Public Works Committee Meeting
December 9, 2025 @ 6:30 PM
This meeting is recorded for public record.

Committee Members:
Bernie Flynn, Chair
Sheila Vaccaro
Bryan Travis

Interim Director of Public Works: Donald Anderson
Wastewater Director: Sean Mitchell
Director of Parks & Recreation: Keith Kurowski
Borough Manager: Sean Metrick

Public Works Committee Meeting:

I. Call to Order

II. Announcements

A. The Borough will be collecting canned goods to benefit the West Chester Food Cupboard at Borough Hall during business hours. Please stop by to contribute. More information can be found on the Borough website.

III. Comments

Comments, suggestions, petitions by residents, taxpayers and visitors in attendance regarding items that are not on the agenda. Please be advised there is a 5-minute time limit which is at the discretion of the Council President and/or Chair.

IV. Reports

A. Engineers' report (attachment)

B. Public Works (attachment)

C. Wastewater (attachment)

D. Parks & Recreation (attachment)

V. Old Business

A. Approve November 2025 meeting minutes (attachment)

VI. New Business

A. Motion to approve and adopt Goose Creek Pollution Reduction Plan (attachment)

B. Motion to approve 60-day tree maintenance services contract (attachment)

C. Motion to approve 60-day extension of custodial services contract (attachment)

D. Motion to approve 60-day extension of traffic signal maintenance (attachment)

VII. Other Business

VIII. Adjournment

Visit www.west-chester.com for access to all attachments.
Agendas are posted to www.west-chester.com by noon 3 business days prior to the meeting.

MONTHLY ENGINEERING REPORT

TO: Sean Metrick, Borough Manager

FROM: Kelly Goff, PE, CFM, Consulting Engineer

RE: West Chester Borough
Monthly Engineering Report

DATE: December 4, 2025

The purpose of this memorandum is to provide a status update regarding various projects in the Borough. The following table provides a concise summary of high priority projects. A detailed engineer's report is enclosed in Appendix A.

Project	Project Summary	Status Update
Gay Street Closure Project	The Gay Street Closure Project is a project funded by the Chester County Revitalization Grant that will result in removable barricades along the Gay Street open air market.	RVE is reviewing submittals. The project is expected to be mobilized on March 30 and completed by July 2.
MS4 Permit Services	The Borough's MS4 permit is a mandatory stormwater discharge permit under the Clean Water Act. The Borough is required to implement pollution-reducing practices for stormwater systems that discharge to surface waters.	RVE has reviewed public input from the PRP and TMDL Addenda. Revisions have been made accordingly. RVE is scheduling outfall inspections.
High & Linden Bus Shelter	The Borough received funding to install a bus shelter at the intersection of High & Linden.	RVE is working on permitting requirements with PennDOT

Should you have any questions, please do not hesitate to contact me directly (484) 843-3653.



Figure 1 – Rendering of Gay Street Closure Project



Figure 2 – Sample Rain Garden Curb Bump-out at Chestnut Intersection



Figure 3 – Outfall Inspections

Appendix A - Detailed Engineer's Report

1 GENERAL ENGINEERING & PLANNING SERVICES

1.1 Monthly Meetings (PCWBT020)

Progress meetings are held with RVE and Borough staff on a monthly basis. Progress on various projects is discussed during the meetings. The last progress meeting was held on 12/02/2025 at 1:00 PM.

1.2 Planning Services

1.2.1 High Street Improvements

RVE worked with Borough staff to acquire the DCED MTF grant. RVE is working with Borough staff to acquire additional funding. An updated construction estimate was submitted to Borough staff on 9/23/2025. Project design is projected to begin in 2026.

1.2.2 Intersection Improvements

RVE is working with the Borough in order to make improvements to various intersections throughout the Borough.

1.2.2.1 High & Linden Bus shelter

The project includes a bus shelter installation near the intersection of High and Linden. The project is being funded by a County grant. RVE submitted the latest revisions to the PennDOT HOP application on 9/3/2025. RVE resubmitted on 12/3/2025.

1.2.2.2 Gay & High Street Intersection Improvements

RVE made a site visit to the intersection in order to determine remediations needed. RVE submitted a memo with remediation recommendations and associated costs on 11/7/2025 to Borough Staff.

RVE was authorized to take cores on 12/2/2025. RVE is preparing an HOP for this work.

1.2.2.3 Additional Intersection Improvements

Intersections that have been considered for improvements are listed below. The Borough's committee is compiling public input.

- Saint Agnes School Intersections (Hannum and New)
- E Gay Street & Matlack
- N Biddle Street & N High Street
- E Biddle Street & N Penn Street
- N Franklin Street & E Marshall Street
- W Ashbridge Street & Hoopes Park Lane
- W Gay Street & N New Street
- Gay Street & High Street
- Washington & High
- Chestnut and New (Public works is gathering quotes to maintain the existing striping)

- Price Street & Darlington (Improvements Completed 2025)
- S Brandywine Street & Price Street (Improvements Completed 2024)
- Gay & Bradford (Improvements Completed 2025)

1.2.3 Truck study

The Borough is reviewing and considering revisions to truck restrictions throughout the Borough. The Borough staff began reviewing the current ordinance and signage in place on 12/2/2025. RVE is supporting as needed.

1.3 Grant Funding Acquisition Services

RVE is working with Borough staff in order to determine grant opportunities that match the needs of the Borough. A 2025 grants memorandum was submitted to the Borough on 12/19/2024. RVE reviews updated grant information when available.

1.3.1 Priority Projects

The Borough and RVE are maintaining a list of priority projects that need grant funding. The Borough is interested in funding the following projects through grant programs.

- Gay & Matlack intersection improvements
- Darlington & Chestnut Parking Lot improvements
- Rain Garden Curb Bump-outs
- High Street Improvements Phase 2
- Gay Street Phase 2
- Goose Creek Interceptor Phase 2
- Cedar Alley Gabions
- Public Works Building

1.3.2 LSA Grant

This application for Gay Street Phase 2 was submitted in November 2025.

1.3.3 Green Light Go

This application scoping form is due 1/2. Traffic Signal improvements are eligible.

2 MS4 SERVICES (PCWBT026)

The Borough's MS4 permit is a mandatory stormwater discharge permit under the Clean Water Act. The Borough is required to implement pollution-reducing practices for stormwater systems that discharge to surface waters. RVE is working with the staff in order to ensure the Borough meets those requirements.

2.1 Annual Report

The annual report was submitted on 9/22/2025.

2.2 PRP and TMDL Addenda (Goose Creek)

The PRP and TMDL Plan are mandatory components of Pennsylvania's MS4 permit program, designed to reduce sediment and pollutant discharges into impaired waterways through BMPs. Some BMPs listed in the original plans are not feasible. Addenda have been developed to include additional BMPS.

RVE received preliminary approval for TMDL and PRP addenda from PADEP on 5/15/2025.

RVE prepared presentation materials for the public meeting to be held on 8/5/2025. The public comment period ended on 9/15/2025.

RVE revised the Addenda to address public comment. The Addenda was submitted to the Borough staff on 12/3/2025.

2.3 BMP Inspections

The Borough staff is reviewing needs internally.

2.4 Outfall Inspections

RVE is scheduling outfall inspections. Outfall inspections and samplings are required by PADEP.

3 CAPITAL PROJECTS (PLANNING, DESIGN, BIDDING & CONSTRUCTION)

3.1 Gay Street Closure (PCWBT015)

The Gay Street Closure Project is a project funded by the Chester County Revitalization Grant that will result in removable barricades along the Gay Street open air market.

- The Borough council voted on 8/28/2025 to issue a notice of intent to award the Base Bid, Alternate 1, Alternate 5, and Alternate 6.
- A preconstruction meeting was held on 9/30/2025.
- A Notice to Proceed was issued on 10/2/2025.
- Submittals are being reviewed.
- The Contractor has estimated a March 2026 mobilization.

3.2 Storm infrastructure Lining project (PCWBT030)

This project proposed to rehabilitate several stormwater pipes by adding a liner. This project is being funded by the flood mitigation grant.

- RVE submitted the updated specifications on 7/29/2025 to the Borough staff.
- The public works department is facilitating the bidding. RVE is assisting with answering bidder's questions.
- This project is set to be constructed in 2026.

4 SUBDIVISION & LAND DEVELOPMENT REVIEWS

4.1 410 High Street (PCWBP001)

The applicant is proposing to construct a proposed mixed-use building 128 residential apartment units with 149 off-street parking spaces.

- A SALDO application was submitted to RVE on 2/9/2023.
- RVE issued review letter #1 on 3/3/2023. The comments contained engineering concerns related to parking and traffic.
- RVE issued review letter #1, revision #1 on 3/22/2023. The comments included engineering concerns related to parking, and traffic.
- A second review letter was issued on 6/21/2023.
- A third review letter was issued on 8/18/2023.
- RVE received a 4th submission on 9/26/2023. RVE submitted a draft review 4 letter to the borough staff on 10/6. A 4th review letter was sent on 10/9.
- RVE received a 5th submission on 10/27. Review letter #5 was issued to the Borough on 11/20.

4.2 330 Market (PCWBP002)

The applicant is proposing to construct a 185 unit apartment building with 215 parking spaces.

- RVE received the first submission on 5/3/2023. RVE is reviewing this submission.

- A second review letter was issued on 8/18/2023.
- RVE attended the Planning Commission meeting on 8/29/2023 in order to address concerns from the public.
- RVE issued a 3rd review letter on 1/9/24.
- RVE issued a 4th Review letter on 2/23/24.

4.3 611 E Nields (PCWBP003)

The project proposes to construct two separate industrial warehouse buildings totaling 523,653 square feet at 611 East Nields Street within the Industrial (ID) zoning district. This application has preliminary land development approval.

- RVE issued a review letter #1 on 2/27/24.
- RVE issued a review letter #2 on 5/9/24.
- RVE issued a review letter #3 on 6/27/25.

4.4 410 High Street, Application #2 (PCWBP004)

The applicant is proposing to construct a multi-family residential apartment building consisting of 139 residential apartment units with 175 off-street parking spaces. This is the second application by the same developer for this property.

- RVE issued review letter #1 on 6/14/2024.
- RVE issued review letter #2 on 7/26/2024.
- RVE issued review letter #3 on 8/27/2024.
- RVE issued review letter #4 on 10/14/2024.

4.5 250 East Market (PCWBP005)

The applicant is proposing to construct a four-story apartment building with 221 units and 230 parking spaces.

- RVE issued review letter #1 on 8/17/2024.
- RVE issued review letter #2 on 10/01/2024.
- RVE issued review letter #3 on 7/14/2025.

4.6 210-214 W. Washington Street (PCWBP006)

The applicant is proposing to construct 8 single-family attached homes on three parcels along West Washington Street within the Neighborhood Conservation District (NC-2) zoning district. The site is bounded by West Washington Street to the west, Patton Alley to the east, and Birdseye Alley to the south. The proposed subdivision plans to demolish the existing automotive repair building and consolidate the three parcels. Each home will have a 1-car garage and share a common driveway.

- RVE sent review letter #1 to the Borough staff on 11/07/2024.
- RVE sent review letter #2 to Borough staff on 1/30/2025.
- RVE sent review letter #3 to Borough staff on 5/21/2025.
- RVE submitted review letter #4 to Borough staff on 12/4/2025.

4.7 700 S High Street (PCWBP007)

The applicant is proposing improvements to the university.

- RVE sent a review letter to Borough staff on 7/3/2025.

4.8 410 High Street, Application #3 (Coming Soon)

This application is proposing a set of townhomes at the old Burger King site. The application has not been submitted to RVE at the time of this report.

4.9 615/617 South Walnut (Coming Soon)

This application is proposed five (5) townhomes. The application has not been submitted to RVE at the time of this report.

December 2025 Public Works Report

Facilities

West Chester Public Library

- The architectural firm, Architectural Concepts PC, has identified the source of water infiltration at the library.

Streets

- PennDOT has agreed to let us enhance the crosswalk at New and Chestnut Street. We are currently waiting for warmer weather to install the thermoplastic crosswalks.
- The Gay Street Bollards Project is on schedule to start in March and finish in July
- Replacing the brick crosswalks at the intersection of Gay and High Street.
- The 2025 paving is complete, and I'm finalizing the forms for PennDOT to secure our liquid fuel reimbursement.
- Last week was the final week for leaf collection, but we will continue to collect as long as the weather permits
- We repaired the sidewalk at 401 East Gay Street using Perkepave (Attachment)

Parks and landscapes

- We finished the playground demolition at Horace Pippin Park (Attachment)
- We are assisting Will Williams with this Fall's tree planting.

Sanitary/Storm Sewers

- During our routine CCTV inspections, we discovered an illicit discharge and reported this information to the Building & Housing Department.
- We recently sent CCTV footage to Abel Recon. They will be relining sections of our old brick storm sewer mains next year.

Trash and recycling

- We have identified several residents who are in violation of **Chapter 62** and are currently working with the Building and Housing Department to determine the next steps. **(UPDATE)**

- Kristen Camp reviewed the letter drafted by Aaron Flook, and last week, we started sending NOV letters to residents.
- We also started entering the NOV letters into Smartgov, which will be the platform that we store this information.
- Installed new big bellies in the CBD and repurposed older cans to other other locations.

Vehicles/fleet

- I have attached a list of all Public Works Vehicles and Equipment, color-coded to indicate their age. (Attachment)
- **Line item 01-43720-80- for vehicle repairs is projected to exceed its budget this year.**

Cartegraph reports

- **Public Works**, Work & Request orders (Attachments)

Administration

- We are managing several contracts that will expire at the end of 2025.
- These contracts are currently out for bid.

1. **2026 Tree Maintenance**
2. **2026 Landscaping**
3. **2026 Materials**
4. **2026 Garden Maintenance**
5. **2026 Shade Tree Planting**
6. **2026 Street Signs**
7. **2026 Traffic Signal Maintenance**
8. **2026 Custodial**

Other

- Lenni Electric is currently installing conduit along South High Street for future installation of Decorative Lights
- Brubacher is installing a new water main on Goshen Road between High and Hillside Drive.
- Brubacher is working in the Southwest section of town for PECO.
- PECO is working in the Northwest section of town


FOR
PARK
USERS
ONLY
PARK RULES
AND REGULATIONS
• A permit is required for groups larger than
• No alcoholic beverages are permitted in parks.
• All trash must be put in cans or tightly
• Motor vehicles are not permitted except in
designated parking areas.
• Firearms and fireworks are not permitted.
• Fires are permitted only in designated grills.
• Dogs must be properly licensed, on a
leash, and curbed.
• Car washing and oil changing are not
permitted.
• The Recreation Department reserves the
Borough of West Chester
Smoking
Prohibited
On Borough of
West Chester
Property
Chapter 76.1 & 76.2
Mutt Mitt
Pet Waste Pick-Up Mitt


Mutt Mitt
Better than a Bag!
Pet Waste Pick-Up Mitt


THE GREEN HOUSE
2-WAY
West


NO PARKING
2AM - 5AM
PAY TO PARK
44 WEST
Essential
Please Recycle


PENN'S TABLE
N CHURCH


STOP

2025 West Chester Public Works Vehicle and Equipment List

Color Code By Year

0-5 yrs | 5-10 yrs | 10-20 yrs | 20-+ yrs

Veh #	Company v	Insured ID	Plate #	Year	Make	Model	Body type	VIN	Condition of Vehicle	Cost new
37	37	44-01	MG 0614L	2018	Ford	Fusion Ene	COUPE	3FA6P0PU8JR286489	GREAT	100000
38	38	44-02	MG 7338J	2017	Ford	F-150	TK	1FTFX1EF2HFA27377	GOOD	120000
39	39	44-04	Public Wor	2010	Ford	F-150	TK	1FTEX1E8XAFA89628	BAD	58000
40	40	44-05	MG 7364J	2017	Ford	F350	TK	1FD8W3H61HEB79204	GOOD	15000
41	41	44-07	ZTF 4231	2022	Chevrolet	Colorado	TK	1GCHTBEA6N1224219	GREAT	140000
42	42	44-08	MG 7352J	2017	Ford	F350	TK	1FD8W3H6XHEB79203	GOOD	50000
44	44	44-10	MG 2564H	2015	Ford	F-350	TK	1FTRF3B64FEA52543	BAD	
45	45	44-11	MG 74400	2007	Ford	E-350	TK	1FBSS31L47DB25412	BAD	87000
46	46	44-12	MG 2554H	2014	Ford	F-350	TK	1FDBF3A67EEA74016	BAD	100000
		44-12A	ZXY1850	2024	Ford	F-350	TK	1FDRF3EN9REF67847	GREAT	170000
47	47	44-13	70K9078	2022	Ford	F-150	TK	1FTFX1E52NKE13355	GREAT	230000
48	48	44-14	MG 6485E	2014	Ford	F-150	TK	1FTPW14V49FB13243	BAD	225000
49	49	44-15	MG 3531J	2016	Ford	F-350	TK	1FDRF3H69GEB69507	BAD	225000
50	50	44-16	MG 87240	2003	Ford	F-350	TK	1FDWF32L33EB25871	BAD	10000
51	51	44-17	MG 8485K	2018	Ford	F350	TK	1FTRF3B65JEC65185	GOOD	225000
52	52	44-18	MG 8221F	2011	Ford	F-150	TK	1FTMF1CM0BKD97818	BAD	75000
53	53	44-19	MG 06030	2006	Ford	E-350	TK	1FDWE35L46DA44760	GOOD	110000
54	54	44-21	MG 32760	2007	Peterbilt	340	TKTR	2NPRLD0XX7M731334	BAD	
55	55	44-22	MG 2870F	2016	Peterbilt	337	TKTR	2NP2HJ7X5GM369498	GOOD	
56	56	44-23	ZVE 7842	2022	Ford	F-150	TK	1FTFX1E59NKE13191	GREAT	100000
57	57	44-24	MG 1565G	2012	Peterbilt	337	TKTR	2NP2HN7X6CM164421	GOOD	
58	58	44-25	MG 0821N	2021	Ford	F-550	TK	1FDUF5HNXMEE14727	GREAT	
59	59	44-26	`MG 3532J	2016	Ford	F-650	TK	1FDWF6DC0GDA04760	BAD	
60	60	44-27	MG 92380	2008	Ford	Lcf	TK	3FRML55Z58V680240	BAD	
61	61	44-28		2016	Bri-Mar	T16-12	TLR	58CB1TD24GC001577	GOOD	650000
62	62	44-29	MG 5171K	2018	Peterbilt	Hook Lift G	TKTR	2NP3LJ0X8JM462455	GREAT	650000
64	64	44-30	MG 59712	1997	Ford	F-800	TK	1FDYF80EXVVA25005	BAD	763015
		44-31	MG 7697P	2025	Freightliner		TK	3ALAHCFC0SDVR1123	GREAT	650000

