are described in detail in the attached responses to comments 3, 13, & 14 as prepared by ADG are attached. In addition, we have revised the planting plan to be responsive to this comment as follows:

- a) Additional street trees are proposed at a spacing of 40 feet on center maximum depending upon the species.
- b) The wall location along Old Little Britain Road has been shifted to behind the planting to allow the view of both the plants and the wall together.
- c) Red Maples and Swamp Red Oaks have been added to the bioretention feature.
- d) 2 groups of 2 parking spaces (4 spaces) have been omitted and 2 White Spruce are now proposed adjacent to the building.

The 3 "layers" of complementary planting in concert with the decorative fieldstone parapet wall will serve to provide a synergistic softening of the view of the building.

9. **Comment:** There will be views into the site from Old Little Britain Road and residential properties along the front portion of the western property line. The parking area, truck loading area, building and large retaining wall will be very visible. Grey Gleam Junipers ultimately grow 15-20' tall and 7' wide or so are shown spaced 10' apart. The wall is 2-8'+ in height with a fence on top, truck parking and the tall building. The Junipers will only provide screening of the wall and maybe the fence many years from now. There appears to be some sort of storm water management facility along the front portion of the wall, leaving little space for adequate screening. We would like to see double rows of evergreens screening between properties. White Pines are doing quite well on the Kohl's and Home Depot sites which might be a better option if the soil is more dry than wet. However, adequate space must be provided.

Response: Additional planting and screening have been added to the site plans as follows:

- a) The proposed number of Junipers and Arborvitae have been doubled in a staggered alignment for most of the subject property line. Only a short segment remains as a single row as there is limited room; it is noteworthy that this location is at the far end of a long line of double staggered plants that viewed holistically provide an enhanced view from the two residences located south of this location. White Pines were not selected for use at this location because of their scale and the moisture conditions at this location.
- b) An 8-foot-high solid cedar fence is proposed on top of the retaining wall.

10. **Comment:** Town of Newburgh Design Guidelines, under Section D, Commercial Area Design, Subsection 1 says the following:

"Provide natural landscape buffers, in addition to walls, and or fences, to soften the visual impact between parking areas, commercial buildings, street frontages, and adjacent properties."

Grading is proposed in the area where trees exist between the commercial property with Kohl's and Pet Smart. The proposed grading will eliminate the wooded area. This area should remain undisturbed to preserve the existing trees (we will know better what exists after the tree inventory). Additional planting may be necessary to thicken the screening of the truck area. The area to the northeastern side of the site preserves none of the existing trees and provides no landscaping to screen the view of the parking area or building from the adjacent commercial property. Only a stone wall is proposed immediately adjacent to the parking area which will do nothing to mitigate visual impacts of tractor trailer parking and the large building. Existing vegetation should be preserved if possible, and new planting proposed to provide dense screening between properties and from Unity Place.

Response:

- a) The grading proposed at the area located between the site and Kohl's and PetSmart has been revised to not disturb most of the handful of existing trees located at this vicinity.
- b) The treatment of the area located at the northeast of the site has been revised to eliminate the formerly proposed stone wall and to provide a combination of a planted berm and solid cedar fence. Proposed plantings located at this vicinity of the Unity Place driveway have been carefully situated and where possible a planted berm has been incorporated where sight distance restrictions do not preclude them.

11. **Comment:** Show street trees and large, evergreen tree screening along Unity Place to provide an aesthetically pleasing streetscape and soften the view of the large warehouse. Show thick growing large deer resistant shrubs in strategic locations to fill gaps in screen. For example, between evergreen trees while they are growing to fill in gaps, under deciduous trees to screen ground level views. These plants will be proposed on a fairly steep slope so provisions must be made for this type of planting.

Response: The proposed planting along Unity Place has been revised to indicate a denser screening with street trees and evergreens as suggested. Large evergreen shrubs from native plant species are proposed along the building façade and a detail for shrub planting on the proposed slope has been added to the drawing set.

12. **Comment:** Specify lawn and ground covers on the plan.

Response: Proposed lawn treatment is indicated on Note 11 on the Planting Plan. The only ground cover proposed is mulch at planting beds which is indicated on Note10 on the Planting Plan.

13. **Comment:** Consider colors of the building that don't stand out so the building blends with the proposed screen planting.

Response: Response from Anderson Design Group (ADG) is attached.

14. **Comment:** Consider locations where roof top utility units will be located and the visibility of these units from other properties. According to the design guidelines, they must be screened.

Response: Response from Anderson Design Group (ADG) is attached.

15. **Comment:** Will security fencing be necessary? Larger warehouse developments require security fencing and a guard house at the entrance to the site. If security fencing is necessary, it should be considered now.

Response: Response from Anderson Design Group (ADG) is attached.



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RESPONSE LETTER

Project:	21124 Unity Place Warehouse	Documents:	Karen Arent Design comments dated 12/29/2022
Date:	May 2, 2023	Respondent:	As noted below

Comment No.	Page No., Section No.	Reviewer Comment	Respondent	Response
Karen Arent Design comments dated 12/29/2022				
Specific Conditions				
3		The proposed warehouse development is in an area where no warehouses exist and is out of character with the streetscape to the east and north of the proposed project. Commercial uses including Home Depot and Kohl's exist to the west. The loading docks for Home Depot are completely screened from views along Old Little Britain Road. The landscape around the Kohl's building and parking area soften views from the road and help create an aesthetically pleasing streetscape. Views of the service yard for Kohl's are completely screened from the adjacent residential properties by wooded areas that were	ADG	<p>The proposed development is in an area zoned for industrial uses, the proposed loading docks are completely screened from Unity Place, and the building aesthetics have been designed to complement the existing streetscape. As has been reviewed with the board, the intent of the building design was to create the appearance of a contemporary Office / Research & Development type facility as seen along Unity place, while keeping the warehouse operations hidden 'behind' the building to the West.</p> <p>The proposed building will employ a variety of different design treatments, including windows, vertical and horizontal banding, and varying parapet heights to break up the monotony of a continuous wall. In locations where the building will be seen from the road, the structure utilizes a variety of facades, including two story glass curtain walls, walls of a different height and color, a projecting aluminum band outlining the office areas, and a horizontal brise soleil sun-screen system at the glass. In addition, the longer expanses of concrete precast walls are punctuated by square windows running around the perimeter.</p> <p>Earth tone colors are proposed for the structure, including dark and light slate grays, consistent with rock outcroppings found in the general area.</p>



Comment No.	Page No., Section No.	Reviewer Comment	Respondent	Response
		preserved and landscaping that was planted when the site was developed.		The intent is that the colors, glass, and overall appearance would compliment the convention hall across the street, and the streetscape in general. This has been demonstrated in the multiple building renderings and viewshed photo-simulations.
13	A-901-PB A-902-PB A-903-PB	Consider colors of the building that don't stand out so the building blends with the proposed screen planting.	ADG	As described above, multiple renderings, viewshed photo-simulations, and paint colors samples were previously submitted and reviewed with the board. As currently proposed, the warehouse will contain a two-story glass element and earth tone colors; blues, grays painted on concrete panels. The building will have precast wall panels which will be 12' wide and will contain two offices, on each east end. Stone and slate colors incorporated into the concrete panels are proposed to compliment the surrounding area, including the colors found in the convention hall across the street. The natural colors will be further enhanced by screen planting.
14	A-300-PB	Consider locations where roof top utility units will be located and the visibility of these units from other properties. According to the design guidelines, they must be screened.	ADG	As has been reviewed and discussed with board, The exterior elevations show parapets all around the building which will fully screen all roof top mechanical units.
15		Will security fencing be necessary? Larger warehouse developments require security fencing and a guard house at the entrance to the site. If security fencing is necessary, it should be considered now.	ADG	While no fencing is proposed at this time, any fencing proposed by a future tenant will need to incorporate vegetative and other methods of screening to adequately screen and soften any view of the fence to the maximum extent practicable. Any guardhouse, if proposed, in the future will be designed to be compatible with the architecture of the main building.

Appendix H

Stormwater Runoff Volume Summary
&
Lockwood Basin Watershed Analysis



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STORMWATER RUNOFF VOLUME SUMMARY
&
LOCKWOOD BASIN WATERSHED ANALYSIS
prepared for
UNITY PLACE WAREHOUSE
April 25, 2023

As requested in the City of Newburgh's letter dated January 5, 2023, our office has reviewed the total overall volume discharged to the southerly point of interest which flows into the existing stormwater conveyance system along Old Little Britain Road. We then performed a watershed analysis to demonstrate the de minimis impact it has towards the City's downstream flooding concerns of Lockwood Basin.

Stormwater Runoff Volume Summary

Supplemental HydroCAD outputs with extended time spans to calculate the full runoff volume conveyed to the southerly point are provided at the end of this report. The pre- versus post- conditions summary for the proposed warehouse site is provided below.

POI SOUTH
Volume Summary (Acre-feet)

<u>FREQUENCY</u>	<u>EXISTING CONDITIONS</u>	<u>PROPOSED CONDITIONS</u>	<u>DIFFERENCE</u>
1 YEAR	0.804	1.419	+0.615
10 YEAR	2.751	3.233	+0.482
25 YEAR	4.040	4.344	+0.304
100 YEAR	6.863	6.684	-0.179

As part of the proposed development, 3.6 acres of drainage area (roof drainage) has been redirected to the northerly point of interest due to better soil conditions that allow for infiltration facilities. This design element has limited the amount of additional runoff volume to the south.

- The 1, 10, & 25-year storm events demonstrate a relatively small net increase in stormwater runoff volume.
- The 100-year storm demonstrates a net **decrease** in stormwater runoff volume.

The gradual decrease in overall volume difference when comparing storm frequencies is due to the 3.6-acre area reduction and relationship between rainfall and CN values. As observed in TR-55 Table 2-1 below, the magnitude of runoff depth of pervious versus impervious surfaces is significantly less for the 100-year storm than more frequent storms.

Table 2-1 Runoff depth for selected CN's and rainfall amounts ^{1/}

Rainfall	Runoff depth for curve number of—													
	40	45	50	55	60	65	70	75	80	85	90	95	98	
inches														
1.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.08	0.17	0.32	0.56	0.79	
1.2	.00	.00	.00	.00	.00	.00	.03	.07	.15	.27	.46	.74	.99	
1.4	.00	.00	.00	.00	.00	.02	.06	.13	.24	.39	.61	.92	1.18	
1.6	.00	.00	.00	.00	.01	.05	.11	.20	.34	.52	.76	1.11	1.38	
1.8	.00	.00	.00	.00	.03	.09	.17	.29	.44	.65	.93	1.29	1.58	
~1-yr storm	2.0	.00	.00	.00	.02	.06	.14	.24	.38	.56	.80	1.09	1.48	1.77
	2.5	.00	.00	.02	.08	.17	.30	.46	.65	.89	1.18	1.53	1.96	2.27
	3.0	.00	.02	.09	.19	.33	.51	.71	.96	1.25	1.59	1.98	2.45	2.77
	3.5	.02	.08	.20	.35	.53	.75	1.01	1.30	1.64	2.02	2.45	2.94	3.27
	4.0	.06	.18	.33	.53	.76	1.03	1.33	1.67	2.04	2.46	2.92	3.43	3.77
	4.5	.14	.30	.50	.74	1.02	1.33	1.67	2.05	2.46	2.91	3.40	3.92	4.26
	5.0	.24	.44	.69	.98	1.30	1.65	2.04	2.45	2.89	3.37	3.88	4.42	4.76
	6.0	.50	.80	1.14	1.52	1.92	2.35	2.81	3.28	3.78	4.30	4.85	5.41	5.76
~100-yr storm	7.0	.84	1.24	1.68	2.12	2.60	3.10	3.62	4.15	4.69	5.25	5.82	6.41	6.76
	8.0	1.25	1.74	2.25	2.78	3.33	3.89	4.46	5.04	5.63	6.21	6.81	7.40	7.76
	9.0	1.71	2.29	2.88	3.49	4.10	4.72	5.33	5.95	6.57	7.18	7.79	8.40	8.76
	10.0	2.23	2.89	3.56	4.23	4.90	5.56	6.22	6.88	7.52	8.16	8.78	9.40	9.76
	11.0	2.78	3.52	4.26	5.00	5.72	6.43	7.13	7.81	8.48	9.13	9.77	10.39	10.76
	12.0	3.38	4.19	5.00	5.79	6.56	7.32	8.05	8.76	9.45	10.11	10.76	11.39	11.76
	13.0	4.00	4.89	5.76	6.61	7.42	8.21	8.98	9.71	10.42	11.10	11.76	12.39	12.76
	14.0	4.65	5.62	6.55	7.44	8.30	9.12	9.91	10.67	11.39	12.08	12.75	13.39	13.76
	15.0	5.33	6.36	7.35	8.29	9.19	10.04	10.85	11.63	12.37	13.07	13.74	14.39	14.76

^{1/}Interpolate the values shown to obtain runoff depths for CN's or rainfall amounts not shown.

For example, if we assume a 95 CN for proposed conditions and a 70 CN for existing, the 1-year storm has 4.2 times more runoff depth in proposed conditions than existing conditions. The 100-year storm, on the other hand, has only 1.6 times more runoff depth in proposed conditions than existing. Since there is more impervious but less drainage area in proposed conditions, this results in a gradual decrease in the difference of runoff volume as the storm intensity is increased.

Lockwood Basin Watershed Analysis

In response to the City of Newburgh's concerns of downstream flooding impacts to Lockwood Basin, our office has prepared a watershed analysis to evaluate the current contributing volume to Lockwood Basin and how the proposed warehouse facility will affect it. Please refer to the Watershed Map attached to this report that illustrates the contributing drainage area to Lockwood Basin. We've incorporated two conveyance diversion points that have the option of directing water to Lake Washington & Lockwood Basin.

Lockwood Basin Direct Contributing Area: 700 acres

Silver Stream Diversion Contributing Area: 2,319 acres

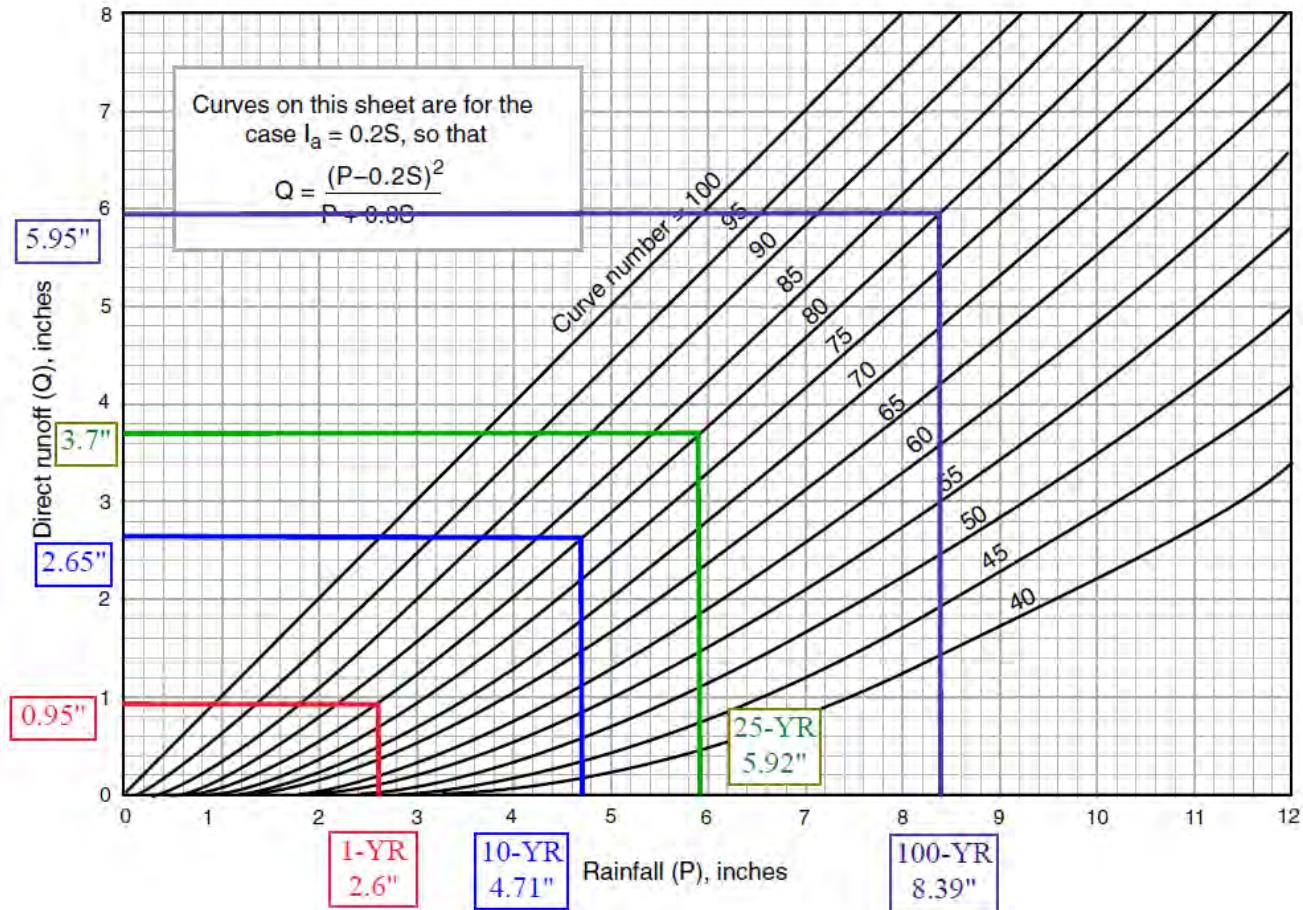
Murphy's Ditch Diversion Contributing Area: 1,586 acres

Total Contributing Area to Lockwood Basin: 4,605 acres

Assumed Watershed Characteristics

Cover Type:	Water Surfaces (352 acres) – CN 98 Impervious Roofs, Pavements, Hardscape (1,063 acres) – CN 98 Woods/Grass Combo, Good Condition (3,190 acres) – CN 72
Total Area:	4,605 Acres
Hydrologic Soil Group:	C
Composite Curve Number:	80

Total Runoff Volume Estimation Utilizing TR-55 Guidance - Direct Runoff Chart, Figure 2-1

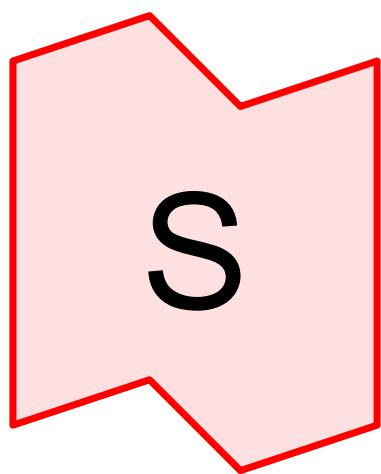


1-YR Storm Frequency Runoff Volume: (0.95 inches * 1 ft / 12 inches) * 4,605 acres = **365 acre-ft**
 10-YR Storm Frequency Runoff Volume: (2.65 inches * 1 ft / 12 inches) * 4,605 acres = **1,017 acre-ft**
 25-YR Storm Frequency Runoff Volume: (3.7 inches * 1 ft / 12 inches) * 4,605 acres = **1,420 acre-ft**
 100-YR Storm Frequency Runoff Volume: (5.95 inches * 1 ft / 12 inches) * 4,605 acres = **2,283 acre-ft**

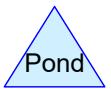
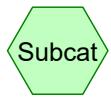
POI SOUTH
Volume Summary (Acre-feet)

<u>FREQUENCY</u>	<u>EXISTING</u>	<u>PROPOSED</u>	
	<u>RUNOFF VOLUME</u>	<u>RUNOFF VOLUME</u>	<u>DIFFERENCE (%)</u>
1 YEAR	365	365.615	+ 0.17%
10 YEAR	1,017	1,017.482	+ 0.05%
25 YEAR	1,420	1,420.304	+ 0.02%
100 YEAR	2,283	2,282.821	- 0.008%

As observed in the volume summary table above, the Unity Warehouse project will result in a de minimis impact to the overall contributing runoff volume to Lockwood Basin. It's our understanding that flooding events in that area in the past are a result from more intense storm events, such as the 100-year storm, which our project exhibits a decrease in total volume for. In conclusion, the minor fluctuations indicated above are beyond the scope of Lockwood Basin's apparent lack of storage and/or discharge capacity.



POI South



Routing Diagram for Existing

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Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-Year	Type III 24-hr		Default	24.00	1	2.60	2
2	10-Year	Type III 24-hr		Default	24.00	1	4.71	2
3	25-Year	Type III 24-hr		Default	24.00	1	5.92	2
4	100-Year	Type III 24-hr		Default	24.00	1	8.39	2

Existing

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Page 3

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.000	0	TOTAL AREA

Existing

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Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.000	Other	
0.000		TOTAL AREA

Existing

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Page 5

Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.000	0.000	0.000	TOTAL AREA	

Existing

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Type III 24-hr 1-Year Rainfall=2.60"

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Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Link S: POI South

Inflow=4.65 cfs 0.804 af

Primary=4.65 cfs 0.804 af

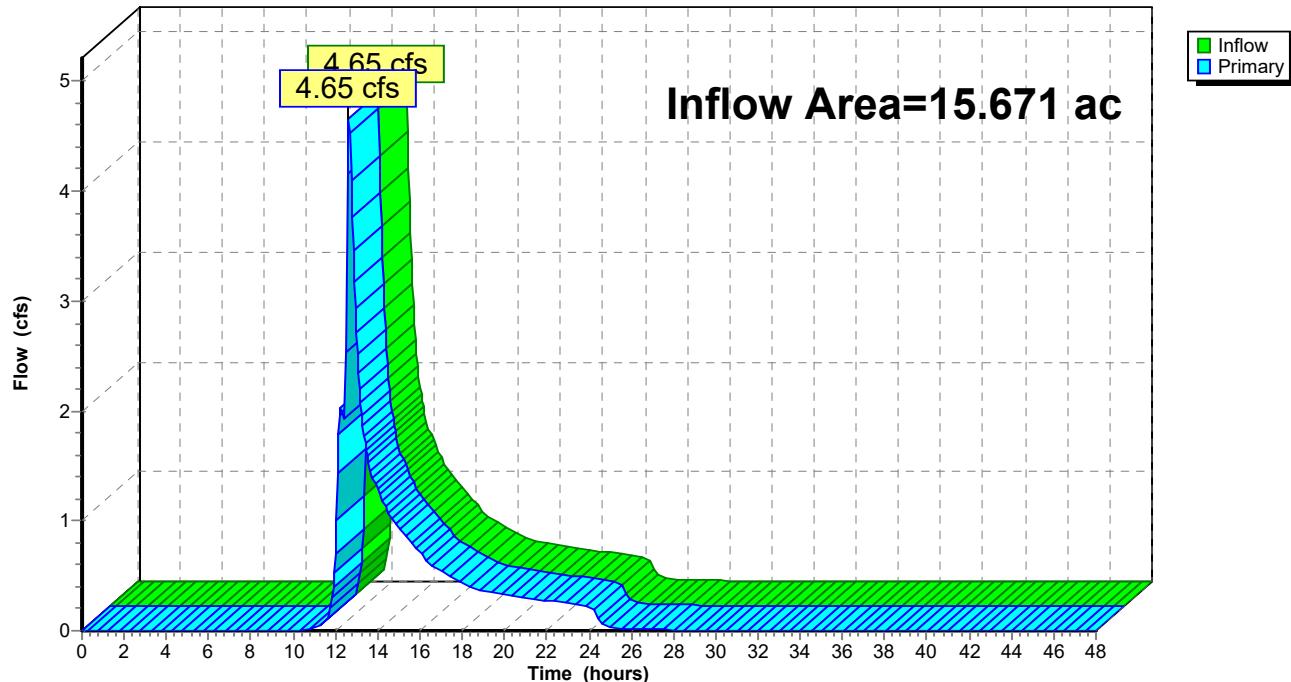
Summary for Link S: POI South

Inflow Area = 15.671 ac, 12.35% Impervious, Inflow Depth = 0.62" for 1-Year event

Inflow = 4.65 cfs @ 12.63 hrs, Volume= 0.804 af

Primary = 4.65 cfs @ 12.63 hrs, Volume= 0.804 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Link S: POI South**Hydrograph**

Existing

Prepared by Hewlett-Packard Company

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Type III 24-hr 1-Year Rainfall=2.60"

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Hydrograph for Link S: POI South

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.50	0.01	0.00	0.01
0.50	0.00	0.00	0.00	27.00	0.01	0.00	0.01
1.00	0.00	0.00	0.00	27.50	0.01	0.00	0.01
1.50	0.00	0.00	0.00	28.00	0.01	0.00	0.01
2.00	0.00	0.00	0.00	28.50	0.01	0.00	0.01
2.50	0.00	0.00	0.00	29.00	0.01	0.00	0.01
3.00	0.00	0.00	0.00	29.50	0.01	0.00	0.01
3.50	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.50	0.00	0.00	0.00
4.50	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.50	0.00	0.00	0.00
5.50	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.50	0.00	0.00	0.00
6.50	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.50	0.00	0.00	0.00
7.50	0.00	0.00	0.00	34.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	34.50	0.00	0.00	0.00
8.50	0.00	0.00	0.00	35.00	0.00	0.00	0.00
9.00	0.00	0.00	0.00	35.50	0.00	0.00	0.00
9.50	0.00	0.00	0.00	36.00	0.00	0.00	0.00
10.00	0.00	0.00	0.00	36.50	0.00	0.00	0.00
10.50	0.00	0.00	0.00	37.00	0.00	0.00	0.00
11.00	0.02	0.00	0.02	37.50	0.00	0.00	0.00
11.50	0.07	0.00	0.07	38.00	0.00	0.00	0.00
12.00	0.70	0.00	0.70	38.50	0.00	0.00	0.00
12.50	3.14	0.00	3.14	39.00	0.00	0.00	0.00
13.00	2.71	0.00	2.71	39.50	0.00	0.00	0.00
13.50	1.59	0.00	1.59	40.00	0.00	0.00	0.00
14.00	1.28	0.00	1.28	40.50	0.00	0.00	0.00
14.50	1.07	0.00	1.07	41.00	0.00	0.00	0.00
15.00	0.94	0.00	0.94	41.50	0.00	0.00	0.00
15.50	0.83	0.00	0.83	42.00	0.00	0.00	0.00
16.00	0.71	0.00	0.71	42.50	0.00	0.00	0.00
16.50	0.61	0.00	0.61	43.00	0.00	0.00	0.00
17.00	0.54	0.00	0.54	43.50	0.00	0.00	0.00
17.50	0.49	0.00	0.49	44.00	0.00	0.00	0.00
18.00	0.43	0.00	0.43	44.50	0.00	0.00	0.00
18.50	0.39	0.00	0.39	45.00	0.00	0.00	0.00
19.00	0.36	0.00	0.36	45.50	0.00	0.00	0.00
19.50	0.35	0.00	0.35	46.00	0.00	0.00	0.00
20.00	0.33	0.00	0.33	46.50	0.00	0.00	0.00
20.50	0.31	0.00	0.31	47.00	0.00	0.00	0.00
21.00	0.30	0.00	0.30	47.50	0.00	0.00	0.00
21.50	0.29	0.00	0.29	48.00	0.00	0.00	0.00
22.00	0.27	0.00	0.27				
22.50	0.26	0.00	0.26				
23.00	0.25	0.00	0.25				
23.50	0.24	0.00	0.24				
24.00	0.22	0.00	0.22				
24.50	0.10	0.00	0.10				
25.00	0.03	0.00	0.03				
25.50	0.02	0.00	0.02				
26.00	0.02	0.00	0.02				

Existing

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Type III 24-hr 10-Year Rainfall=4.71"

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Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Link S: POI South

Inflow=22.08 cfs 2.751 af

Primary=22.08 cfs 2.751 af

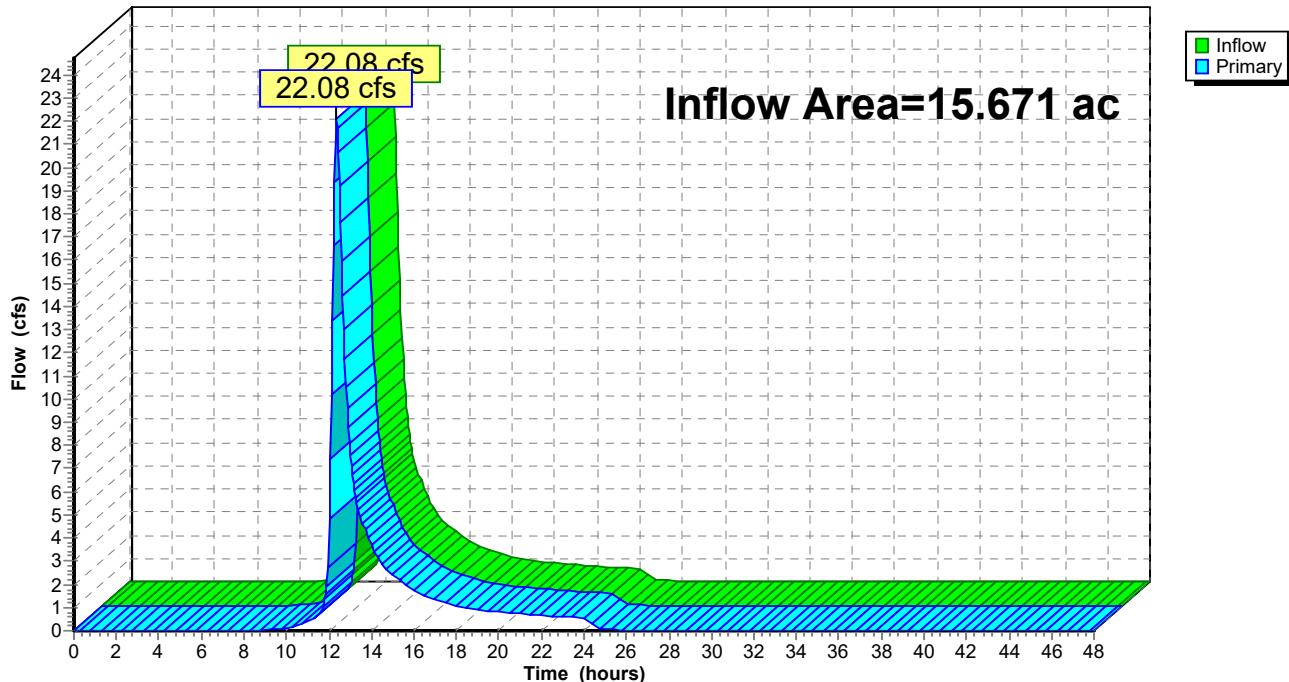
Summary for Link S: POI South

Inflow Area = 15.671 ac, 12.35% Impervious, Inflow Depth = 2.11" for 10-Year event

Inflow = 22.08 cfs @ 12.36 hrs, Volume= 2.751 af

Primary = 22.08 cfs @ 12.36 hrs, Volume= 2.751 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Link S: POI South**Hydrograph**

Existing

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Type III 24-hr 10-Year Rainfall=4.71"

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Hydrograph for Link S: POI South