65	65	44-35	MG7938N	2022	Ford	F-600	TK	1FDFF6LN2NDA24685	GREAT	25000
66	66	44-40	MG 1667N	2022	Bucher	City Cat 50		TEBC50AF4M4V09172	GREAT	25000
67	67	44-40A	MG 8723D	2007	Internatio	4200	TKTR	1HTMPAFN87H433876	BAD	30000
68	68	44-41	MG 6523E	2016	Internatio	4300	TKTR	1HTMMAAN9GH743938	GOOD	25000
69	69	44-50	MG 2493F	2010	Mack	Mru613	TKTR	1M2AV02C5AM006069	GOOD	25000
70	70	44-51	MG-6748G	2010	Mack	Leu613	TKTR	1M2AU02CXDM007953	GOOD	25000
72	72	44-52	MG 6753L	2019	Mack	Lr64	TKTR	1M2LR1GC7KM002358	GOOD	25000
444		44-53		2025	Battle Moto	LET2 - McN	OT	1CYAADACXT1007164	GREAT	28000
73	73	44-60		2012	John Deere	544K		1DW544KZLCE645007	BAD	20000
74	74	44-62	MG1377K	2017	John Deere	410L		1T0410LXAHF313439	GOOD	35000
63	63			2017		Hook Lift 20	TKTR	ODSCL800SM20HL	GREAT	50000
75	75			1991	Sullair	175		004-103993	BAD	50000
76	76			2002	Stone Char	665Pm		152001074	BAD	55000
77	77			2022	Sure Trac	6x10 Decko	DMPTK	5JW1D1023N4374273	GOOD	50000
78	78			1996	Tarrant	Ttl-3-R16		Q18ZA4448Q00	BAD	50000
79	79			2002	Odb	Lct60C		0902-3481	BAD	50000
61	61	44-28		2016	Bri-Mar	T16-12	TLR	58CB1TD24GC001577		650000
Item numbe	Site ID	Owned	Type	Description	ID/Serial nu	New/Used	Date purch	Model	Model year	Capacity
1		X	ROLLER		20000804	U		VR-36HA	2001	BAD
2		X	SKIDSTEER		ALJ816821	U		S650	2015	GOOD
4		X	LEAFBLOW		101060831	U		9130-00-01	2001	GOOD
5		X	LEAFBLOW		101060832	U		9130-00-01	2001	GOOD
6		X	SNOWBLO		M01332L21	U		1332Dde	2001	GOOD
7		X	SNOWBLO		MO1332L2	U		1332Dde	2001	GOOD

Tasks During a Time Period

Task ID	Activity	Asset ID	Actual Stop Date	Status	Total Cost	Notes
Change Light						
27565	Change Light	TR-B-1	11/3/2025	Completed	0.00	New LED lights were installed in our soda ash room.
					Count: 1	
Clean						
27792	Clean	TR-B-1	11/16/2025	Completed	0.00	B1 was swept, mopped and trash taken out.
27789	Clean	WW - New Street Pump Station - Valve Chamber	11/13/2025	Completed	0.00	vacuumed out water and debris
27589	Clean	TR-B-5	11/8/2025	Completed	0.00	B5 was swept, mopped and trash taken out.
26506	Clean	TR-B-5	11/1/2025	Completed	0.00	B5 was swept, Mopped and trash taken out.
27580	Clean	GC-GT	11/6/2025	Completed	0.00	monthly pump down and cleaning, not bad at all
26505	Clean	TR-B-1	11/1/2025	Completed	0.00	B1 was swept, mopped, and trash taken out.
27784	Clean	WW - Worthington Street Pump Station - Wet Well	11/13/2025	Completed	0.00	pumped down and housed out with the pump truck
27790	Clean	WW - College Avenue Pump Station - Wet Well	11/13/2025	Completed	0.00	pumped down and housed out with the pump truck
27791	Clean	WW - College Avenue Pump Station - Valve Chamber	11/13/2025	Completed	0.00	vacuumed out water and debris

Task ID	Activity	Asset ID	Actual Stop Date	Status	Total Cost	Notes
27653	Clean	P-5B	11/11/2025	Completed	0.00	cleaned out inspection port, not much inside
27654	Clean	T-7B	11/7/2025	Completed	0.00	Contact tank B was dropped and sprayed clean.
27788	Clean	WW - New Street Pump Station - Wet Well	11/13/2025	Completed	0.00	pumped down and housed out with the pump truck,
27844	Clean	GC - Structures T-12	11/18/2025	Completed	0.00	pulled rags and debris out of the center column
27786	Clean	WW - Miner Street Pump Station - Wet Well	11/13/2025	Completed	0.00	pumped down and housed out with the pump truck,
27652	Clean	P-5A	11/11/2025	Completed	0.00	cleaned out inspection port, not much inside
27588	Clean	TR-B-1	11/8/2025	Completed	0.00	B1 was swept, mopped and trash taken out.
27787	Clean	WW - Miner Street Pump Station - Valve Chamber	11/13/2025	Completed	0.00	vacuumed out water and debris
27793	Clean	TR-B-5	11/16/2025	Completed	0.00	B5 was swept, mopped and trash taken out.
27916	Clean	GC-T7C	11/25/2025	Completed	0.00	cleaned out debris from bottom of empty tank. leaves, sticks, walnuts
					Count: 19	
Cleaning						
27852	Cleaning	GC - B4 - Polymer Pumping Tank	11/19/2025	Completed	0.00	pumped out and cleaned off walls and bottom of tank
27648	Cleaning	GC-T13	11/11/2025	Completed	0.00	drained and cleaned rags\debris off of mixer blades and ladder rungs

Task ID	Activity	Asset ID	Actual Stop Date	Status	Total Cost	Notes
27785	Cleaning	WW - Worthington Street Pump Station - Valve Chamber	11/13/2025	Completed	0.00	vacuumed out water and debris
27563	Cleaning	WW - Miner Street Pump Station - Valve Chamber	11/4/2025	Completed	0.00	pumped down wet well, isolated each check valve and removed the lids. Removed all rags and debris built up around flapper and hinge pin. Replaced all bolts with stainless bolts and anti seize not to much debris but definitely needed cleaned
27569	Cleaning	WW - College Avenue Pump Station - Valve Chamber	11/5/2025	Completed	0.00	pumped down wet well, isolated each check valve and removed the lids. Removed all rags and debris built up around flapper and hinge pin. Replaced all bolts with stainless bolts and anti seize pump#2 good amount of rags pump #1 nothing
27562	Cleaning	WW - New Street Pump Station - Valve Chamber	11/4/2025	Completed	0.00	pumped down wet well, isolated each check valve and removed the lids. Removed all rags and debris built up around flapper and hinge pin. Replaced all bolts with stainless bolts and anti seize lots of rags, 3\4 of a bucket full per side
					Count: 6	
Ice						
27872	Ice	GC-SCREEN-2	11/20/2025	Completed	0.00	ran ice thur to clean out
					Count: 1	
Inspect						
27610	Inspect	SMH-0884	11/10/2025	Completed	0.00	
27611	Inspect	SMH-0865	11/10/2025	Completed	0.00	
27609	Inspect	SMH-0184	11/7/2025	Completed	44.46	

Task ID	Activity	Asset ID	Actual Stop Date	Status	Total Cost	Notes
27608	Inspect	SMH-0177	11/7/2025	Completed	0.00	
					Count: 4	
Oil Change						
27944	Oil Change	01-21	11/21/2025	Completed	0.00	
27949	Oil Change	01-19	11/19/2025	Completed	0.00	
27950	Oil Change	01-25	11/25/2025	Completed	0.00	
27932	Oil Change	01-14	11/11/2025	Completed	0.00	
27933	Oil Change	01-15	11/12/2025	Completed	0.00	
27945	Oil Change	01-23	11/24/2025	Completed	0.00	
27951	Oil Change	01-26	11/26/2025	Completed	0.00	
27934	Oil Change	01-16	11/13/2025	Completed	0.00	
27861	Oil Change	GC-GRINDER-1	11/18/2025	Completed	0.00	changed oil in upper chamber, pumped old oil out (no drain plug) and pumped new oil in 2 quarts 80\90w
27946	Oil Change	01-18	11/18/2025	Completed	0.00	
27947	Oil Change	01-24	11/19/2025	Completed	0.00	
27935	Oil Change	01-17	11/17/2025	Completed	0.00	
					Count: 12	
Other						
27841	Other	WW - College Avenue Pump Station	11/18/2025	Completed	0.00	removed a large limb hanging over the wet well and wire junction box
27842	Other	PS-2	11/18/2025	Completed	0.00	removed limbs at the entrance that were dragging along the trucks

Task ID	Activity	Asset ID	Actual Stop Date	Status	Total Cost	Notes
28049	Other		11/18/2025	Completed	2,258.10	Employees were assigned the task of removing all playground equipment from the paly area at Horace Pippin Park. All play features were removed area made safe and an orange construction fence was placed around the construction area for safety.
27647	Other	GC	11/11/2025	Completed	0.00	shut off sprays, removed spray tips, installed winter bypass water hoses on T-4 T-12 T-7 tanks and turned on/checked all heat trace in plant
27564	Other		11/4/2025	Completed	172.74	employees removed signs from old posts and installed new posts centered on parking spaces and remounted the permit parking signs.
27856	Other		11/11/2025	Completed	3,047.90	
27581	Other		11/6/2025	Completed	1,348.20	leaf collection in the southeast quadrant
27582	Other		11/6/2025	Completed	1,110.30	leaf collection in the northeast quadrant, northwest quadrant, southwest quadrant.
					Count: 8	
Preventive Maintenance						
27590	Preventive Maintenance	557	11/6/2025	Completed	0.00	Primary weekly maintenance: Raw Sampler. Pump tubing inspected for punctures. Sensor, Sample line and torpedo cleaned. Proper operation of lights, heater, fan and refrigerator checked.
27918	Preventive Maintenance	Final Comp	11/25/2025	Completed	0.00	Final Weekly Maintenance: Sigma Sample pumps: Final. Pump tubing checked for punctures. Sensor, Sample line and torpedo cleaned. Lights, Heater, Fan and refrigerator checked for proper operation.

Task ID	Activity	Asset ID	Actual Stop Date	Status	Total Cost	Notes
27942	Preventive Maintenance	Pak room eye wash and shower system	11/26/2025	Completed	0.00	Primary Weekly Maintenance: Pak room eye wash/ shower station. System tested for water pressure and supply.
27602	Preventive Maintenance	I-5	11/6/2025	Completed	0.00	Final Weekly Maintenance: Chlorine Analyzer & Pre/Post Sample Pump. Grease cup taken off pump and old grease removed and fresh polyrex blue grease installed. Grease cup reinstalled. Sample box checked for leaks and other developing problems. Tubing on analyzer inspected for clogs or punctures. Drain lines cleaned out and reinstalled. Strainer cleaned and reinstalled.
27638	Preventive Maintenance	RBC-B4	11/12/2025	Completed	0.00	Primary Weekly Maintenance: RBC B4. RBC weighed with hydraulic pump and recorded.
27640	Preventive Maintenance	TR-LA	11/12/2025	Completed	0.00	Primary Weekly Maintenance: Aluminum Sulfite Storage Tank. Moat pumped out as needed.
27583	Preventive Maintenance		11/6/2025	Completed	259.86	employees working to winterize the Chestnut Street Parking Garage and the Bicentennial Parking Garage.
27940	Preventive Maintenance	DS2 sampler	11/26/2025	Completed	0.00	Primary Weekly Maintenance: Samplers: DS2. Pump tubing inspected for punctures. Cleaned sensor, Sample line and torpedo. Checked for proper operation of lights, heater, fan and refrigerator.
27941	Preventive Maintenance	Alum silo eye wash/ shower	11/26/2025	Completed	0.00	Primary Weekly Maintenance: Alum Silo eye wash/ shower station. System tested for water pressure and supply.
27943	Preventive Maintenance	Primary Scum Mixer	11/25/2025	Completed	0.00	Primary Weekly Maintenance: Primary Scum Mixer. Super Bio Clean 510 put into scum pit and mixed for two minutes and drained out.

Task ID	Activity	Asset ID	Actual Stop Date	Status	Total Cost	Notes
27555	Preventive Maintenance	RBC-B4	11/5/2025	Completed	0.00	Primary Weekly Maintenance: RBC B4. RBC weighed with hydraulic pump and weight recorded into maintenance book.
27948	Preventive Maintenance	F-2	11/20/2025	Completed	0.00	Primary Monthly Maintenance: Lakeside Rotomat Fine Screens. Shut down both screens and placed one on hand at a time. Checked rotation and that screenings are moving freely. Held power switch in reverse and checked screenings. Board placed under ultrasonic level controllers to stimulate a high flow. Wye strainers cleaned.
27594	Preventive Maintenance	TR-T-6A	11/7/2025	Completed	0.00	Final Weekly Maintenance: T6A. Oil level in reducers checked. Oil level in lower housing checked. Chain inspected for slack. Scraper arm checked for wear. Vent cleaned.
27877	Preventive Maintenance	DS1 sampler	11/19/2025	Completed	0.00	Primary Weekly Maintenance: DS1 Sigma Sampler. Pump tubing inspected for punctures. Sensor, Sample line and torpedo cleaned. Lights, Heater, Fan and refrigerator checked for proper operation.
27869	Preventive Maintenance	soda ash silo shower	11/20/2025	Completed	0.00	Final Weekly Maintenance: Soda Ash Silo Shower. System checked for leaks, opened valves and checked for water supply and pressure.
27870	Preventive Maintenance	soda ash eye wash shower	11/20/2025	Completed	0.00	Final Weekly Maintenance: Soda Ash room shower. System checked for leaks. Valves opened and checked for water pressure and supply.
27599	Preventive Maintenance	Final Comp	11/7/2025	Completed	0.00	Final Weekly Maintenance: Final Comp. Pump tubing inspected for punctures. Sensor, Sample line and torpedo cleaned. Proper operation of lights, heater, fan and refrigerator.

Task ID	Activity	Asset ID	Actual Stop Date	Status	Total Cost	Notes
27921	Preventive Maintenance	soda ash silo shower	11/25/2025	Completed	0.00	Final Weekly Maintenance: Shower and Eye wash Stations: Soda Ash Silo. System checked for leaks and water pressure and supply.
27601	Preventive Maintenance	Ds3 sampler	11/7/2025	Completed	0.00	Final Weekly Maintenance: DS3. Pump tubing inspected for punctures. Sensor, Sample line and torpedo cleaned. Proper operation of lights, heater, fan and refrigerator checked.
27617	Preventive Maintenance	GEN-2	11/12/2025	Completed	0.00	Primary Weekly Maintenance: Plant Generator. Oil level checked. Coolant level checked in radiator glass sight. Belt checked for tension. Hose checked for connections. gauges and lights checked.
27823	Preventive Maintenance	RBC-C4	11/19/2025	Completed	0.00	Primary Weekly Maintenance: C4. RBC weighed with hydraulic pump and weight recorded in maintenance book.
27922	Preventive Maintenance	soda ash eye wash shower	11/25/2025	Completed	0.00	Final Weekly Maintenance: Soda Ash Room System. Shower and eye wash station tested for water pressure and supply.
27899	Preventive Maintenance	RBC-B1	11/26/2025	Completed	0.00	Primary Weekly Maintenance: B1. Hydraulic pump hooked up and weighed. Weight recorded into maintenance book.
27807	Preventive Maintenance	TR-LA	11/19/2025	Completed	0.00	Primary Weekly Maintenance: Aluminum Sulfite Storage Tank. Moat pumped out.
27633	Preventive Maintenance	RBC-C4	11/12/2025	Completed	0.00	Primary Weekly Maintenance: RBC C4. RBC weighed with hydraulic pump and recorded.
27801	Preventive Maintenance	soda ash eye wash shower	11/13/2025	Completed	0.00	Final weekly maintenance: Soda ash room shower and eyewash. System checked for leaks. Valves opened to test water pressure and supply.

Task ID	Activity	Asset ID	Actual Stop Date	Status	Total Cost	Notes
27597	Preventive Maintenance	soda ash eye wash shower	11/5/2025	Completed	0.00	Final Weekly Maintenance: Soda Ash Room Eyewash and Shower station. System checked for leaks, water supply and pressure.
27904	Preventive Maintenance	RBC-C4	11/26/2025	Completed	0.00	Primary Weekly Maintenance: C4. Hydraulic pump hooked up and weighed. Weight recorded into maintenance book.
27919	Preventive Maintenance	final back up	11/25/2025	Completed	0.00	Final Weekly Maintenance: Final back up Sampler. Pump tubing checked for punctures. Cleaned sensor, sample line and torpedo. Checked proper operation of lights, fan, heater and refrigerator.
27830	Preventive Maintenance	GEN-2	11/19/2025	Completed	0.00	Primary Weekly Maintenance: Plant Generator. Oil level checked. Coolant for radiator checked. Belt checked for tensions. Gauges and lights checked for proper operation.
27593	Preventive Maintenance	Primary Scum Mixer	11/5/2025	Completed	0.00	Primary Weekly maintenance: Primary scum mixer. Super Bio Clean 510 put into scum pit and mixed for several minutes. Then pumped out through pumps 3/4.
27878	Preventive Maintenance	DS2 sampler	11/19/2025	Completed	0.00	Primary Weekly Maintenance: DS1 Sigma Sampler. Pump tubing checked for punctures. Sensor, Sample line and Torpedo cleaned. Lights, Heater, Fan and refrigerator checked for proper operation.
27816	Preventive Maintenance	RBC-A4	11/19/2025	Completed	0.00	Primary Weekly Maintenance: A4. RBC weighed with hydraulic pump and weight recorded in maintenance book.

Task ID	Activity	Asset ID	Actual Stop Date	Status	Total Cost	Notes
27890	Preventive Maintenance	GEN-2	11/26/2025	Completed	0.00	Primary Weekly Maintenance: Plant Generator. Oil level checked. Coolant level checked in glass sight in radiator. Belts checked for tension. Hose connection checked. Checked gauges and lights.
27892	Preventive Maintenance	RBC-A1	11/26/2025	Completed	0.00	Primary Weekly Maintenance: A1. Hydraulic pump hooked up and weighed. Weight recorded into maintenance book.
27571	Preventive Maintenance	WW - Worthington Street Pump Station - Valve Chamber	11/4/2025	Completed	0.00	replaced all nuts, bolts with stainless ones and anti seize
27910	Preventive Maintenance	TR-LA	11/26/2025	Completed	0.00	Primary Weekly Maintenance: Aluminum Sulfite Storage Tank. Moat pumped out.
27839	Preventive Maintenance	Primary Scum Mixer	11/12/2025	Completed	0.00	Primary Weekly Maintenance: Primary Scum Mixer. Super Bio Clean 510 put into pit and mixed for two minutes. Drained out.
27923	Preventive Maintenance	I-5	11/25/2025	Completed	0.00	Final Weekly Maintenance: Chlorine Analyzer and Pre/Post sample pump. Grease cup from Pre/post pump taken to shop and old grease removed. Fresh grease put in, and grease cup reinstalled. Analyzer tubing cleaned. Drain line cleaned as well as the strainer.
27534	Preventive Maintenance	GEN-2	11/4/2025	Completed	0.00	Primary weekly maintenance: Plant generator. Oil level checked. Coolant level checked in radiator. Belt checked for tension. Hose connections checked. Lights and gauges checked.

Task ID	Activity	Asset ID	Actual Stop Date	Status	Total Cost	Notes
27897	Preventive Maintenance	RBC-A4	11/26/2025	Completed	0.00	Primary Weekly Maintenance: A4. Hydraulic pump hooked up and weighed. Weight recorded into maintenance book.
27799	Preventive Maintenance	Ds3 sampler	11/13/2025	Completed	0.00	Final weekly maintenance: Sigma Sampler DS3. Pump tubing inspected for punctures. Sensor, Sample line and torpedo cleaned. Proper operation of lights, fan, heater and refrigerator checked.
27810	Preventive Maintenance	RBC-A1	11/19/2025	Completed	0.00	Primary Weekly Maintenance: A1. RBC weighed with hydraulic pump and weight recorded in maintenance book.
27557	Preventive Maintenance	TR-LA	11/5/2025	Completed	0.00	Primary Weekly Maintenance: Aluminum Sulfite Storage Tank. Storage tank inspected for leaks. Pumped out as needed.
27595	Preventive Maintenance	TR-T-6B	11/7/2025	Completed	0.00	Final Weekly Maintenance: T6B. Oil level in reducers checked. Oil level in lower housing checked. Chain inspected for slack. Scraper arm checked for wear. Vent cleaned.
27802	Preventive Maintenance	I-5	11/13/2025	Completed	0.00	Final weekly maintenance: Chlorine analyzer and pre/ post sample pumps. Grease cup removed for pre/post sample pump and old grease replaced with fresh polyrex blue grease and reinstalled. Sample box checked over for leaks. Tubing on analyzer cleaned. Drain line cleaned out and strainer cleaned.
27864	Preventive Maintenance	TR-T-6A	11/20/2025	Completed	0.00	Final Weekly Maintenance: T6A Clarifier. Oil Level checked in reducer. Oil level checked in lower housing. Chain checked for slack. Scraper arm checked for wear.

Task ID	Activity	Asset ID	Actual Stop Date	Status	Total Cost	Notes
27865	Preventive Maintenance	TR-T-6B	11/20/2025	Completed	0.00	Final Weekly Maintenance: T6B Clarifier. Oil level checked in reducer. Oil level checked in lower housing. Chain checked for slack. Scraper arm checked for wear.
27866	Preventive Maintenance	Final Comp	11/20/2025	Completed	0.00	Final Weekly Maintenance: Sigma Sampler Final Comp. Pump tubing inspected for punctures. Sensor, Sample line and torpedo. Proper operation of lights, heater, fan and refrigerator checked.
27868	Preventive Maintenance	Ds3 sampler	11/20/2025	Completed	0.00	Final Weekly Maintenance: DS3 Sampler. Pump tubing inspected for punctures. Sensor, Sample line and torpedo cleaned. Lights, heater, fan and refrigerator checked for proper operation.
27871	Preventive Maintenance	I-5	11/20/2025	Completed	0.00	Final Weekly Maintenance: Chlorine Analyzer & Pre/Post Sample Pumps. Grease cup taken off pump and old grease removed. Refilled with new polyrex blue grease. Boxed checked for leaks. Tubing on analyzer cleaned. Drain line cleaned as well as strainer.
27895	Preventive Maintenance	RBC-C1	11/26/2025	Completed	0.00	Primary Weekly Maintenance: C1 Hydraulic pump hooked up and weighed. Weight recorded into maintenance book.
27837	Preventive Maintenance	Alum silo eye wash/ shower	11/12/2025	Completed	0.00	Primary Weekly Maintenance: Alum silo. System checked for water pressure and supply. Checked for leaks.
27838	Preventive Maintenance	Pak room eye wash and shower system	11/12/2025	Completed	0.00	Primary weekly Maintenance. Pak room. System checked for water pressure and supply. Checked for leaks.

Task ID	Activity	Asset ID	Actual Stop Date	Status	Total Cost	Notes
27875	Preventive Maintenance	558	11/18/2025	Completed	0.00	Primary Weekly Maintenance: Bucket Elevator & Incline Screw Conveyor. Oil level in reducers checked. All fittings greased. Chain checked for slack. Drive chain checked for slack. Belt checked for tension and wear.
27876	Preventive Maintenance	557	11/19/2025	Completed	0.00	Primary Weekly Maintenance: Raw Sigma Sampler. Pump tubing inspected for punctures. Sensor, Sample line and torpedo cleaned. Lights, Heater, fan and refrigerator.
27879	Preventive Maintenance	Alum silo eye wash/ shower	11/19/2025	Completed	0.00	Primary Weekly Maintenance: Alum Silo Eye wash/ Shower. System tested for water pressure and supply.
27880	Preventive Maintenance	Pak room eye wash and shower system	11/19/2025	Completed	0.00	Primary Weekly Maintenance: Pak room eye wash and shower system. System tested for water pressure and supply.
27860	Preventive Maintenance	GC-MIXER-T3	11/20/2025	Completed	0.00	tightened the mounting bolts and adjusted the shims
27813	Preventive Maintenance	RBC-C1	11/21/2025	Completed	0.00	Primary Weekly Maintenance: C1. RBC weighed with hydraulic pump and weight recorded in maintenance book.
27818	Preventive Maintenance	RBC-B1	11/19/2025	Completed	0.00	Primary Weekly Maintenance: B1. RBC weighed with hydraulic pump and weight recorded in maintenance book.
27828	Preventive Maintenance	RBC-B4	11/19/2025	Completed	0.00	Primary Weekly Maintenance: B4. RBC weighed with hydraulic pump and weight recorded in maintenance book.
27623	Preventive Maintenance	RBC-C1	11/12/2025	Completed	0.00	Primary Weekly Maintenance: RBC C1. RBC weighed with hydraulic pump and recorded.
27626	Preventive Maintenance	RBC-A4	11/12/2025	Completed	0.00	Primary Weekly Maintenance: RBC A4. RBC weighed with hydraulic pump and recorded.

Task ID	Activity	Asset ID	Actual Stop Date	Status	Total Cost	Notes
27628	Preventive Maintenance	RBC-B1	11/12/2025	Completed	0.00	Primary Weekly Maintenance: RBC B1. RBC weighed with hydraulic pump and recorded.
27592	Preventive Maintenance	DS2 sampler	11/6/2025	Completed	0.00	Primary weekly maintenance: DS1 Sampler. Pump tubing inspected for punctures. Cleaned sensor, sample line and torpedo. Proper operation of lights, heater, fan and refrigerator checked.
27596	Preventive Maintenance	soda ash silo shower	11/5/2025	Completed	0.00	Final Weekly Maintenance: Shower and eye wash station Soda Ash Silo. System Checked for leaks. Valves opened and checked for water supply and pressure.
27598	Preventive Maintenance	4	11/7/2025	Completed	0.00	Final Weekly Maintenance: Soda Ash Solution Tank. Sensor removed and cleaned in the shop and reinstalled.
27794	Preventive Maintenance	TR-T-6A	11/13/2025	Completed	0.00	Final Weekly Maintenance: T6A. Oil Checked in reducers. Oil checked in lower housing. Chain inspected for slack. Scraper arm check for wear. Vent cleaned off.
27867	Preventive Maintenance	final back up	11/20/2025	Completed	0.00	Final Weekly Maintenance: Final back up comp. Pump tubing inspected for punctures. Sensor, Sample line and torpedo cleaned. Lights, heater, fan and refrigerator checked for proper operation.
27537	Preventive Maintenance	RBC-A1	11/5/2025	Completed	0.00	Primary Weekly Maintenance: RBC A1. RBC weighed with hydraulic pump and weight recorded into maintenance book.
27540	Preventive Maintenance	RBC-C1	11/5/2025	Completed	0.00	Primary Weekly Maintenance: RBC C1. RBC weighed with hydraulic pump and weight recorded into maintenance book.

Task ID	Activity	Asset ID	Actual Stop Date	Status	Total Cost	Notes
27591	Preventive Maintenance	DS1 sampler	11/6/2025	Completed	0.00	Primary weekly maintenance. DS1 Sampler. Pump tubing checked for punctures. Sensor, Sample line and torpedo cleaned. Lights, heater, fan and refrigerator checked for proper operation.
27543	Preventive Maintenance	RBC-A4	11/5/2025	Completed	0.00	Primary Weekly Maintenance: RBC A4. RBC weighed with hydraulic pump and weight recorded into maintenance book.
27545	Preventive Maintenance	RBC-B1	11/5/2025	Completed	0.00	Primary Weekly Maintenance: RBC B1. RBC weighed with hydraulic pump and weight recorded into maintenance book.
27550	Preventive Maintenance	RBC-C4	11/5/2025	Completed	0.00	Primary Weekly Maintenance: RBC C4. RBC weighed with hydraulic pump and weight recorded into maintenance book.
27600	Preventive Maintenance	final back up	11/7/2025	Completed	0.00	Final Weekly Maintenance: Final Back up. Pump tubing inspected for punctures. Sensor, Sample line and torpedo cleaned. Proper operation of lights, heater, fan and refrigerator checked.
27584	Preventive Maintenance		11/6/2025	Completed	352.67	employees working on removing old calking around entrance on the patio side of the building. recaulking the entrance doorway to seal and help with water leakage.
27585	Preventive Maintenance		11/6/2025	In Progress	363.47	employees working to remove old sealant from doorway and replacing with new caulking to help water from leaking into the building.
27795	Preventive Maintenance	TR-T-6B	11/13/2025	Completed	0.00	Final weekly maintenance: T6B. Oil checked in reducers. Oil level in lower housing. Chain inspected for slack. Scraper arm inspected for wear. Vent cleaned.

Task ID	Activity	Asset ID	Actual Stop Date	Status	Total Cost	Notes
27797	Preventive Maintenance	Final Comp	11/13/2025	Completed	0.00	Final weekly Maintenance: Sigma Samplers. Final Comp. Pump tubing inspected for punctures. Sensor, Sample line and torpedo cleaned. Proper operation of Lights, heater, fan and refrigerator checked.
27798	Preventive Maintenance	final back up	11/13/2025	Completed	0.00	Final weekly maintenance: Sigma Samplers. Final back up. Pump tubing inspected for punctures. Sensor, Sample line and torpedo cleaned. Proper Operation of lights, heater, fan and refrigerator checked.
27800	Preventive Maintenance	soda ash silo shower	11/13/2025	Completed	0.00	Final weekly maintenance: Shower and Eyewash. Soda Ash Silo. System checked for leaks. Valves opened and tested for water pressure and supply.
27620	Preventive Maintenance	RBC-A1	11/12/2025	Completed	0.00	Primary Weekly Maintenance: RBC A1. RBC weighed with hydraulic pump and recorded.
27936	Preventive Maintenance	558	11/26/2025	Completed	0.00	Primary Weekly Maintenance: Oil in reducers checked. All fittings greased. Chain checked for slack. Drive chain checked for slack. Belt checked for tension and wear.
27937	Preventive Maintenance	557	11/26/2025	Completed	0.00	Primary Weekly Maintenance: Sigma Samplers: Raw. Pump tubing inspected for punctures. Sensor, Sample line and torpedo cleaned. Lights, Heater, Fan and refrigerator checked for proper operation.
27939	Preventive Maintenance	DS1 sampler	11/26/2025	Completed	0.00	Primary Weekly Maintenance: Samplers: DS1. Pump tubing inspected for punctures. Sensor, Sample line and torpedo cleaned. Checked lights, heater, fan and refrigerator for proper operation.