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.50	0.02	0.00	0.02
0.50	0.00	0.00	0.00	27.00	0.01	0.00	0.01
1.00	0.00	0.00	0.00	27.50	0.01	0.00	0.01
1.50	0.00	0.00	0.00	28.00	0.01	0.00	0.01
2.00	0.00	0.00	0.00	28.50	0.01	0.00	0.01
2.50	0.00	0.00	0.00	29.00	0.01	0.00	0.01
3.00	0.00	0.00	0.00	29.50	0.01	0.00	0.01
3.50	0.00	0.00	0.00	30.00	0.01	0.00	0.01
4.00	0.00	0.00	0.00	30.50	0.00	0.00	0.00
4.50	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.50	0.00	0.00	0.00
5.50	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.50	0.00	0.00	0.00
6.50	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.50	0.00	0.00	0.00
7.50	0.00	0.00	0.00	34.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	34.50	0.00	0.00	0.00
8.50	0.01	0.00	0.01	35.00	0.00	0.00	0.00
9.00	0.03	0.00	0.03	35.50	0.00	0.00	0.00
9.50	0.07	0.00	0.07	36.00	0.00	0.00	0.00
10.00	0.13	0.00	0.13	36.50	0.00	0.00	0.00
10.50	0.24	0.00	0.24	37.00	0.00	0.00	0.00
11.00	0.38	0.00	0.38	37.50	0.00	0.00	0.00
11.50	0.66	0.00	0.66	38.00	0.00	0.00	0.00
12.00	4.83	0.00	4.83	38.50	0.00	0.00	0.00
12.50	19.21	0.00	19.21	39.00	0.00	0.00	0.00
13.00	7.54	0.00	7.54	39.50	0.00	0.00	0.00
13.50	4.82	0.00	4.82	40.00	0.00	0.00	0.00
14.00	3.74	0.00	3.74	40.50	0.00	0.00	0.00
14.50	2.86	0.00	2.86	41.00	0.00	0.00	0.00
15.00	2.40	0.00	2.40	41.50	0.00	0.00	0.00
15.50	2.06	0.00	2.06	42.00	0.00	0.00	0.00
16.00	1.74	0.00	1.74	42.50	0.00	0.00	0.00
16.50	1.47	0.00	1.47	43.00	0.00	0.00	0.00
17.00	1.32	0.00	1.32	43.50	0.00	0.00	0.00
17.50	1.19	0.00	1.19	44.00	0.00	0.00	0.00
18.00	1.06	0.00	1.06	44.50	0.00	0.00	0.00
18.50	0.94	0.00	0.94	45.00	0.00	0.00	0.00
19.00	0.88	0.00	0.88	45.50	0.00	0.00	0.00
19.50	0.84	0.00	0.84	46.00	0.00	0.00	0.00
20.00	0.80	0.00	0.80	46.50	0.00	0.00	0.00
20.50	0.76	0.00	0.76	47.00	0.00	0.00	0.00
21.00	0.72	0.00	0.72	47.50	0.00	0.00	0.00
21.50	0.69	0.00	0.69	48.00	0.00	0.00	0.00
22.00	0.66	0.00	0.66				
22.50	0.63	0.00	0.63				
23.00	0.60	0.00	0.60				
23.50	0.57	0.00	0.57				
24.00	0.53	0.00	0.53				
24.50	0.23	0.00	0.23				
25.00	0.06	0.00	0.06				
25.50	0.03	0.00	0.03				
26.00	0.02	0.00	0.02				

Existing

Prepared by Hewlett-Packard Company

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Type III 24-hr 25-Year Rainfall=5.92"

Printed 5/1/2023

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Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Link S: POI South

Inflow=34.53 cfs 4.040 af

Primary=34.53 cfs 4.040 af

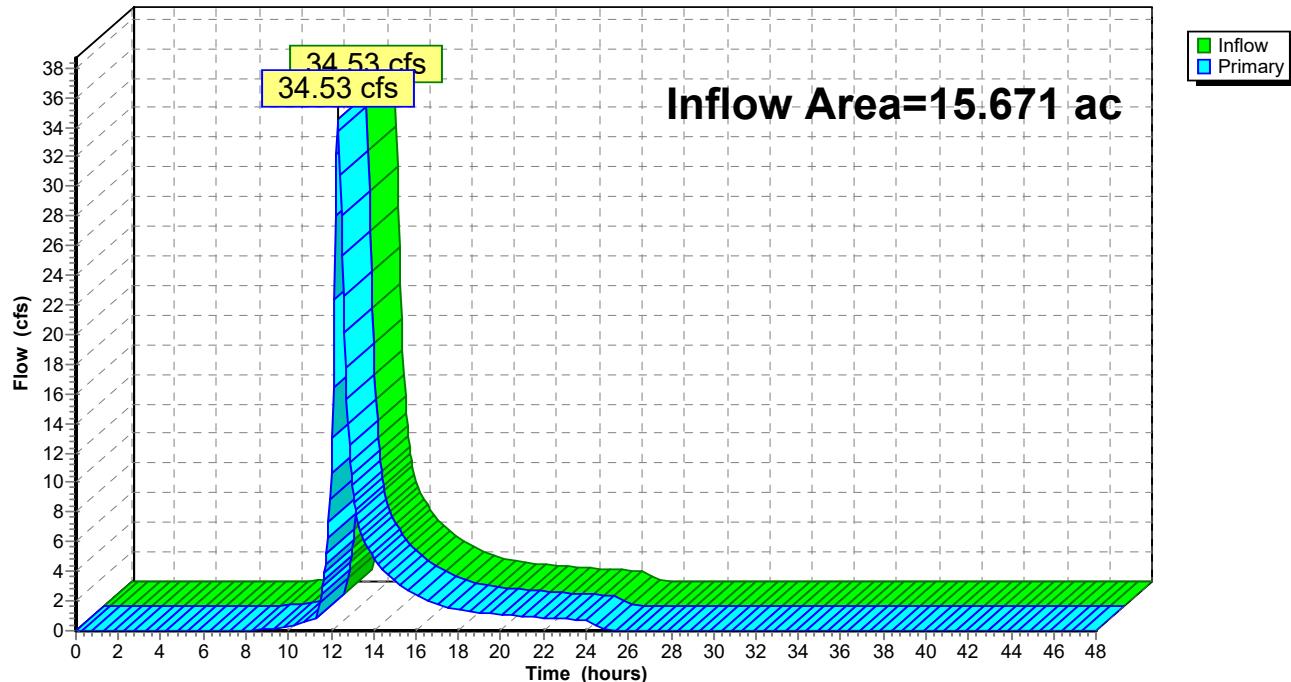
Summary for Link S: POI South

Inflow Area = 15.671 ac, 12.35% Impervious, Inflow Depth = 3.09" for 25-Year event

Inflow = 34.53 cfs @ 12.33 hrs, Volume= 4.040 af

Primary = 34.53 cfs @ 12.33 hrs, Volume= 4.040 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Link S: POI South**Hydrograph**

Hydrograph for Link S: POI South

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.50	0.02	0.00	0.02
0.50	0.00	0.00	0.00	27.00	0.02	0.00	0.02
1.00	0.00	0.00	0.00	27.50	0.01	0.00	0.01
1.50	0.00	0.00	0.00	28.00	0.01	0.00	0.01
2.00	0.00	0.00	0.00	28.50	0.01	0.00	0.01
2.50	0.00	0.00	0.00	29.00	0.01	0.00	0.01
3.00	0.00	0.00	0.00	29.50	0.01	0.00	0.01
3.50	0.00	0.00	0.00	30.00	0.01	0.00	0.01
4.00	0.00	0.00	0.00	30.50	0.00	0.00	0.00
4.50	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.50	0.00	0.00	0.00
5.50	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.50	0.00	0.00	0.00
6.50	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.50	0.00	0.00	0.00
7.50	0.01	0.00	0.01	34.00	0.00	0.00	0.00
8.00	0.03	0.00	0.03	34.50	0.00	0.00	0.00
8.50	0.06	0.00	0.06	35.00	0.00	0.00	0.00
9.00	0.12	0.00	0.12	35.50	0.00	0.00	0.00
9.50	0.20	0.00	0.20	36.00	0.00	0.00	0.00
10.00	0.31	0.00	0.31	36.50	0.00	0.00	0.00
10.50	0.46	0.00	0.46	37.00	0.00	0.00	0.00
11.00	0.66	0.00	0.66	37.50	0.00	0.00	0.00
11.50	1.88	0.00	1.88	38.00	0.00	0.00	0.00
12.00	10.63	0.00	10.63	38.50	0.00	0.00	0.00
12.50	28.00	0.00	28.00	39.00	0.00	0.00	0.00
13.00	9.77	0.00	9.77	39.50	0.00	0.00	0.00
13.50	6.27	0.00	6.27	40.00	0.00	0.00	0.00
14.00	5.01	0.00	5.01	40.50	0.00	0.00	0.00
14.50	3.99	0.00	3.99	41.00	0.00	0.00	0.00
15.00	3.31	0.00	3.31	41.50	0.00	0.00	0.00
15.50	2.81	0.00	2.81	42.00	0.00	0.00	0.00
16.00	2.36	0.00	2.36	42.50	0.00	0.00	0.00
16.50	1.99	0.00	1.99	43.00	0.00	0.00	0.00
17.00	1.78	0.00	1.78	43.50	0.00	0.00	0.00
17.50	1.59	0.00	1.59	44.00	0.00	0.00	0.00
18.00	1.41	0.00	1.41	44.50	0.00	0.00	0.00
18.50	1.25	0.00	1.25	45.00	0.00	0.00	0.00
19.00	1.18	0.00	1.18	45.50	0.00	0.00	0.00
19.50	1.13	0.00	1.13	46.00	0.00	0.00	0.00
20.00	1.07	0.00	1.07	46.50	0.00	0.00	0.00
20.50	1.02	0.00	1.02	47.00	0.00	0.00	0.00
21.00	0.97	0.00	0.97	47.50	0.00	0.00	0.00
21.50	0.93	0.00	0.93	48.00	0.00	0.00	0.00
22.00	0.89	0.00	0.89				
22.50	0.84	0.00	0.84				
23.00	0.80	0.00	0.80				
23.50	0.76	0.00	0.76				
24.00	0.71	0.00	0.71				
24.50	0.30	0.00	0.30				
25.00	0.07	0.00	0.07				
25.50	0.04	0.00	0.04				
26.00	0.03	0.00	0.03				

Existing

Prepared by Hewlett-Packard Company

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Type III 24-hr 100-Year Rainfall=8.39"

Printed 5/1/2023

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Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Link S: POI South

Inflow=59.81 cfs 6.863 af

Primary=59.81 cfs 6.863 af

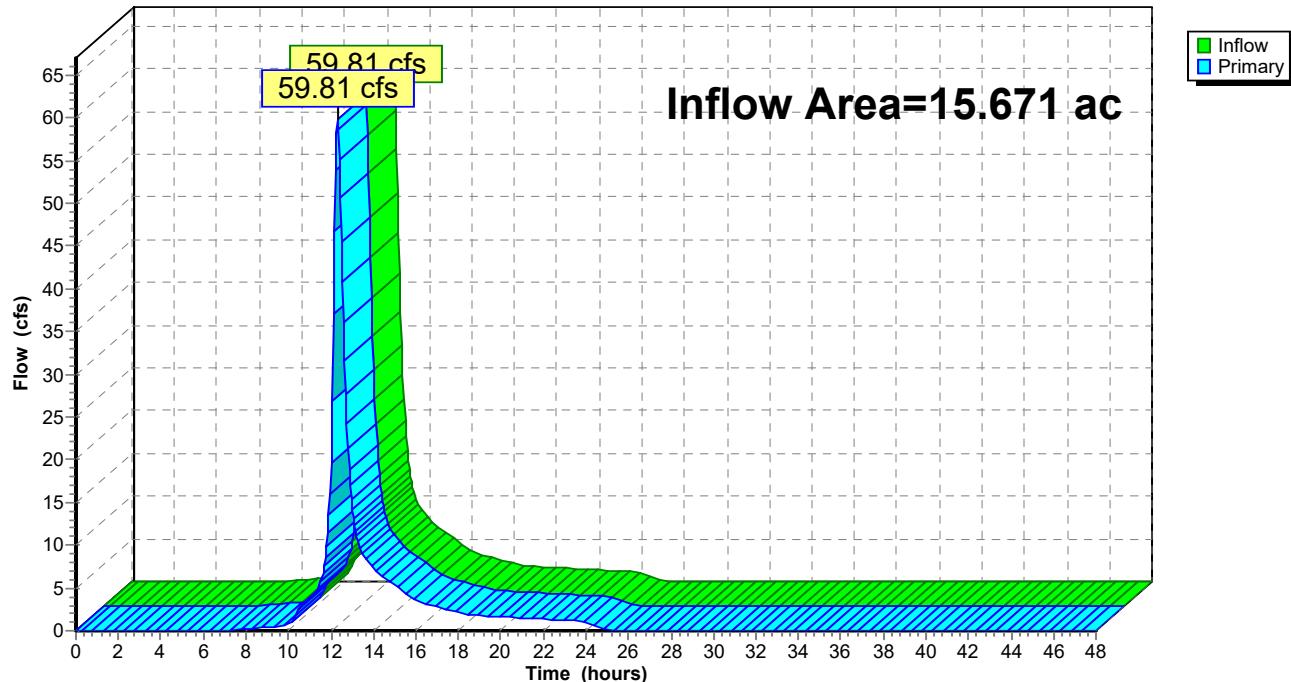
Summary for Link S: POI South

Inflow Area = 15.671 ac, 12.35% Impervious, Inflow Depth = 5.26" for 100-Year event

Inflow = 59.81 cfs @ 12.30 hrs, Volume= 6.863 af

Primary = 59.81 cfs @ 12.30 hrs, Volume= 6.863 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Link S: POI South**Hydrograph**

Existing

Prepared by Hewlett-Packard Company

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Type III 24-hr 100-Year Rainfall=8.39"

Printed 5/1/2023

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Hydrograph for Link S: POI South

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.50	0.02	0.00	0.02
0.50	0.00	0.00	0.00	27.00	0.02	0.00	0.02
1.00	0.00	0.00	0.00	27.50	0.01	0.00	0.01
1.50	0.00	0.00	0.00	28.00	0.01	0.00	0.01
2.00	0.00	0.00	0.00	28.50	0.01	0.00	0.01
2.50	0.00	0.00	0.00	29.00	0.01	0.00	0.01
3.00	0.00	0.00	0.00	29.50	0.01	0.00	0.01
3.50	0.00	0.00	0.00	30.00	0.01	0.00	0.01
4.00	0.00	0.00	0.00	30.50	0.01	0.00	0.01
4.50	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.50	0.00	0.00	0.00
5.50	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.00	0.01	0.00	0.01	32.50	0.00	0.00	0.00
6.50	0.03	0.00	0.03	33.00	0.00	0.00	0.00
7.00	0.06	0.00	0.06	33.50	0.00	0.00	0.00
7.50	0.11	0.00	0.11	34.00	0.00	0.00	0.00
8.00	0.17	0.00	0.17	34.50	0.00	0.00	0.00
8.50	0.26	0.00	0.26	35.00	0.00	0.00	0.00
9.00	0.38	0.00	0.38	35.50	0.00	0.00	0.00
9.50	0.53	0.00	0.53	36.00	0.00	0.00	0.00
10.00	0.71	0.00	0.71	36.50	0.00	0.00	0.00
10.50	2.63	0.00	2.63	37.00	0.00	0.00	0.00
11.00	3.81	0.00	3.81	37.50	0.00	0.00	0.00
11.50	5.81	0.00	5.81	38.00	0.00	0.00	0.00
12.00	19.57	0.00	19.57	38.50	0.00	0.00	0.00
12.50	45.57	0.00	45.57	39.00	0.00	0.00	0.00
13.00	14.15	0.00	14.15	39.50	0.00	0.00	0.00
13.50	8.97	0.00	8.97	40.00	0.00	0.00	0.00
14.00	7.39	0.00	7.39	40.50	0.00	0.00	0.00
14.50	6.13	0.00	6.13	41.00	0.00	0.00	0.00
15.00	5.23	0.00	5.23	41.50	0.00	0.00	0.00
15.50	4.41	0.00	4.41	42.00	0.00	0.00	0.00
16.00	3.65	0.00	3.65	42.50	0.00	0.00	0.00
16.50	3.07	0.00	3.07	43.00	0.00	0.00	0.00
17.00	2.73	0.00	2.73	43.50	0.00	0.00	0.00
17.50	2.44	0.00	2.44	44.00	0.00	0.00	0.00
18.00	2.15	0.00	2.15	44.50	0.00	0.00	0.00
18.50	1.91	0.00	1.91	45.00	0.00	0.00	0.00
19.00	1.80	0.00	1.80	45.50	0.00	0.00	0.00
19.50	1.71	0.00	1.71	46.00	0.00	0.00	0.00
20.00	1.62	0.00	1.62	46.50	0.00	0.00	0.00
20.50	1.54	0.00	1.54	47.00	0.00	0.00	0.00
21.00	1.47	0.00	1.47	47.50	0.00	0.00	0.00
21.50	1.41	0.00	1.41	48.00	0.00	0.00	0.00
22.00	1.34	0.00	1.34				
22.50	1.28	0.00	1.28				
23.00	1.21	0.00	1.21				
23.50	1.15	0.00	1.15				
24.00	1.09	0.00	1.09				
24.50	0.44	0.00	0.44				
25.00	0.10	0.00	0.10				
25.50	0.05	0.00	0.05				
26.00	0.03	0.00	0.03				

Existing

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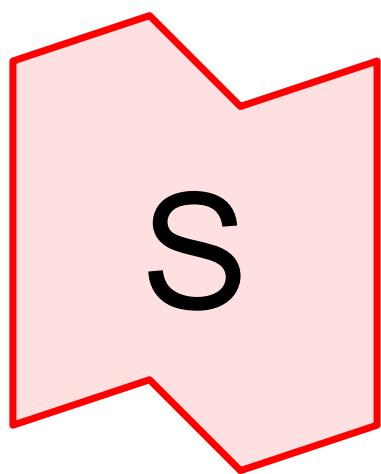
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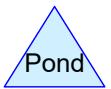
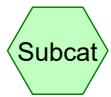
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POI South



Routing Diagram for Proposed

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Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-Year	Type III 24-hr		Default	24.00	1	2.60	2
2	10-Year	Type III 24-hr		Default	24.00	1	4.71	2
3	25-Year	Type III 24-hr		Default	24.00	1	5.92	2
4	100-Year	Type III 24-hr		Default	24.00	1	8.39	2

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Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.000	0	TOTAL AREA

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Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.000	Other	
0.000		TOTAL AREA

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Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.000	0.000	0.000	TOTAL AREA	

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Type III 24-hr 1-Year Rainfall=2.60"

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Time span=0.00-60.00 hrs, dt=0.02 hrs, 3001 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Link S: POI South

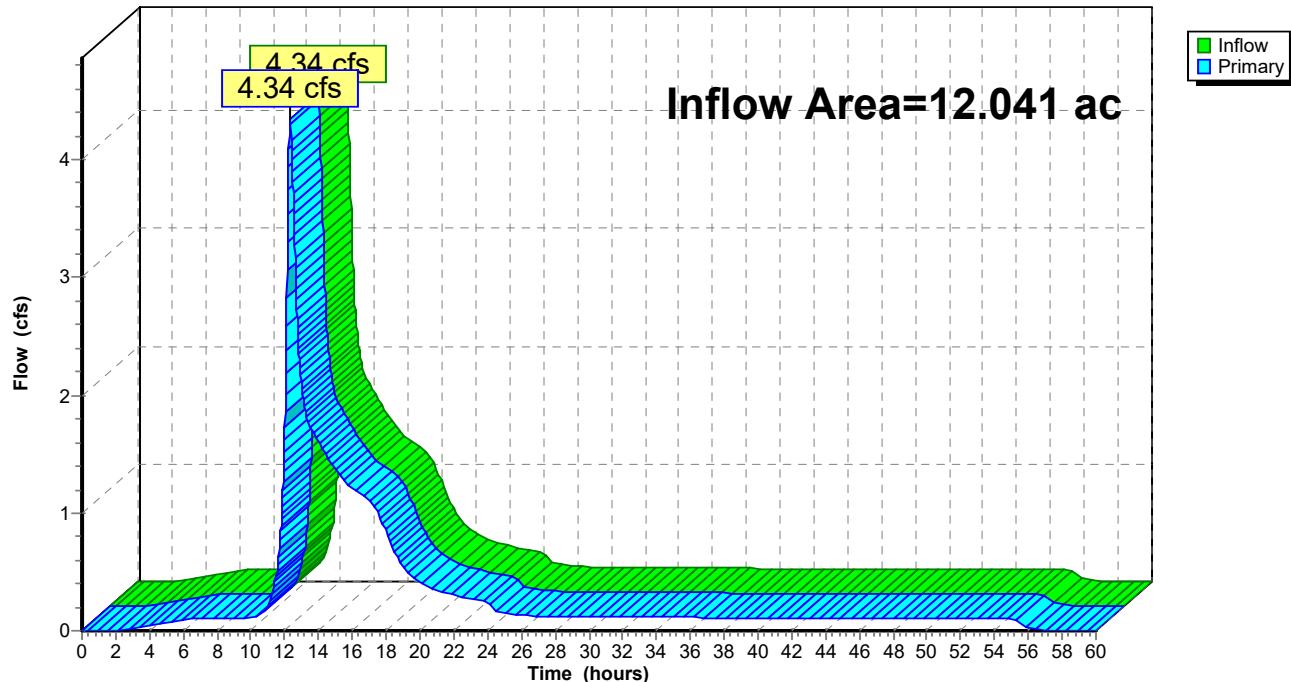
Inflow=4.34 cfs 1.419 af

Primary=4.34 cfs 1.419 af

Summary for Link S: POI South

Inflow Area = 12.041 ac, 46.90% Impervious, Inflow Depth = 1.41" for 1-Year event
Inflow = 4.34 cfs @ 12.32 hrs, Volume= 1.419 af
Primary = 4.34 cfs @ 12.32 hrs, Volume= 1.419 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.02 hrs

Link S: POI South**Hydrograph**

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Type III 24-hr 1-Year Rainfall=2.60"

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Hydrograph for Link S: POI South

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	10.60	0.14	0.00	0.14
0.20	0.00	0.00	0.00	10.80	0.17	0.00	0.17
0.40	0.00	0.00	0.00	11.00	0.21	0.00	0.21
0.60	0.00	0.00	0.00	11.20	0.28	0.00	0.28
0.80	0.00	0.00	0.00	11.40	0.40	0.00	0.40
1.00	0.00	0.00	0.00	11.60	0.56	0.00	0.56
1.20	0.00	0.00	0.00	11.80	0.95	0.00	0.95
1.40	0.00	0.00	0.00	12.00	1.73	0.00	1.73
1.60	0.00	0.00	0.00	12.20	3.75	0.00	3.75
1.80	0.00	0.00	0.00	12.40	4.16	0.00	4.16
2.00	0.00	0.00	0.00	12.60	3.27	0.00	3.27
2.20	0.01	0.00	0.01	12.80	2.45	0.00	2.45
2.40	0.01	0.00	0.01	13.00	2.07	0.00	2.07
2.60	0.01	0.00	0.01	13.20	1.88	0.00	1.88
2.80	0.02	0.00	0.02	13.40	1.77	0.00	1.77
3.00	0.02	0.00	0.02	13.60	1.71	0.00	1.71
3.20	0.03	0.00	0.03	13.80	1.65	0.00	1.65
3.40	0.03	0.00	0.03	14.00	1.60	0.00	1.60
3.60	0.03	0.00	0.03	14.20	1.55	0.00	1.55
3.80	0.04	0.00	0.04	14.40	1.50	0.00	1.50
4.00	0.04	0.00	0.04	14.60	1.46	0.00	1.46
4.20	0.05	0.00	0.05	14.80	1.42	0.00	1.42
4.40	0.05	0.00	0.05	15.00	1.38	0.00	1.38
4.60	0.06	0.00	0.06	15.20	1.34	0.00	1.34
4.80	0.06	0.00	0.06	15.40	1.30	0.00	1.30
5.00	0.07	0.00	0.07	15.60	1.25	0.00	1.25
5.20	0.07	0.00	0.07	15.80	1.23	0.00	1.23
5.40	0.08	0.00	0.08	16.00	1.21	0.00	1.21
5.60	0.08	0.00	0.08	16.20	1.20	0.00	1.20
5.80	0.09	0.00	0.09	16.40	1.18	0.00	1.18
6.00	0.09	0.00	0.09	16.60	1.16	0.00	1.16
6.20	0.10	0.00	0.10	16.80	1.14	0.00	1.14
6.40	0.10	0.00	0.10	17.00	1.11	0.00	1.11
6.60	0.10	0.00	0.10	17.20	1.07	0.00	1.07
6.80	0.10	0.00	0.10	17.40	1.03	0.00	1.03
7.00	0.10	0.00	0.10	17.60	0.98	0.00	0.98
7.20	0.10	0.00	0.10	17.80	0.91	0.00	0.91
7.40	0.10	0.00	0.10	18.00	0.84	0.00	0.84
7.60	0.10	0.00	0.10	18.20	0.77	0.00	0.77
7.80	0.10	0.00	0.10	18.40	0.70	0.00	0.70
8.00	0.10	0.00	0.10	18.60	0.63	0.00	0.63
8.20	0.10	0.00	0.10	18.80	0.58	0.00	0.58
8.40	0.10	0.00	0.10	19.00	0.54	0.00	0.54
8.60	0.10	0.00	0.10	19.20	0.51	0.00	0.51
8.80	0.10	0.00	0.10	19.40	0.48	0.00	0.48
9.00	0.10	0.00	0.10	19.60	0.45	0.00	0.45
9.20	0.10	0.00	0.10	19.80	0.43	0.00	0.43
9.40	0.11	0.00	0.11	20.00	0.41	0.00	0.41
9.60	0.11	0.00	0.11	20.20	0.39	0.00	0.39
9.80	0.11	0.00	0.11	20.40	0.37	0.00	0.37
10.00	0.11	0.00	0.11	20.60	0.36	0.00	0.36
10.20	0.12	0.00	0.12	20.80	0.35	0.00	0.35
10.40	0.13	0.00	0.13	21.00	0.34	0.00	0.34

Hydrograph for Link S: POI South (continued)

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
21.20	0.34	0.00	0.34	31.80	0.12	0.00	0.12
21.40	0.33	0.00	0.33	32.00	0.11	0.00	0.11
21.60	0.32	0.00	0.32	32.20	0.11	0.00	0.11
21.80	0.31	0.00	0.31	32.40	0.11	0.00	0.11
22.00	0.31	0.00	0.31	32.60	0.11	0.00	0.11
22.20	0.30	0.00	0.30	32.80	0.11	0.00	0.11
22.40	0.29	0.00	0.29	33.00	0.11	0.00	0.11
22.60	0.29	0.00	0.29	33.20	0.11	0.00	0.11
22.80	0.28	0.00	0.28	33.40	0.11	0.00	0.11
23.00	0.27	0.00	0.27	33.60	0.11	0.00	0.11
23.20	0.27	0.00	0.27	33.80	0.11	0.00	0.11
23.40	0.26	0.00	0.26	34.00	0.11	0.00	0.11
23.60	0.26	0.00	0.26	34.20	0.11	0.00	0.11
23.80	0.25	0.00	0.25	34.40	0.11	0.00	0.11
24.00	0.25	0.00	0.25	34.60	0.11	0.00	0.11
24.20	0.23	0.00	0.23	34.80	0.11	0.00	0.11
24.40	0.18	0.00	0.18	35.00	0.11	0.00	0.11
24.60	0.16	0.00	0.16	35.20	0.11	0.00	0.11
24.80	0.15	0.00	0.15	35.40	0.11	0.00	0.11
25.00	0.14	0.00	0.14	35.60	0.11	0.00	0.11
25.20	0.14	0.00	0.14	35.80	0.11	0.00	0.11
25.40	0.14	0.00	0.14	36.00	0.11	0.00	0.11
25.60	0.14	0.00	0.14	36.20	0.11	0.00	0.11
25.80	0.13	0.00	0.13	36.40	0.11	0.00	0.11
26.00	0.13	0.00	0.13	36.60	0.11	0.00	0.11
26.20	0.13	0.00	0.13	36.80	0.11	0.00	0.11
26.40	0.13	0.00	0.13	37.00	0.11	0.00	0.11
26.60	0.13	0.00	0.13	37.20	0.11	0.00	0.11
26.80	0.13	0.00	0.13	37.40	0.11	0.00	0.11
27.00	0.12	0.00	0.12	37.60	0.11	0.00	0.11
27.20	0.12	0.00	0.12	37.80	0.11	0.00	0.11
27.40	0.12	0.00	0.12	38.00	0.11	0.00	0.11
27.60	0.12	0.00	0.12	38.20	0.11	0.00	0.11
27.80	0.12	0.00	0.12	38.40	0.11	0.00	0.11
28.00	0.12	0.00	0.12	38.60	0.11	0.00	0.11
28.20	0.12	0.00	0.12	38.80	0.11	0.00	0.11
28.40	0.12	0.00	0.12	39.00	0.11	0.00	0.11
28.60	0.12	0.00	0.12	39.20	0.11	0.00	0.11
28.80	0.12	0.00	0.12	39.40	0.11	0.00	0.11
29.00	0.12	0.00	0.12	39.60	0.11	0.00	0.11
29.20	0.12	0.00	0.12	39.80	0.11	0.00	0.11
29.40	0.12	0.00	0.12	40.00	0.11	0.00	0.11
29.60	0.12	0.00	0.12	40.20	0.11	0.00	0.11
29.80	0.12	0.00	0.12	40.40	0.11	0.00	0.11
30.00	0.12	0.00	0.12	40.60	0.11	0.00	0.11
30.20	0.12	0.00	0.12	40.80	0.11	0.00	0.11
30.40	0.12	0.00	0.12	41.00	0.11	0.00	0.11
30.60	0.12	0.00	0.12	41.20	0.11	0.00	0.11
30.80	0.12	0.00	0.12	41.40	0.11	0.00	0.11
31.00	0.12	0.00	0.12	41.60	0.11	0.00	0.11
31.20	0.12	0.00	0.12	41.80	0.11	0.00	0.11
31.40	0.12	0.00	0.12	42.00	0.11	0.00	0.11
31.60	0.12	0.00	0.12	42.20	0.11	0.00	0.11

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Type III 24-hr 1-Year Rainfall=2.60"

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Hydrograph for Link S: POI South (continued)