Task ID	Activity	Asset ID	Actual Stop Date	Status	Total Cost	Notes
27908	Preventive Maintenance	RBC-B4	11/26/2025	Completed	0.00	Primary Weekly Maintenance: B4. Hydraulic pump hooked up and weighed. Weight recorded into maintenance book.
27920	Preventive Maintenance	Ds3 sampler	11/25/2025	Completed	0.00	Final Weekly Maintenance: DS3 Sampler. Pump tubing checked for punctures. Sensor, Sample line and Torpedo cleaned. Proper operation of Lights, heater, Fan and refrigerator checked.
27863	Preventive Maintenance	WW - New Street Pump Station - Generator	11/20/2025	Completed	0.00	checked oil, antifreeze and antifreeze heater. ran generator for 20mins
27881	Preventive Maintenance	Primary Scum Mixer	11/19/2025	Completed	0.00	Primary Weekly Maintenance: Scum Mixer. Super Bio Clean 510 poured into pit and mixed for two minutes and drained out.
					Count: 91	
Recycling Collection						
24848	Recycling Collection		11/7/2025	Completed	0.00	
27577	Recycling Collection		11/6/2025	Completed	1,329.14	
27559	Recycling Collection		11/5/2025	Completed	3,120.66	
24940	Recycling Collection		11/7/2025	Completed	0.00	
24937	Recycling Collection		11/7/2025	Completed	0.00	
24943	Recycling Collection		11/7/2025	Completed	0.00	
26435	Recycling Collection		11/7/2025	Completed	0.00	
24987	Recycling Collection		11/7/2025	Completed	0.00	
27567	Recycling Collection		11/5/2025	Completed	1,474.94	
24995	Recycling Collection		11/7/2025	Completed	0.00	
26101	Recycling Collection		11/7/2025	Completed	0.00	
27530	Recycling Collection		11/5/2025	Completed	3,120.66	
					Count: 12	

Task ID	Activity	Asset ID	Actual Stop Date	Status	Total Cost	Notes
Repair						
28083	Repair	44-50	11/26/2025	Completed	693.75	
27613	Repair	GC-SCREEN-1	11/7/2025	Completed	0.00	dropped off micro screen (screen) for repairs at Baillie fab.
27848	Repair	GC - Structures - Maintenance Shop	11/20/2025	Completed	0.00	repairing damaged wall behind where oil tank was with caulk\joint compound and prepping for paint. also prepping bathroom ceiling for paint. cleaning all light fixture diffusers, painted bathroom walls and ceiling. mounted a new compartment bin to organize the conduit fittings, elec. switches\outlets
28077	Repair	44-29	11/26/2025	Completed	2,769.60	
27883	Repair	K-1	11/21/2025	Completed	0.00	K1 Aerator went down. The electric motor was replaced. A new compressor was installed. We will be rebuilding the old one. The butterfly valve was found to be faulty and was replaced with a check valve. The power switch was rebuilt and the old electrical conduit replaced. A section of the airlines was replaced. New parts/ motor stand sanded and painted before installation.
28080	Repair	44-29	11/5/2025	Completed	1,158.97	
					Count: 6	
Replace						
27579	Replace	GC - Portable Equipment - 6in. Pump	11/6/2025	Completed	0.00	cut off rusted metal battery box and installed a plastic box, deep cell marine battery and rerouted battery cables
27572	Replace	GC-SCREEN-1	11/5/2025	Completed	0.00	replaced brush screen needs repaired, will remove tomorrow

Task ID	Activity	Asset ID	Actual Stop Date	Status	Total Cost	Notes
27655	Replace	GC - Structures T-12	11/12/2025	Completed	0.00	replaced a G.F.I outlet on the side of the tank with a regular one. hooked up heat trace and wrapped water pipe for sprays
28081	Replace	Sub.P-3	12/1/2025	Completed	0.00	replaced the Hr. meter with new one
27853	Replace	44-50	11/19/2025	Completed	354.15	
27854	Replace	44-25	11/19/2025	Completed	4,685.90	
27855	Replace	44-12	11/19/2025	Completed	570.53	
27862	Replace	GC - T11-Effluent Sluice Gate 2	11/20/2025	Completed	0.00	dropped off sluice gate at fabrication shop
27836	Replace	44-62	11/18/2025	Completed	288.87	
27850	Replace	44-29A	11/19/2025	Completed	17.01	
27888	Replace	P-3B	11/21/2025	Completed	0.00	replaced small fuse for 110v side
27957	Replace	I-5	11/28/2025	Completed	0.00	The motor on out Pre sample/Post sample pump failed. It was removed and a new motor was installed.
27782	Replace	GC-B-2	11/13/2025	Completed	0.00	replaced callout box in breezeway, re-wired sensor\power wires, installed new ground wire, programed phone numbers and tested calling out
27851	Replace	GC - T11-Effluent Sluice Gate 2	11/19/2025	Completed	0.00	removed framework for sluice gate, not much left of it. cleaned out all the grease\grit out of the influent trough and what was left of the frame down in the grit
27849	Replace	GC - T11-Effluent Sluice Gate 2	11/18/2025	Completed	0.00	removed everything but the frame of the sluice and cleaned. preparing to send out to be rebuilt.
27928	Replace	GC-B-1	11/26/2025	Completed	0.00	replaced blown light bulbs in front overhang
					Count: 16	

Task ID	Activity	Asset ID	Actual Stop Date	Status	Total Cost	Notes
Retire						
27646	Retire	GC - Structures - Maintenance Shop	11/11/2025	Completed	0.00	removed 250gal. oil tank from shop, drained remaining heating oil into large tank behind B-3. patched holes in block wall with concrete. placed tank in shed to store out of the weather
					Count: 1	
Solid Waste Collection						
24939	Solid Waste Collection		11/7/2025	Completed	0.00	
24986	Solid Waste Collection		11/7/2025	Completed	0.00	
27558	Solid Waste Collection		11/5/2025	Completed	3,504.00	
24936	Solid Waste Collection		11/7/2025	Completed	0.00	
24942	Solid Waste Collection		11/7/2025	Completed	1,635.84	
26100	Solid Waste Collection		11/7/2025	Completed	0.00	
27566	Solid Waste Collection		11/5/2025	Completed	1,635.84	
24847	Solid Waste Collection		11/7/2025	Completed	0.00	
27529	Solid Waste Collection		11/5/2025	Completed	3,504.00	
24994	Solid Waste Collection		11/7/2025	Completed	0.00	
26434	Solid Waste Collection		11/7/2025	Completed	0.00	
27576	Solid Waste Collection		11/6/2025	Completed	1,635.84	
					Count: 12	
State Safety Inspection						
27930	State Safety Inspection	01-20	11/20/2025	Completed	49.95	
27927	State Safety Inspection	55-10	11/24/2025	Completed	0.00	
27931	State Safety Inspection	01-22	11/24/2025	Completed	49.95	
					Count: 3	

Task ID	Activity	Asset ID	Actual Stop Date	Status	Total Cost	Notes
Sweeping						
27587	Sweeping		11/6/2025	Completed	1,249.90	
27586	Sweeping		11/6/2025	Completed	1,483.90	
					Count: 2	
Troubleshoot						
27882	Troubleshoot	RBC-A3	11/19/2025	Completed	0.00	Saturday November 15th RBC A3 went down. Struts and hold down bars broke which caused some of the media to fall out. On November 19th a section of the media was removed. It was also discovered that bolt holes in the ring surrounding the shaft were wallowed out. A3 was made operable again. We still need to do further repairs to get it back to 100%. Further work includes additional repairs as well as welding.
27656	Troubleshoot	GC-MC2	11/12/2025	Completed	0.00	looked further into why the electric wasn't working for the light and exhaust fan, discovered the conduit going from B-3 to the pit has collapsed just outside the foundation cutting the wires off. not sure how we are going to fix yet
27614	Troubleshoot	P-5A	11/10/2025	Completed	0.00	pump was tripping out after only running for a few seconds over the weekend. spun pump over by hand a few times and then turned back on, seems to be running fine now. 2.8 amps on all 3 legs heaters are for 6.5-8 amps

Task ID	Activity	Asset ID	Actual Stop Date	Status	Total Cost	Notes
27612	Troubleshoot	GC - Structures - Maintenance Shop	11/7/2025	Completed	0.00	new heaters in shop shut off , determined it tripped the breakers. heater company came out and figured out the breakers installed were to small. will be repaired monday
27917	Troubleshoot	GC-PS-1	11/25/2025	Completed	0.00	Hr mete for pump#3 is not working. checked\cleaned all connections but didnt help. will order new meter
					Count: 5	
Yard Waste Collection						
27568	Yard Waste Collection		11/5/2025	Completed	2,042.90	
24988	Yard Waste Collection		11/7/2025	Completed	0.00	
24996	Yard Waste Collection		11/7/2025	Completed	0.00	
26436	Yard Waste Collection		11/7/2025	Completed	0.00	
24944	Yard Waste Collection		11/7/2025	Completed	0.00	
24941	Yard Waste Collection		11/7/2025	Completed	0.00	
26102	Yard Waste Collection		11/7/2025	Completed	0.00	
27560	Yard Waste Collection		11/5/2025	Completed	3,058.80	
24938	Yard Waste Collection		11/7/2025	Completed	0.00	
24849	Yard Waste Collection		11/7/2025	Completed	0.00	
27531	Yard Waste Collection		11/5/2025	Completed	3,041.52	
27578	Yard Waste Collection		11/6/2025	Completed	2,056.40	
					Count: 12	
					Count: 211	

Goose Creek Plant
351 Snyder Ave.
West Chester, PA 19382
(610) 696-2320

Ed Jamieson
Superintendent

Taylor Run Plant
795 Downingtown Pike
West Chester, PA 19380
(610) 436-1370

Michael Findley
Superintendent

Sean Mitchell
Wastewater Director

WASTEWATER DEPARTMENT

December 2025 Wastewater Department Report

Goose Creek

A good size hole was found in the back of the micro-screen lower cage. The cage was removed and sent to a fabricator to be repaired. While the cage is off the unit, a new brush has been installed.

Battavio Plumbing/HVAC installed two new mini-split units in the maintenance shop. These units replaced a 30+ year-old oil-fired heater.

All sprays on the clarifiers have been shut down as a cold weather preventive maintenance measure. The bypass lines have been installed and heat trace turned on in the plant and pumping stations.

Crews installed a malfunctioning emergency call-out box. New sensors, power and phone wires were installed.

Avg. Monthly Flow: 0.832 MGD

Taylor Run

Employees found an RBC unit shut down. After removing the media section, they found broken struts and hold down bars and rounded out bolt holes. The unit was made operational and placed back on-line. Further repairs and some welding work are being investigated.

An Aeration blower failed, upon installing a spare motor and compressor it was discovered that a butterfly valve and power switch were faulty. Both parts were replaced, the unit was cleaned, painted and placed back in service. The original motor and compressor have been rebuilt and placed on a shelf as a back-up.

Taylor Run had their accredited laboratory in person audit performed this past month by the PADEP. Everything went well, we are just waiting on the final report.

Avg. Monthly Flow: 0.719 MGD

Pumping Stations

Monthly cleaning and inspections were performed at all four pumping stations. Crews pumped down, hosed out wet wells and bar screen chambers and adjusted floats where needed.

The semi-annual cleaning and inspections of the check valves took place at all four pumping stations. Lids were taken off, debris in cavity and on flapper removed, and any standard nut and bolts were replaced with stainless steel ones to help with corrosion.

Capital Projects

The Maple Alley project plans are being buttoned up, and the WQM permit application should be submitted in the near future. Phase one is still on course for a summer 2026 construction.

Taylor Run block bearings have been ordered, they are scheduled to be delivered and paid for before year end.

The Goose Creek Substation Upgrade Project.

Through Pennbid, the bids were opened on Friday November 21 by BCM engineer Charlie Liu. The recommendation to award letter (attached) along with the required RCO documents and Contractor Responsibility Determination form for the bid is on the Finance Committee agenda for approval.

Two contractors bid on the project:

1. Brendan Stanton Inc. (BSI) of Montgomeryville, PA submitted the low bid of $545,600.00.
2. PKF-Mark III, Inc. of Newtown, PA submitted a bid of $1,254,984.00.

67 vendors downloaded the bid files from Pennbid's site, 12 of which are electric companies, 4 companies attended the non-mandatory pre-bid meeting at the plant.

BSI has 13 electricians and 3 apprentices that may work on the project, no subcontractors will be used. They have been registered in the Commonwealth of PA apprenticeship program since 1981, hold PA contractors license and small business license. Records of completed Apprenticeship training programs, OSHA thirty (30) hour, and OSHA ten (10) hour safety training certificates have been provided.
BSI has 48 years of experience with projects valued up to $13.5 million for the City of Reading's WWTP. They provide the needed experience, workforce, and equipment needed for the project.


MVA
TRANSFORMER
LVA

BCM ENGINEERS
ATC GROUP SERVICES LLC

920 Germantown Pike, Suite 200
Plymouth Meeting, PA 19462
610-313-3100
Fax 610-313-3151

December 1, 2025

Sean Metrick, Borough Manager
Borough of West Chester
401 East Gay Street
West Chester, PA 19380

Subject: Goose Creek WWTP (GCWWTP) Substation Rehabilitation Phase 2 Project
Contract No. GCWWTP 2025-1
Bids and RCO Documents Review and Recommendation for Contract Award
BCM Project No. Z057000527

Dear Mr. Metrick:

On November 21, 2025, through pennbid, the Borough received two (2) bids as shown below:

1. Brendan Stanton Inc. (BSI) of Montgomeryville, PA submitted the low bid, $545,600.00.

2. PKF-Mark III, Inc. of Newtown, PA submitted a bid of $1,254,984.00.

A Bid Tabulation summarizing 10 pricing items and 13 support documents is attached (Appendix A).

We would recommend for the Borough's consideration to award this project to BSI as discussed below.

A. Based on our review, it is our opinion that the bid documents submitted by BSI are complete and in good order.

B. The requirements of the Borough of West Chester Responsible Contractor Ordinance (RCO) are included in the bid documents, BCM/Atlas has completed an independent review of the records and qualifications of BSI, it is our opinion that BSI complies with the RCO as outlined below:

   1. BSI submitted the Contractor Responsibility Certification (Appendix B) as a part of its bid, which shows its participation in an Apprenticeship Program, currently registered with the Commonwealth of Pennsylvania for each craft employee to be employed on the project.

      Note that BSI will not use subcontractors for this project.

   2. A list of 13 electricians and 3 electrical apprentices employed by BSI who may work on the project (Appendix C).

   3. Since November 1981, BSI has registered an apprenticeship program with the Commonwealth of PA, Program # PA006810015. See BSI's registration certificates issued by PA Department of Labor and Industry (Appendix D).

   4. BSI is licensed in the Commonwealth of Pennsylvania – License # PA011014. BSI also holds a Small Business License #179109-2025-08-SB with the PA Department of General Services (Appendix E).

   5. Records of BSI employees who completed the apprenticeship training program (Appendix F).

6. Records of BSI employees who completed the OSHA thirty-hour training course (Appendix G).

7. Records of BSI employees who completed the OSHA ten-hour training course (Appendix H).

BSI has 48 years of experience. It has completed several successful projects that were designed by BCM/Atlas and other consultants. The scale of many of BSI's projects is more complex and much greater in value (as high as $13.5 million for City of Reading's Fritz Island WWTP Upgrade) than the subject project (Appendix I).

It is our opinion that BSI is well equipped to provide the needed experience, workforce, cranes, generators, and other equipment (Appendix J) to work on the subject project.

Project Schedules

The following preliminary schedules are proposed for the Borough's review and approval:

1. Contracts award and execution - December 2025.
2. Notice to proceed (NTP) for construction – December 2025.
3. Construction complete – July 2026.

Prior to construction commencement on the project, the Contractor must submit the following:

1. Certificate of Insurance that shows the Borough as the Certificate Holder
2. Performance Bond
3. Payment Bond
4. Executed Contract

Should you have any questions, please feel free to contact us.

Sincerely,

Charlie Liu

Charlie Liu, P.E. , BCM/Atlas
Borough of West Chester Wastewater Engineer

cc: Sean Mitchell, Wastewater Department Director
Ed Jamieson, GCWWTP Superintendent
Uzair Ahmadi, P.E., BCM/Atlas

Wastewater Tasks

Department	Asset	Activity	Date Completed	Notes	Total Cost
Waste Water (Goose Creek)					
Waste Water (Goose Creek)	WWTP Structure WW - Worthington Street Pump Station - Valve Chamber	Preventive Maintenance	11/4/2025	replaced all nuts, bolts with stainless ones and anti seize	0.00
Waste Water (Goose Creek)	WWTP Structure WW - New Street Pump Station - Valve Chamber	Cleaning	11/4/2025	pumped down wet well, isolated each check valve and removed the lids. Removed all rags and debris built up around flapper and hinge pin. Replaced all bolts with stainless bolts and anti seize lots of rags, 3\4 of a bucket full per side	0.00
Waste Water (Goose Creek)	WWTP Structure WW - Miner Street Pump Station - Valve Chamber	Cleaning	11/4/2025	pumped down wet well, isolated each check valve and removed the lids. Removed all rags and debris built up around flapper and hinge pin. Replaced all bolts with stainless bolts and anti seize not to much debris but definitely needed cleaned	0.00
Waste Water (Goose Creek)	WWTP Structure WW - College Avenue Pump Station - Valve Chamber	Cleaning	11/5/2025	pumped down wet well, isolated each check valve and removed the lids. Removed all rags and debris built up around flapper and hinge pin. Replaced all bolts with stainless bolts and anti seize pump#2 good amount of rags pump #1 nothing	0.00
Waste Water (Goose Creek)	WWTP Screen GC-SCREEN-1	Replace	11/5/2025	replaced brush screen needs repaired, will remove tomorrow	0.00
Waste Water (Goose Creek)	WWTP Pump GC - Portable Equipment - 6in. Pump	Replace	11/6/2025	cut off rusted metal battery box and installed a plastic box, deep cell marine battery and rerouted battery cables	0.00
Waste Water (Goose Creek)	WWTP Structure GC-GT	Clean	11/6/2025	monthly pump down and cleaning, not bad at all	0.00
Waste Water (Goose Creek)	WWTP Facility GC - Structures - Maintenance Shop	Troubleshoot	11/7/2025	new heaters in shop shut off , determined it tripped the breakers. heater company came out and figured out the breakers installed were to small. will be repaired monday	0.00
Waste Water (Goose Creek)	WWTP Screen GC-SCREEN-1	Repair	11/7/2025	dropped off micro screen (screen) for repairs at Baillie fab.	0.00
Waste Water (Goose Creek)	WWTP Pump P-5A	Troubleshoot	11/10/2025	pump was tripping out after only running for a few seconds over the weekend. spun pump over by hand a few times and then turned back on, seems to be running fine now. 2.8 amps on all 3 legs heaters are for 6.5-8 amps	0.00
Waste Water (Goose Creek)	WWTP Structure GC-T13	Cleaning	11/11/2025	drained and cleaned rags\debris off of mixer blades and ladder rungs	0.00
Waste Water (Goose Creek)	WWTP Pump P-5A	Clean	11/11/2025	cleaned out inspection port, not much inside	0.00
Waste Water (Goose Creek)	WWTP Facility GC - Structures - Maintenance Shop	Retire	11/11/2025	removed 250gal. oil tank from shop, drained remaining heating oil into large tank behind B-3. patched holes in block wall with concrete. placed tank in shed to store out of the weather	0.00

Department	Asset	Activity	Date Completed	Notes	Total Cost
Waste Water (Goose Creek)	Wastewater Treatment Plant GC	Other	11/11/2025	shut off sprays, removed spray tips, installed winter bypass water hoses on T-4 T-12 T-7 tanks and turned on/checked all heat trace in plant	0.00
Waste Water (Goose Creek)	WWTP Pump P-5B	Clean	11/11/2025	cleaned out inspection port, not much inside	0.00
Waste Water (Goose Creek)	WWTP Structure GC - Structures T-12	Replace	11/12/2025	replaced a G.F.I outlet on the side of the tank with a regular one. hooked up heat trace and wrapped water pipe for sprays	0.00
Waste Water (Goose Creek)	WWTP Facility GC-MC2	Troubleshoot	11/12/2025	looked further into why the electric wasn't working for the light and exhaust fan, discovered the conduit going from B-3 to the pit has collapsed just outside the foundation cutting the wires off. not sure how we are going to fix yet	0.00
Waste Water (Goose Creek)	WWTP Structure WW - Miner Street Pump Station - Wet Well	Clean	11/13/2025	pumped down and housed out with the pump truck,	0.00
Waste Water (Goose Creek)	WWTP Structure WW - College Avenue Pump Station - Valve Chamber	Clean	11/13/2025	vacuumed out water and debris	0.00
Waste Water (Goose Creek)	WWTP Structure WW - New Street Pump Station - Wet Well	Clean	11/13/2025	pumped down and housed out with the pump truck,	0.00
Waste Water (Goose Creek)	WWTP Structure WW - Miner Street Pump Station - Valve Chamber	Clean	11/13/2025	vacuumed out water and debris	0.00
Waste Water (Goose Creek)	WWTP Facility GC-B-2	Replace	11/13/2025	replaced callout box in breezeway, re-wired sensor\power wires, installed new ground wire, programed phone numbers and tested calling out	0.00
Waste Water (Goose Creek)	WWTP Structure WW - New Street Pump Station - Valve Chamber	Clean	11/13/2025	vacuumed out water and debris	0.00
Waste Water (Goose Creek)	WWTP Structure WW - Worthington Street Pump Station - Wet Well	Clean	11/13/2025	pumped down and housed out with the pump truck	0.00
Waste Water (Goose Creek)	WWTP Structure WW - Worthington Street Pump Station - Valve Chamber	Cleaning	11/13/2025	vacuumed out water and debris	0.00
Waste Water (Goose Creek)	WWTP Structure WW - College Avenue Pump Station - Wet Well	Clean	11/13/2025	pumped down and housed out with the pump truck	0.00
Waste Water (Goose Creek)	WWTP Sluice Gate GC - T11-Effluent Sluice Gate 2	Replace	11/18/2025	removed everything but the frame of the sluice and cleaned. preparing to send out to be rebuilt.	0.00
Waste Water (Goose Creek)	WWTP Screen GC-GRINDER-1	Oil Change	11/18/2025	changed oil in upper chamber, pumped old oil out (no drain plug) and pumped new oil in 2 quarts 80\90w	0.00

Department	Asset	Activity	Date Completed	Notes	Total Cost
Waste Water (Goose Creek)	WWTP Structure GC - Structures T-12	Clean	11/18/2025	pulled rags and debris out of the center column	0.00
Waste Water (Goose Creek)	Wastewater Treatment Plant WW - College Avenue Pump Station	Other	11/18/2025	removed a large limb hanging over the wet well and wire junction box	0.00
Waste Water (Goose Creek)	Wastewater Treatment Plant PS-2	Other	11/18/2025	removed limbs at the entrance that were dragging along the trucks	0.00
Waste Water (Goose Creek)	WWTP Sluice Gate GC - T11-Effluent Sluice Gate 2	Replace	11/19/2025	removed framework for sluice gate, not much left of it. cleaned out all the grease\grit out of the influent trough and what was left of the frame down in the grit	0.00
Waste Water (Goose Creek)	Facility Equipment GC - B4 - Polymer Pumping Tank	Cleaning	11/19/2025	pumped out and cleaned off walls and bottom of tank	0.00
Waste Water (Goose Creek)	WWTP Facility GC - Structures - Maintenance Shop	Repair	11/20/2025	repairing damaged wall behind where oil tank was with caulk\joint compound and prepping for paint. also prepping bathroom ceiling for paint. cleaning all light fixture diffusers, painted bathroom walls and ceiling. mounted a new compartment bin to organize the conduit fittings, elec. switches\outlets	0.00
Waste Water (Goose Creek)	WWTP Electrical Generator WW - New Street Pump Station - Generator	Preventive Maintenance	11/20/2025	checked oil, antifreeze and antifreeze heater. ran generator for 20mins	0.00
Waste Water (Goose Creek)	WWTP Sluice Gate GC - T11-Effluent Sluice Gate 2	Replace	11/20/2025	dropped off sluice gate at fabrication shop	0.00
Waste Water (Goose Creek)	WWTP Mixer GC-MIXER-T3	Preventive Maintenance	11/20/2025	tightened the mounting bolts and adjusted the shims	0.00
Waste Water (Goose Creek)	WWTP Screen GC-SCREEN-2	Ice	11/20/2025	ran ice thur to clean out	0.00
Waste Water (Goose Creek)	WWTP Pump P-3B	Replace	11/21/2025	replaced small fuse for 110v side	0.00
Waste Water (Goose Creek)	WWTP Structure GC-T7C	Clean	11/25/2025	cleaned out debris from bottom of empty tank. leaves, sticks, walnuts	0.00
Waste Water (Goose Creek)	WWTP Facility GC-PS-1	Troubleshoot	11/25/2025	Hr mete for pump#3 is not working. checked\cleaned all connections but didnt help. will order new meter	0.00
Waste Water (Goose Creek)	WWTP Facility GC-B-1	Replace	11/26/2025	replaced blown light bulbs in front overhang	0.00
Waste Water (Taylor Run)					
Waste Water (Taylor Run)	WWTP Facility TR-B-5	Clean	11/1/2025	B5 was swept, Mopped and trash taken out.	0.00
Waste Water (Taylor Run)	WWTP Facility TR-B-1	Clean	11/1/2025	B1 was swept, mopped, and trash taken out.	0.00

Department	Asset	Activity	Date Completed	Notes	Total Cost
Waste Water (Taylor Run)	WWTP Facility TR-B-1	Change Light	11/3/2025	New LED lights were installed in our soda ash room.	0.00
Waste Water (Taylor Run)	WWTP Electrical Generator GEN-2	Preventive Maintenance	11/4/2025	Primary weekly maintenance: Plant generator. Oil level checked. Coolant level checked in radiator. Belt checked for tension. Hose connections checked. Lights and gauges checked.	0.00
Waste Water (Taylor Run)	WWTP RBC RBC-B4	Preventive Maintenance	11/5/2025	Primary Weekly Maintenance: RBC B4. RBC weighed with hydraulic pump and weight recorded into maintenance book.	0.00
Waste Water (Taylor Run)	WWTP Structure TR-LA	Preventive Maintenance	11/5/2025	Primary Weekly Maintenance: Aluminum Sulfite Storage Tank. Storage tank inspected for leaks. Pumped out as needed.	0.00
Waste Water (Taylor Run)	WWTP RBC RBC-A1	Preventive Maintenance	11/5/2025	Primary Weekly Maintenance: RBC A1. RBC weighed with hydraulic pump and weight recorded into maintenance book.	0.00
Waste Water (Taylor Run)	WWTP RBC RBC-C1	Preventive Maintenance	11/5/2025	Primary Weekly Maintenance: RBC C1. RBC weighed with hydraulic pump and weight recorded into maintenance book.	0.00
Waste Water (Taylor Run)	WWTP RBC RBC-A4	Preventive Maintenance	11/5/2025	Primary Weekly Maintenance: RBC A4. RBC weighed with hydraulic pump and weight recorded into maintenance book.	0.00
Waste Water (Taylor Run)	WWTP RBC RBC-B1	Preventive Maintenance	11/5/2025	Primary Weekly Maintenance: RBC B1. RBC weighed with hydraulic pump and weight recorded into maintenance book.	0.00
Waste Water (Taylor Run)	WWTP RBC RBC-C4	Preventive Maintenance	11/5/2025	Primary Weekly Maintenance: RBC C4. RBC weighed with hydraulic pump and weight recorded into maintenance book.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation soda ash silo shower	Preventive Maintenance	11/5/2025	Final Weekly Maintenance: Shower and eye wash station Soda Ash Silo. System Checked for leaks. Valves opened and checked for water supply and pressure.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation soda ash eye wash shower	Preventive Maintenance	11/5/2025	Final Weekly Maintenance: Soda Ash Room Eyewash and Shower station. System checked for leaks, water supply and pressure.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation Primary Scum Mixer	Preventive Maintenance	11/5/2025	Primary Weekly maintenance: Primary scum mixer. Super Bio Clean 510 put into scum pit and mixed for several minutes. Then pumped out through pumps 3/4.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation 557	Preventive Maintenance	11/6/2025	Primary weekly maintenance: Raw Sampler. Pump tubing inspected for punctures. Sensor, Sample line and torpedo cleaned. Proper operation of lights, heater, fan and refrigerator checked.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation I-5	Preventive Maintenance	11/6/2025	Final Weekly Maintenance: Chlorine Analyzer & Pre/Post Sample Pump. Grease cup taken off pump and old grease removed and fresh polyrex blue grease installed. Grease cup reinstalled. Sample box checked for leaks and other developing problems. Tubing on analyzer inspected for clogs or punctures. Drain lines cleaned out and reinstalled. Strainer cleaned and reinstalled.	0.00

Department	Asset	Activity	Date Completed	Notes	Total Cost
Waste Water (Taylor Run)	WWTP Instrumentation DS2 sampler	Preventive Maintenance	11/6/2025	Primary weekly maintenance: DS1 Sampler. Pump tubing inspected for punctures. Cleaned sensor, sample line and torpedo. Proper operation of lights, heater, fan and refrigerator checked.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation DS1 sampler	Preventive Maintenance	11/6/2025	Primary weekly maintenance. DS1 Sampler. Pump tubing checked for punctures. Sensor, Sample line and torpedo cleaned. Lights, heater, fan and refrigerator checked for proper operation.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation final back up	Preventive Maintenance	11/7/2025	Final Weekly Maintenance: Final Back up. Pump tubing inspected for punctures. Sensor, Sample line and torpedo cleaned. Proper operation of lights, heater, fan and refrigerator checked.	0.00
Waste Water (Taylor Run)	WWTP Structure TR-T-6B	Preventive Maintenance	11/7/2025	Final Weekly Maintenance: T6B. Oil level in reducers checked. Oil level in lower housing checked. Chain inspected for slack. Scraper arm checked for wear. Vent cleaned.	0.00
Waste Water (Taylor Run)	WWTP Structure 4	Preventive Maintenance	11/7/2025	Final Weekly Maintenance: Soda Ash Solution Tank. Sensor removed and cleaned in the shop and reinstalled.	0.00
Waste Water (Taylor Run)	WWTP Structure TR-T-6A	Preventive Maintenance	11/7/2025	Final Weekly Maintenance: T6A. Oil level in reducers checked. Oil level in lower housing checked. Chain inspected for slack. Scraper arm checked for wear. Vent cleaned.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation Final Comp	Preventive Maintenance	11/7/2025	Final Weekly Maintenance: Final Comp. Pump tubing inspected for punctures. Sensor, Sample line and torpedo cleaned. Proper operation of lights, heater, fan and refrigerator.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation Ds3 sampler	Preventive Maintenance	11/7/2025	Final Weekly Maintenance: DS3. Pump tubing inspected for punctures. Sensor, Sample line and torpedo cleaned. Proper operation of lights, heater, fan and refrigerator checked.	0.00
Waste Water (Taylor Run)	WWTP Structure T-7B	Clean	11/7/2025	Contact tank B was dropped and sprayed clean.	0.00
Waste Water (Taylor Run)	WWTP Facility TR-B-5	Clean	11/8/2025	B5 was swept, mopped and trash taken out.	0.00
Waste Water (Taylor Run)	WWTP Facility TR-B-1	Clean	11/8/2025	B1 was swept, mopped and trash taken out.	0.00
Waste Water (Taylor Run)	WWTP Electrical Generator GEN-2	Preventive Maintenance	11/12/2025	Primary Weekly Maintenance: Plant Generator. Oil level checked. Coolant level checked in radiator glass sight. Belt checked for tension. Hose checked for connections. gauges and lights checked.	0.00
Waste Water (Taylor Run)	WWTP RBC RBC-B4	Preventive Maintenance	11/12/2025	Primary Weekly Maintenance: RBC B4. RBC weighed with hydraulic pump and recorded.	0.00
Waste Water (Taylor Run)	WWTP Structure TR-LA	Preventive Maintenance	11/12/2025	Primary Weekly Maintenance: Aluminum Sulfite Storage Tank. Moat pumped out as needed.	0.00
Waste Water (Taylor Run)	WWTP RBC RBC-C4	Preventive Maintenance	11/12/2025	Primary Weekly Maintenance: RBC C4. RBC weighed with hydraulic pump and recorded.	0.00

Department	Asset	Activity	Date Completed	Notes	Total Cost
Waste Water (Taylor Run)	WWTP RBC RBC-C1	Preventive Maintenance	11/12/2025	Primary Weekly Maintenance: RBC C1. RBC weighed with hydraulic pump and recorded.	0.00
Waste Water (Taylor Run)	WWTP RBC RBC-A4	Preventive Maintenance	11/12/2025	Primary Weekly Maintenance: RBC A4. RBC weighed with hydraulic pump and recorded.	0.00
Waste Water (Taylor Run)	WWTP RBC RBC-B1	Preventive Maintenance	11/12/2025	Primary Weekly Maintenance: RBC B1. RBC weighed with hydraulic pump and recorded.	0.00
Waste Water (Taylor Run)	WWTP RBC RBC-A1	Preventive Maintenance	11/12/2025	Primary Weekly Maintenance: RBC A1. RBC weighed with hydraulic pump and recorded.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation Alum silo eye wash/ shower	Preventive Maintenance	11/12/2025	Primary Weekly Maintenance: Alum silo. System checked for water pressure and supply. Checked for leaks.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation Pak room eye wash and shower system	Preventive Maintenance	11/12/2025	Primary weekly Maintenance. Pak room. System checked for water pressure and supply. Checked for leaks.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation Primary Scum Mixer	Preventive Maintenance	11/12/2025	Primary Weekly Maintenance: Primary Scum Mixer. Super Bio Clean 510 put into pit and mixed for two minutes. Drained out.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation soda ash eye wash shower	Preventive Maintenance	11/13/2025	Final weekly maintenance: Soda ash room shower and eyewash. System checked for leaks. Valves opened to test water pressure and supply.	0.00
Waste Water (Taylor Run)	WWTP Structure TR-T-6A	Preventive Maintenance	11/13/2025	Final Weekly Maintenance: T6A. Oil Checked in reducers. Oil checked in lower housing. Chain inspected for slack. Scraper arm check for wear. Vent cleaned off.	0.00
Waste Water (Taylor Run)	WWTP Structure TR-T-6B	Preventive Maintenance	11/13/2025	Final weekly maintenance: T6B. Oil checked in reducers. Oil level in lower housing. Chain inspected for slack. Scraper arm inspected for wear. Vent cleaned.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation Final Comp	Preventive Maintenance	11/13/2025	Final weekly Maintenance: Sigma Samplers. Final Comp. Pump tubing inspected for punctures. Sensor, Sample line and torpedo cleaned. Proper operation of Lights, heater, fan and refrigerator checked.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation final back up	Preventive Maintenance	11/13/2025	Final weekly maintenance: Sigma Samplers. Final back up. Pump tubing inspected for punctures. Sensor, Sample line and torpedo cleaned. Proper Operation of lights, heater, fan and refrigerator checked.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation soda ash silo shower	Preventive Maintenance	11/13/2025	Final weekly maintenance: Shower and Eyewash. Soda Ash Silo. System checked for leaks. Valves opened and tested for water pressure and supply.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation I-5	Preventive Maintenance	11/13/2025	Final weekly maintenance: Chlorine analyzer and pre/ post sample pumps. Grease cup removed for pre/post sample pump and old grease replaced with fresh polyrex blue grease and reinstalled. Sample box checked over for leaks. Tubing on analyzer cleaned. Drain line cleaned out and strainer cleaned.	0.00