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
42.40	0.11	0.00	0.11	53.00	0.10	0.00	0.10
42.60	0.11	0.00	0.11	53.20	0.10	0.00	0.10
42.80	0.11	0.00	0.11	53.40	0.10	0.00	0.10
43.00	0.11	0.00	0.11	53.60	0.10	0.00	0.10
43.20	0.11	0.00	0.11	53.80	0.10	0.00	0.10
43.40	0.11	0.00	0.11	54.00	0.10	0.00	0.10
43.60	0.11	0.00	0.11	54.20	0.10	0.00	0.10
43.80	0.11	0.00	0.11	54.40	0.10	0.00	0.10
44.00	0.11	0.00	0.11	54.60	0.10	0.00	0.10
44.20	0.11	0.00	0.11	54.80	0.10	0.00	0.10
44.40	0.11	0.00	0.11	55.00	0.10	0.00	0.10
44.60	0.11	0.00	0.11	55.20	0.10	0.00	0.10
44.80	0.11	0.00	0.11	55.40	0.07	0.00	0.07
45.00	0.11	0.00	0.11	55.60	0.05	0.00	0.05
45.20	0.11	0.00	0.11	55.80	0.03	0.00	0.03
45.40	0.11	0.00	0.11	56.00	0.02	0.00	0.02
45.60	0.11	0.00	0.11	56.20	0.01	0.00	0.01
45.80	0.11	0.00	0.11	56.40	0.01	0.00	0.01
46.00	0.11	0.00	0.11	56.60	0.01	0.00	0.01
46.20	0.11	0.00	0.11	56.80	0.00	0.00	0.00
46.40	0.11	0.00	0.11	57.00	0.00	0.00	0.00
46.60	0.11	0.00	0.11	57.20	0.00	0.00	0.00
46.80	0.11	0.00	0.11	57.40	0.00	0.00	0.00
47.00	0.11	0.00	0.11	57.60	0.00	0.00	0.00
47.20	0.11	0.00	0.11	57.80	0.00	0.00	0.00
47.40	0.11	0.00	0.11	58.00	0.00	0.00	0.00
47.60	0.11	0.00	0.11	58.20	0.00	0.00	0.00
47.80	0.11	0.00	0.11	58.40	0.00	0.00	0.00
48.00	0.11	0.00	0.11	58.60	0.00	0.00	0.00
48.20	0.11	0.00	0.11	58.80	0.00	0.00	0.00
48.40	0.11	0.00	0.11	59.00	0.00	0.00	0.00
48.60	0.11	0.00	0.11	59.20	0.00	0.00	0.00
48.80	0.11	0.00	0.11	59.40	0.00	0.00	0.00
49.00	0.11	0.00	0.11	59.60	0.00	0.00	0.00
49.20	0.11	0.00	0.11	59.80	0.00	0.00	0.00
49.40	0.11	0.00	0.11	60.00	0.00	0.00	0.00
49.60	0.11	0.00	0.11				
49.80	0.11	0.00	0.11				
50.00	0.11	0.00	0.11				
50.20	0.11	0.00	0.11				
50.40	0.11	0.00	0.11				
50.60	0.11	0.00	0.11				
50.80	0.11	0.00	0.11				
51.00	0.11	0.00	0.11				
51.20	0.11	0.00	0.11				
51.40	0.11	0.00	0.11				
51.60	0.11	0.00	0.11				
51.80	0.11	0.00	0.11				
52.00	0.11	0.00	0.11				
52.20	0.11	0.00	0.11				
52.40	0.11	0.00	0.11				
52.60	0.10	0.00	0.10				
52.80	0.10	0.00	0.10				

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Type III 24-hr 10-Year Rainfall=4.71"

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Time span=0.00-60.00 hrs, dt=0.02 hrs, 3001 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Link S: POI South

Inflow=19.64 cfs 3.233 af

Primary=19.64 cfs 3.233 af

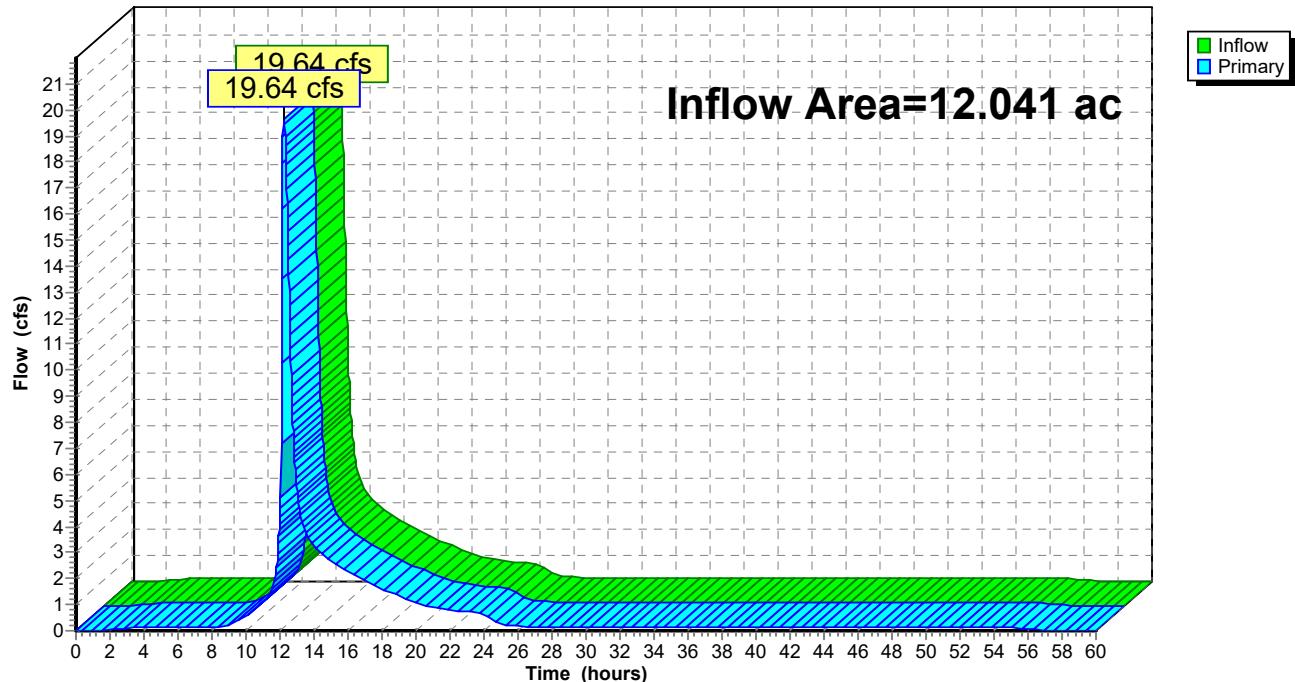
Summary for Link S: POI South

Inflow Area = 12.041 ac, 46.90% Impervious, Inflow Depth = 3.22" for 10-Year event

Inflow = 19.64 cfs @ 12.21 hrs, Volume= 3.233 af

Primary = 19.64 cfs @ 12.21 hrs, Volume= 3.233 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.02 hrs

Link S: POI South**Hydrograph**

Proposed

Prepared by Hewlett-Packard Company

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Type III 24-hr 10-Year Rainfall=4.71"

Printed 5/1/2023

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Hydrograph for Link S: POI South

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	10.60	0.87	0.00	0.87
0.20	0.00	0.00	0.00	10.80	0.99	0.00	0.99
0.40	0.00	0.00	0.00	11.00	1.11	0.00	1.11
0.60	0.00	0.00	0.00	11.20	1.24	0.00	1.24
0.80	0.00	0.00	0.00	11.40	1.43	0.00	1.43
1.00	0.00	0.00	0.00	11.60	1.72	0.00	1.72
1.20	0.00	0.00	0.00	11.80	2.45	0.00	2.45
1.40	0.01	0.00	0.01	12.00	4.38	0.00	4.38
1.60	0.02	0.00	0.02	12.20	19.62	0.00	19.62
1.80	0.03	0.00	0.03	12.40	16.97	0.00	16.97
2.00	0.04	0.00	0.04	12.60	11.36	0.00	11.36
2.20	0.05	0.00	0.05	12.80	7.37	0.00	7.37
2.40	0.06	0.00	0.06	13.00	5.53	0.00	5.53
2.60	0.07	0.00	0.07	13.20	4.49	0.00	4.49
2.80	0.08	0.00	0.08	13.40	3.92	0.00	3.92
3.00	0.09	0.00	0.09	13.60	3.64	0.00	3.64
3.20	0.10	0.00	0.10	13.80	3.43	0.00	3.43
3.40	0.10	0.00	0.10	14.00	3.25	0.00	3.25
3.60	0.10	0.00	0.10	14.20	3.08	0.00	3.08
3.80	0.10	0.00	0.10	14.40	2.94	0.00	2.94
4.00	0.10	0.00	0.10	14.60	2.83	0.00	2.83
4.20	0.10	0.00	0.10	14.80	2.74	0.00	2.74
4.40	0.10	0.00	0.10	15.00	2.65	0.00	2.65
4.60	0.10	0.00	0.10	15.20	2.56	0.00	2.56
4.80	0.10	0.00	0.10	15.40	2.48	0.00	2.48
5.00	0.10	0.00	0.10	15.60	2.40	0.00	2.40
5.20	0.10	0.00	0.10	15.80	2.33	0.00	2.33
5.40	0.10	0.00	0.10	16.00	2.25	0.00	2.25
5.60	0.10	0.00	0.10	16.20	2.17	0.00	2.17
5.80	0.10	0.00	0.10	16.40	2.10	0.00	2.10
6.00	0.10	0.00	0.10	16.60	2.04	0.00	2.04
6.20	0.10	0.00	0.10	16.80	1.98	0.00	1.98
6.40	0.10	0.00	0.10	17.00	1.91	0.00	1.91
6.60	0.11	0.00	0.11	17.20	1.85	0.00	1.85
6.80	0.11	0.00	0.11	17.40	1.79	0.00	1.79
7.00	0.11	0.00	0.11	17.60	1.73	0.00	1.73
7.20	0.11	0.00	0.11	17.80	1.67	0.00	1.67
7.40	0.11	0.00	0.11	18.00	1.60	0.00	1.60
7.60	0.11	0.00	0.11	18.20	1.54	0.00	1.54
7.80	0.12	0.00	0.12	18.40	1.49	0.00	1.49
8.00	0.12	0.00	0.12	18.60	1.44	0.00	1.44
8.20	0.13	0.00	0.13	18.80	1.40	0.00	1.40
8.40	0.14	0.00	0.14	19.00	1.35	0.00	1.35
8.60	0.16	0.00	0.16	19.20	1.29	0.00	1.29
8.80	0.19	0.00	0.19	19.40	1.23	0.00	1.23
9.00	0.22	0.00	0.22	19.60	1.17	0.00	1.17
9.20	0.27	0.00	0.27	19.80	1.11	0.00	1.11
9.40	0.34	0.00	0.34	20.00	1.05	0.00	1.05
9.60	0.41	0.00	0.41	20.20	1.01	0.00	1.01
9.80	0.50	0.00	0.50	20.40	0.97	0.00	0.97
10.00	0.58	0.00	0.58	20.60	0.95	0.00	0.95
10.20	0.66	0.00	0.66	20.80	0.92	0.00	0.92
10.40	0.76	0.00	0.76	21.00	0.90	0.00	0.90

Hydrograph for Link S: POI South (continued)

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
21.20	0.88	0.00	0.88	31.80	0.12	0.00	0.12
21.40	0.86	0.00	0.86	32.00	0.12	0.00	0.12
21.60	0.84	0.00	0.84	32.20	0.12	0.00	0.12
21.80	0.82	0.00	0.82	32.40	0.12	0.00	0.12
22.00	0.81	0.00	0.81	32.60	0.12	0.00	0.12
22.20	0.79	0.00	0.79	32.80	0.12	0.00	0.12
22.40	0.77	0.00	0.77	33.00	0.12	0.00	0.12
22.60	0.76	0.00	0.76	33.20	0.12	0.00	0.12
22.80	0.74	0.00	0.74	33.40	0.11	0.00	0.11
23.00	0.73	0.00	0.73	33.60	0.11	0.00	0.11
23.20	0.71	0.00	0.71	33.80	0.11	0.00	0.11
23.40	0.69	0.00	0.69	34.00	0.11	0.00	0.11
23.60	0.67	0.00	0.67	34.20	0.11	0.00	0.11
23.80	0.64	0.00	0.64	34.40	0.11	0.00	0.11
24.00	0.62	0.00	0.62	34.60	0.11	0.00	0.11
24.20	0.54	0.00	0.54	34.80	0.11	0.00	0.11
24.40	0.40	0.00	0.40	35.00	0.11	0.00	0.11
24.60	0.33	0.00	0.33	35.20	0.11	0.00	0.11
24.80	0.29	0.00	0.29	35.40	0.11	0.00	0.11
25.00	0.26	0.00	0.26	35.60	0.11	0.00	0.11
25.20	0.23	0.00	0.23	35.80	0.11	0.00	0.11
25.40	0.21	0.00	0.21	36.00	0.11	0.00	0.11
25.60	0.19	0.00	0.19	36.20	0.11	0.00	0.11
25.80	0.18	0.00	0.18	36.40	0.11	0.00	0.11
26.00	0.17	0.00	0.17	36.60	0.11	0.00	0.11
26.20	0.16	0.00	0.16	36.80	0.11	0.00	0.11
26.40	0.15	0.00	0.15	37.00	0.11	0.00	0.11
26.60	0.15	0.00	0.15	37.20	0.11	0.00	0.11
26.80	0.14	0.00	0.14	37.40	0.11	0.00	0.11
27.00	0.14	0.00	0.14	37.60	0.11	0.00	0.11
27.20	0.14	0.00	0.14	37.80	0.11	0.00	0.11
27.40	0.13	0.00	0.13	38.00	0.11	0.00	0.11
27.60	0.13	0.00	0.13	38.20	0.11	0.00	0.11
27.80	0.13	0.00	0.13	38.40	0.11	0.00	0.11
28.00	0.13	0.00	0.13	38.60	0.11	0.00	0.11
28.20	0.13	0.00	0.13	38.80	0.11	0.00	0.11
28.40	0.13	0.00	0.13	39.00	0.11	0.00	0.11
28.60	0.12	0.00	0.12	39.20	0.11	0.00	0.11
28.80	0.12	0.00	0.12	39.40	0.11	0.00	0.11
29.00	0.12	0.00	0.12	39.60	0.11	0.00	0.11
29.20	0.12	0.00	0.12	39.80	0.11	0.00	0.11
29.40	0.12	0.00	0.12	40.00	0.11	0.00	0.11
29.60	0.12	0.00	0.12	40.20	0.11	0.00	0.11
29.80	0.12	0.00	0.12	40.40	0.11	0.00	0.11
30.00	0.12	0.00	0.12	40.60	0.11	0.00	0.11
30.20	0.12	0.00	0.12	40.80	0.11	0.00	0.11
30.40	0.12	0.00	0.12	41.00	0.11	0.00	0.11
30.60	0.12	0.00	0.12	41.20	0.11	0.00	0.11
30.80	0.12	0.00	0.12	41.40	0.11	0.00	0.11
31.00	0.12	0.00	0.12	41.60	0.11	0.00	0.11
31.20	0.12	0.00	0.12	41.80	0.11	0.00	0.11
31.40	0.12	0.00	0.12	42.00	0.11	0.00	0.11
31.60	0.12	0.00	0.12	42.20	0.11	0.00	0.11

Hydrograph for Link S: POI South (continued)

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
42.40	0.11	0.00	0.11	53.00	0.11	0.00	0.11
42.60	0.11	0.00	0.11	53.20	0.10	0.00	0.10
42.80	0.11	0.00	0.11	53.40	0.10	0.00	0.10
43.00	0.11	0.00	0.11	53.60	0.10	0.00	0.10
43.20	0.11	0.00	0.11	53.80	0.10	0.00	0.10
43.40	0.11	0.00	0.11	54.00	0.10	0.00	0.10
43.60	0.11	0.00	0.11	54.20	0.10	0.00	0.10
43.80	0.11	0.00	0.11	54.40	0.10	0.00	0.10
44.00	0.11	0.00	0.11	54.60	0.10	0.00	0.10
44.20	0.11	0.00	0.11	54.80	0.10	0.00	0.10
44.40	0.11	0.00	0.11	55.00	0.10	0.00	0.10
44.60	0.11	0.00	0.11	55.20	0.10	0.00	0.10
44.80	0.11	0.00	0.11	55.40	0.10	0.00	0.10
45.00	0.11	0.00	0.11	55.60	0.10	0.00	0.10
45.20	0.11	0.00	0.11	55.80	0.10	0.00	0.10
45.40	0.11	0.00	0.11	56.00	0.07	0.00	0.07
45.60	0.11	0.00	0.11	56.20	0.05	0.00	0.05
45.80	0.11	0.00	0.11	56.40	0.03	0.00	0.03
46.00	0.11	0.00	0.11	56.60	0.02	0.00	0.02
46.20	0.11	0.00	0.11	56.80	0.01	0.00	0.01
46.40	0.11	0.00	0.11	57.00	0.01	0.00	0.01
46.60	0.11	0.00	0.11	57.20	0.01	0.00	0.01
46.80	0.11	0.00	0.11	57.40	0.00	0.00	0.00
47.00	0.11	0.00	0.11	57.60	0.00	0.00	0.00
47.20	0.11	0.00	0.11	57.80	0.00	0.00	0.00
47.40	0.11	0.00	0.11	58.00	0.00	0.00	0.00
47.60	0.11	0.00	0.11	58.20	0.00	0.00	0.00
47.80	0.11	0.00	0.11	58.40	0.00	0.00	0.00
48.00	0.11	0.00	0.11	58.60	0.00	0.00	0.00
48.20	0.11	0.00	0.11	58.80	0.00	0.00	0.00
48.40	0.11	0.00	0.11	59.00	0.00	0.00	0.00
48.60	0.11	0.00	0.11	59.20	0.00	0.00	0.00
48.80	0.11	0.00	0.11	59.40	0.00	0.00	0.00
49.00	0.11	0.00	0.11	59.60	0.00	0.00	0.00
49.20	0.11	0.00	0.11	59.80	0.00	0.00	0.00
49.40	0.11	0.00	0.11	60.00	0.00	0.00	0.00
49.60	0.11	0.00	0.11				
49.80	0.11	0.00	0.11				
50.00	0.11	0.00	0.11				
50.20	0.11	0.00	0.11				
50.40	0.11	0.00	0.11				
50.60	0.11	0.00	0.11				
50.80	0.11	0.00	0.11				
51.00	0.11	0.00	0.11				
51.20	0.11	0.00	0.11				
51.40	0.11	0.00	0.11				
51.60	0.11	0.00	0.11				
51.80	0.11	0.00	0.11				
52.00	0.11	0.00	0.11				
52.20	0.11	0.00	0.11				
52.40	0.11	0.00	0.11				
52.60	0.11	0.00	0.11				
52.80	0.11	0.00	0.11				

Proposed

Prepared by Hewlett-Packard Company

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Type III 24-hr 25-Year Rainfall=5.92"

Printed 5/1/2023

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Time span=0.00-60.00 hrs, dt=0.02 hrs, 3001 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Link S: POI South

Inflow=32.80 cfs 4.344 af

Primary=32.80 cfs 4.344 af

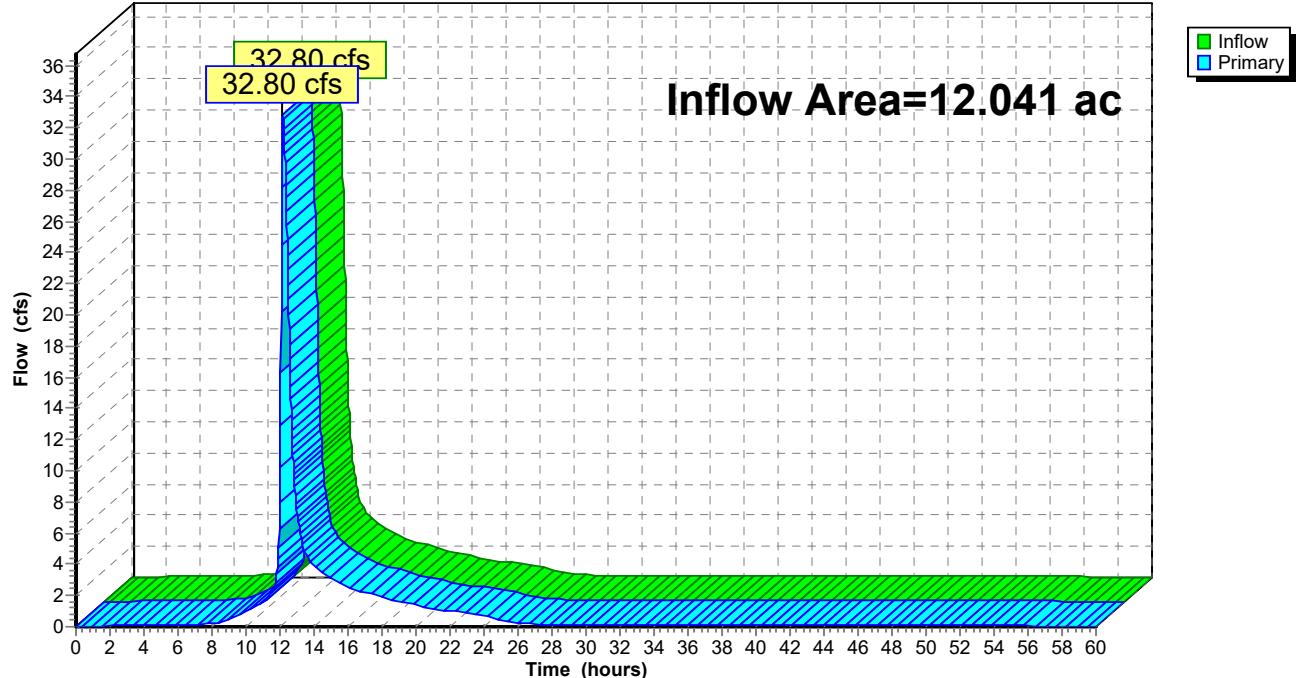
Summary for Link S: POI South

Inflow Area = 12.041 ac, 46.90% Impervious, Inflow Depth = 4.33" for 25-Year event

Inflow = 32.80 cfs @ 12.17 hrs, Volume= 4.344 af

Primary = 32.80 cfs @ 12.17 hrs, Volume= 4.344 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.02 hrs

Link S: POI South**Hydrograph**

Proposed

Prepared by Hewlett-Packard Company

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Type III 24-hr 25-Year Rainfall=5.92"

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Hydrograph for Link S: POI South

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	10.60	1.29	0.00	1.29
0.20	0.00	0.00	0.00	10.80	1.42	0.00	1.42
0.40	0.00	0.00	0.00	11.00	1.57	0.00	1.57
0.60	0.00	0.00	0.00	11.20	1.72	0.00	1.72
0.80	0.00	0.00	0.00	11.40	1.98	0.00	1.98
1.00	0.01	0.00	0.01	11.60	2.34	0.00	2.34
1.20	0.02	0.00	0.02	11.80	3.36	0.00	3.36
1.40	0.03	0.00	0.03	12.00	10.20	0.00	10.20
1.60	0.04	0.00	0.04	12.20	32.38	0.00	32.38
1.80	0.06	0.00	0.06	12.40	25.71	0.00	25.71
2.00	0.07	0.00	0.07	12.60	16.28	0.00	16.28
2.20	0.08	0.00	0.08	12.80	10.14	0.00	10.14
2.40	0.10	0.00	0.10	13.00	7.37	0.00	7.37
2.60	0.10	0.00	0.10	13.20	5.85	0.00	5.85
2.80	0.10	0.00	0.10	13.40	5.02	0.00	5.02
3.00	0.10	0.00	0.10	13.60	4.55	0.00	4.55
3.20	0.10	0.00	0.10	13.80	4.18	0.00	4.18
3.40	0.10	0.00	0.10	14.00	3.90	0.00	3.90
3.60	0.10	0.00	0.10	14.20	3.68	0.00	3.68
3.80	0.10	0.00	0.10	14.40	3.51	0.00	3.51
4.00	0.10	0.00	0.10	14.60	3.37	0.00	3.37
4.20	0.10	0.00	0.10	14.80	3.25	0.00	3.25
4.40	0.10	0.00	0.10	15.00	3.13	0.00	3.13
4.60	0.10	0.00	0.10	15.20	3.01	0.00	3.01
4.80	0.10	0.00	0.10	15.40	2.90	0.00	2.90
5.00	0.10	0.00	0.10	15.60	2.79	0.00	2.79
5.20	0.10	0.00	0.10	15.80	2.68	0.00	2.68
5.40	0.11	0.00	0.11	16.00	2.57	0.00	2.57
5.60	0.11	0.00	0.11	16.20	2.46	0.00	2.46
5.80	0.11	0.00	0.11	16.40	2.39	0.00	2.39
6.00	0.11	0.00	0.11	16.60	2.33	0.00	2.33
6.20	0.11	0.00	0.11	16.80	2.27	0.00	2.27
6.40	0.11	0.00	0.11	17.00	2.21	0.00	2.21
6.60	0.11	0.00	0.11	17.20	2.16	0.00	2.16
6.80	0.12	0.00	0.12	17.40	2.09	0.00	2.09
7.00	0.12	0.00	0.12	17.60	2.03	0.00	2.03
7.20	0.13	0.00	0.13	17.80	1.96	0.00	1.96
7.40	0.14	0.00	0.14	18.00	1.89	0.00	1.89
7.60	0.16	0.00	0.16	18.20	1.82	0.00	1.82
7.80	0.17	0.00	0.17	18.40	1.76	0.00	1.76
8.00	0.20	0.00	0.20	18.60	1.71	0.00	1.71
8.20	0.23	0.00	0.23	18.80	1.67	0.00	1.67
8.40	0.27	0.00	0.27	19.00	1.63	0.00	1.63
8.60	0.33	0.00	0.33	19.20	1.59	0.00	1.59
8.80	0.41	0.00	0.41	19.40	1.55	0.00	1.55
9.00	0.50	0.00	0.50	19.60	1.50	0.00	1.50
9.20	0.59	0.00	0.59	19.80	1.44	0.00	1.44
9.40	0.68	0.00	0.68	20.00	1.37	0.00	1.37
9.60	0.77	0.00	0.77	20.20	1.31	0.00	1.31
9.80	0.87	0.00	0.87	20.40	1.25	0.00	1.25
10.00	0.96	0.00	0.96	20.60	1.19	0.00	1.19
10.20	1.06	0.00	1.06	20.80	1.15	0.00	1.15
10.40	1.17	0.00	1.17	21.00	1.11	0.00	1.11

Hydrograph for Link S: POI South (continued)

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
21.20	1.08	0.00	1.08	31.80	0.12	0.00	0.12
21.40	1.05	0.00	1.05	32.00	0.12	0.00	0.12
21.60	1.03	0.00	1.03	32.20	0.12	0.00	0.12
21.80	1.01	0.00	1.01	32.40	0.12	0.00	0.12
22.00	0.99	0.00	0.99	32.60	0.12	0.00	0.12
22.20	0.97	0.00	0.97	32.80	0.12	0.00	0.12
22.40	0.95	0.00	0.95	33.00	0.12	0.00	0.12
22.60	0.93	0.00	0.93	33.20	0.12	0.00	0.12
22.80	0.91	0.00	0.91	33.40	0.12	0.00	0.12
23.00	0.89	0.00	0.89	33.60	0.12	0.00	0.12
23.20	0.87	0.00	0.87	33.80	0.12	0.00	0.12
23.40	0.86	0.00	0.86	34.00	0.12	0.00	0.12
23.60	0.84	0.00	0.84	34.20	0.11	0.00	0.11
23.80	0.82	0.00	0.82	34.40	0.11	0.00	0.11
24.00	0.80	0.00	0.80	34.60	0.11	0.00	0.11
24.20	0.71	0.00	0.71	34.80	0.11	0.00	0.11
24.40	0.55	0.00	0.55	35.00	0.11	0.00	0.11
24.60	0.47	0.00	0.47	35.20	0.11	0.00	0.11
24.80	0.42	0.00	0.42	35.40	0.11	0.00	0.11
25.00	0.38	0.00	0.38	35.60	0.11	0.00	0.11
25.20	0.36	0.00	0.36	35.80	0.11	0.00	0.11
25.40	0.33	0.00	0.33	36.00	0.11	0.00	0.11
25.60	0.31	0.00	0.31	36.20	0.11	0.00	0.11
25.80	0.28	0.00	0.28	36.40	0.11	0.00	0.11
26.00	0.25	0.00	0.25	36.60	0.11	0.00	0.11
26.20	0.23	0.00	0.23	36.80	0.11	0.00	0.11
26.40	0.21	0.00	0.21	37.00	0.11	0.00	0.11
26.60	0.19	0.00	0.19	37.20	0.11	0.00	0.11
26.80	0.18	0.00	0.18	37.40	0.11	0.00	0.11
27.00	0.17	0.00	0.17	37.60	0.11	0.00	0.11
27.20	0.16	0.00	0.16	37.80	0.11	0.00	0.11
27.40	0.15	0.00	0.15	38.00	0.11	0.00	0.11
27.60	0.15	0.00	0.15	38.20	0.11	0.00	0.11
27.80	0.14	0.00	0.14	38.40	0.11	0.00	0.11
28.00	0.14	0.00	0.14	38.60	0.11	0.00	0.11
28.20	0.14	0.00	0.14	38.80	0.11	0.00	0.11
28.40	0.13	0.00	0.13	39.00	0.11	0.00	0.11
28.60	0.13	0.00	0.13	39.20	0.11	0.00	0.11
28.80	0.13	0.00	0.13	39.40	0.11	0.00	0.11
29.00	0.13	0.00	0.13	39.60	0.11	0.00	0.11
29.20	0.13	0.00	0.13	39.80	0.11	0.00	0.11
29.40	0.12	0.00	0.12	40.00	0.11	0.00	0.11
29.60	0.12	0.00	0.12	40.20	0.11	0.00	0.11
29.80	0.12	0.00	0.12	40.40	0.11	0.00	0.11
30.00	0.12	0.00	0.12	40.60	0.11	0.00	0.11
30.20	0.12	0.00	0.12	40.80	0.11	0.00	0.11
30.40	0.12	0.00	0.12	41.00	0.11	0.00	0.11
30.60	0.12	0.00	0.12	41.20	0.11	0.00	0.11
30.80	0.12	0.00	0.12	41.40	0.11	0.00	0.11
31.00	0.12	0.00	0.12	41.60	0.11	0.00	0.11
31.20	0.12	0.00	0.12	41.80	0.11	0.00	0.11
31.40	0.12	0.00	0.12	42.00	0.11	0.00	0.11
31.60	0.12	0.00	0.12	42.20	0.11	0.00	0.11

Hydrograph for Link S: POI South (continued)