Department	Asset	Activity	Date Completed	Notes	Total Cost
Waste Water (Taylor Run)	WWTP Instrumentation Ds3 sampler	Preventive Maintenance	11/13/2025	Final weekly maintenance: Sigma Sampler DS3. Pump tubing inspected for punctures. Sensor, Sample line and torpedo cleaned. Proper operation of lights, fan, heater and refrigerator checked.	0.00
Waste Water (Taylor Run)	WWTP Facility TR-B-5	Clean	11/16/2025	B5 was swept, mopped and trash taken out.	0.00
Waste Water (Taylor Run)	WWTP Facility TR-B-1	Clean	11/16/2025	B1 was swept, mopped and trash taken out.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation 558	Preventive Maintenance	11/18/2025	Primary Weekly Maintenance: Bucket Elevator & Incline Screw Conveyor. Oil level in reducers checked. All fittings greased. Chain checked for slack. Drive chain checked for slack. Belt checked for tension and wear.	0.00
Waste Water (Taylor Run)	WWTP RBC RBC-B4	Preventive Maintenance	11/19/2025	Primary Weekly Maintenance: B4. RBC weighed with hydraulic pump and weight recorded in maintenance book.	0.00
Waste Water (Taylor Run)	WWTP RBC RBC-B1	Preventive Maintenance	11/19/2025	Primary Weekly Maintenance: B1. RBC weighed with hydraulic pump and weight recorded in maintenance book.	0.00
Waste Water (Taylor Run)	WWTP RBC RBC-A1	Preventive Maintenance	11/19/2025	Primary Weekly Maintenance: A1. RBC weighed with hydraulic pump and weight recorded in maintenance book.	0.00
Waste Water (Taylor Run)	WWTP Electrical Generator GEN-2	Preventive Maintenance	11/19/2025	Primary Weekly Maintenance: Plant Generator. Oil level checked. Coolant for radiator checked. Belt checked for tensions. Gauges and lights checked for proper operation.	0.00
Waste Water (Taylor Run)	WWTP RBC RBC-A4	Preventive Maintenance	11/19/2025	Primary Weekly Maintenance: A4. RBC weighed with hydraulic pump and weight recorded in maintenance book.	0.00
Waste Water (Taylor Run)	WWTP Structure TR-LA	Preventive Maintenance	11/19/2025	Primary Weekly Maintenance: Aluminum Sulfite Storage Tank. Moat pumped out.	0.00
Waste Water (Taylor Run)	WWTP RBC RBC-C4	Preventive Maintenance	11/19/2025	Primary Weekly Maintenance: C4. RBC weighed with hydraulic pump and weight recorded in maintenance book.	0.00
Waste Water (Taylor Run)	WWTP RBC RBC-A3	Troubleshoot	11/19/2025	Saturday November 15th RBC A3 went down. Struts and hold down bars broke which caused some of the media to fall out. On November 19th a section of the media was removed. It was also discovered that bolt holes in the ring surrounding the shaft were wallowed out. A3 was made operable again. We still need to do further repairs to get it back to 100%. Further work includes additional repairs as well as welding.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation Primary Scum Mixer	Preventive Maintenance	11/19/2025	Primary Weekly Maintenance: Scum Mixer. Super Bio Clean 510 poured into pit and mixed for two minutes and drained out.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation 557	Preventive Maintenance	11/19/2025	Primary Weekly Maintenance: Raw Sigma Sampler. Pump tubing inspected for punctures. Sensor, Sample line and torpedo cleaned. Lights, Heater, fan and refrigerator.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation Alum silo eye wash/ shower	Preventive Maintenance	11/19/2025	Primary Weekly Maintenance: Alum Silo Eye wash/ Shower. System tested for water pressure and supply.	0.00

Department	Asset	Activity	Date Completed	Notes	Total Cost
Waste Water (Taylor Run)	WWTP Instrumentation Pak room eye wash and shower system	Preventive Maintenance	11/19/2025	Primary Weekly Maintenance: Pak room eye wash and shower system. System tested for water pressure and supply.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation DS1 sampler	Preventive Maintenance	11/19/2025	Primary Weekly Maintenance: DS1 Sigma Sampler. Pump tubing inspected for punctures. Sensor, Sample line and torpedo cleaned. Lights, Heater, Fan and refrigerator checked for proper operation.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation DS2 sampler	Preventive Maintenance	11/19/2025	Primary Weekly Maintenance: DS1 Sigma Sampler. Pump tubing checked for punctures. Sensor, Sample line and Torpedo cleaned. Lights, Heater, Fan and refrigerator checked for proper operation.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation soda ash silo shower	Preventive Maintenance	11/20/2025	Final Weekly Maintenance: Soda Ash Silo Shower. System checked for leaks, opened valves and checked for water supply and pressure.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation soda ash eye wash shower	Preventive Maintenance	11/20/2025	Final Weekly Maintenance: Soda Ash room shower. System checked for leaks. Valves opened and checked for water pressure and supply.	0.00
Waste Water (Taylor Run)	WWTP Structure TR-T-6A	Preventive Maintenance	11/20/2025	Final Weekly Maintenance: T6A Clarifier. Oil Level checked in reducer. Oil level checked in lower housing. Chain checked for slack. Scraper arm checked for wear.	0.00
Waste Water (Taylor Run)	WWTP Structure TR-T-6B	Preventive Maintenance	11/20/2025	Final Weekly Maintenance: T6B Clarifier. Oil level checked in reducer. Oil level checked in lower housing. Chain checked for slack. Scraper arm checked for wear.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation Final Comp	Preventive Maintenance	11/20/2025	Final Weekly Maintenance: Sigma Sampler Final Comp. Pump tubing inspected for punctures. Sensor, Sample line and torpedo. Proper operation of lights, heater, fan and refrigerator checked.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation Ds3 sampler	Preventive Maintenance	11/20/2025	Final Weekly Maintenance: DS3 Sampler. Pump tubing inspected for punctures. Sensor, Sample line and torpedo cleaned. Lights, heater, fan and refrigerator checked for proper operation.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation I-5	Preventive Maintenance	11/20/2025	Final Weekly Maintenance: Chlorine Analyzer & Pre/Post Sample Pumps. Grease cup taken off pump and old grease removed. Refilled with new polyrex blue grease. Boxed checked for leaks. Tubing on analyzer cleaned. Drain line cleaned as well as strainer.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation final back up	Preventive Maintenance	11/20/2025	Final Weekly Maintenance: Final back up comp. Pump tubing inspected for punctures. Sensor, Sample line and torpedo cleaned. Lights, heater, fan and refrigerator checked for proper operation.	0.00

Department	Asset	Activity	Date Completed	Notes	Total Cost
Waste Water (Taylor Run)	WWTP Screen F-2	Preventive Maintenance	11/20/2025	Primary Monthly Maintenance: Lakeside Rotomat Fine Screens. Shut down both screens and placed one on hand at a time. Checked rotation and that screenings are moving freely. Held power switch in reverse and checked screenings. Board placed under ultrasonic level controllers to stimulate a high flow. Wye strainers cleaned.	0.00
Waste Water (Taylor Run)	WWTP RBC RBC-C1	Preventive Maintenance	11/21/2025	Primary Weekly Maintenance: C1. RBC weighed with hydraulic pump and weight recorded in maintenance book.	0.00
Waste Water (Taylor Run)	WWTP Blower K-1	Repair	11/21/2025	K1 Aerator went down. The electric motor was replaced. A new compressor was installed. We will be rebuilding the old one. The butterfly valve was found to be faulty and was replaced with a check valve. The power switch was rebuilt and the old electrical conduit replaced. A section of the airlines was replaced. New parts/ motor stand sanded and painted before installation.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation soda ash silo shower	Preventive Maintenance	11/25/2025	Final Weekly Maintenance: Shower and Eye wash Stations: Soda Ash Silo. System checked for leaks and water pressure and supply.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation final back up	Preventive Maintenance	11/25/2025	Final Weekly Maintenance: Final back up Sampler. Pump tubing checked for punctures. Cleaned sensor, sample line and torpedo. Checked proper operation of lights, fan, heater and refrigerator.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation I-5	Preventive Maintenance	11/25/2025	Final Weekly Maintenance: Chlorine Analyzer and Pre/Post sample pump. Grease cup from Pre/post pump taken to shop and old grease removed. Fresh grease put in, and grease cup reinstalled. Analyzer tubing cleaned. Drain line cleaned as well as the strainer.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation soda ash eye wash shower	Preventive Maintenance	11/25/2025	Final Weekly Maintenance: Soda Ash Room System. Shower and eye wash station tested for water pressure and supply.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation Final Comp	Preventive Maintenance	11/25/2025	Final Weekly Maintenance: Sigma Sample pumps: Final. Pump tubing checked for punctures. Sensor, Sample line and torpedo cleaned. Lights, Heater, Fan and refrigerator checked for proper operation.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation Primary Scum Mixer	Preventive Maintenance	11/25/2025	Primary Weekly Maintenance: Primary Scum Mixer. Super Bio Clean 510 put into scum pit and mixed for two minutes and drained out.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation Ds3 sampler	Preventive Maintenance	11/25/2025	Final Weekly Maintenance: DS3 Sampler. Pump tubing checked for punctures. Sensor, Sample line and Torpedo cleaned. Proper operation of Lights, heater, Fan and refrigerator checked.	0.00

Department	Asset	Activity	Date Completed	Notes	Total Cost
Waste Water (Taylor Run)	WWTP Instrumentation 558	Preventive Maintenance	11/26/2025	Primary Weekly Maintenance: Oil in reducers checked. All fittings greased. Chain checked for slack. Drive chain checked for slack. Belt checked for tension and wear.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation 557	Preventive Maintenance	11/26/2025	Primary Weekly Maintenance: Sigma Samplers: Raw. Pump tubing inspected for punctures. Sensor, Sample line and torpedo cleaned. Lights, Heater, Fan and refrigerator checked for proper operation.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation DS1 sampler	Preventive Maintenance	11/26/2025	Primary Weekly Maintenance: Samplers: DS1. Pump tubing inspected for punctures. Sensor, Sample line and torpedo cleaned. Checked lights, heater, fan and refrigerator for proper operation.	0.00
Waste Water (Taylor Run)	WWTP Structure TR-LA	Preventive Maintenance	11/26/2025	Primary Weekly Maintenance: Aluminum Sulfite Storage Tank. Moat pumped out.	0.00
Waste Water (Taylor Run)	WWTP RBC RBC-A4	Preventive Maintenance	11/26/2025	Primary Weekly Maintenance: A4. Hydraulic pump hooked up and weighed. Weight recorded into maintenance book.	0.00
Waste Water (Taylor Run)	WWTP RBC RBC-C1	Preventive Maintenance	11/26/2025	Primary Weekly Maintenance: C1 Hydraulic pump hooked up and weighed. Weight recorded into maintenance book.	0.00
Waste Water (Taylor Run)	WWTP RBC RBC-B4	Preventive Maintenance	11/26/2025	Primary Weekly Maintenance: B4. Hydraulic pump hooked up and weighed. Weight recorded into maintenance book.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation Pak room eye wash and shower system	Preventive Maintenance	11/26/2025	Primary Weekly Maintenance: Pak room eye wash/ shower station. System tested for water pressure and supply.	0.00
Waste Water (Taylor Run)	WWTP RBC RBC-B1	Preventive Maintenance	11/26/2025	Primary Weekly Maintenance: B1. Hydraulic pump hooked up and weighed. Weight recorded into maintenance book.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation DS2 sampler	Preventive Maintenance	11/26/2025	Primary Weekly Maintenance: Samplers: DS2. Pump tubing inspected for punctures. Cleaned sensor, Sample line and torpedo. Checked for proper operation of lights, heater, fan and refrigerator.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation Alum silo eye wash/ shower	Preventive Maintenance	11/26/2025	Primary Weekly Maintenance: Alum Silo eye wash/ shower station. System tested for water pressure and supply.	0.00
Waste Water (Taylor Run)	WWTP RBC RBC-C4	Preventive Maintenance	11/26/2025	Primary Weekly Maintenance: C4. Hydraulic pump hooked up and weighed. Weight recorded into maintenance book.	0.00
Waste Water (Taylor Run)	WWTP RBC RBC-A1	Preventive Maintenance	11/26/2025	Primary Weekly Maintenance: A1. Hydraulic pump hooked up and weighed. Weight recorded into maintenance book.	0.00
Waste Water (Taylor Run)	WWTP Electrical Generator GEN-2	Preventive Maintenance	11/26/2025	Primary Weekly Maintenance: Plant Generator. Oil level checked. Coolant level checked in glass sight in radiator. Belts checked for tension. Hose connection checked. Checked gauges and lights.	0.00
Waste Water (Taylor Run)	WWTP Instrumentation I-5	Replace	11/28/2025	The motor on out Pre sample/Post sample pump failed. It was removed and a new motor was installed.	0.00

Park Notes and Projects November 2025

Projects can be Capital, grant funded, Rec Fee in Lieu of, or General.

Hoopes Park

Hoopes Park Playground renovation project

- Project is in the preliminary concept phase using information gathered from the group that met in Aug.
    - Our playground designer met with the Parks and Rec department to start laying out concept designs
        - We are looking into "inclusive play" designs for this playground renovation
            - Inclusive play takes ADA to another level and incorporates elements of play for hearing/vision impaired along with sensory sensitive ideas
    - We'll take this information and go back to the group with ideas for further discussion

Marshall Square Park – No projects at current time

Mosteller Park – No projects at current time

Fugget Park – No projects at current time

Horace Pippin Park – Waiting on the equipment and supplies to be delivered

- "Mesa Verde" by HAGS 8102028 - BM Wood Posts/HPL Panels
    - UniPlay Mesa Verde | HAGS
- This is a budgeted item
    - Total cost is $65,386,00
        - Includes delivery, removal and disposal of old equipment, and installation.
        - Equipment has been ordered and we've been informed that the equipment will now be here early December

Kathy McBratnie Park - No projects at current time

Greenfield Park – No projects at current time

Veteran's Memorial Park - No projects at current time

Barclay Park - No projects at current time

Bayard Rustin Park – The basketball courts have been relined to for both basketball and pickleball, thank you to Public Works for their support.

- We have seen the newly lined courts being used more than usual for both pickleball and basketball

John O Green Park –

Fall zone project 2025 and beyond

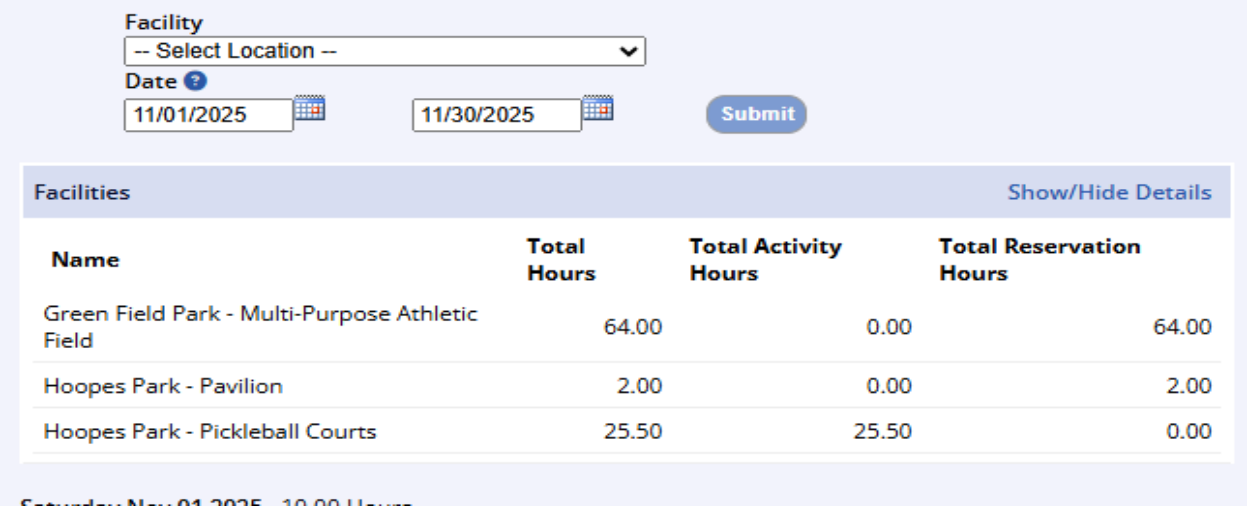
- We have been working on two grants to revitalize JOG Park.
  - DCED – Greenways, Trails, and Recreation Program grant; submitted 5/30/2025
    - With assistance from Pennoni, the Borough submitted a grant for $250,000.00 (max amount)
    - Borough match for this $304,400.00 project would be $54,400.00k or roughly 18% (and 15% is the minimum match)

      NOTE* - There was a slight change in pricing as the grantors made a few changes to our grant application
    - This "concept" includes new playground equipment, expanded pavilion, more seating, new grilling area, and games area.
      - Awards for this grant are not expected until Q1 2026
- People, Parks, and Community Foundation (a subsidy of the PA Recreation and Parks Society)- Submitted 5.30.25
  - The Borough submitted the application for this grant, max amount, $30,000.00 with no match from the Borough
    - Unfortunately we did not receive the grant from PPFC for this project
      - There were 121 grant apps submitted for a total of 3.2M in projects
      - 6 grants were awarded for a total of $112k
    - We are reworking our scope of work and timeline to complete this project, but the contractor we would like to use (who installed the playground and has worked on it several times) is unavailable until Spring 2026
  - The Parks and Recreation Director was invited to speak with the Friends of West Chester Parks and Recreation about regarding a donation towards this project's shortfall.
    - A memo was sent from the FOWCPR to members of council, the Borough Mgr., outlining questions and concerns. Attached.



Park Usages/Rentals

November Park Rentals



Name	Total Hours	Total Activity Hours	Total Reservation Hours
Green Field Park - Multi-Purpose Athletic Field	64.00	0.00	64.00
Hoopes Park - Pavilion	2.00	0.00	2.00
Hoopes Park - Pickleball Courts	25.50	25.50	0.00

Events

There were no Borough sponsored events scheduled in November.

Camps, classes, and bus trips

Ryan Michael, Program Coordinator, is continually working on our list of programming for Spring/Summer/Fall 2025.