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
42.40	0.11	0.00	0.11	53.00	0.11	0.00	0.11
42.60	0.11	0.00	0.11	53.20	0.11	0.00	0.11
42.80	0.11	0.00	0.11	53.40	0.10	0.00	0.10
43.00	0.11	0.00	0.11	53.60	0.10	0.00	0.10
43.20	0.11	0.00	0.11	53.80	0.10	0.00	0.10
43.40	0.11	0.00	0.11	54.00	0.10	0.00	0.10
43.60	0.11	0.00	0.11	54.20	0.10	0.00	0.10
43.80	0.11	0.00	0.11	54.40	0.10	0.00	0.10
44.00	0.11	0.00	0.11	54.60	0.10	0.00	0.10
44.20	0.11	0.00	0.11	54.80	0.10	0.00	0.10
44.40	0.11	0.00	0.11	55.00	0.10	0.00	0.10
44.60	0.11	0.00	0.11	55.20	0.10	0.00	0.10
44.80	0.11	0.00	0.11	55.40	0.10	0.00	0.10
45.00	0.11	0.00	0.11	55.60	0.10	0.00	0.10
45.20	0.11	0.00	0.11	55.80	0.10	0.00	0.10
45.40	0.11	0.00	0.11	56.00	0.10	0.00	0.10
45.60	0.11	0.00	0.11	56.20	0.07	0.00	0.07
45.80	0.11	0.00	0.11	56.40	0.04	0.00	0.04
46.00	0.11	0.00	0.11	56.60	0.03	0.00	0.03
46.20	0.11	0.00	0.11	56.80	0.02	0.00	0.02
46.40	0.11	0.00	0.11	57.00	0.01	0.00	0.01
46.60	0.11	0.00	0.11	57.20	0.01	0.00	0.01
46.80	0.11	0.00	0.11	57.40	0.01	0.00	0.01
47.00	0.11	0.00	0.11	57.60	0.00	0.00	0.00
47.20	0.11	0.00	0.11	57.80	0.00	0.00	0.00
47.40	0.11	0.00	0.11	58.00	0.00	0.00	0.00
47.60	0.11	0.00	0.11	58.20	0.00	0.00	0.00
47.80	0.11	0.00	0.11	58.40	0.00	0.00	0.00
48.00	0.11	0.00	0.11	58.60	0.00	0.00	0.00
48.20	0.11	0.00	0.11	58.80	0.00	0.00	0.00
48.40	0.11	0.00	0.11	59.00	0.00	0.00	0.00
48.60	0.11	0.00	0.11	59.20	0.00	0.00	0.00
48.80	0.11	0.00	0.11	59.40	0.00	0.00	0.00
49.00	0.11	0.00	0.11	59.60	0.00	0.00	0.00
49.20	0.11	0.00	0.11	59.80	0.00	0.00	0.00
49.40	0.11	0.00	0.11	60.00	0.00	0.00	0.00
49.60	0.11	0.00	0.11				
49.80	0.11	0.00	0.11				
50.00	0.11	0.00	0.11				
50.20	0.11	0.00	0.11				
50.40	0.11	0.00	0.11				
50.60	0.11	0.00	0.11				
50.80	0.11	0.00	0.11				
51.00	0.11	0.00	0.11				
51.20	0.11	0.00	0.11				
51.40	0.11	0.00	0.11				
51.60	0.11	0.00	0.11				
51.80	0.11	0.00	0.11				
52.00	0.11	0.00	0.11				
52.20	0.11	0.00	0.11				
52.40	0.11	0.00	0.11				
52.60	0.11	0.00	0.11				
52.80	0.11	0.00	0.11				

Proposed

Prepared by Hewlett-Packard Company

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Type III 24-hr 100-Year Rainfall=8.39"

Printed 5/1/2023

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Time span=0.00-60.00 hrs, dt=0.02 hrs, 3001 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Link S: POI South

Inflow=54.93 cfs 6.684 af

Primary=54.93 cfs 6.684 af

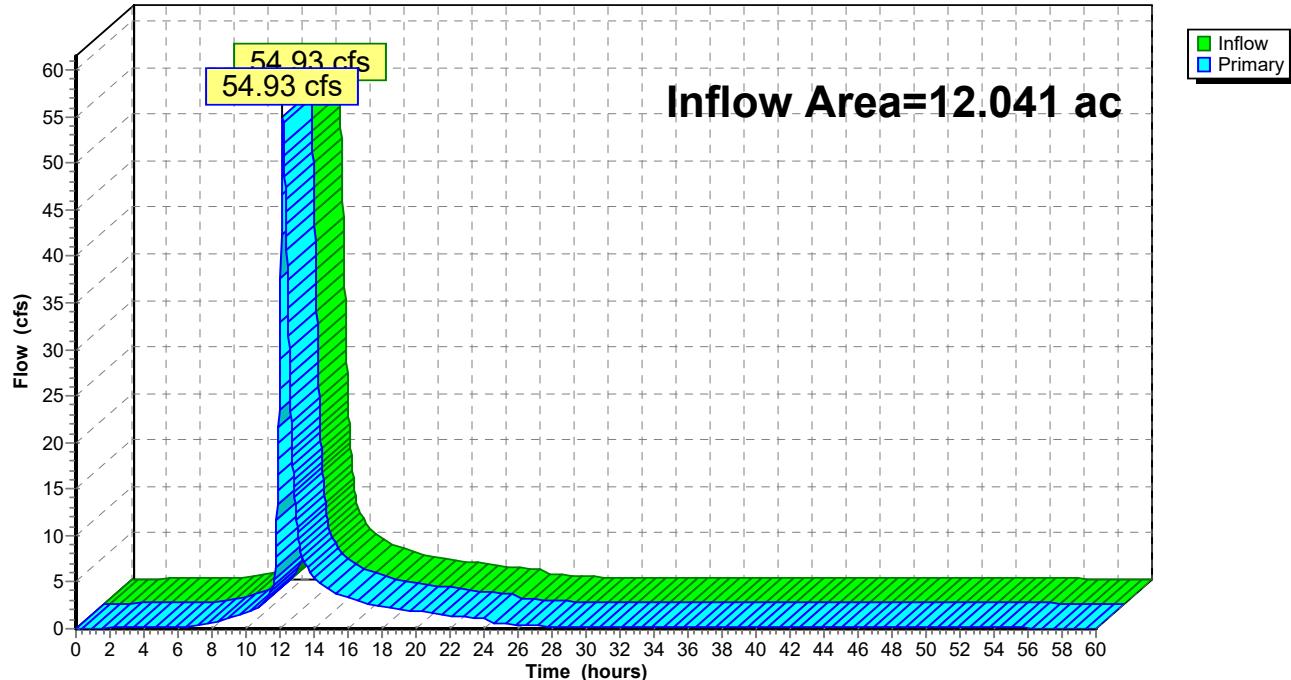
Summary for Link S: POI South

Inflow Area = 12.041 ac, 46.90% Impervious, Inflow Depth = 6.66" for 100-Year event

Inflow = 54.93 cfs @ 12.16 hrs, Volume= 6.684 af

Primary = 54.93 cfs @ 12.16 hrs, Volume= 6.684 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.02 hrs

Link S: POI South**Hydrograph**

Hydrograph for Link S: POI South

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	10.60	2.08	0.00	2.08
0.20	0.00	0.00	0.00	10.80	2.41	0.00	2.41
0.40	0.00	0.00	0.00	11.00	2.84	0.00	2.84
0.60	0.00	0.00	0.00	11.20	3.27	0.00	3.27
0.80	0.01	0.00	0.01	11.40	3.84	0.00	3.84
1.00	0.03	0.00	0.03	11.60	4.59	0.00	4.59
1.20	0.06	0.00	0.06	11.80	10.23	0.00	10.23
1.40	0.08	0.00	0.08	12.00	28.90	0.00	28.90
1.60	0.10	0.00	0.10	12.20	53.51	0.00	53.51
1.80	0.10	0.00	0.10	12.40	40.56	0.00	40.56
2.00	0.10	0.00	0.10	12.60	25.87	0.00	25.87
2.20	0.10	0.00	0.10	12.80	16.03	0.00	16.03
2.40	0.10	0.00	0.10	13.00	11.07	0.00	11.07
2.60	0.10	0.00	0.10	13.20	8.56	0.00	8.56
2.80	0.10	0.00	0.10	13.40	7.29	0.00	7.29
3.00	0.10	0.00	0.10	13.60	6.56	0.00	6.56
3.20	0.10	0.00	0.10	13.80	6.01	0.00	6.01
3.40	0.10	0.00	0.10	14.00	5.53	0.00	5.53
3.60	0.10	0.00	0.10	14.20	5.09	0.00	5.09
3.80	0.11	0.00	0.11	14.40	4.77	0.00	4.77
4.00	0.11	0.00	0.11	14.60	4.52	0.00	4.52
4.20	0.11	0.00	0.11	14.80	4.29	0.00	4.29
4.40	0.11	0.00	0.11	15.00	4.09	0.00	4.09
4.60	0.11	0.00	0.11	15.20	3.94	0.00	3.94
4.80	0.11	0.00	0.11	15.40	3.78	0.00	3.78
5.00	0.11	0.00	0.11	15.60	3.63	0.00	3.63
5.20	0.11	0.00	0.11	15.80	3.46	0.00	3.46
5.40	0.12	0.00	0.12	16.00	3.30	0.00	3.30
5.60	0.13	0.00	0.13	16.20	3.15	0.00	3.15
5.80	0.14	0.00	0.14	16.40	3.02	0.00	3.02
6.00	0.15	0.00	0.15	16.60	2.92	0.00	2.92
6.20	0.16	0.00	0.16	16.80	2.83	0.00	2.83
6.40	0.19	0.00	0.19	17.00	2.74	0.00	2.74
6.60	0.21	0.00	0.21	17.20	2.65	0.00	2.65
6.80	0.24	0.00	0.24	17.40	2.58	0.00	2.58
7.00	0.29	0.00	0.29	17.60	2.50	0.00	2.50
7.20	0.34	0.00	0.34	17.80	2.42	0.00	2.42
7.40	0.41	0.00	0.41	18.00	2.35	0.00	2.35
7.60	0.48	0.00	0.48	18.20	2.29	0.00	2.29
7.80	0.55	0.00	0.55	18.40	2.23	0.00	2.23
8.00	0.62	0.00	0.62	18.60	2.19	0.00	2.19
8.20	0.69	0.00	0.69	18.80	2.15	0.00	2.15
8.40	0.78	0.00	0.78	19.00	2.11	0.00	2.11
8.60	0.87	0.00	0.87	19.20	2.07	0.00	2.07
8.80	0.98	0.00	0.98	19.40	2.03	0.00	2.03
9.00	1.09	0.00	1.09	19.60	1.98	0.00	1.98
9.20	1.19	0.00	1.19	19.80	1.94	0.00	1.94
9.40	1.30	0.00	1.30	20.00	1.90	0.00	1.90
9.60	1.41	0.00	1.41	20.20	1.85	0.00	1.85
9.80	1.52	0.00	1.52	20.40	1.81	0.00	1.81
10.00	1.64	0.00	1.64	20.60	1.77	0.00	1.77
10.20	1.75	0.00	1.75	20.80	1.72	0.00	1.72
10.40	1.90	0.00	1.90	21.00	1.66	0.00	1.66

Hydrograph for Link S: POI South (continued)

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
21.20	1.60	0.00	1.60	31.80	0.12	0.00	0.12
21.40	1.54	0.00	1.54	32.00	0.12	0.00	0.12
21.60	1.47	0.00	1.47	32.20	0.12	0.00	0.12
21.80	1.41	0.00	1.41	32.40	0.12	0.00	0.12
22.00	1.36	0.00	1.36	32.60	0.12	0.00	0.12
22.20	1.33	0.00	1.33	32.80	0.12	0.00	0.12
22.40	1.29	0.00	1.29	33.00	0.12	0.00	0.12
22.60	1.26	0.00	1.26	33.20	0.12	0.00	0.12
22.80	1.23	0.00	1.23	33.40	0.12	0.00	0.12
23.00	1.21	0.00	1.21	33.60	0.12	0.00	0.12
23.20	1.18	0.00	1.18	33.80	0.12	0.00	0.12
23.40	1.16	0.00	1.16	34.00	0.12	0.00	0.12
23.60	1.13	0.00	1.13	34.20	0.12	0.00	0.12
23.80	1.11	0.00	1.11	34.40	0.12	0.00	0.12
24.00	1.09	0.00	1.09	34.60	0.12	0.00	0.12
24.20	0.96	0.00	0.96	34.80	0.12	0.00	0.12
24.40	0.71	0.00	0.71	35.00	0.12	0.00	0.12
24.60	0.59	0.00	0.59	35.20	0.11	0.00	0.11
24.80	0.54	0.00	0.54	35.40	0.11	0.00	0.11
25.00	0.51	0.00	0.51	35.60	0.11	0.00	0.11
25.20	0.49	0.00	0.49	35.80	0.11	0.00	0.11
25.40	0.48	0.00	0.48	36.00	0.11	0.00	0.11
25.60	0.47	0.00	0.47	36.20	0.11	0.00	0.11
25.80	0.45	0.00	0.45	36.40	0.11	0.00	0.11
26.00	0.44	0.00	0.44	36.60	0.11	0.00	0.11
26.20	0.42	0.00	0.42	36.80	0.11	0.00	0.11
26.40	0.39	0.00	0.39	37.00	0.11	0.00	0.11
26.60	0.36	0.00	0.36	37.20	0.11	0.00	0.11
26.80	0.34	0.00	0.34	37.40	0.11	0.00	0.11
27.00	0.31	0.00	0.31	37.60	0.11	0.00	0.11
27.20	0.29	0.00	0.29	37.80	0.11	0.00	0.11
27.40	0.26	0.00	0.26	38.00	0.11	0.00	0.11
27.60	0.23	0.00	0.23	38.20	0.11	0.00	0.11
27.80	0.21	0.00	0.21	38.40	0.11	0.00	0.11
28.00	0.19	0.00	0.19	38.60	0.11	0.00	0.11
28.20	0.18	0.00	0.18	38.80	0.11	0.00	0.11
28.40	0.17	0.00	0.17	39.00	0.11	0.00	0.11
28.60	0.16	0.00	0.16	39.20	0.11	0.00	0.11
28.80	0.15	0.00	0.15	39.40	0.11	0.00	0.11
29.00	0.15	0.00	0.15	39.60	0.11	0.00	0.11
29.20	0.14	0.00	0.14	39.80	0.11	0.00	0.11
29.40	0.14	0.00	0.14	40.00	0.11	0.00	0.11
29.60	0.14	0.00	0.14	40.20	0.11	0.00	0.11
29.80	0.13	0.00	0.13	40.40	0.11	0.00	0.11
30.00	0.13	0.00	0.13	40.60	0.11	0.00	0.11
30.20	0.13	0.00	0.13	40.80	0.11	0.00	0.11
30.40	0.13	0.00	0.13	41.00	0.11	0.00	0.11
30.60	0.13	0.00	0.13	41.20	0.11	0.00	0.11
30.80	0.12	0.00	0.12	41.40	0.11	0.00	0.11
31.00	0.12	0.00	0.12	41.60	0.11	0.00	0.11
31.20	0.12	0.00	0.12	41.80	0.11	0.00	0.11
31.40	0.12	0.00	0.12	42.00	0.11	0.00	0.11
31.60	0.12	0.00	0.12	42.20	0.11	0.00	0.11

Hydrograph for Link S: POI South (continued)

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
42.40	0.11	0.00	0.11	53.00	0.11	0.00	0.11
42.60	0.11	0.00	0.11	53.20	0.11	0.00	0.11
42.80	0.11	0.00	0.11	53.40	0.11	0.00	0.11
43.00	0.11	0.00	0.11	53.60	0.10	0.00	0.10
43.20	0.11	0.00	0.11	53.80	0.10	0.00	0.10
43.40	0.11	0.00	0.11	54.00	0.10	0.00	0.10
43.60	0.11	0.00	0.11	54.20	0.10	0.00	0.10
43.80	0.11	0.00	0.11	54.40	0.10	0.00	0.10
44.00	0.11	0.00	0.11	54.60	0.10	0.00	0.10
44.20	0.11	0.00	0.11	54.80	0.10	0.00	0.10
44.40	0.11	0.00	0.11	55.00	0.10	0.00	0.10
44.60	0.11	0.00	0.11	55.20	0.10	0.00	0.10
44.80	0.11	0.00	0.11	55.40	0.10	0.00	0.10
45.00	0.11	0.00	0.11	55.60	0.10	0.00	0.10
45.20	0.11	0.00	0.11	55.80	0.10	0.00	0.10
45.40	0.11	0.00	0.11	56.00	0.10	0.00	0.10
45.60	0.11	0.00	0.11	56.20	0.10	0.00	0.10
45.80	0.11	0.00	0.11	56.40	0.07	0.00	0.07
46.00	0.11	0.00	0.11	56.60	0.04	0.00	0.04
46.20	0.11	0.00	0.11	56.80	0.03	0.00	0.03
46.40	0.11	0.00	0.11	57.00	0.02	0.00	0.02
46.60	0.11	0.00	0.11	57.20	0.01	0.00	0.01
46.80	0.11	0.00	0.11	57.40	0.01	0.00	0.01
47.00	0.11	0.00	0.11	57.60	0.01	0.00	0.01
47.20	0.11	0.00	0.11	57.80	0.00	0.00	0.00
47.40	0.11	0.00	0.11	58.00	0.00	0.00	0.00
47.60	0.11	0.00	0.11	58.20	0.00	0.00	0.00
47.80	0.11	0.00	0.11	58.40	0.00	0.00	0.00
48.00	0.11	0.00	0.11	58.60	0.00	0.00	0.00
48.20	0.11	0.00	0.11	58.80	0.00	0.00	0.00
48.40	0.11	0.00	0.11	59.00	0.00	0.00	0.00
48.60	0.11	0.00	0.11	59.20	0.00	0.00	0.00
48.80	0.11	0.00	0.11	59.40	0.00	0.00	0.00
49.00	0.11	0.00	0.11	59.60	0.00	0.00	0.00
49.20	0.11	0.00	0.11	59.80	0.00	0.00	0.00
49.40	0.11	0.00	0.11	60.00	0.00	0.00	0.00
49.60	0.11	0.00	0.11				
49.80	0.11	0.00	0.11				
50.00	0.11	0.00	0.11				
50.20	0.11	0.00	0.11				
50.40	0.11	0.00	0.11				
50.60	0.11	0.00	0.11				
50.80	0.11	0.00	0.11				
51.00	0.11	0.00	0.11				
51.20	0.11	0.00	0.11				
51.40	0.11	0.00	0.11				
51.60	0.11	0.00	0.11				
51.80	0.11	0.00	0.11				
52.00	0.11	0.00	0.11				
52.20	0.11	0.00	0.11				
52.40	0.11	0.00	0.11				
52.60	0.11	0.00	0.11				
52.80	0.11	0.00	0.11				

Proposed

Prepared by Hewlett-Packard Company

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Printed 5/1/2023

TABLE OF CONTENTS**Project Reports**

- 1 Routing Diagram
- 2 Rainfall Events Listing (selected events)
- 3 Area Listing (selected nodes)
- 4 Soil Listing (selected nodes)
- 5 Ground Covers (selected nodes)

1-Year Event

- 6 Node Listing
- 7 Link S: POI South

10-Year Event


- 11 Node Listing
- 12 Link S: POI South

25-Year Event

- 16 Node Listing
- 17 Link S: POI South

100-Year Event

- 21 Node Listing
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REV. DESCRIPTION	BY DATE	
DISCLAIMER: UNAUTHORIZED ALTERATION OR ADDITIONS TO THESE PLANS IS A VIOLATION OF THE N.Y.S. EDUCATION LAW, ARTICLE 14A, SECTION 7209, SUBSECTION 2.		
BROOKER ENGINEERING, PLLC PROFESSIONAL ENGINEERS AND LAND SURVEYORS LAND DEVELOPMENT - MUNICIPAL - STRUCTURAL - HYDROLOGICAL - SURVEYING www.BrookerEngineering.com		
74 Lafayette Avenue, Suite 501 22 Porta Avenue, Suite 105 Newburgh, NY 12550 Port Chester, NY 10573 (845) 357-4411 (201) 684-1221		
PROJECT: UNITY PLACE WAREHOUSE TOWN OF NEWBURGH ORANGE COUNTY NEW YORK		
TITLE: LOCKWOOD BASIN WATERSHED MAP		
PROJECT NO.: 21202	DRAWN: AP	CHECKED: MT
SCALE: 1' = 800'	GRAPHIC SCALE: 0' 800' 1600'	
DATE: 04/24/2023	DRAWING NO: 1	



**Department of
Environmental
Conservation**

**NYS Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505**

**MS4 Stormwater Pollution Prevention Plan (SWPPP) Acceptance
Form**

for

Construction Activities Seeking Authorization Under SPDES General Permit

***(NOTE: Attach Completed Form to Notice Of Intent and Submit to Address Above)**

I. Project Owner/Operator Information

1. Owner/Operator Name: Unity Place Newburgh LLC
2. Contact Person: Akiva Bomzer
3. Street Address: 95 Chestnut Ridge Road
4. City/State/Zip: Montvale, NJ 07645

II. Project Site Information

5. Project/Site Name: Unity Place Warehouse
6. Street Address: 7 Unity Place
7. City/State/Zip: Newburgh, NY 12550

III. Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance Information

8. SWPPP Reviewed by:
9. Title/Position:
10. Date Final SWPPP Reviewed and Accepted:

IV. Regulated MS4 Information

11. Name of MS4:
12. MS4 SPDES Permit Identification Number: NYR20A
13. Contact Person:
14. Street Address:
15. City/State/Zip:
16. Telephone Number:

MS4 SWPPP Acceptance Form - continued

V. Certification Statement - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative

I hereby certify that the final Stormwater Pollution Prevention Plan (SWPPP) for the construction project identified in question 5 has been reviewed and meets the substantive requirements in the SPDES General Permit For Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s). Note: The MS4, through the acceptance of the SWPPP, assumes no responsibility for the accuracy and adequacy of the design included in the SWPPP. In addition, review and acceptance of the SWPPP by the MS4 does not relieve the owner/operator or their SWPPP preparer of responsibility or liability for errors or omissions in the plan.


Printed Name:

Title/Position:

Signature:

Date:

VI. Additional Information



SITE PLANS PREPARED FOR
UNITY PLACE WAREHOUSE
TOWN OF NEWBURGH
ORANGE COUNTY, NEW YORK

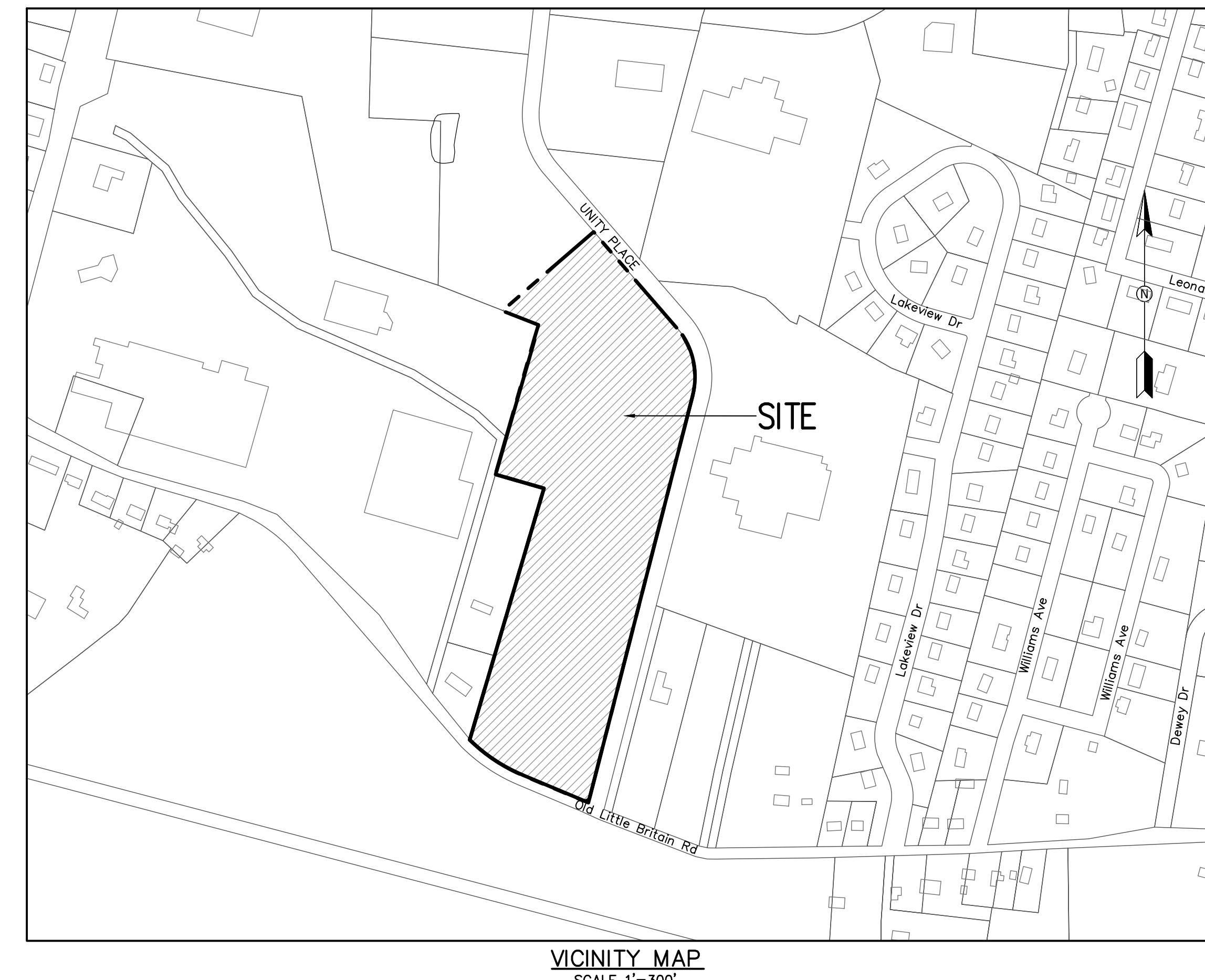
OWNER/APPLICANT
UNITY PLACE NEWBURGH LLC
95 CHESTNUT RIDGE ROAD,
MONVALE, NJ, 07645
(212) 796 5449

ENGINEER
BROOKER ENGINEERING, PLLC
74 LAFAYETTE AVENUE, SUITE 501
SUFFERN, NY 10501
(845) 547 2509

SURVEYOR
JAY A. GREENWELL, PLS, LLC
34 WAYNE AVE, 2ND FLOOR
SUFFERN, NY 10501
(845) 357 0830

ARCHITECT
ANDERSON DESIGN GROUP
25 WALLKILL AVENUE
MONTGOMERY, NY 12549
(845) 294 2724

TRAFFIC ENGINEER
COLLIERS ENGINEERING
400 COLUMBUS AVENUE, SUITE 180E
VALHALLA, NY 10295
(914) 347 7500



SITE PLANS
1. TAX LOT 97-2-14, 97-2-19-12 & 97-2-19-12
2. AREA OF TRACT: 648,630 SF ± (14.891 AC ±)
3. ZONING: T-1
4. USE: WAREHOUSE, STORAGE AND TRANSPORTATION FACILITIES INCLUDING TRUCK AND BUS TERMINALS
5. PLAT NUMBER: SITE PLAN NO. 97-2-14-12-1
6. RECORD OWNERS: 1) TAX LOT 97-2-19-12
RONALD K. BARTON HOLDING LLC
C/O BARTON CHEVROLET, INC.
200 AUTO PART PLACE
NEWBURGH, NEW YORK, 12550

2) TAX LOT 97-2-14-1
UNITY PLACE PROPERTIES LLC
ADAM R. BARTON
C/O BARTON CHEVROLET, INC.
200 AUTO PART PLACE
NEWBURGH, NEW YORK, 12550

3) TAX LOT 97-2-37-2
NEWBURGH AUTO PARK, LLC
ADAM R. BARTON
C/O BARTON CHEVROLET, INC.
200 AUTO PART PLACE
NEWBURGH, NEW YORK, 12550

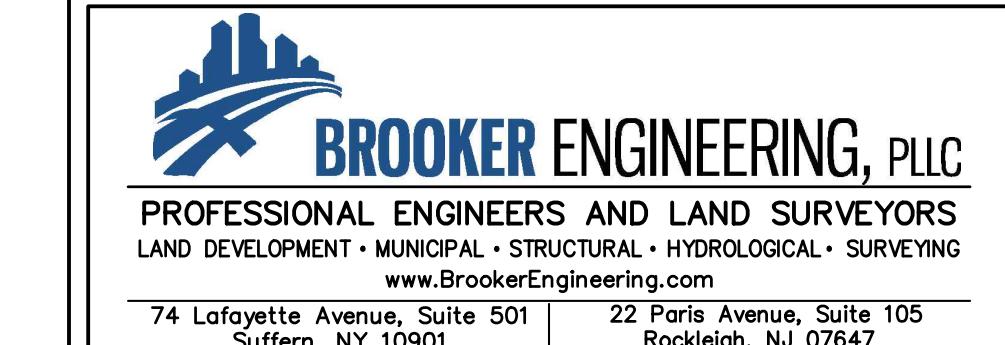
7. APPLICANT: UNITY PLACE NEWBURGH LLC
95 CHESTNUT RIDGE ROAD,
MONVALE, NJ, 07645
(212) 796 5449

DRAWING LIST:

	ORIGINAL DATE	REVISED DATE
1. TITLE SHEET	05/27/2022	05/04/2023
2. LAYOUT PLAN	05/27/2022	05/04/2023
3. GRADING, DRAINAGE & UTILITY PLAN	05/27/2022	05/04/2023
4. EROSION AND SEDIMENT CONTROL PLAN	05/27/2022	05/04/2023
5. LIGHTING & PLANTING PLAN	05/27/2022	05/04/2023
6. CONSTRUCTION DETAILS (1 OF 3)	05/27/2022	05/04/2023
7. CONSTRUCTION DETAILS (2 OF 3)	05/27/2022	05/04/2023
8. CONSTRUCTION DETAILS (3 OF 3)	05/27/2022	05/04/2023
9. TREE PRESERVATION PLAN	05/04/2023	-
10. SURVEY BY JAY A. GREENWELL, PLS, LLC	04/26/2022	02/07/2023
TM. TRUCK MANEUVER PLAN - INFORMATION DRAWING	05/27/2022	05/04/2023

5	GENERAL REVISIONS	XC	05/04/23
4	AS PER 10/03/22 MHE ENGINEERING COMMENTS	MT	10/20/22
3	AS PER 09/02/22 MHE ENGINEERING COMMENTS	JO	09/26/22
2	AS PER 08/25/22 DECISION WATER CONNECTION	JO	08/25/22
1	AS PER 6/16/2022 PLANNING BOARD COMMENTS	JO	07/11/2022
REV	DESCRIPTION	BY	DATE

DISCLAIMER:
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OF THE N.Y.S. EDUCATION LAW, ARTICLE 145, SECTION 7209, SUBSECTION 2.