November Myrec.com report

Program Sales Report for 11/01/2025 - 11/30/2025

Program Name	Res Count	Non-Res Count	Total Count	Res Total	Non-Res Total	Totals
Brandywine School - Wizard Camp	0	5	5	$0.00	$535.00	$535.00
Breakfast With Santa 2025	5	72	77	$90.00	$1,440.00	$1,530.00
New York Bus Trips!	0	30	30	$0.00	$1,560.00	$1,560.00
Totals	5	107	112	$90.00	$3,535.00	$3,625.00

*NOTE: The Parks and Recreation Dept., along with the IT Department, have been looking into other Recreation Software applications that may be better suited for our programing and events participants.

** In 2026 the Parks and Recreation Department will be utilizing a new recreation software.

Civic Plus will replace Myrec.com

- The Borough currently uses Civic Plus to handle our website and with this transition we hope to help make our recreation platform more integrated for use by the public.

PROS Plan Steering Committee

The Borough's solicitor has been integral during this approval/adoption process.

Procedural Requirements for Adoption of Comprehensive Plan

- Section 302 - Planning Commission must hold one public meeting before forwarding the Comp Plan to the governing body ("public meeting" is defined in MPC and only requires a Sunshine notice- one ad placed at least 24 hours in advance of mtg)
- County PC must get a copy **45** days prior to hearing.
- Contiguous municipalities and School District must receive a copy **45** days prior to Borough Council hearing
- Borough Council must hold one public hearing pursuant to public notice
- Adoption is by Resolution approved by a majority of Borough Council
- Section 306 – within **30** days after adoption, Plan must be to Chester County Planning Commission

This meeting is being audio recorded for the public record.

Public Works Committee

Date: **November 11, 2025 @ 6:30 PM**

Committee Members Present: Bernie Flynn – 6th Ward (Chair)
Bryan Travis – 2nd Ward
Sheila Vaccaro – 5th Ward

Department Heads Present:
Don Anderson, Interim Director Public Works
Sean Mitchell, Wastewater Director
Keith Kurowski, Director Parks & Recreation

Borough Manager: Sean Metrick

****

1. Call to Order - meeting was called to order at 6:57 PM

2. Announcements
    - The Borough will be collecting canned goods to benefit the West Chester Food Cupboard at Borough Hall during business hours. Please stop by to contribute. More information can be found on the Borough website.

3. Comments, suggestions, petitions by residents in attendance regarding items not on the agenda.
    - Laurie Waddy, 301 W. Barnard stated she is perplexed by the irregularity of the street sweeping and leaf collection. She called Public Works when they don't show up one or two times a month. She would appreciate an explanation of why this happens. I am told the vehicles are down and being repaired. I am bringing this to your attention and want to know what the plan is to address. Mr. Flynn said they would take it under advisement. Mr. Travis stated he has noticed this as well and would like Mr. Anderson to address the inconsistencies. Mr. Anderson explained we have equipment that goes down, and we are trying our best to collect everything. He stated that even though residents don't look at our webpage frequently we do post when the sweeper is down. Mr. Flynn asked if Mr. Anderson would have a timeline on when the sweeper will be repaired and operational. Mr. Bill Mann said we cannot do robocalls due to the cost, we use it for emergencies only. We can, however, send out a targeted text message to people that signed up for Ready Chesco. Ms. Waddy stated she spends a lot of time blowing the leaves to the curbline and appreciates assistance.

4. Departmental Reports

a) Traffic & Engineering Reports

- Kelly Goff, RVE, stated they are reviewing submissions for the Gay Street Closure Project as they come in. The new projected timeline for the bollards arriving is March 2026, which will give the contractor time to complete the job before the May 31st deadline. As for the MS4 permit services, we received public comments, and we are currently reviewing them with the borough staff and adjusting the report accordingly. We will start the outfall inspections shortly. An outfall is where the water discharges into a waterway and we look for any dry weather flow to see if flow is coming out when it hasn't rained recently. We reviewed the intersection of E Gay and High Streets because there are a lot of deteriorated pavers and rutting. We provided a memo with various options for remediation efforts for that intersection. They range in price depending on the products selected. The asphalt option was the lowest and all brick pavers is the most expensive.

- The W. Chestnut and N. New Streets intersection was discussed at last month's meeting. The crosswalk can be repainted with PennDOT approval, or a traffic study can be performed and coordinated with PennDOT. Mr. Flynn asked if we could get a prototype of the bollard so the contractor can figure out how to assemble and install. Ms. Goff stated while the product is not made in the USA that they have representatives in the states that can advise. Ms. Vaccaro stated that it isn't wise to use a prototype because it is not the real thing. Mr. Flynn stated he likes stamped concrete for the project. Ms. Goff stated that PennDOT requires ADA compliance, so she measured the ADA ramps too. Jerry Szczepaniak E. Viriginia Avenue asked if there was a timeline for repairing the crosswalks and Ms. Goff said no date as of yet.

b) Public Works

- Mr. Don Anderson, Interim Director, went over the mission statement he created for the department. He stated an architect looked at the West Chester Library water infiltration issue in the basement. They made recommendations and we have instituted a few of them. We had rainfall after some of the changes and no water. While this is a short-term fix we need to make plans for future improvements. The leaf collection program is in full swing. We only have one machine as two machines are down and being repaired. We discovered a sink hole at W. Miner and S. New Streets and our crew replaced the broken terracotta pipe and blacktopped the roadway.

- Aaron Flook, Director of Building and Housing, and I discussed the enforcement of Chapter 62 – Garbage, Rubbish and Refuse. A letter was drafted and reviewed by the solicitor. Public Works went out and identified a list of properties that are in violation.

We will start to mail letters for enforcement. The budget line-item 01-43720/80 for Vehicle repairs will be over budget. One of the reasons is the age of the equipment. Also, one of the mechanics has been out so we had to outsource the repairs. We will make some adjustments for the 2026 budget. As for Cartegraph, we are entering the tasks, and a slide was shown of the past month's work orders for the committee to review. We are working on the contracts to bid for 2026. Ms. Vaccaro stated the dog waste bag holder at McBratnie Park needs to be replaced. …NO VOLUME… Mr. Anderson said there was a miscommunication and Mr. Flynn stated they are disrespecting the Borough. Mr. Flynn asked how we are going to get chapter 62 letters to the property owners as quickly as possible. Mr. Flook stated they have been trying to give them notice and they started stickering the cans, which is a warning. Mr. Travis stated the sub-committee wanted to make sure this was enforceable and Mr. Flook said it is enforceable and is requiring collaboration of the two departments. Mr. Travis stated we need to get to the point of issuing citations. Mr. Flook said we need to educate and build cases for the courts. Ms. Vaccaro stated she has seen stickers and we need to continue and be consistent. One of her constituents received a notification on her door but it wasn't stickered, so they were confused. Mr. Flynn stated every hauler has to register with the borough so maybe we can send them our ordinance with addresses that need to reduce the cans. Lisa Kearns, W. Biddle Street said we need to educate, and Mr. Flynn said a sticker usually results in a phone call which can educate them.

c) Wastewater

- Sean Mitchell, Wastewater Director, stated that Goose Creek found a microscreen in the headworks building not working A new level transducer, control panel and conduit were installed. All clarifiers, mixers, blowers, pump compressors and valves had an oil change, lubrication and inspection. Two separate tours of the plant were given to a total of 32 WCU students. Crews cleaned and flushed out the McGovern offloading pipe. The plant had its annual walk-through inspection by the PADEP; no issues were found. The average flow was 0.897 mgd. Taylor Run tore down the soda ash pumps. The check valves were cleaned, and all of the parts were inspected before they were reinstalled. Tree branches around the plant were trimmed back for safety. An open operator/trainee position has been filled and the employee started at the beginning of the month. The average flow was 0.701 mgd. We want to thank Bill Mann for the Cyber Security training last month.

- The pump stations had their monthly cleaning and inspections. The crew observed the College Avenue wet well overflowing. Once they lowered the levels the PADEP was notified. The area was cleaned up and upon further inspection a large amount of dental floss was wrapped around all of the floats. They cleaned all of the floats, and everything is back to normal.

- The Maple Alley connection management plan and resolution are ready for council approval. We are working with Pennoni and a few residents to finalize the design portion of the project. The Goose Creek electrical substation bids are out and will be opened at the end of November and ready for council approval at the December meetings. The low voltage switch gear is supposed to be shipped this month; we have a feeling it might be delayed. We had a pre-construction bid meeting for the bidders that showed up at the plant in the beginning of the month. An update on the Davis Oil property, Christine McCarthy from the PADEP, reached out and informed us the grassy area along E. Barnard Street is clear and the transformer vault will be installed at 535 E. Union Street. The vaults at the Davis property at 614 E. Barnard have been installed and they will be in touch once the electrical hook-ups are complete. Mr. Flynn inquired about the EDU status for the retail buildings on High Street. Mr. Mitchell stated that the change of use at 34 S. High Street was approved and he is not sure if they are proceeding at 27 S. High Street.

d) Parks and Recreation

- Keith Kurowski, Parks & Recreation Director, said we are waiting on the playground equipment to upgrade Horace Pippen Park. We are working on the improvements to John O'Green Park. We had a meeting with the Friends of West Chester Parks and Recreation, and they are willing to support the John O'Green improvement project. They had concerns regarding maintenance and upkeep. I believe that will be addressed when the Pros Plan is adopted. In 2026 the first phase of the Pros Plan will be implemented and there is a high-level executive summary at the beginning of the plan. The Pros Plan is currently at the County for review and will be sent to the Planning Commission at the end of November.

- The attendance at the Halloween Parade was down, which is to be expected with the format change. The biggest complaint was it was scheduled during an Eagles game. Also, we apparently took the "fun" out by having it during the day. The reason it changed was because of safety. We are discussing maybe moving it to twilight. It is easier to shut down the streets on Sunday rather than the middle of the week. On December 6th the fifth annual Santa in the Square will be held at Marshall Square Park. Ms. Vaccaro said the Halloween Parade is for the community and not the convenience of the Police and Public Works. She was disappointed and said that bands were needed. Mr. Kurowski said there was a conflict with the local bands and competition events. Ms. Vaccaro said that better coordination was needed with the schools and bands. Mr. Travis asked if it could go back to a mid-week evening. Mr. Flynn asked to discuss it with the Recreation Commission to move back to Wednesday evening.

5. Old Business
   a) Approve September and October 2025 minutes (attachment)
      - Approve 3 – 0

6. Other Business
   - Motion to approve resolution for sewer connection and capacity policy for Goose Creek Wastewater Treatment – restricted flow area (attachment)
     - Sean Mitchell stated that the policy is for one year and for Goose Creek. When phase one is completed, we can update the number of EDUs. Per the Connection Management Plan (CMP) approved by the PADEP we will be able to allow 20 dwelling unit EDUs for that area. We have a map to give residents if they ask. This is primarily for 250 E. Market Street and any additional would be Phase two and Phase three.
       - Approve 3 – 0

   - Discuss Special Events Application procedures (attachment)
     - Ms. Ramsey Reiner explained that she worked with Keith Kurowski on the Special Event Application (SEA) procedural project. The purpose was to add clarity to the internal and external process. This will go into the SmartGov application, and we are collaborating with the other departments to streamline the process. It will also align with the ordinances. There are five types of events: parades, 5k/walk CBD festivals, single block closures, public park events and other. There will be garage revenue sharing, 50% deposit and final billing after events. Maps are defined for each event. Ms. Reiner went through the presentation with explanations for each event. Ms. Vaccaro feels there are too many "other" events and Ms. Reiner said they can be reviewed. Ms. Vaccaro stated that a parade is a parade. Mr. Flynn said the businesses were caught off guard with the Run for Her race this year because they weren't aware the race was granted a different loop from previous years. Mr. Flynn and Mr. Travis both stated they should pay the borough and we will divvy it out to be consistent. Ms. Reiner stated we are attempting to standardize the events and fees. Ms. Vaccaro stated she wants to see many of the events to fit in one of the buckets rather than other because conformity is important. There needs to be a better way to communicate to residents. Mr. Travis said he liked the presentation and feels it is a good first step. Mr. Flynn recommended notifying the big stake holders in January/February so they can be alerted and prepared.

Adjourn – 8:32 PM

ADDENDUM NO. 1
Date: 4/11/2025
Revision: 11/19/2025

Pollution Reduction Plan
Borough of West Chester
Chester County, PA

The information enclosed in this addendum has been issued in order to include revisions to the Pollution Reduction Plan (PRP), originally approved by PADEP in 2018.

Specifically, Addendum No. 1 includes additional proposed BMP's. Enclosed herein, are the amended sections of the original report.

DRAFT

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Appendix B – BMP Sketches..... **Error! Bookmark not defined.**

DRAFT

Section A, Public Participation.

The following section shall be appended to Section A, Public Participation.

Public Participation – Addendum No. 1
The Borough of West Chester has completed the Public Participation measures for Addendum No. 1. All required documentation of public participation for Addendum No. 1 is included in Appendix A of this Addendum.

- Proposed PRP Plan Addendum No. 1 public notice was published in: Daily Local News
- Proposed PRP Plan Addendum No. 1 public notice was published in newspaper: 7/21/2025
- Proposed PRP Plan Addendum No. 1 was made available for public review/comment: 7/21/2025
- Proposed PRP Plan Addendum No. 1 comments were accepted at a public meeting: 8/5/2025
- End date for receipt of written comments: 9/15/2025

A summary of the comments received and respective responses have been enclosed in Appendix A.

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Section E, Select BMPs To Achieve the Minimum Required Reductions in Pollutant Loading

The following section shall be appended to Section E, Select BMPs to Achieve the Minimum Required Reductions in Pollutant Loading

Additional BMPs & Revised Calculation Methodology – Addendum No. 1

The total sediment load, drainage area and loading rate was determined from the previous MapShed calculations for the Goose Creek Drainage area in West Chester Borough are listed in Table 1. The loading rate was assumed to be consistent throughout the Goose Creek Watershed because according to Appendix D, the Goose Creek Watershed is composed entirely of High-Density Residential and High-Density Mixed Urban land. At the time of this addendum, the version of MapShed was no longer available for public use. A loading rate of 99.3 lbs./ac/year for High Density-Mixed land use (HD Mixed) and 99.0 lbs./ac/year for High Density-Residential (HD Residential) were previously determined in the MapShed software and used for the initial PRP reduction calculations. For consistency, these same loading rates will be used in the updated reduction calculations.

Table 1 – Existing Sediment Load & Loading Rate, Addendum No. 1

Source	Total Sediment Load (lbs./yr)	Drainage Area (acres)	Loading Rate (lbs./ac/year)
Forest	27	2	13.5
HD Mixed	20,853	210	99.3
HD Residential	4,356	44	99.0
Total	**25,236**	256	-

DRAFT

The sediment reductions from the proposed structural BMPs were calculated using the loading rate found in Table 1, BMP drainage area, and the BMP efficiencies found in the PA DEP BMP Effectiveness Values Table.

Proposed BMPs added via this addendum are listed below.

- Bio Swale at the Public Works Building
- Rain Garden at the Public Works Building
- Bio Retention Garden at the end of Magnolia & Maple Avenue
- Bio Swale at the Good Will Fire Company No. 2 Building
- Bio Swales at the intersection of Bolmar Street & Miner Street
- Nineteen (19) Roadway Bump-out Rain Gardens to collect roadway stormwater runoff at twelve (12) intersections
    - S. Matlack Street & Magnolia Street
    - S. Matlack Street & Union Street
    - S. Matlack Street & Linden Street
    - S. Matlack Street & Lacey Street
    - S. Matlack Street & E. Nields Street
    - S. Matlack Street & E. Miner Street
    - Linden Street & Maple Alley
    - E. Miner Street & Poplar
    - S. Adams Street & E. Miner Street
    - S. Franklin Street & E. Miner Street
    - Market Street Midblock between Franklin Avenue & S Adams Street
    - S. Walnut Street & E. Barnard Street
- Basin Retrofit to convert Dry Detention Basin at Union & Worthington Street into a Bioretention Rain Garden
- Streetscape & Bioswale Project along S. Bolmar Street near E. Miner Street

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Drainage Areas for each BMP were delineated using contours provided by Pennsylvania Spatial Data Access (PASDA). The BMP efficiencies were determined by using the PA DEP BMP Effectiveness Values Table. Sketches for these proposed BMPs can be found in the Appendices of this addendum. A summary of the reductions for the structural BMPs can be found in Table 2 on the next page

Table 2 – Calculation Methodology: Structural BMPs, Addendum No. 1

Location	BMP Type	Drainage Area (ac)	Land Use	Loading (lbs./ac/yr)	Efficiency (%)	Reduction (lbs./yr)
John O. Green Park	Permeable Pavement w/o Sand or Veg (A/B Soils w/o underdrain)	1.12	HD Mixed	99.3	85%	94.9
Fugett Park/Borough Hall	Raingarden (A/B soils w/ underdrain)	1.07	HD Mixed	99.3	80%	85.0
	Filtering Practices	0.55	HD Mixed	99.3	80%	43.7
Greenview Alley	Bioretention (A/B soils w/o underdrain)	0.47	HD Mixed	99.3	90%	42.0
	Bioretention (A/B soils w/o underdrain)	0.22	MD Mixed	99.3	90%	19.7
	Bioretention (A/B soils w/o underdrain)	0.06	LD Mixed	24.5	90%	1.3
					Subtotal	286.6
Addendum #1 Additional Proposed BMPs						
Public Works Building	Bioswale	0.67	HD Mixed	99.3	80%	53.2
	Raingarden (A/B soils w/o underdrain)	0.8	HD Mixed	99.3	90%	71.5
Magnolia St. & Maple Alley	Bioretention (A/B soils w/o underdrain)	0.65	HD Residential	99.0	90%	57.5
Good Will Fire Company	Bioswale	1.34	HD Mixed	99.3	80%	106.4
Various Intersections	"Bump-out" Rain Gardens (A/B soils w underdrain)	28.52	HD Residential	99.0	80%	2258.8
Bolmar St. & Miner St.	Bioswale	0.8	HD Residential	99.0	80%	63.4
Union St & Worthington St*	Bioretention (A/B soils w/ underdrain)	4.25	HD Residential	99.0	20%	84.2
					Subtotal	2694.9
					Total Reduction	**2981.5**

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***Union St Bio Retention is a basin retrofit of a Dry Extended Detention Basin, as such the calculated reduction/efficiency is the difference between the two types of BMPs**

The Street Sweeping load reduction was calculated using the loading rate (98.58 lbs./ac/yr) and the efficiency rate was determined from the PA DEP BMP Effectiveness Values Table (9%) for sweeping 25 times a year. The miles swept and their area equivalent is 16 miles, or 16 acres. A reduction of 142 lbs./yr of sediment was calculated. A summary of the street sweeping sediment reduction can be found in Table 3.