74 Lafayette Avenue, Suite 501 22 Portis Avenue, Suite 105
Valhalla, NY 10595 White Plains, NY 10601
(845) 357-4411 (201) 684-1221

PROJECT: **UNITY PLACE WAREHOUSE**
TOWN OF NEWBURGH
ORANGE COUNTY
NEW YORK

TITLE: **TITLE SHEET**

PROJECT NO:	DRAWN:	CHECKED:
21202	JO	DR
SCALE:	1' = 40'	
GRAPHIC SCALE:	0 40' 80'	
DATE:	DRAWING NO:	
05/27/2022	1	



BARRING CALCULATIONS:
1) AS PER ZONING CODE § 185-13:
1 EMPLOYEE / 1,500 SF
154,700 SF / 1,500 SF = 104 EMPLOYEES
REQUIRED 2 SPACES / 3 EMPLOYEES = 104 EMPLOYEES = 70 SPACES
2) PROVIDED: 83 SPACES > 70 SPACES
1 PARKING GENERATION RATES:
REQUIRED: 0.5 SPACES / 1,000 SF GROSS BUILDING AREA (154,700 SF) = 76 SPACES
PROVIDED: 83 SPACES (>70 & >76 SF)

DEVELOPMENT SUMMARY:
BUILDING AREA: 162,800 SF
PARKING AREA RESERVATION REQUIRED: 154,700 SF
PARKING AREA RESERVATION PROPOSED: 236,570 SF
TOTAL LOADING DOCKS: 72 DOCKS
TOTAL TRAILER STORAGE SPACES: 36 SPACES

SITE PLAN NOTES:
1) TAX LOTS 97-2-14.1, 97-2-19.12 & 97-2-37.2
2) AREA OF TRACT: 648,630 SF ± (14.891 AC ±)
3) USE: WAREHOUSE, STORAGE AND TRANSPORTATION FACILITIES INCLUDING TRUCK AND BUS TERMINALS
4) PARKING GENERATION RATES: PROVIDED
5) RECORD OWNERS: 1) TAX LOT 97-2-19.12
RONALD X. BARTON
BARTON HOLDING LLC
C/O BARTON CHEVROLET, INC.
800 AUTO PART PLACE
NEWBURGH, NEW YORK, 12550
2) TAX LOT 97-2-14.1
UNIT PLAZA PROPERTIES LLC
RONALD X. BARTON
C/O BARTON CHEVROLET, INC.
800 AUTO PART PLACE
NEWBURGH, NEW YORK, 12550
3) TAX LOT 97-2-37.2
NEWBURGH AUTO PARK, LLC
RONALD X. BARTON
C/O BARTON CHEVROLET, INC.
800 AUTO PART PLACE
NEWBURGH, NEW YORK, 12550

7. APPLICANT:

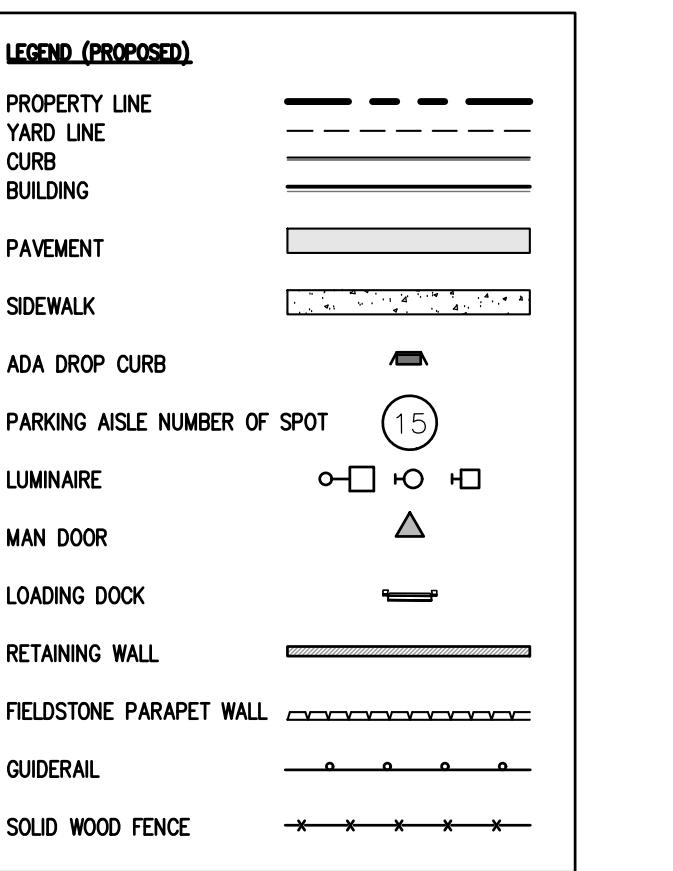
UNITY PLACE NEWBURGH LLC
900 UNION AVENUE, SUITE 100
MONTVALE, NJ, 07645
(212) 796-5449

SIGN SCHEDULE

SYMBOL	SIGN PANEL	QUANTITY
(A)	STOP SIGN MUTCD R1-1 (30"x30")	4
(B)	"NO RIGHT TURN FOR TRUCKS"	1
(C)	"ALL TRUCKS" ONE WAY SIGN R6-1R (30"x12")	4
(D)	ADA PARKING MUTCD R7-B	4
(E)	NO PARKING ANYTIME MUTCD R7-1	2
(F)	EXIT	1

NOTE: REFER TO SIGN DETAILS SHEET #6

NOTES:
ALL PAVEMENT STRIPING REMOVAL AND NEW PAVEMENT MARKINGS SHALL CONFORM WITH THE NYSDOT STANDARD SPECIFICATIONS AS FOLLOW:
PAVEMENT STRIPING REMOVAL SCHEDULE:
ITEM 635.0103 - CLEANING AND PREPARATION OF PAVEMENT SURFACE - LINES
ITEM 635.0104 - CLEANING AND PREPARATION OF PAVEMENT SURFACE - LETTERS
ITEM 635.0303 - CLEANING AND PREPARATION OF PAVEMENT SURFACE - SYMBOLS
NEW PAVEMENT MARKING SCHEDULE:
ITEM 685.11 - WHITE EPOXY REFLECTORIZED PAVEMENT STRIPPING - 20 MILS
ITEM 685.11 - YELLOW EPOXY REFLECTORIZED PAVEMENT STRIPPING - 20 MILS
ITEM 685.11 - GREEN EPOXY REFLECTORIZED PAVEMENT STRIPPING - LETTERS
ITEM 685.11 - WHITE EPOXY REFLECTORIZED PAVEMENT STRIPPING - SYMBOLS



LOT BUILDING COVERAGE

BUILDING AREA = 154,700 SF
= (154,700)/648,630) = 0.238 X 100 = 23.8%
MAX. PERMITTED LOT SURFACE COVERAGE
PAVEMENT AREA = 22,740 SF
SIDEWALK AREA = 690 SF
STOCKPILE AREA = 35,000 SF
SURFACE COVERAGE = (384,337/648,630) = 0.591 x 100 = 59%

5. GENERAL REVISIONS	XO	05/24/23
1. AS PER 6/16/2022 PLANNING BOARD COMMENTS	JO	07/11/2022
REV DESCRIPTION	BY	DATE


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OF THE N.Y.S. EDUCATION LAW, ARTICLE 145, SECTION 7209, SUBSECTION 2.

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LAND DEVELOPMENT - MUNICIPAL - STRUCTURAL - HYDROLOGICAL - SURVEYING
www.BrookerEngineering.com
74 Lafayette Avenue, Suite 501
Newburgh, New York 12550
(201) 684-1221
(845) 357-4411

PROJECT: UNITY PLACE WAREHOUSE
TOWN OF NEWBURGH
ORANGE COUNTY
NEW YORK

TITLE: LAYOUT PLAN

PROJECT NO:	DRAWN:	CHECKED:
21202	JO	DR
SCALE: 1" = 40'		
GRAPHIC SCALE: 40' 80'		
DATE: 05/27/2022		
DRAWING NO: 2		



CONSTRUCTION NOTES

1. CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES AND VERIFY ALL LOCATIONS, ELEVATIONS, INVERTS, ETC. PRIOR TO ANY CONSTRUCTION AND NOTIFY THE DESIGN ENGINEER OF ANY DISCREPANCIES ON THIS PLAN.
 2. CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES AND HAVE ALL UTILITIES FIELD LOCATED BY RESPECTIVE UTILITY COMPANY AND SHALL ASSUME FULL RESPONSIBILITY AND SHALL BE SOLELY RESPONSIBLE FOR MAINTAINING CONTINUOUS UTILITY SERVICE AND REPAIRS TO ANY DAMAGE.
 3. PROJECT SAFETY AND TRAFFIC MAINTENANCE ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
 4. CONTRACTOR TO COORDINATE WITH ALL COMPANIES TO ASSURE ADEQUATE SUPPLY AND SCHEDULING OF NEW SERVICE, WHERE REQUIRED, TO FIT THE CONSTRUCTION SCHEDULING AND SEQUENCE TO ASSURE NO DAMAGE OR DISTURBANCE TO EXISTING SERVICES. IF THE CONTRACTOR DAMAGES ANY MATERIALS WHICH ARE TO REMAIN IN PLACE, THE DAMAGED MATERIALS SHALL BE REPAIRED OR REPLACED IN A MANNER SATISFACTORY TO THE ENGINEER AT THE EXPENSE OF THE CONTRACTOR.
 5. THE CONTRACTOR IS RESPONSIBLE TO NOTIFY THE OWNER AND ENGINEER OF ANY UNANTICIPATED UTILITIES ENCOUNTERED AND MAINTAIN THE UTILITIES IN WORKING ORDER UNTIL THEIR DISPOSITION IS RESOLVED.
 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RELOCATION, PROTECTION AND/OR TEMPORARY SUPPORT OF ANY UTILITIES ENCOUNTERED WITHIN THE WORK AREA.
 7. THE CONTRACTOR SHALL COORDINATE DIRECTLY WITH EACH AFFECTED UTILITY COMPANY, SHALL APPLY FOR AND OBTAIN THE NECESSARY PERMITS AND APPROVALS, AND SHALL INITIATE AND COORDINATE ALL INSPECTIONS NECESSARY FOR FINAL APPROVAL AND ACCEPTANCE BY THE SUBJECT UTILITY COMPANY.
 8. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING CONTINUOUS SERVICE OF ALL EXISTING UTILITIES WITHIN THE WORK AREA AT ALL TIMES. CONTRACTOR SHALL COORDINATE ANY REPAIR, RELOCATION OR REMOVAL OF EXISTING UTILITIES WITH EACH RESPECTIVE UTILITY COMPANY AND PROVISIONS MUST BE PROVIDED FOR TEMPORARY SERVICE OF ANY RESPECTIVE UTILITY SERVICE Affected BY THE CONSTRUCTION IN THE EVENT OF ANY DISRUPTION TO THE EXISTING UTILITY. SHUT-DOWNS SHALL BE AT THE DISCRETION OF THE RESPECTIVE UTILITY COMPANIES AND COORDINATED WITH THE MUNICIPALITY AND THE ENGINEER FOR PUBLIC NOTICE IF NECESSARY. TEMPORARY SERVICE SHALL BE PROVIDED AND MAINTAINED AT NO ADDITIONAL COST.

TOWN OF NEWBURGH WATER SYSTEM NOTES FOR SITE

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TOWN OF NEWBURGH WATER SYSTEM NOTES FOR ONE

 1. CONSTRUCTION OF POTABLE WATER UTILITIES AND CONNECTION TOWN OF NEWBURGH WATER SYSTEM REQUIRES A PERMIT FROM TOWN OF NEWBURGH WATER DEPARTMENT. ALL WORK AND MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE NYSDOH AND TOWN OF NEWBURGH."
 2. ALL WATER SERVICE LINES FOUR (4) INCHES AND LARGER IN DIA. SHALL BE CEMENT LINED CLASS 52 DUCTILE IRON PIPE CONFORMING TO ANSI\AWWA C151\A21.51 FOR DUCTILE IRON PIPE, LATEST REVISION. JOINTS SHALL BE EITHER PUSH-ON OR MECHANICAL JOINT AS INDICATED.
 3. THRUST RESTRAINT OF THE PIPE SHALL BE THROUGH THE USE OF MECHANICAL JOINT PIPE WITH RETRAINER GLANDS. THRUST BLOCKS ARE NOT ACCEPTABLE. JOINT RESTRAINT SHALL BE THROUGH THE USE OF MECHANICAL JOINT PIPE WITH RETRAINER GLANDS FOR JOINT RESTRAINT. RETAINER GLANDS SHALL BE EBBA IRON MEGALUG SERIES 1100 OR APPROVED EQUAL. THE USE OF MANUFACTURED RESTRAINED JOINT PIPE IS ACCEPTABLE WITH PRIOR APPROVAL OF THE WATER DEPARTMENT.
 4. ALL FITTINGS SHALL BE CAST IRON OR DUCTILE IRON, MECHANICAL JOINT, CLASS 250 AND CONFORM TO ANSI\AWWA C110\A21.10 OR APPROVED EQUAL. ALL DUCTILE AND GRAY IRON FITTINGS OR ANSI\AWWA C153\A21.53 OR APPROVED EQUAL. DUCTILE IRON COMPACT FITTINGS, LATEST REVISION.
 5. ALL VALVES 4 TO 12 INCHES SHALL BE RESILIENT WEDGE GATE VALVES CONFORMING TO ANSI\AWWA C509 SUCH AS MUELLER MODEL A-2360-23 OR APPROVED EQUAL. ALL GATE VALVES SHALL OPERATE IN A COUNTERCLOCKWISE DIRECTION.
 6. TAPPING SLEEVE SHALL BE MECHANICAL JOINT SUCH AS MUELLER T-2360-19 OR APPROVED EQUAL. TAPPING VALVES 4 TO 12 INCHES SHALL BE RESILIENT WEDGE GATE VALVES CONFORMING TO ANSI\AWWA C509 SUCH AS MUELLER MODEL T-2360-19 OR APPROVED EQUAL. ALL TAPPING SLEEVES AND VALVES SHALL BE TESTED TO 150 PSI MINIMUM; THE TAPPING SLEEVE AND VALVE MUST BE WITNESSED AND ACCEPTED BY THE TOWN OF NEWBURGH WATER DEPARTMENT PRIOR TO CUTTING INTO THE PIPE.

WWA TOWN OF NEWBURGH SEWER SYSTEM NOTES FOR SITE PLANS

1. CONSTRUCTION OF SANITARY SEWER FACILITIES AND CONNECTION TO THE TOWN OF NEWBURGH SANITARY SEWER SYSTEM REQUIRES A PERMIT FROM THE TOWN OF NEWBURGH SEWER DEPARTMENT. ALL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE NYSDEC AND THE TOWN OF NEWBURGH.

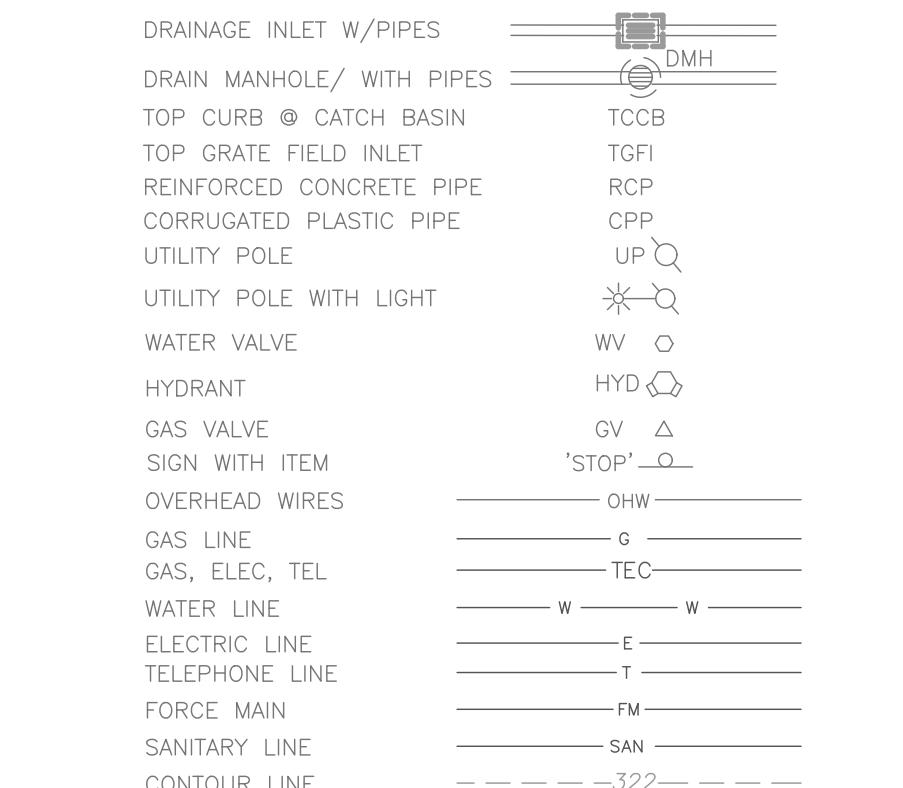
2. ALL SEWER PIPE INSTALLATION SHALL BE SUBJECT TO INSPECTION BY THE TOWN OF NEWBURGH SEWER DEPARTMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL INSPECTIONS AS REQUIRED WITH THE TOWN OF NEWBURGH SEWER DEPARTMENT.

3. ALL GRAVITY SANITARY SEWER SERVICE LINES SHALL BE 4 INCHES IN DIAMETER OR LARGER AND SHALL BE SDR-35 PVC PIPE CONFORMING TO ASTM D-3034-89. JOINTS SHALL BE PUSH-ON WITH ELASTOMERIC RING GASKET CONFORMING ASTM D-3212. FITTINGS SHALL BE AS MANUFACTURED BY THE PIPE SUPPLIER OR EQUAL AND SHALL HAVE A SPIGOT AND SLEEVE CONFIGURATION COMPATIBLE WITH THE PIPE.

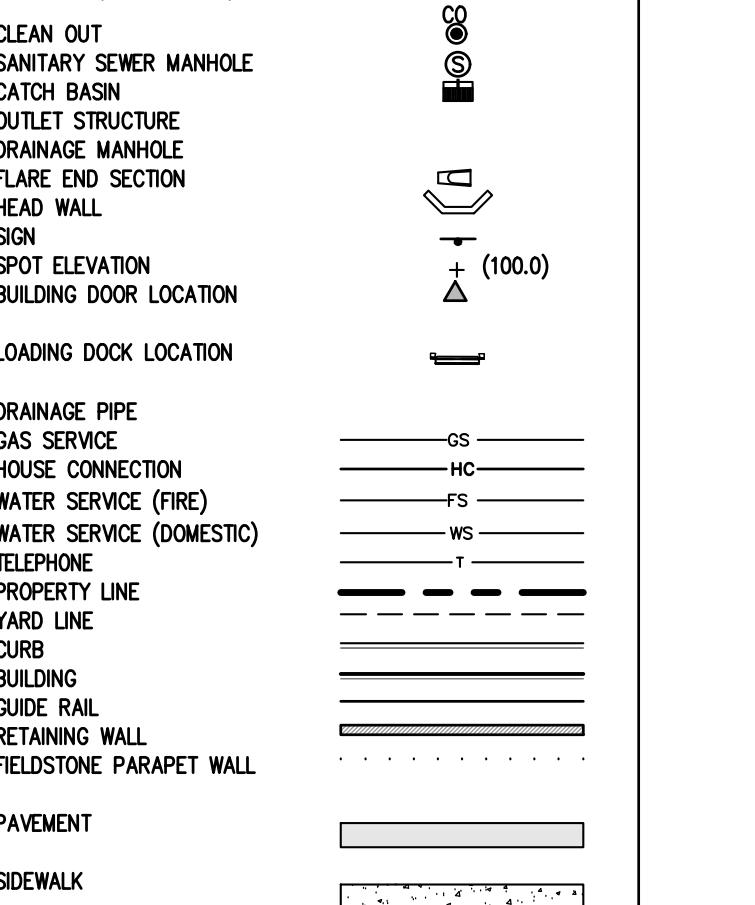
4. THE SEWER MAIN SHALL BE TESTED IN ACCORDANCE WITH TOWN OF NEWBURGH REQUIREMENTS. ALL TESTING SHALL BE COORDINATED WITH THE TOWN OF NEWBURGH SEWER DEPARTMENT.

5. THE FINAL LAYOUT OF THE PROPOSED WATER AND/OR SEWER CONNECTION, INCLUDING ALL MATERIALS, SIZE AND LOCATION OF SERVICE AND ALL APPURTENANCES, IS SUBJECT TO THE REVIEW AND APPROVAL OF THE TOWN OF NEWBURGH WATER AND/OR SEWER DEPARTMENT. NO PERMITS SHALL BE ISSUED FOR A WATER AND/OR SEWER CONNECTION UNTIL A FINAL LAYOUT IS APPROVED BY THE RESPECTIVE DEPARTMENT.

LEGEND (EXI)



LEGEND (PROPOSED)



REV	DESCRIPTION	BY	DATE
5	GENERAL REVISIONS	XC	05/04/23
4	AS PER 10/03/22 MHE ENGINEERING COMMENTS	MT	10/20/22
3	AS PER 09/02/22 MHE ENGINEERING COMMENTS	MT	09/26/22
2	PUMP STATION DESIGN & WATER NOTES	JO	08/23/22
1	AS PER 6/16/2022 PLANNING BOARD COMMENTS	JO	07/11/2022

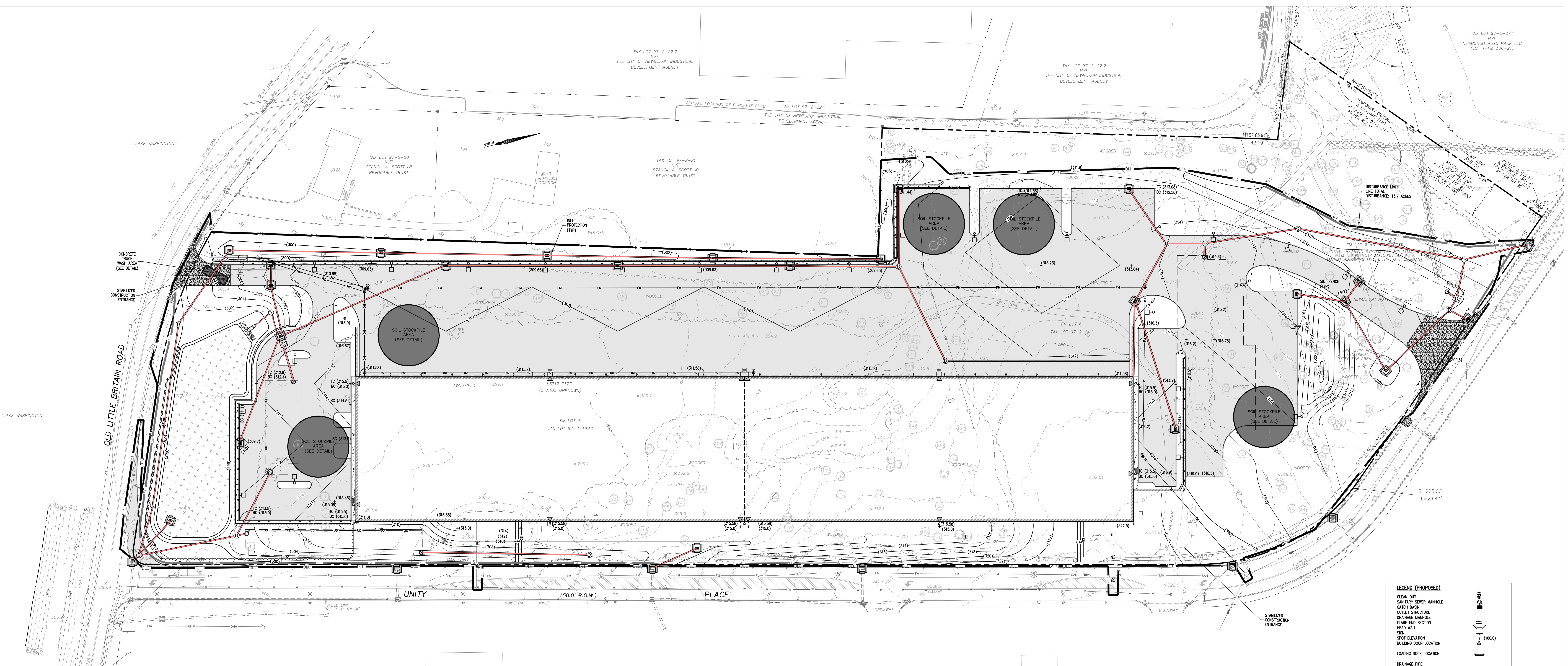
The logo for Brooker Engineering, PLLC features a blue silhouette of a city skyline with several buildings of varying heights. Below the skyline is a stylized blue road or bridge that curves from the left towards the right. To the right of the graphic, the company name "BROOKER ENGINEERING, PLLC" is written in a large, bold, blue sans-serif font. Below the main name, the words "PROFESSIONAL ENGINEERS AND LAND SURVEYORS" are written in a smaller, all-caps, blue sans-serif font.

LAND DEVELOPMENT • MUNICIPAL • STRUCTURAL • HYDROLOGICAL • SURVEYING
www.BrookerEngineering.com

74 Lafayette Avenue, Suite 501 22 Paris Avenue, Suite 105
Suffern, NY 10588 Rockleigh, NJ 07647
(845) 357-4411 (201) 684-1221

NEW YORK

	PROJECT NO:	DRAWN:	CHECKED:
	21202	JO	DR
	SCALE: 1' = 40'		
	GRAPHIC SCALE: 		
	DATE:	DRAWING NO:	
	05/27/2022	3	



STANDARD EROSION CONTROL NOTES:

- ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED IN ACCORDANCE WITH THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, AND SHALL BE INSTALLED IN PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT STABILIZATION IS ESTABLISHED.
- THE CONTRACTOR SHALL MAINTAIN AND MAINTAIN SUCH THAT ALL STORMWATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES.
- THE CONTRACTOR SHALL MAINTAIN AND INSPECTING ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES ON A REGULAR BASIS, INCLUDING AFTER EVERY STORM EVENT.
- STOCKPILES ARE NOT TO BE LOCATED ON A SLOPE, ROADWAY OR DRAINAGE FACILITY. THE BASE OF ALL STOCKPILES SHALL BE COVERED WITH A CRUSHED STONE, VEHICLE WHEEL-CLEANING BLANKET OR APPROVED EQUIVALENT.
- A CRUSHED STONE, VEHICLE WHEEL-CLEANING BLANKET SHALL BE INSTALLED WHEREVER A CONSTRUCTION ACCESS ROAD INTERSECTS ANY EXISTING ROADWAY, DRAINAGE FACILITY, OR OTHER CONSTRUCTION AREAS.
- ALL SOIL, WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE WORK AREA OR ONTO PUBLIC RIGHT-OF-WAY, SHALL BE REMOVED IMMEDIATELY AND DISPOSED OF IN AN APPROVED MANNER.
- DUST SHALL BE CONTROLLED AT ALL TIMES IN ACCORDANCE WITH THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
- TEMPORARY SEDIMENTATION ENTRAPMENT AREAS SHALL BE PROVIDED AT KEY LOCATIONS TO INTERCEPT AND CLARIFY SILT LADEN RUNOFF FROM THE SITE. THESE MAY BE EXCAVATED OR MAY BE CREATED UTILIZING EARTHEN BERMS, RIP-RAP OR CRUSHED STONE DAMS, FILTER CLOTH, FILTER FABRIC, AND OTHER APPROVED EQUIVALENTS. THESE AREAS SHALL NOT BE USED OR LOCATED INTO THE ENTRAPMENT AREAS, WHICH SHALL NOT BE FILLED IN, BUT SHALL BE CLEANED PERIODICALLY DURING THE CONSTRUCTION PHASE.
- ALL DISTURBED AREAS, EXCEPT ROADWAYS, WHICH WILL REMAIN OPEN OR UNFINISHED FOR MORE THAN 10 DAYS SHALL BE TEMPORARILY STABILIZED WITH A 1/2 LB. CUBE GRAVEL, APPROVED WITH 100% PASS, NO. 1000, 1/2 INCH DIA. IN 100' LENGTH ROWS. SHALL BE STABILIZED AS PRACTICABLE. THE INSTALLATION OF BACKFILL, STABILIZER, A TEMPORARY SEEDING AND/OR HULMING SHOULD BE APPLIED TO DISTURBED AREAS THAT ARE LEFT FOR 15 DAYS UNLESS CONSTRUCTION WILL BEGIN WITHIN THAT TIME.
- IF SILT LEAVES THE SITE, IT SHALL BE COLLECTED AND REMOVED AS DIRECTED BY APPROPRIATE MUNICIPAL AUTHORITIES.
- ALL DISTURBED AREAS WHICH ARE NOT RE-SEDED OR RE-GRADED, PLANTED OR TREATED IN ACCORDANCE WITH THE APPROVED PLANS, SHALL BE STABILIZED WITH PERMANENT VEGETATIVE COVER, USING ON-SITE GRADING, SEEDING, OR EQUIVALENT.
- KENTUCKY BLUE GRASS - 1 LB. PER ACRE
- GREENING RED FESCUS - 20 0.45
- GREENING RED FESCUS - 20 0.10
- ALL SEDIMENT CONTAINMENT AREAS TO HAVE AN APPROVAL OF THE FOLLOWING:
- FERTILIZER - 15 LBS. PER 1,000 SF OF 10-20-0 FERTILIZER OR APPROVED EQUAL.
- NOT LANDSCAPED OTHERWISE, NEW CONSTRUCTED STEEP PERMANENT SLOPED LESS THAN 1 (VERTICAL) : 2.5 (HORIZONTAL) TO BE SEDED WITH 1/2 LB. CUBE GRAVEL, APPROVED WITH 100% PASS, NO. 1000, 1/2 INCH DIA. IN 100' LENGTH ROWS.
- IF SILT LEAVES THE SITE, IT SHALL BE COLLECTED AND REMOVED AS DIRECTED BY APPROPRIATE MUNICIPAL AUTHORITIES.
- ALL DISTURBED AREAS WHICH ARE NOT RE-SEDED OR RE-GRADED, PLANTED OR TREATED IN ACCORDANCE WITH THE APPROVED PLANS, SHALL BE STABILIZED WITH PERMANENT VEGETATIVE COVER, USING ON-SITE GRADING, SEEDING, OR EQUIVALENT.

1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85.

2. FILTER FABRIC SHALL BE 100% POLYPROPYLENE, 4" CONSTRUCTION GRADE LUMBER.

3. WIRE MESH CONSTRUCTION THROAT SHALL BE A CONTINUOUS PIECE 30 INCH MINIMUM WIDTH WITH A LENGTH 4 FEET LONGER THAN THE THROAT. IT SHALL BE SHAPED AND SECURELY NAILED TO A 2" X 4" WCR.

4. THE WIRE MESH CONSTRUCTION THROAT SHALL BE SECURED TO THE FILTER FABRIC WITH TIES SPACED EVERY 6" apart.

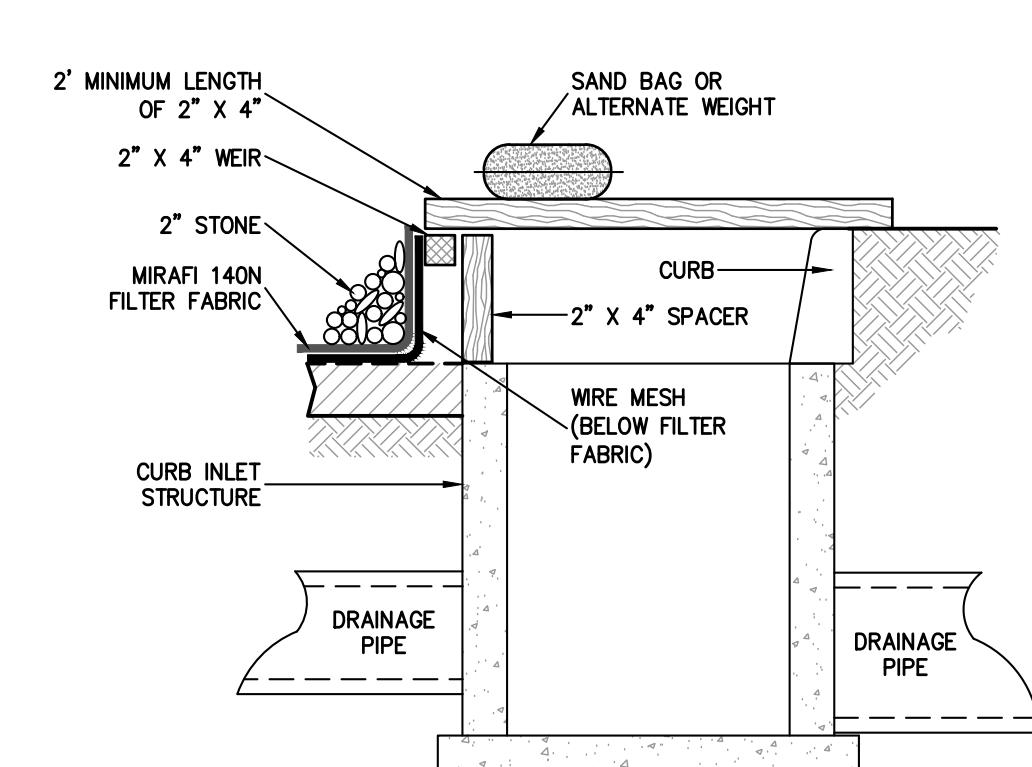
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA

OR APPROVED EQUIVALENT.

6. PREFABRICATED UNITS SHALL BE GEOPAB, ENVIROFENCE, OR APPROVED EQUIVALENT.

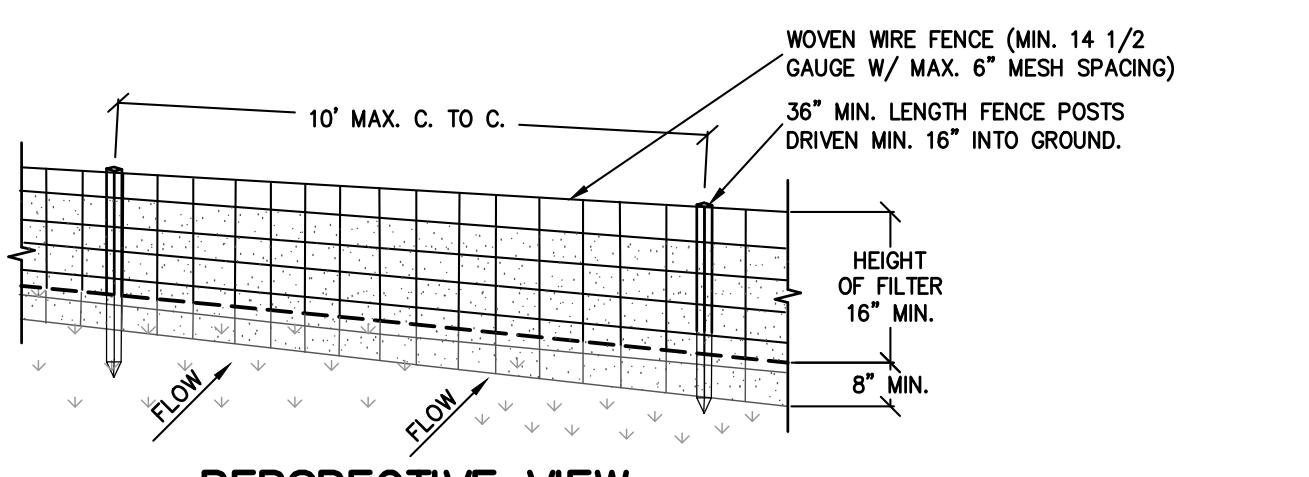
7. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

8. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

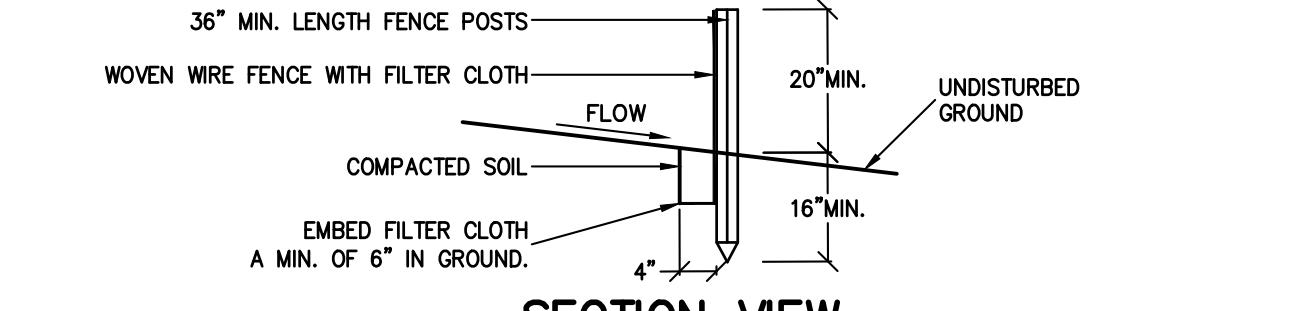


CURB INLET PROTECTION DETAIL

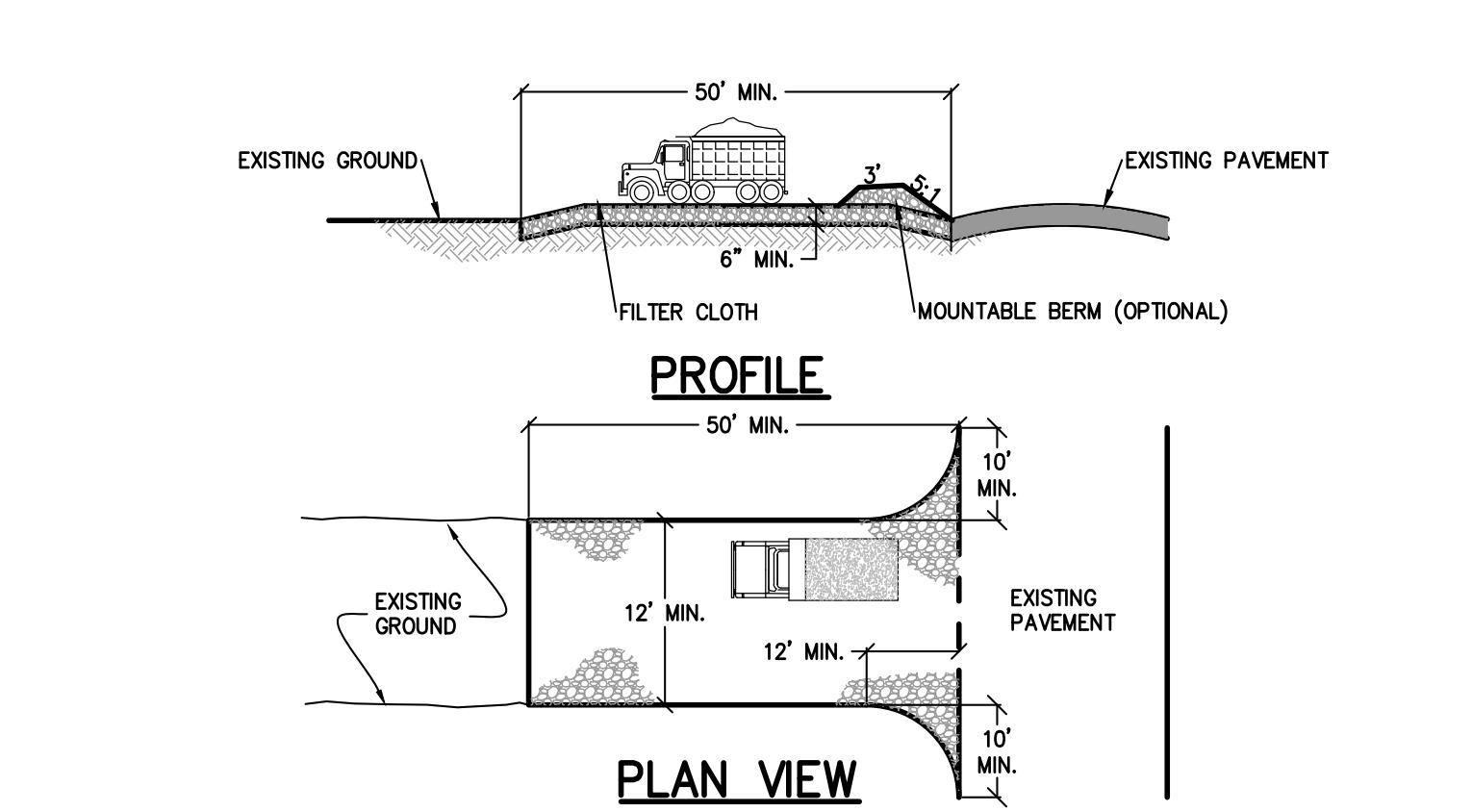
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PERSPECTIVE VIEW



SECTION VIEW



PROFILE

PLAN VIEW

NOTES:

1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85.

2. LENGTH - NOT LESS THAN 50' (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 20 FOOT MINIMUM LENGTH WOULD APPLY).

3. THICKNESS - NOT LESS THAN SIX (6) INCHES.

4. MINIMUM TWO (2) FOOT DEPTH OF FILTER CLOTH LESS THAN THE FULL MOTION AT POINTS WHERE INGRESS AND EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE SITE.

5. COVERS THE ENTIRE AREA PRIOR TO PLACEMENT OF STONE.

6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BEHIND THE SILT FENCE.

7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT SPILLS, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY SHALL BE REMOVED AS SOON AS POSSIBLE.

8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP.

9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

NOTES:

1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85.

2. FILTER FABRIC SHALL BE 100% POLYPROPYLENE, 4" CONSTRUCTION GRADE LUMBER.

3. WIRE MESH CONSTRUCTION THROAT SHALL BE A CONTINUOUS PIECE 30 INCH MINIMUM WIDTH WITH A LENGTH 4 FEET LONGER THAN THE THROAT. IT SHALL BE SHAPED AND SECURELY NAILED TO A 2" X 4" WCR.

4. THE WIRE MESH CONSTRUCTION THROAT SHALL BE SECURED TO THE FILTER FABRIC WITH TIES SPACED EVERY 6" apart.

5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA

OR APPROVED EQUIVALENT.

6. PREFABRICATED UNITS SHALL BE GEOPAB, ENVIROFENCE, OR APPROVED EQUIVALENT.

7. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

8. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

9. ONE-THIRD THE HEIGHT OF THE FENCE WHEN IT HAS REACHED ONE-HALF THE DESIGN DEPTH OF THE BASIN. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA IN A MANNER SUCH THAT IT WILL NOT ERODE.

10. TEMPORARY SEDIMENT TRAPS ONCE IT HAS ACCUMULATED ONE-HALF THE DESIGN DEPTH OF THE BASIN. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA IN A MANNER SUCH THAT IT WILL NOT ERODE.

11. SILT FENCE SHALL BE INSPECTED FOR LEAKS OR HOLE. IF SEEN, REPAIRS SHALL BE MADE IMMEDIATELY. POSTS ARE FIRMLY IN THE GROUND.

12. TEMPORARY SEDIMENT TRAPS ONCE IT HAS ACCUMULATED ONE-HALF THE DESIGN DEPTH OF THE BASIN. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA IN A MANNER SUCH THAT IT WILL NOT ERODE.

13. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

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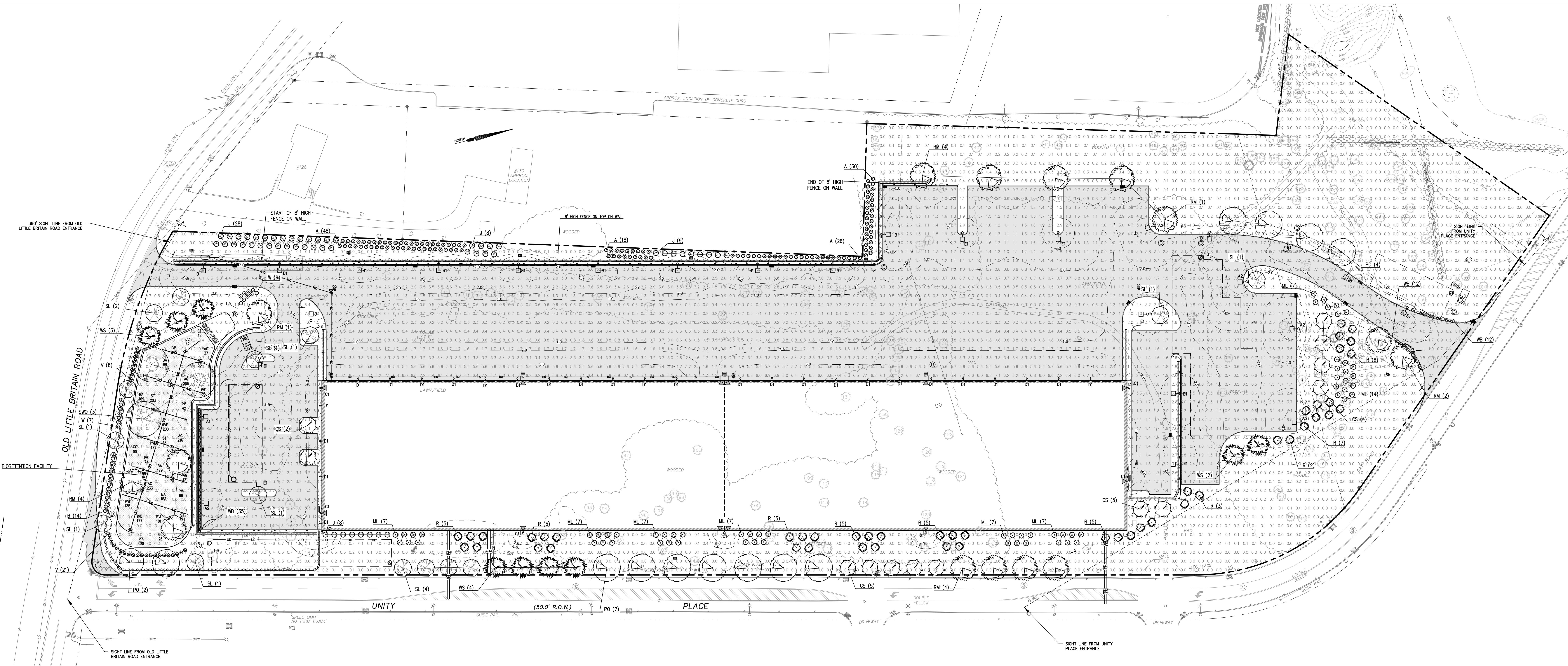
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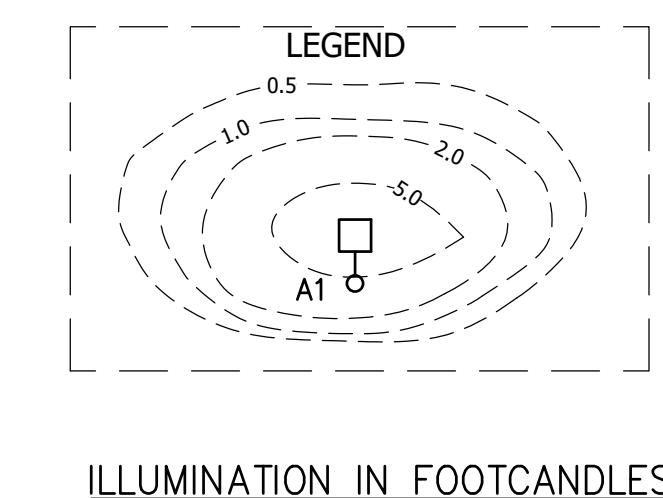
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LUMINAIRE SCHEDULE								
SYMBOL	TAG	QUANTITY	LABEL	DESCRIPTION	ARRANGEMENT	MANUFACTURER	COLOR TEMP.	MOUNTED HEIGHT (FEET)
O-□	A1	1	DSX2 LED Area Luminaire	DSX2 LED P2 30K TSM 15VOLT	SINGLE	LITHONIA LIGHTING	3000K	20
O-□	A2	5	DSX2 LED Area Luminaire	DSX2 LED P2 30K TSM 15VOLT HS	SINGLE	LITHONIA LIGHTING	3000K	20
O-□	B1	15	DSX2 LED Area Luminaire	DSX2 LED P1 30K BLC 15VOLT	SINGLE	LITHONIA LIGHTING	3000K	20
□	C1	8	WFX1 LED WALLPACK	WFX1 LED P2 30K 15VOLT	WALL MOUNTED	LITHONIA LIGHTING	3000K	8
□	D1	28	WFX1 LED WALLPACK	WFX1 LED P2 30K 15VOLT	WALL MOUNTED	LITHONIA LIGHTING	3000K	20
O-□	E1	7	DSX2 LED Area Luminaire	DSX2 LED P1 30K TSM 15VOLT	SINGLE	LITHONIA LIGHTING	3000K	20



NOTES:

1. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OF POLE MOUNTING BASE FOR APPROVAL OF OWNER AND APPROVED ENGINEER. ALL DRAWINGS TO BE SUBMITTED IN THREE PRECISELY DRAWN COPIES.
2. ALL LIGHTING SHOWN IN THIS PLAN SHALL BE DIRECTED AWAY OR SHIELDED SO AS TO PRECLUDE OBSTRUCTIVE GLARE OBSERVABLE FROM ADJACENT STREETS AND PROPERTIES.
3. DESIGN AND SELECTION TO BE MADE BY ELECTRICAL ENGINEER.
4. LIGHTING CONTROLS TO BE SELECTED BY OWNER.

PLANTING TABLE

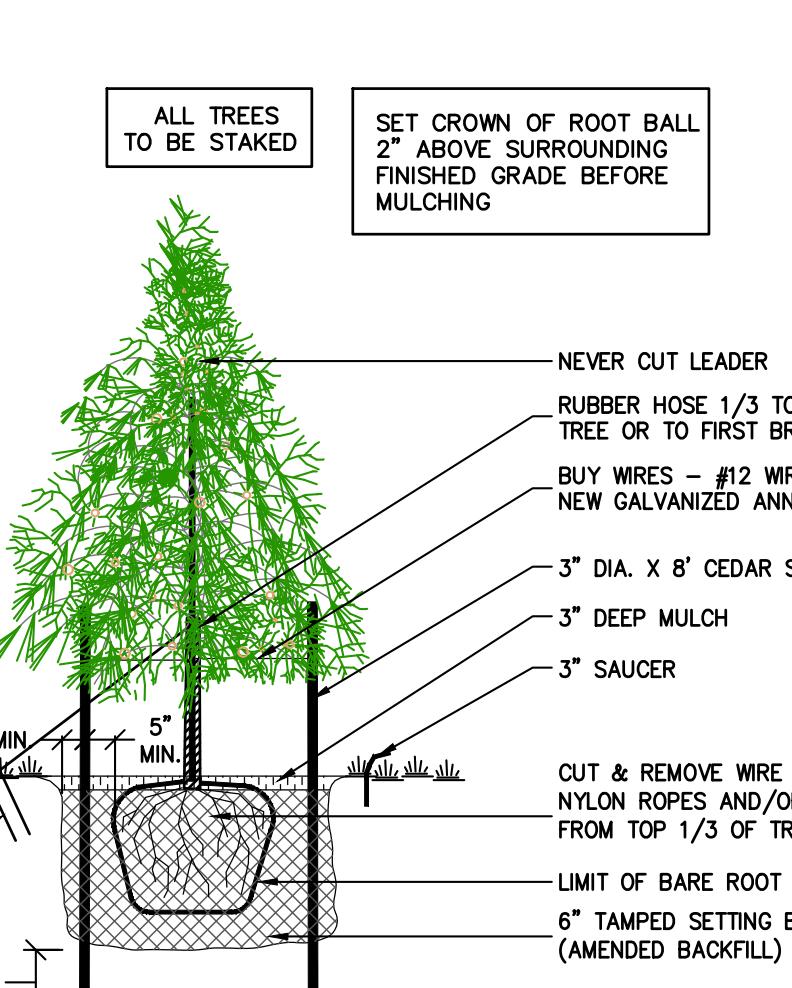
SYMBOL	SCIENTIFIC NAME	COMMON NAME	SIZE	QUANTITY	TOTAL TREE INCHES PLANTED
P0	QUERCUS PALUSTRIS	PIN OAK	3"-35" CAL.	13	39
B	MYRTUS PENNSYLVANICA	NORTHERN BAYBERRY	2 GAL.	14	
W	ILEX VERTICILLATA	COMMON WINTERBERRY	2 GAL.	16 TOTAL, 2 MALE	
V	VIBURNUM DENTATUM	ARROWWOOD VIBURNUM	3 GAL.	29	
J	JUNIPERUS SCOPULORUM "GRAY GLEAM"	ROCKY MOUNTAIN JUNIPER	8 FEET HIGH	53	106
ML	KALMIA LATIFOLIA "SARAH"	MOUNTAIN LAUREL SARAH	30"-36" B&B	63	
R	RHODODENDRON MAXIMUM "THROEM"	PINK ROSEBAY RHODODENDRON	30"-36" B&B	44	
SL	TORENIA TOMENTOSA	SILVER LINDEN	25"-3" CAL.	15	37.5
RM	ACER RUBRUM	RED MAPLE	3"-35" CAL.	12	36
A	THUJA OCCIDENTALIS "EMERALD"	EMERALD ARBORVITAE	8 FEET HIGH	122	305
WS	PICEA GLAUCA	WHITE SPRUCE	8 FEET HIGH	9	27
CS	PICEA PUNGENS GLAUCA	COLORADO SPRUCE	8 FEET HIGH	13	39
SWO	QUERCUS BICOLOR	SWAMP WHITE OAK	25"-3" CAL.	3	7.5
WB	BUXUS MICROPHYLLA	WINTER GREEN BOXWOOD	3 GAL	60	
BIOPRETENTION PLANTS					
IV	IRIS VERSICOLOR	BLUE FLAG IRIS	DP-50	837	
BA	SAGITTaria LATIFOLIA	BROADLEAF ARROWHEAD	TUBERS	787	
AG	ANDROPOGON GERARDII	BIG BLUE STEM	PL/T2	875	
CC	CALAMAGROSTIS CANADENSIS	BLUEJOINT GRASS	PL/T2	412	
PV	PANICUM VERTICATUM	SWITCHGRASS	DP-50	450	
ST	SCHONOPLECTUS TABERNAMONTANI (SCORUS VALVIDUS)	SOFTSTEM BULRUSH	DP-50	479	
RM	ACER RUBRUM	RED MAPLE	3"-35" CAL.	3	9
BIORETENTION AREA CAPPING					
TOTAL: 606					

PLANTING NOTES

1. FALL VEGETATION SHOWN ON THIS PLAN SHALL BE MAINTAINED IN A HEALTHY AND MORPHOSIS CONDITION THROUGHOUT THE DURATION OF THE PROPOSED USE OF THE SITE. ALL VEGETATION NOT SO MAINTAINED SHALL BE REPLACED WITH NEW COMPARABLE VEGETATION AT THE BEGINNING OF THE NEXT GROWING SEASON.
2. UTILIZATION OF EXISTING SOIL AND PLANT MATERIAL FOR PLANTING LOCATIONS SHALL BE ADJUST AS REQUIRED TO PRECLUDE ANY DISTURBANCE TO EXISTING UTILITIES.
3. STAKE EVERGREEN TREES WITH 2 ZEDAR STAKES, RUBBER HOSE AROUND TREE (6"-8" ABOVE GRADE) AND TWISTED TO GAUGE GALVANIZED WIRE.
4. GUARD EVERGREEN PLANTING AREA WITH 2" DEEP MULCH.
5. GUARD ALL PLANT AND WOOD FENCE AREAS WITH 2" DEEP MULCH.
6. ALL PLANT MATERIAL SHALL BE NURSERY GROWN AND SHALL CONFORM TO THE AMERICAN ASSOCIATION OF NURSERY MEN'S STANDARDS.
7. PLANTING TOPS ON ALL DESTROYED LAWN AREAS AND ALL AREA NOT FADED OR BUILT UP.
8. PLANT MATERIAL SHALL BE 3" INCHES FOR TREES (MINIMUM OF TWO TIMES ROOT BALL DIAMETER) AND 24" WIDE FOR SHRUBS AND 6" DEEPER THAN ROOT BALL. SET PLANTS AT SAME LEVEL AS ORIGINALLY GROWN ON BASE OF UNDISTURBED SOIL. THE TRUNK PLANT IS TO BE PLANTED AT THE SAME LEVEL AS IT WAS GROWN. DO NOT PLANT IN SOIL THAT IS DRYER THAN THE SOIL IN THE EXISTING SOIL. FROM PLANT PIT AND BACKFILL WITH A MIXTURE OF ONE PART PEAT HUMUS, ONE PART DEHYDRATED COW MANURE AND ONE PART TOPSOIL. ADD 1/2" DEEP MULCH. PLANT SOIL MUST NOT BE DENSE. PLANT SOIL SHOULD NOT BE DRIED OUT. PLANT SOIL OF EVERGREEN PLANTING IS TO BE 5"-10" DEEP FERTILIZER. FOR EVERGREEN PLANTING, ADD 1 LB. PER 100 SQUARE FEET OF PLANT BED EACH OF AMMONIUM SULFATE AND SUPERPHOSPHATE.
9. MULCH PLANTING AREA WITH 2" DEEP SHREDDED PINE, OAK BARK OR OTHER SHREDDED BARK. DO NOT PLACE MULCH AGAINST TREE OR SHRUB TRUNK. THE TRUNK FLARE AND ROOT COLLAR SHALL BE VISIBLE AT THE TOP OF THE PLANT BED. DO NOT PILE MULCH AGAINST THE PLANT BED. THE MULCH IS TO BE 12" INCHES IN DIAMETER AND 6" DEEP. THE MULCH IS TO BE THE SAME AS ORIGINALLY GROWN.
10. TEST PLANTING SEEDS WITH 15 LBS. PER 1000 SQUARE FEET OF 10-20-10 FERTILIZER OR APPROVED EQUIVALENT. REPEAT AFTER 8 WEEKS. LAWN AREAS SHALL BE SEADED AT 5 LBS. PER 1000 SQ. FT. WITH THE FOLLOWING SEED MIX: 40% KENSTON CHEWING FESCUE, 40% BARLEY, 10% KENTUCKY BLUEGRASS, AND 20% RYEGRASS. PLANT SEEDS WITH 1/2" DEEP. DO NOT PILE MULCH OVER PLANTED SEEDS.
11. THE PLANTING PLAN MAY NOT BE CHANGED. TOTAL QUANTITIES OF ALL PLANTS SHOWN ON THE PLANTING PLAN. CHANGES TO THE SITE PLAN FROM THAT SHOWN ON THE PLANTING PLAN THAT CAUSE DIFFERENT SITE AREAS AVAILABLE FOR PLANTING SHALL HAVE PLANTING ADJUSTED ON SITE BY THE DESIGN PROFESSIONAL.

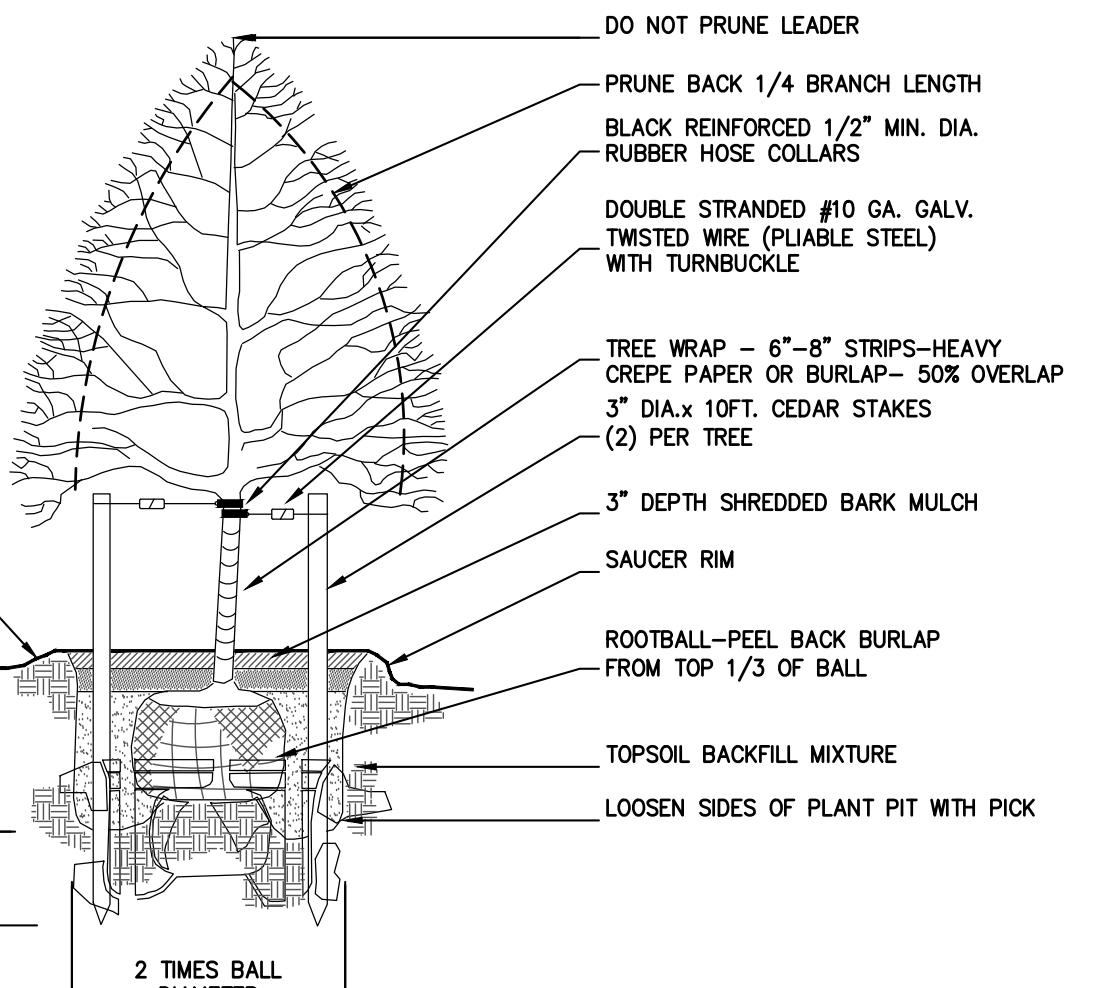
BIORETENTION PLANTING SOIL BED CHARACTERISTICS:

1. THE SOIL SHOULD BE FREE OF STONES, STUMPS, ROOTS, OR OTHER WOODY MATERIAL OVER 1" IN DIAMETER. BRUSH OR SEEDS FROM NOxious WEEDS. PLACEMENT OF THE PLANTING SOIL IN LIFTS OF 12 TO 18", LOOSELY COMPACTED (TAMPED LIGHTLY WITH A DOZER OR BACKHOE BUCKET).
2. PLANTING SOIL MIX (2.5 FEET DEEP): 45% - 100% COARSE, 45% - 50% FINE, 5% - 10% ORGANIC MATTER. 85% - 88% COARSE, MEDIUM SAND 8% - 12% SILTY SAND 3% - 5% ORGANIC MATTER.
3. BIORETENTION AREA SHALL BE CAPPED WITH 3" MULCH.



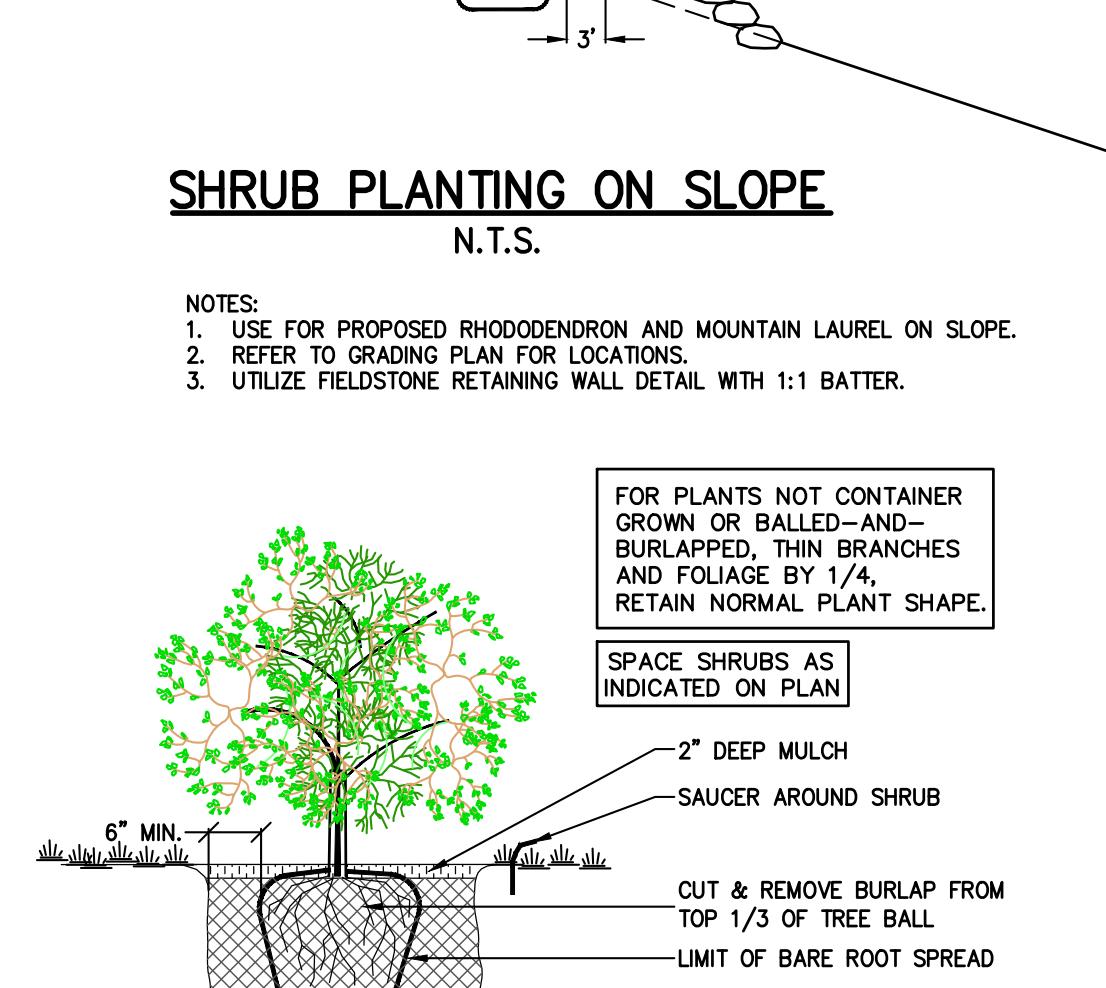
EVERGREEN TREE PLANTING

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DECIDUOUS TREE PLANTING

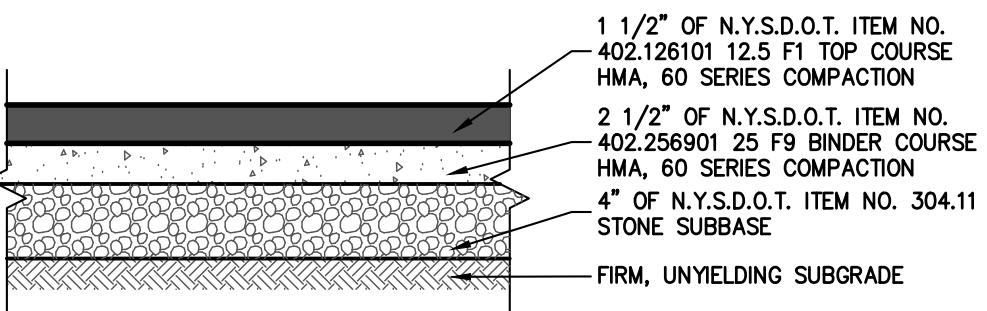
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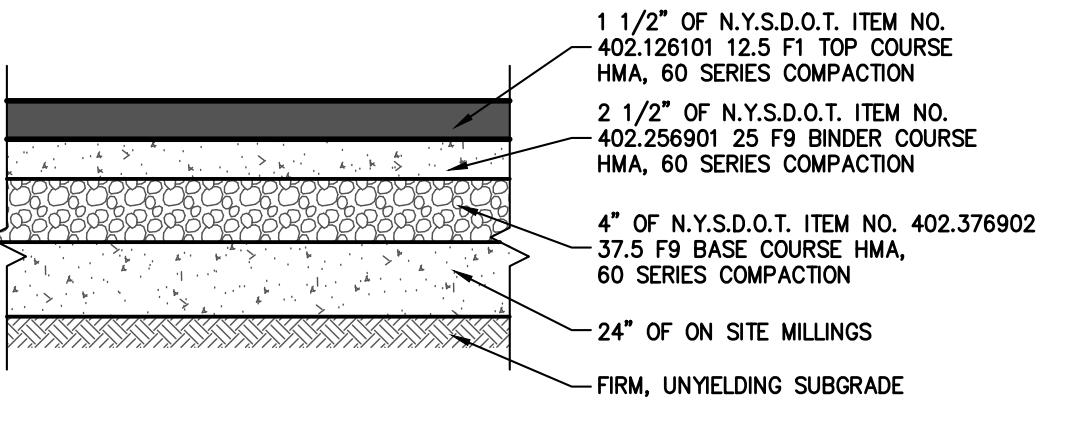
SHRUB PLANTING

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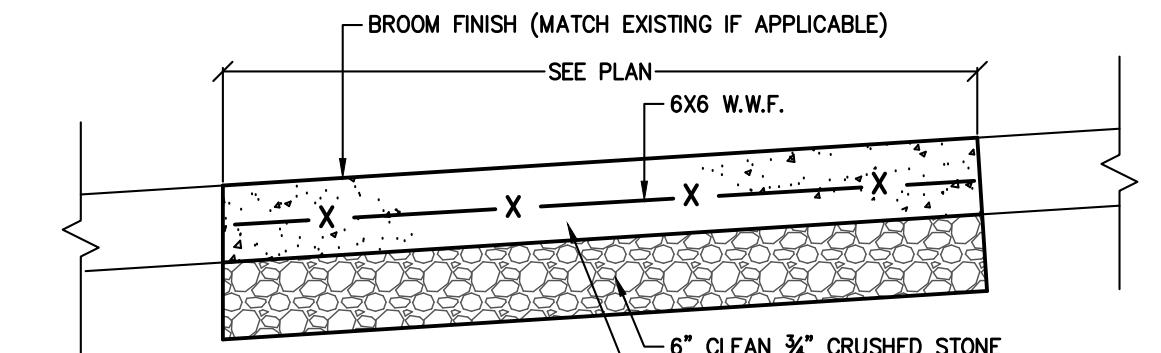
5	GENERAL REVISIONS	XO	05/14/23
1	AS PER 6/16/2022 PLANNING BOARD COMMENTS	XO	07/11/2022
REV	DESCRIPTION	BY	
DISCLAIMER: ANY ALTERATION OR ADDITIONS TO THESE PLANS IS A VIOLATION OF THE N.Y.S. EDUCATION LAW, ARTICLE 145, SECTION 7209, SUBSECTION 2.			
 BROOKER ENGINEERING, PLLC PROFESSIONAL ENGINEERS AND LAND SURVEYORS LAND DEVELOPMENT - MUNICIPAL STRUCTURAL - HYDROLOGICAL - SURVEYING www.BrookerEngineering.com			
74 Lafayette Avenue, Suite 501 • 22 Forest Avenue, Suite 105 • Albany, NY 12206 • (518) 465-4411 • (845) 357-4411			
PROJECT: UNITY PLACE WAREHOUSE TOWN OF NEMBURG ORANGE COUNTY NEW YORK			
TITLE: LIGHTING AND PLANTING PLAN			
PROJECT NO:		DRAWN:	CHECKED:
21202		AP	DR
SCALE: 0		1' = 40'	
GRAPHIC SCALE: 0		40' 80'	
DATE: 05/27/2022		DRAWING NO: 5	



PARKING LOT PAVEMENT SECTION
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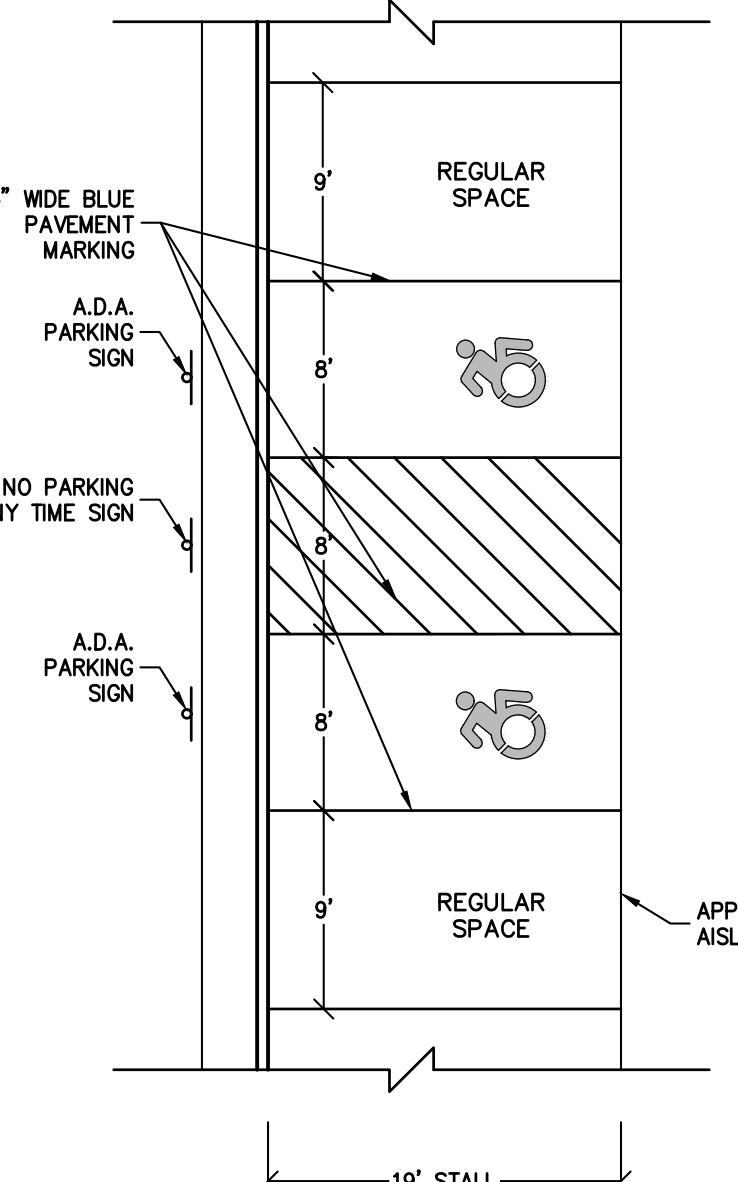


TYPICAL DRIVEWAY PAVEMENT SECTION DETAIL
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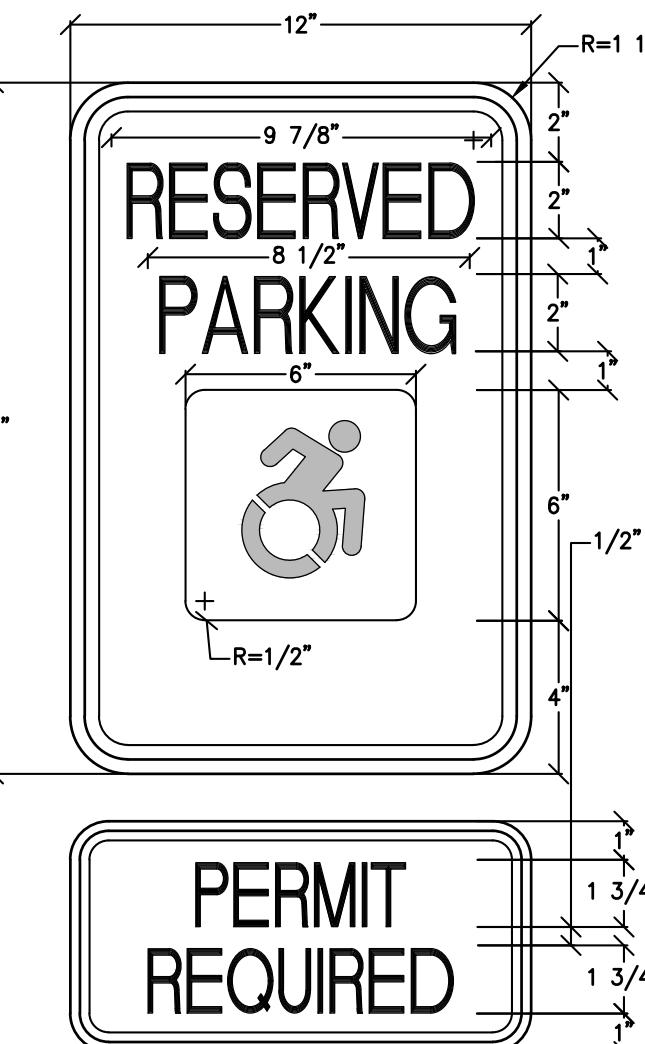


CONCRETE SIDEWALK DETAILS
N.T.S.
1. 1/2" OF N.Y.S.D.O.T. ITEM NO. 402.26101 12.5 T1 TOP COURSE HMA.
2. 1/2" OF N.Y.S.D.O.T. ITEM NO. 402.256901 25 F9 BINDER COURSE HMA.
3. 4" OF N.Y.S.D.O.T. ITEM NO. 304.11 STONE SUBBASE.
FIRM, UNYIELDING SUBGRADE

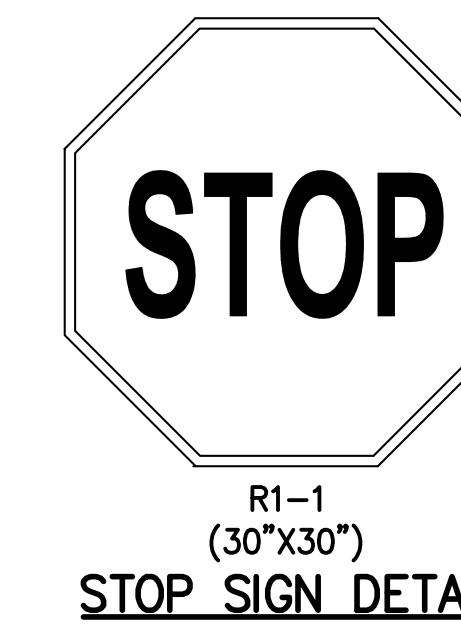
CONCRETE SIDEWALK DETAIL
N.T.S.



A.D.A. PARKING
SPACE DESIGN STANDARDS
N.T.S.



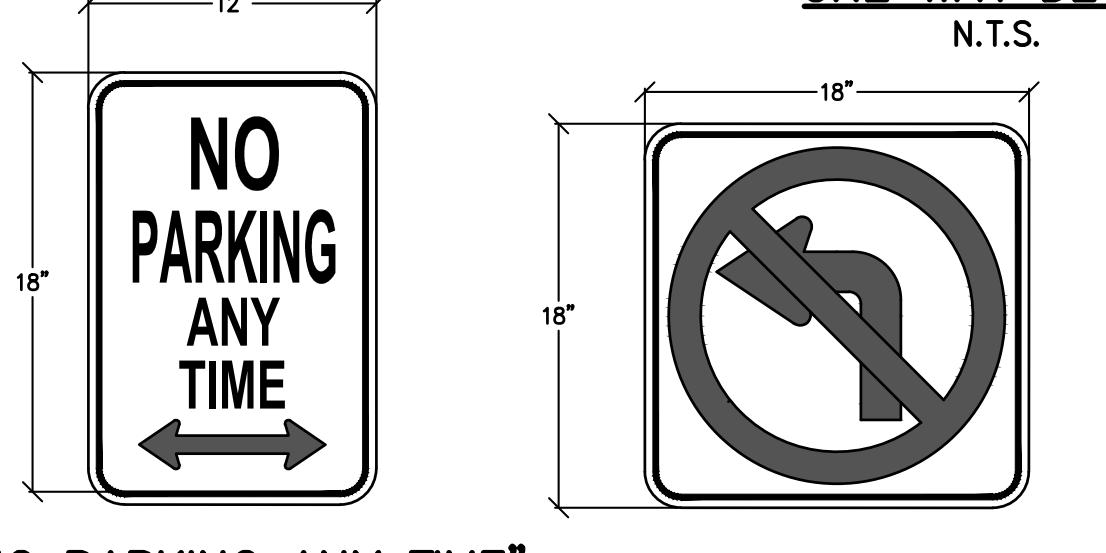
SIGN FOR A.D.A.
PARKING SPACE
N.T.S.



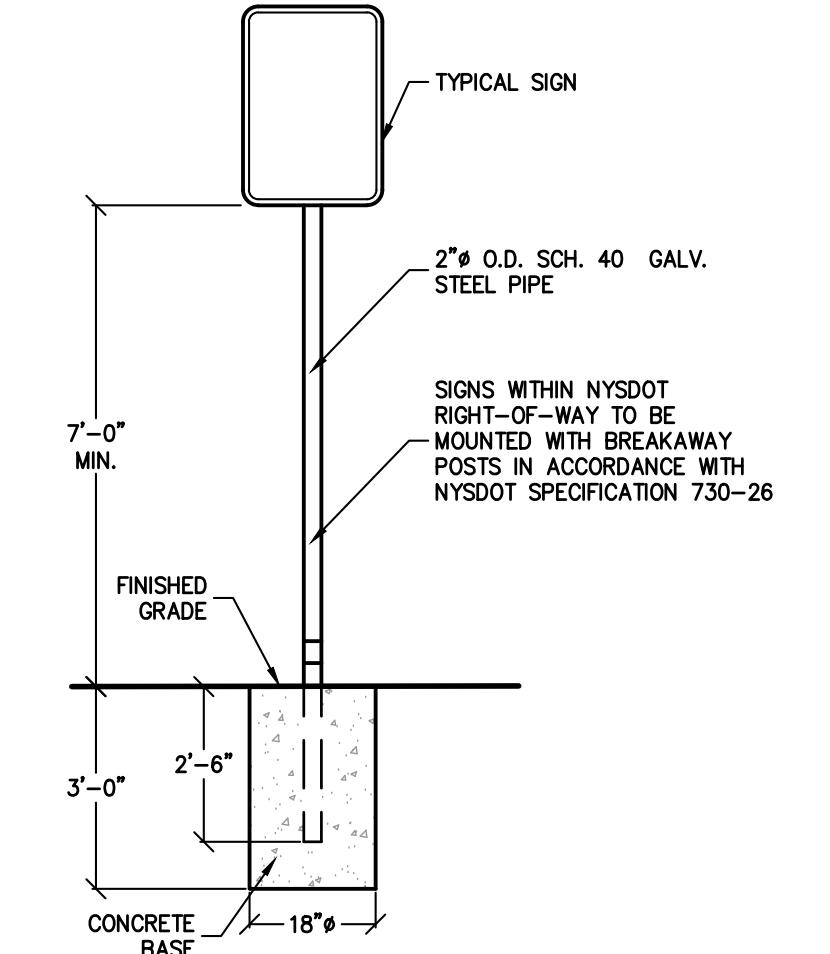
STOP
R1-1
(30"x30")
STOP SIGN DETAIL
N.T.S.



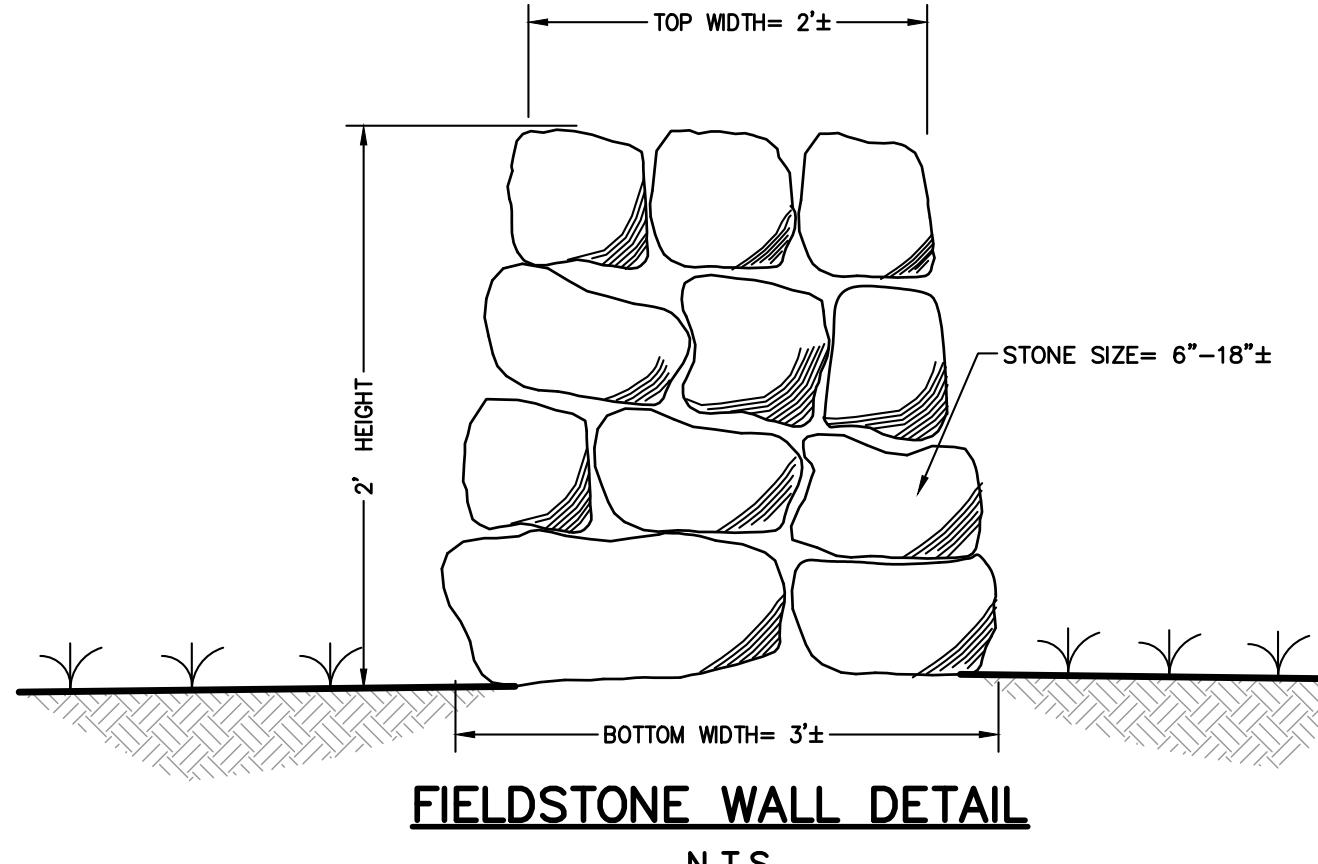
ONE WAY
R6-1R
(36"x12")
ONE WAY DETAIL
N.T.S.



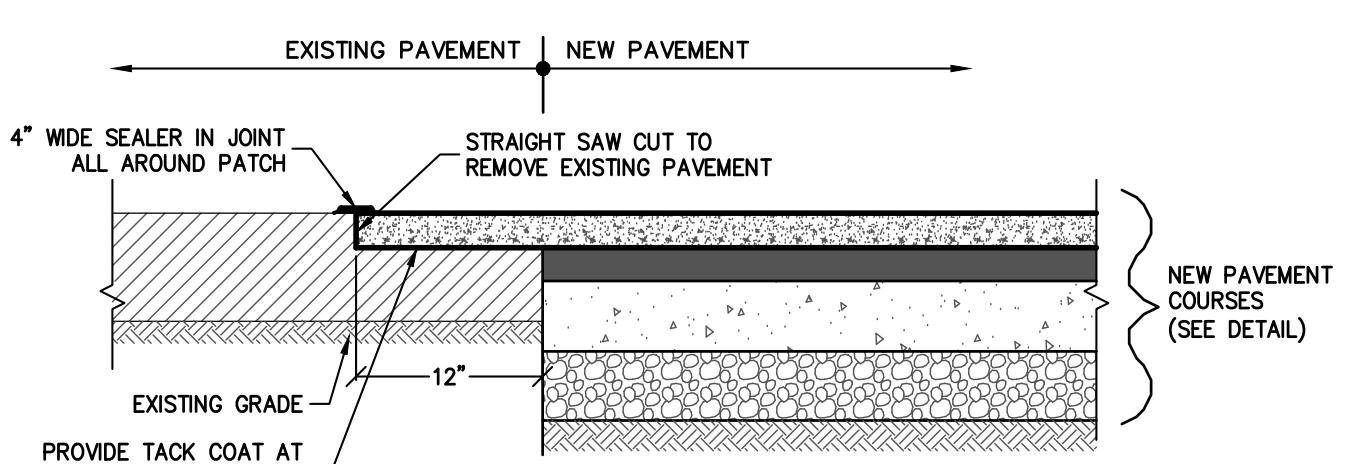
"NO PARKING
ANY TIME"
SIGN MUTCD #R7-1
N.T.S.
"NO LEFT TURN" SIGN
MUTCD #R3-2
N.T.S.



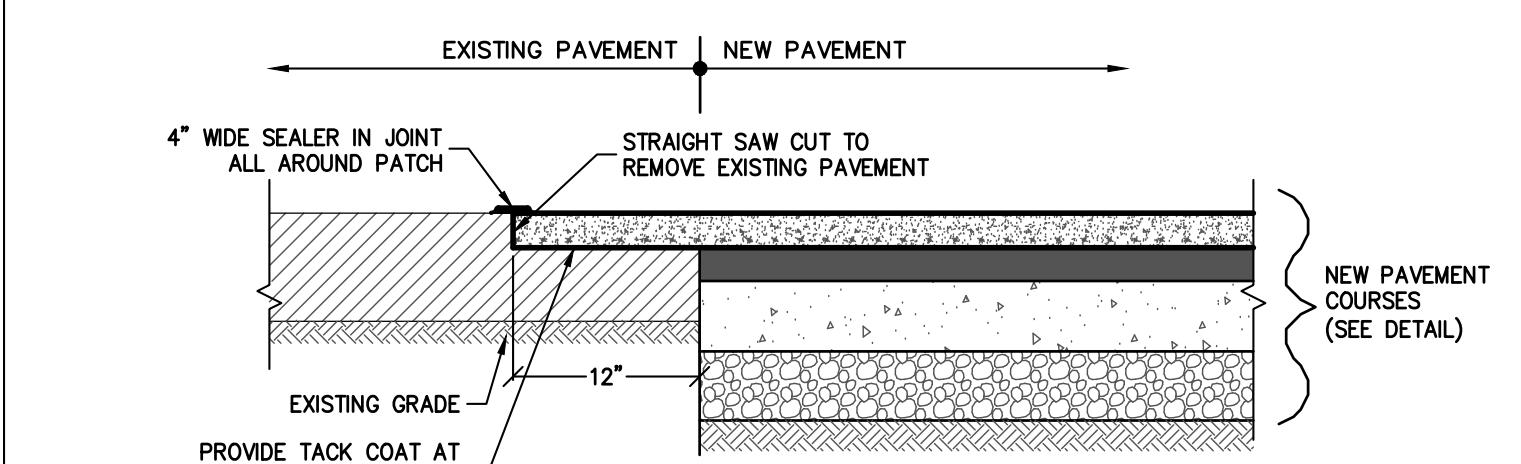
TYPICAL SIGN
MOUNTING DETAIL
N.T.S.



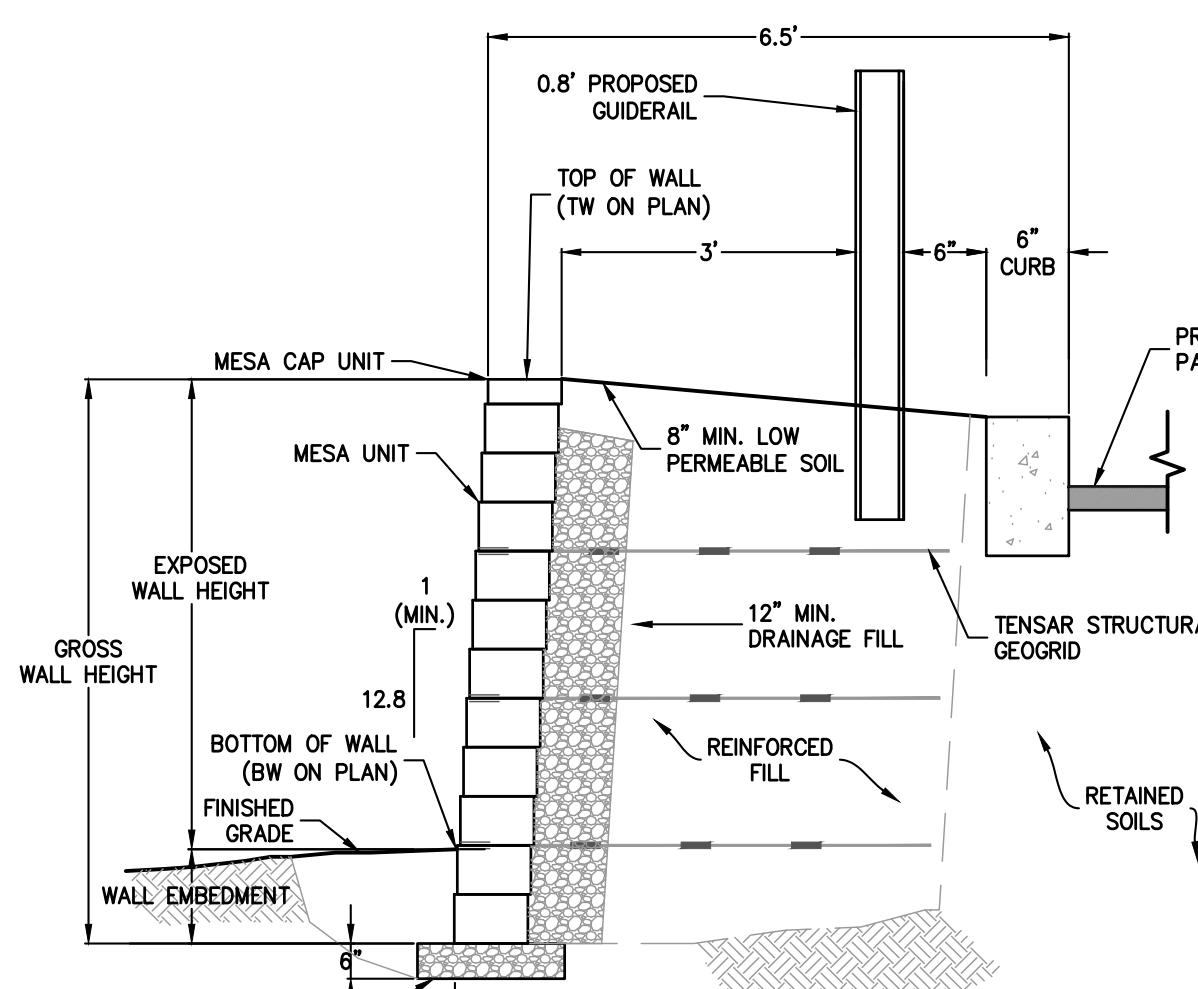
FIELDSTONE WALL DETAIL
N.T.S.



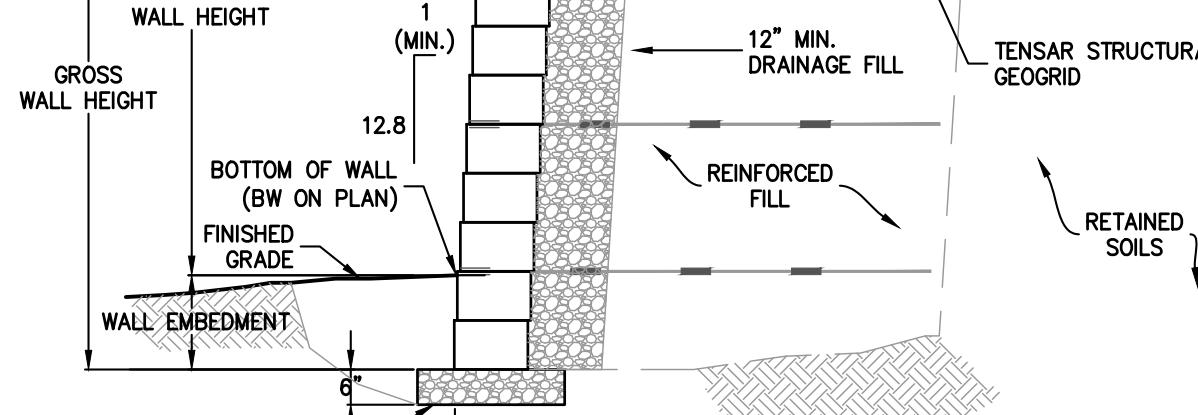
CONCRETE CURB DETAIL
N.T.S.



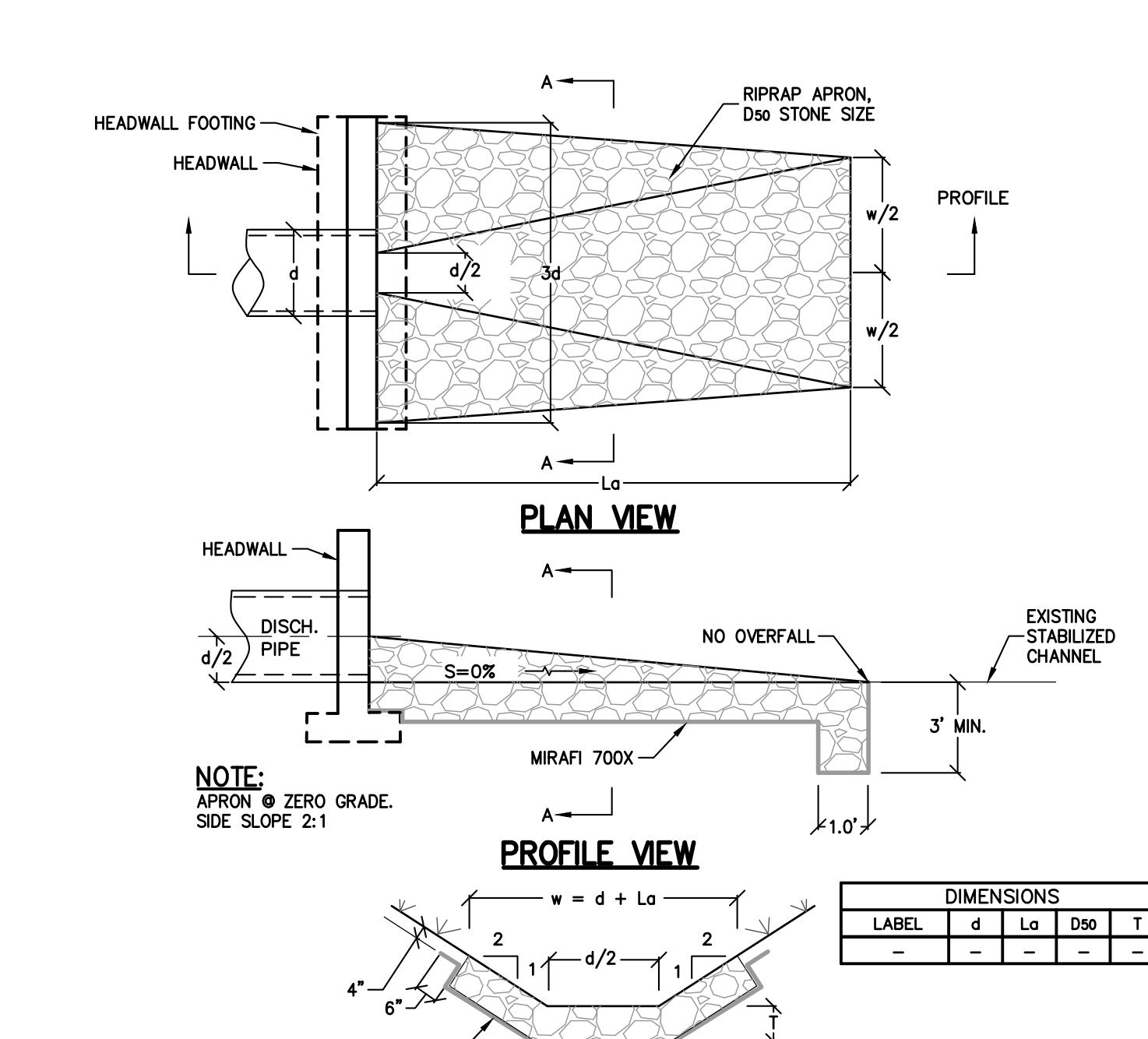
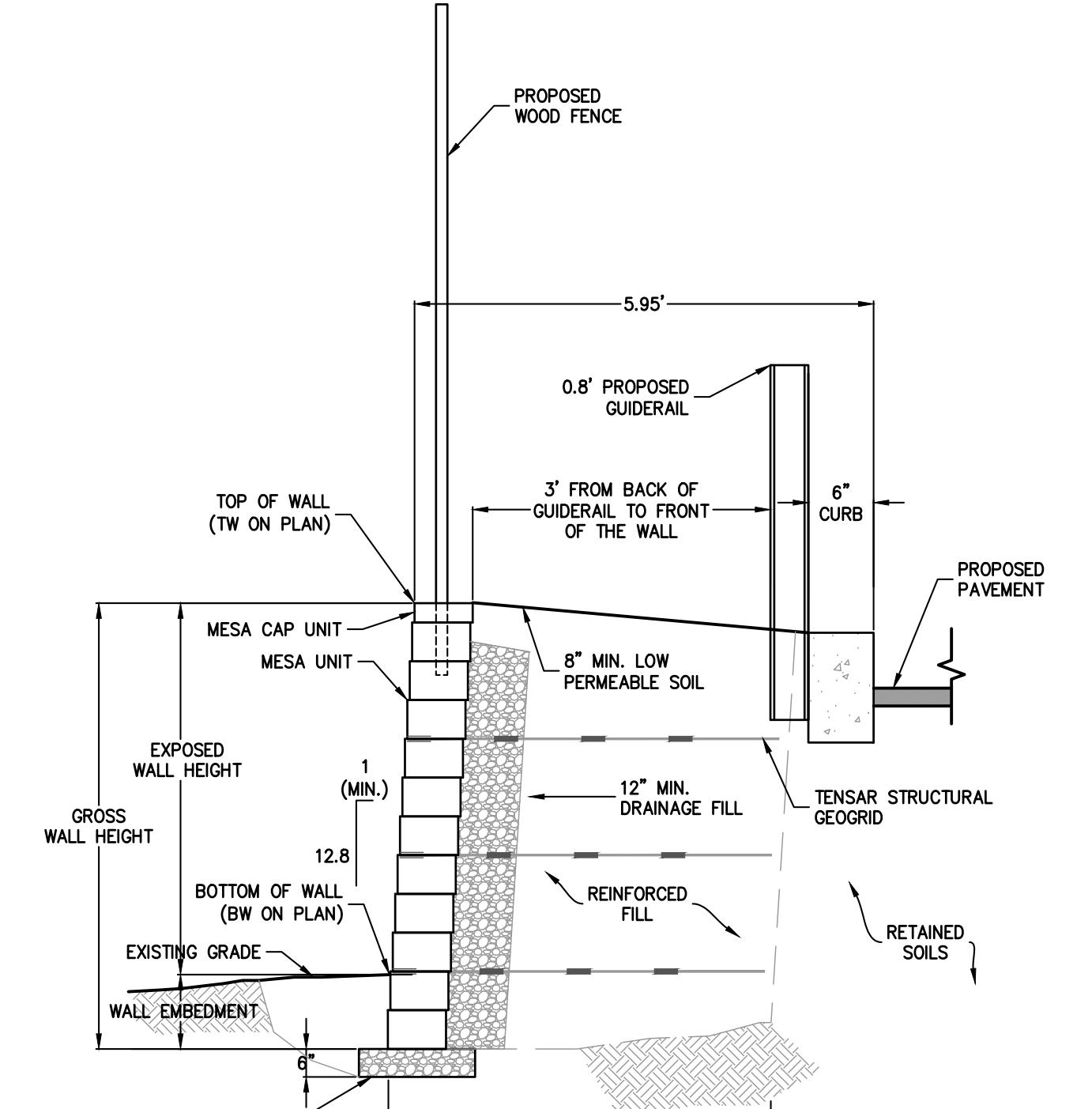
PAVEMENT BUTTING DETAIL
N.T.S.



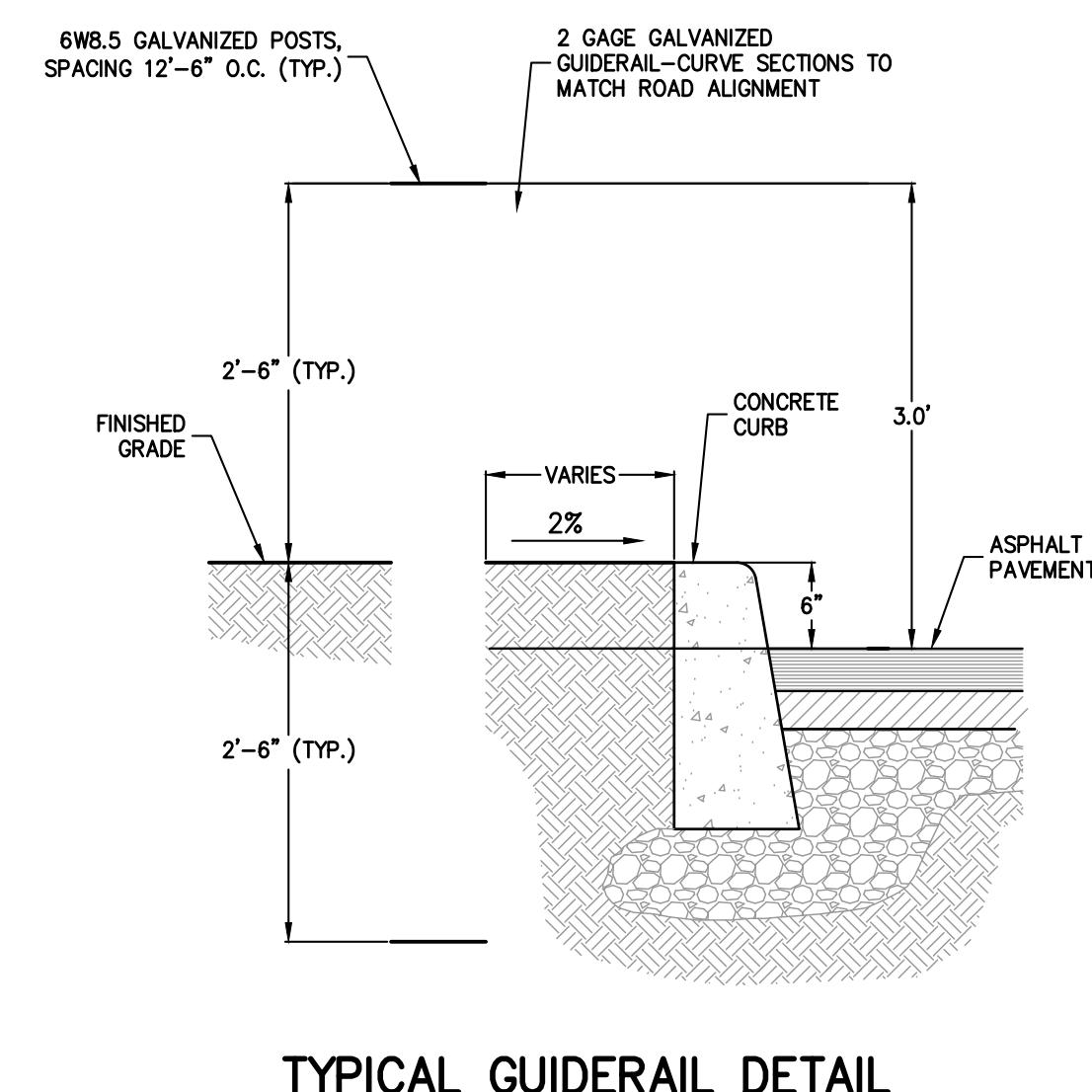
MESA RETAINING WALL SYSTEMS (SOUTH)
N.T.S.



MESA RETAINING WALL SYSTEMS (WEST)
N.T.S.



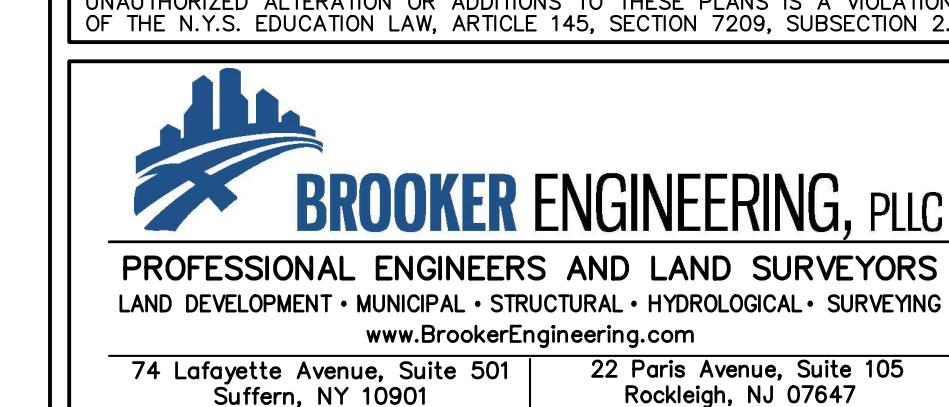
RIPRAP OUTLET PROTECTION DETAIL
N.T.S.



TYPICAL GUIDORAIL DETAIL
N.T.S.


5	GENERAL REVISIONS	XC	05/04/23
4	AS PER 10/03/22 MFG. ENGINEERING COMMENTS	MT	10/20/22
3	AS PER 10/03/22 MFG. ENGINEERING COMMENTS	MT	10/20/22
2	PUMP STATION DESIGN & WATER CONNECT DETAIL	JO	06/23/22
REV	DESCRIPTION	BY	DATE

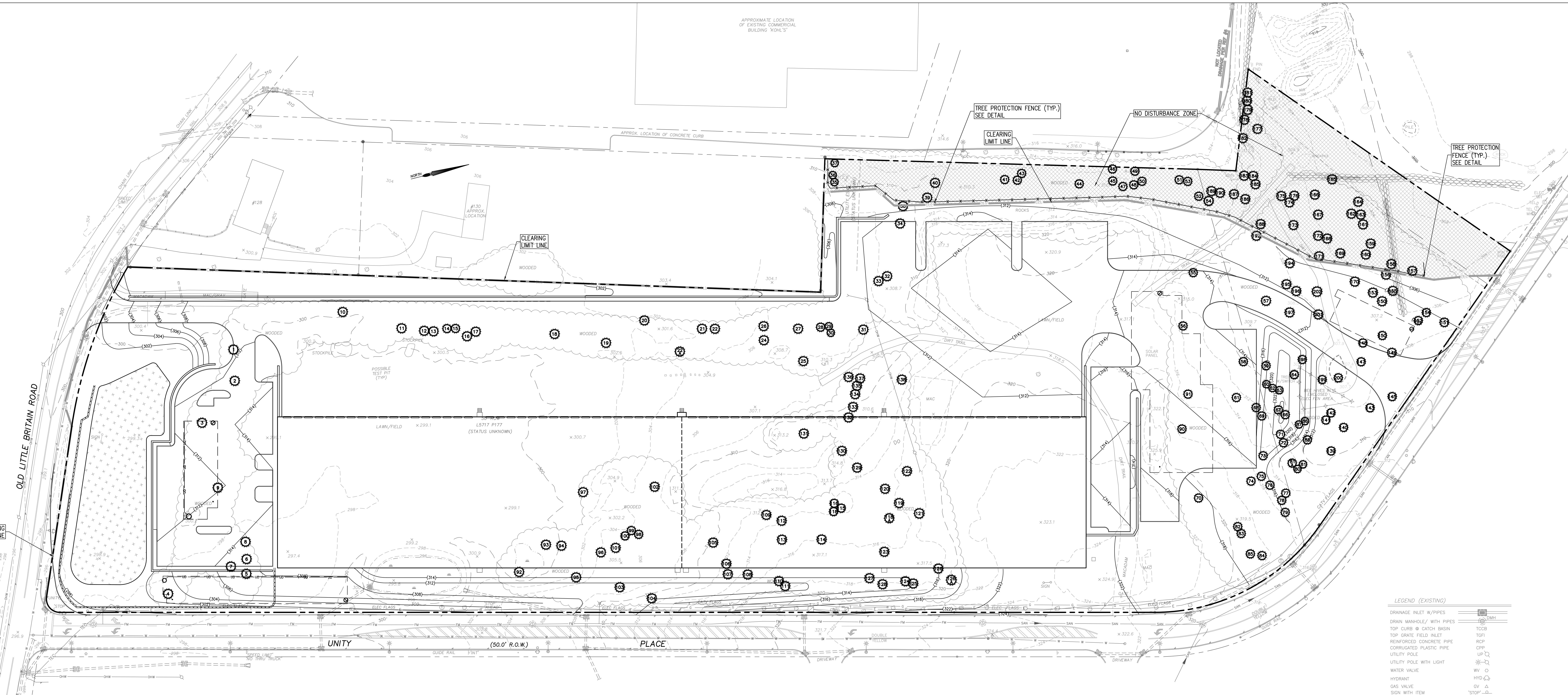
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OF THE N.Y.S. EDUCATION LAW, ARTICLE 145, SECTION 7209, SUBSECTION 2.




PROJECT: **UNITY PLACE WAREHOUSE**
TOWN OF NEMBURGH
ORANGE COUNTY
NEW YORK
TITLE: **CONSTRUCTION DETAILS
(1 OF 3)**


PROJECT NO:	DRAWN:	CHECKED:
SCALE:	AS SHOWN	
GRAPHIC SCALE:		
DATE:	05/27/2022	DRAWING NO: 6





TREE SURVEY LEGEND																																		
NUMBER	SIZE	TYPE	CATEGORY	CONDITION	TREES TO BE REMOVED (TR)	TREES TO BE REMAIN (TR)	NUMBER	SIZE	TYPE	CATEGORY	CONDITION	TREES TO BE REMOVED (TR)	TREES TO BE REMAIN (TR)	NUMBER	SIZE	TYPE	CATEGORY	CONDITION	TREES TO BE REMOVED (TR)	TREES TO BE REMAIN (TR)	NUMBER	SIZE	TYPE	CATEGORY	CONDITION	TREES TO BE REMOVED (TR)	TREES TO BE REMAIN (TR)							
1	TWN 22"	WILLOW - SAUX SP.	A	POOR			41	TWN 15"-19"	RED MAPLE-ACER RUBRUM	A	FAIR			83	14"	PIN OAK-QUECUS PALUSTRIS	A	GOOD			125	18"	SUGAR MAPLE-ACER SACCHARUM	A	POOR			167	16"	RED OAK - QUECUS RUBRA	B	GOOD		
2	19"	WILLOW - SAUX SP.	A	POOR			42	16"	PIGNUT HICKORY - CARYA GLABRA	A	FAIR			84	16"	RED MAPLE-ACER RUBRUM	A	FAIR			126	17"	RED MAPLE - ACER RUBRUM	A	GOOD			168	14"	RED MAPLE - ACER RUBRUM	A	GOOD		
3	TRIPLE 22",20",18"	WILLOW - SAUX SP.	A	FAIR	TBR		43	19"	WHITE OAK-QUECUS ALBA	A	GOOD			85	18"	RED OAK-QUECUS RUBRA	A	GOOD			126A	14"	ASPEN-POPULUS GRANDIDENTATA	A	FAIR			169	22"	SUGAR MAPLE - ACER SACCHARUM	A	POOR		
4	33"	WILLOW - SAUX SP.	A	GOOD			44	18"	RED OAK-QUECUS RUBRA	A	FAIR			86	18"	TULP TREE-LIRIODENDRON TULIPIFERA	A	FAIR			127	16"	OAK QUECUS SP	A	POOR			170	19"	RED OAK - QUECUS RUBRA	B	GOOD		
5	17"	WILLOW - ACER RUBRUM	A	GOOD			45	14"	WHITE OAK-QUECUS ALBA	A	FAIR			87	20"	TULP TREE-LIRIODENDRON TULIPIFERA	A	FAIR			128	15"	RED MAPLE-ACER RUBRUM	A	FAIR			171	17"	SUGAR MAPLE - ACER SACCHARUM	A	POOR		
6	18"	RED MAPLE - ACER RUBRUM	A	GOOD			46	19"	RED OAK-QUECUS RUBRA	A	GOOD			88	14"	ASPEN-POPULUS GRANDIDENTATA	A	GOOD			129	20"	BLACK CHERRY-PRUNUS SEROTINA	A	POOR			172	23"	SUGAR MAPLE - ACER SACCHARUM	A	POOR		
7	TRIPLE 22",20",20"	RED MAPLE - ACER RUBRUM	A	FAIR	TBR		47	19"	RED OAK-QUECUS RUBRA	B	GOOD			89	16"	ASPEN-POPULUS GRANDIDENTATA	A	GOOD			130	20"	BLACK CHERRY-PRUNUS SEROTINA	A	POOR			173	21"	SUGAR MAPLE - ACER SACCHARUM	B	FAIR		
8	TRIPLE 15",21",20"	RED MAPLE - ACER RUBRUM	A	FAIR	TBR		48	17"	RED OAK-QUECUS RUBRA	A	POOR			90	16"	ASPEN-POPULUS GRANDIDENTATA	A	GOOD			131	16"	PRINCESS TREE-PAULOWINA TOMENTOSA	A	POOR			174	28"	RED OAK - QUECUS RUBRA	B	GOOD		
9	14"	ASH	A	POOR			49	17"	RED OAK-QUECUS RUBRA	B	GOOD			91	16"	PIN OAK-QUECUS PALUSTRIS	A	FAIR			132	20"	BLACK CHERRY-PRUNUS SEROTINA	A	FAIR			175	25"	RED OAK - QUECUS RUBRA	B	GOOD		
10	16"	RED MAPLE - ACER RUBRUM	A	GOOD	TBR		50	18"	RED OAK-QUECUS RUBRA	A	GOOD			92	15"	ASPEN-POPULUS GRANDIDENTATA	B	GOOD			133	14"	BLACK CHERRY-PRUNUS SEROTINA	A	FAIR			176	16"	RED OAK - QUECUS RUBRA	A	FAIR		
11	26"	TILA - LINDEN	A	FAIR	TBR		51	14"	WHITE OAK-QUECUS ALBA	A	GOOD			93	TWN 15"-19"	RED MAPLE-ACER RUBRUM	A	FAIR			134	14"	SHAGBARK HICKORY-CARYA GLABRA	A	POOR			177	14"	PRINCE OF HEAVEN - ALNANTHUS ALTIMA	A	POOR		
12	24"	WILLOW - SAUX SP.	A	POOR			52	33"	WHITE OAK-QUECUS ALBA	B	FAIR			94	CLIMP 19"	RED MAPLE-ACER RUBRUM	A	FAIR			135	20"	PIGNUT HICKORY-CARYA GLABRA	A	FAIR			178	21"	PIGNUT HICKORY - CARYA GLABRA	A	POOR		
13	15"	WILLOW - SAUX SP.	A	POOR			53	16"	PIGNUT HICKORY-CARYA GLABRA	A	GOOD			95	20"	BLACK CHERRY-PRUNUS SEROTINA	A	POOR			136	16"	BLACK CHERRY-PRUNUS SEROTINA	A	POOR			179	20"	PIGNUT HICKORY - CARYA GLABRA	A	FAIR		
14	15"	WILLOW - SAUX SP.	A	POOR			54	18"	RED OAK-QUECUS RUBRA	A	FAIR			96	14"	BLACK CHERRY-PRUNUS SEROTINA	A	POOR			137	19"	TREE-OF-HEAVEN - ALNANTHUS ALTIMA	A	GOOD			180	29"	PIGNUT HICKORY - CARYA GLABRA	A	FAIR		
15	35"	WILLOW - SAUX SP.	A	FAIR			55	18"	RED OAK-QUECUS RUBRA	A	FAIR			97	14"	ASPEN-POPULUS GRANDIDENTATA	A	POOR			138	16"	BLACK CHERRY-PRUNUS SEROTINA	A	FAIR			181	22"	PIGNUT HICKORY - CARYA GLABRA	A	FAIR		
16	16"	SWAMP WHITE OAK - QUECUS BIOLIGA	A	GOOD			56	TWN 20"	PIGNUT HICKORY-CARYA GLABRA	A	GOOD			98	14"	RED OAK-QUECUS RUBRA	A	FAIR			139	14"	RED OAK-QUECUS RUBRA	A	POOR			182	15"	RED MAPLE - ACER RUBRUM	A	POOR		
17	17"	RED MAPLE-ACER RUBRUM	A	GOOD			57	20"	PIN OAK-QUECUS PALUSTRIS	B	GOOD			99	TWN 23",20"	RED MAPLE-ACER RUBRUM	A	POOR			140	29"	RED OAK - QUECUS RUBRA	B	GOOD			183	18"	PIGNUT HICKORY - CARYA GLABRA	A	POOR		
18	21"	WILLOW - SAUX SP.	A	GOOD			58	14"	ASPEN-POPULUS GRANDIDENTATA	A	GOOD			100	TWN 19",18"	RED MAPLE-ACER RUBRUM	A	POOR			141	17"	PIGNUT HICKORY - CARYA GLABRA	A	FAIR			184	20"	PIGNUT HICKORY - CARYA GLABRA	A	FAIR		
19	TWN 14",18"	EASTERN RED CEDAR-JUNIPERUS VIRGINIANA	A	GOOD	TBR		59	14"	ASPEN-POPULUS GRANDIDENTATA	A	POOR			101	TWN 18",17"	RED MAPLE-ACER RUBRUM	A	POOR			142	15"	PIGNUT HICKORY - CARYA GLABRA	A	GOOD			185	14"	PIGNUT HICKORY - CARYA GLABRA	A	POOR		
20	12"	EASTERN RED CEDAR-JUNIPERUS VIRGINIANA	A	GOOD			60	14"	TULP TREE-LIRIODENDRON TULIPIFERA	A	FAIR			102	14"	ASPEN-POPULUS GRANDIDENTATA	A	FAIR			143	21"	PIGNUT HICKORY - CARYA GLABRA	B	GOOD			186	26"	RED OAK - QUECUS RUBRA	A	GOOD		
21	10"	EASTERN RED CEDAR-JUNIPERUS VIRGINIANA	A	GOOD	TBR		61	16"	PIN OAK-QUECUS PALUSTRIS	A	POOR			103	23"	RED MAPLE-ACER RUBRUM	A	FAIR			144	27"	TULP TREE-LIRIODENDRON TULIPIFERA	A	FAIR			187	14"	RED OAK - QUECUS RUBRA	B	GOOD		
22	13"	EASTERN RED CEDAR-JUNIPERUS VIRGINIANA	A	GOOD			62	19"	TULP TREE-LIRIODENDRON TULIPIFERA	A	FAIR			104	14"	ASPEN-POPULUS GRANDIDENTATA	A	FAIR			145	22"	OAK QUECUS SP	A	FAIR			188	29"	RED MAPLE - ACER RUBRUM	A	FAIR		
23	15"	PIN OAK - QUECUS PALUSTRIS	A	GOOD			63	18"	ASPEN-POPULUS GRANDIDENTATA	A	GOOD			105	16"	BLACK BIRCH	A	GOOD			146	17"	SUGAR MAPLE - (NOT FOUND)	A	FAIR			189	28"	RED OAK - QUECUS RUBRA	A	GOOD		
24	16"	RED MAPLE-ACER RUBRUM	A	GOOD			64	19"	TULP TREE-LIRIODENDRON TULIPIFERA	A	FAIR			106	14"	ASPEN-POPULUS GRANDIDENTATA	A	FAIR			147	27"	TULP TREE-LIRIODENDRON TULIPIFERA	B	GOOD			190	28"	RED OAK - QUECUS RUBRA	A	GOOD		
25	18"	ASPEN-POPULUS GRANDIDENTATA	A	FAIR			65	18"	ASPEN-POPULUS GRANDIDENTATA	A	FAIR			107	16"	PIN OAK-QUECUS PALUSTRIS	A	FAIR			148	23"	TULP TREE-LIRIODENDRON TULIPIFERA	B	GOOD			191	11"	RED MAPLE - ACER RUBRUM	A	POOR		
26	17"	RED MAPLE-ACER RUBRUM	A	GOOD			66	18"	ASPEN-POPULUS GRANDIDENTATA	A	GOOD			108	16"	OAK QUECUS SP	A	FAIR			149	15"	PIGNUT HICKORY - CARYA GLABRA	A	FAIR			192	29"	RED MAPLE - ACER RUBRUM	A	FAIR		
27	14"	PIN OAK-QUECUS PALUSTRIS	A	FAIR			67	17"	PIN OAK-QUECUS PALUSTRIS	A	FAIR			109	16"	PIGNUT HICKORY - CARYA GLABRA	A	FAIR			150	26"	WHITE OAK - QUECUS ALBA	B	GOOD			193	29"	RED MAPLE - ACER RUBRUM	A	FAIR		
28	15"	RED MAPLE-ACER RUBRUM	A	GOOD			68	16"	PIN OAK-QUECUS PALUSTRIS	A</																								





5	GENERAL REVISIONS	XO	05/04/2003
1	AS PER 6/16/2022 PLANNING BOARD COMMENTS	JO	07/11/2022
REV	DESCRIPTION	BY	DATE

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OF THE N.Y.S. EDUCATION LAW, ARTICLE 145, SECTION 7209, SUBSECTION 2.



PROJECT: UNITY PLACE WAREHOUSE
TOWN OF NEWBURGH
ORANGE COUNTY
NEW YORK

TITLE: TRUCK MANEUVER PLAN
INFORMATION DRAWING

PROJECT NO:	DRAWN:	CHECKED:
21202	DR	
SCALE:	1' = 40'	
GRAPHIC SCALE:	0 40' 80'	
DATE:	05/27/2022	DRAWING NO: TM