Table 3 – Calculation Methodology: Street Sweeping, Addendum No. 1

BMP Type	Miles Swept	Loading (lbs./ac/yr)	Efficiency	Reduction (lbs./yr)
Street Sweeping	16	98.58	9%	142

A summary of the tree planting sediment load reduction calculations can be found in Table 4.

Table 4 – Calculation Methodology: Tree Plantings, Addendum No. 1

BMP Type	Trees	Effective DA (Acres)	Loading (lbs./ac/yr)	Efficiency	Reduction (lbs./yr)
Planted Trees	90	0.9	98.58	20%	17.74

In the original report the Borough proposed to install approximately two-hundred (200) feet of streambank restoration, with a reduction rate of 115 lb/ft/yr. Therefore, the proposed streambank restoration of two-hundred (200) feet would have resulted in 23,000 lbs./yr (200 ft * 115 lbs/ft/yr) reduction. This BMP was found to be infeasible and will not be included in the MS4 BMP Strategy.

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~~*Table 5 – Calculation Methodology: Streambank Stabilization & Restoration*~~

-	~~**Length (ft)**~~	~~**Loading (lbs./ft/yr)**~~	~~**Reduction (lbs./yr)**~~
~~**Streambank Stabilization & Restoration**~~	~~200~~	~~115~~	~~23,000~~

Jellyfish installation was proposed in the original report. A summary of the jellyfish endwall sediment load reduction calculations can be found in Table 6. The loading rate found in Table 1 was used. Sediment reductions of 874 lbs./yr and 693 lbs./yr were calculated for Endwalls 13 and 37 respectively. This BMP was found to be infeasible and will not be included in the MS4 BMP Strategy.

~~*Table 6 – Calculation Methodology: Jellyfish Endwalls*~~

-	~~**Area (ac)**~~	~~**Loading**~~	~~**Efficiency**~~	~~**% of DA reached**~~	~~**Reduction (lbs./yr)**~~
~~**Endwall 13**~~	~~44~~	~~99.3~~	~~80%~~	~~25%~~	~~874~~
~~**Endwall 37**~~	~~35~~	~~99.0~~	~~80%~~	~~25%~~	~~693~~
				~~**Subtotal:**~~	~~1,567~~

A summary of all proposed BMPs found infeasible and their respective load reductions can be found in Table 7 on the next page.

Table 7 – Total Reduction from proposed BMPs found infeasible, Addendum No. 1

	Reduction (lbs./yr)
~~**Streambank Stabilization**~~	~~23,000~~
~~**Jellyfish Endwalls**~~	~~1,576~~
~~**Subtotal**~~	~~24,576~~

A summary of all proposed BMPs in the previous PRP plan can be found in Table 8. The streambank restoration and stabilization BMP and jellyfish endwall BMPs were found to be infeasible and will not be included in the MS4 BMP Strategy. A revised summary of all proposed BMPs can be found in Table 9.

~~*Table 8 – Previous PRP Strategy Summary, to be replaced with Table 9*~~

~~Existing Load (lbs./yr)~~	~~25,236~~
~~Percent Reduction~~	~~10%~~
~~Required Reduction (lbs./yr)~~	~~2,524~~
~~Proposed Reduction (lbs./yr)~~	~~287 (Three BMP Locations)~~ ~~142 (Street Sweeping)~~ ~~18 (Plant Street Trees)~~ ~~23,000 (Streambank Restoration)~~ ~~874 (Endwall 13)~~ ~~695 (Endwall 37)~~ ~~Total Potential Reduction 25,016~~

DRAFT

Table 9 – Revised Summary of Proposed BMPs, Addendum No. 1

Existing Load (lbs./yr)	25,236
Percent Reduction	10%
Required Reduction (lbs./yr)	2,524
Proposed Potential Reduction (lbs./yr)	95 (John O. Green Park) 129 (Fugett Park/Borough Hall) 63 (Greenview Alley) 53 (Public Works Building Bioswale) 72 (Public Works Raingarden) 58 (Magnolia St. & Maple Alley) 106 (Good Will Fire Company) 2,259 (Various Intersections) 63 (Bolmar St. & Miner St.) 84 (Union St & Worthington St Bio Retention) 18 (Planted Trees) 142 (Street Sweeping) Potential Total: 3,142 lbs./yr

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A summary of the MS4 strategy can be found in Table 10.

Table 10 – Summary of MS4 Strategy, Addendum No. 1

Description	Value	Unit
Chester Creek Storm Sewershed/PRP Planning Area	256	acres
Existing Sediment Load	25,236	lb/year
Required Sediment Pollutant Load Reduction Percentage	10%	lb/year
Required Sediment Pollutant Load Reduction	2,524	lb/year
Proposed Sediment Load Reduction from BMP's	3,142	lb/year

Section G, Identify Responsible Parties for Operation and Maintenance (O&M) of BMPs

The following section shall be appended to Section G, Identify Responsible Parties for Operation and Maintenance (O&M) of BMPs

In general, the Borough will follow maintenance outlined in the PA BMP Manual.

Table 11 – Summary of Operation & Maintenance of BMPs, Addendum No. 1

NAME OF BMP	RESPONSIBLE PARTY	O&M ACTIVITY & FREQUENCY
Street Sweeping	West Chester Borough	Per PA BMP Manual (latest revision) BMP 5.9.1 pg 94-97
Street Tree Planting	West Chester Borough	Per PA BMP Manual (latest revision) BMP 5.6.3 pg 63-67
~~Streambank Restoration~~	~~West Chester Borough~~	~~Per PA BMP Manual (latest revision) BMP6.7.1 pg 191-210~~
Proposed Infiltration Facilities	West Chester Borough	Per PA BMP Manual (latest revision) BMP 6.4.3/6.4.4 pg 33-47
~~Jellyfish Filters~~	~~West Chester Borough~~	~~Per Manufactures Instructions~~
Inlet Cleaning	West Chester Borough	Per PA DEP Direction and Applicable Manufacturer's Instructions
Public Works Bio Swale	West Chester Borough	Per PA DEP Manual (latest Revision) BMP 6.4.1
Public Works Rain Garden	West Chester Borough	Per PA DEP Manual (latest Revision) BMP 6.4.1
Magnolia & Maple Bio Retention	West Chester Borough	Per PA DEP Manual (latest Revision) BMP 6.4.1
Good Will Fire Company Bio Swale	West Chester Borough	Per PA DEP Manual (latest Revision) BMP 6.4.1
"Bump Out" Rain Gardens	West Chester Borough	Per PA DEP Manual (latest Revision) BMP 6.4.2
Bolmar & Miner Bio Swale	West Chester Borough	Per PA DEP Manual (latest Revision) BMP 6.4.3
Union & Worthington Bio Retention	West Chester Borough	Per PA DEP Manual (latest Revision) BMP 6.4.4

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Rain Date September 14th
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LEGAL NOTICES

Notice

Goose Creek Pollution Reduction Plan (PRP) & Total Maximum Daily Load Plan (TMDL) Addenda
West Chester Borough

The West Chester Borough will consider Addenda to the Borough's Pollution Reduction Plan (PRP) and Total Maximum Daily Load (TMDL) Plan, as part of the Borough's Stormwater Management Program and MS4 Permit, during an Open House held at the Borough Hall, located at 401 East Gay Street in West Chester Borough, on Tuesday August 5th, 2025 at 5:00 PM. The PRP/TMDL Addenda and its presentation at an open house are a requirement of the Pennsylvania DEP in consideration of the Borough's MS4 permit renewal.
There will be a 30-day public comment period after which the addenda will be finalized and submitted to the Pennsylvania DEP for approval. The draft PRP/TMDL Addenda will be available for public inspection at the West Chester Borough building between the hours of 8:00 AM and 4:00 PM Monday through Friday beginning July 7, 2025. The Addenda will also be available on the Borough's webpage: https://west-chester.com/187/Stormwater-Management
Comments regarding the draft PRP/TMDL Addenda may be received via email at comments@west-chester.com. Comments may be mailed to West Chester Borough at 401 East Gay Street, West Chester, PA, Attn: Sean Metrick, PRP/TMDL Addenda. All comments shall include the name and address of the commenter.
DLN 7/21; 1a

NOTICE IS HEREBY GIVEN that the Zoning Hearing Board of the Borough of West Chester, Pennsylvania has scheduled a Meeting at 6:00 pm, on July 28, 2025. The purpose of this meeting is to hear following appeal:

Appeal # 1031
Applicant
Charles A. Melton Arts & Education Center
Site Address
501 E. Miner Street
Zoning District
CS Customer Service
Parcel's # 1-5-478-E and 1-5-478.1

The Applicant, Charles A. Melton Arts & Education Center is requesting a variance for relief from Section 112-702.B(2)(o)(8) of the West Chester Zoning Ordinance to allow a changeable sign a distance 465 feet from an existing changeable sign, not the required 500 feet.
In addition, the Zoning Hearing Board will hear such other relief deemed necessary per the Application.
The Application is available for public review at the Department of Building & Housing at 401 E. Gay St., West Chester, Pennsylvania or online at www.west-chester.com. All interested persons will be given an opportunity to be heard at this Public Meeting.
Those individuals with disabilities and ADA accommodations for effective participation in the meeting should call 610-692-7574 at least two days prior to the meeting. All attempts will be made for reasonable accommodations.

Yerkes Associates, Inc
Michael Barbeiri
Borough of West Chester Zoning Officer
DLN 7/14, 7/21; 1a

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LEGAL NOTICES

NOTICE IS GIVEN that the Board of Supervisors of East Brandywine Township will conduct a public hearing as part of their regularly scheduled public meeting on Thursday, August 7, 2025 at 9:00 a.m., prevailing time, in the Meeting Hall at the East Brandywine Township Building located at 1214 Horseshoe Pike, Downingtown, Pennsylvania 19335 to consider and possibly enact an Ordinance with the following title and summary:

AN ORDINANCE OF THE TOWNSHIP OF EAST BRANDYWINE, CHESTER COUNTY, PENNSYLVANIA, AMENDING THE EAST BRANDYWINE TOWNSHIP CODE, PART III, TITLED LAND USE LEGISLATION, CHAPTER 399, TITLED ZONING, BY DELETING IN ITS ENTIRETY SECTION 399-102.1, TITLED WOODLAND PROTECTION AND LOGGING STANDARDS; DELETING REFERENCES TO FORESTRY IN VARIOUS ZONING DISTRICTS; ADDING A NEW SECTION 399-87.1 TO PERMIT FORESTRY IN ALL ZONING DISTRICTS; AND AMENDING PART II OF THE CODE, TITLED GENERAL LEGISLATION, BY ENACTING A NEW CODE CHAPTER 165 TITLED FORESTRY REGULATIONS.

The Ordinance amends the Zoning Ordinance by deleting woodland protection and forestry regulations, deleting references to forestry as a use in individual zoning districts, and adding a new section which permits forestry by right in all zoning districts. The Ordinance also enacts a new Chapter 165 of the Township Code which regulates forestry. The provisions of the Ordinance are severable, conflicting ordinances are repealed, and the Ordinance is effective immediately upon enactment.

A complete verbatim text of the proposed Ordinance is available for public inspection and may be examined without charge or obtained for a charge not greater than the cost thereof at the Township's administrative offices, 1214 Horseshoe Pike, Downingtown, PA 19335 during normal business hours, 9:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays. If any person requires an accommodation to participate in the hearing or meeting, please contact the Township building at least 24 hours in advance of the meeting and hearing at 610-269-8230.
DLN 7/21, 7/28; 1a

NOTICE OF PUBLIC SALE:
The following self-storage Cube contents containing household and other goods will be sold for cash by CubeSmart 641 Lancaster Ave. Frazer, Pa. 19355 at approx. 7PM at www.storagetreasures.com

Cube D13A Michael Singleton
Cube G56 David Anders
Cube F63 Justin Dehart
Cube D16 Joe Fox
Cube C85A Jay Jackson
DLN - July 21 -1a

NOTICE IS HEREBY GIVEN that on July 28, 2025 at 7:00 P.M, the Zoning Hearing Board of West Goshen Township will conduct a public hearing at the Township Administration Building, 1025 Paoli Pike, West Chester, PA 19380 on the following application:

Application of 849 WCP, LLC for a variance from Section 84-72.M of the West Goshen Township Zoning Ordinance ("Zoning Ordinance") which requires an applicant to obtain a building permit within one year from the date of the Zoning Hearing Board's decision. The Applicant in this case requests an extension of the expiration time for approvals previously granted by the Zoning Hearing Board, which include a special exception pursuant to Section 84-15.E(1) of the Zoning Ordinance to construct a multi-family dwelling and variance from Section 84-16.B(1) of the Zoning Ordinance, which requires a one-acre minimum lot size. The Applicant is requesting approval to proceed with the plan previously approved in 2021and requests an extension of the previous approvals and/or a reinstatement of the previous Zoning Hearing Board Decision approving the Applicant's plan. The property that is the subject of the application consists of two parcels of land located at 847 West Chester Pike and 849 West Chester Pike both in the R-4 Residential Zoning District. One lot consists of 0.5245-acres identified at UPI No. 52-5F-77 and is unimproved. The other lot consists of 0.329-identified as UPI No. 52-5G-2 and is improved with a single-family home and detached garage.

The Zoning Hearing Board will also consider decisions on: 1) the Application of Richard and Emma Smith d/b/a R. Smith Paving, Inc. to develop a property located at 315 Snyder Avenue. consisting of approximately 2.76-acres identified as Tax Parcel Nos. 52-5-218 and located in the I-2 District. The Applicant is proposing to develop the property for storage of equipment, material and vehicles for the paving business and requested a variance from Section 84-54.E(1) of the West Goshen Township Zoning Ordinance in order to permit a disturbance of precautionary steep slopes and a variance from Section 84-54.F(1) of the Zoning Ordinance in order to permit a disturbance of prohibitive steep slopes; and 2) the Application of JAS Real Estate Holdings, LLC to develop the property located at 328 Westtown Road identified as Tax Parcel No. 52-5K-16, currently used as a car dealership, the property located at 721 E. Nields Street identified as Tax Parcel No. 52-5K-18 consisting of 2.1-acres and 739 E. Nields Street identified as Tax Parcel No. 52-5K-17 consisting of 0.49-acres. The applicant requested a variance from Section 84-38.B.(6) of the Zoning Ordinance in connection with the redevelopment of the three parcels including the construction of the new building.

All interested persons are invited to attend the hearings. Should any person require special accommodations to attend this meeting or wish to view the applications, please contact the West Goshen Township Administration Office at 610-696-5266 in advance of the hearing.
DLN 7/15, 7/21; 1a

NOTICE IS HEREBY GIVEN that the Zoning Hearing Board of the Borough of West Chester, Pennsylvania has scheduled a Meeting at 6:00 pm, on July 28, 2025. The purpose of this meeting is to hear following appeal:

Appeal # 1029
Applicant
Daniel A. & Melissa Jean Hollander
Site Address
531 Marshall Drive
Zoning District
NC-1 Neighborhood Conservation
Parcel # 1-2-89

The Applicants, Daniel A. Hollander and Melissa Jean Hollander are requesting a variance from § 112-306.B (Dimensional Requirements) for the construction of a one-story attached garage encroaching approximately 12.6 feet into the 15 foot required side yard, §112-602.L (General Regulation and Design Standards) for the construction of driveway and parking encroaching approximately 3.7 feet into the required 5 feet setback and §112-602.K (Parking in Front of Building) to allow parking in front of the proposed garage within the required front yard. Each of the Borough of West Chester Zoning Ordinance.
In addition, the Zoning Hearing Board will hear such other relief deemed necessary per the Application.
The Application is available for public review at the Department of Building & Housing at 401 E. Gay St., West Chester, Pennsylvania or online at www.west-chester.com. All interested persons will be given an opportunity to be heard at this Public Meeting.
Those individuals with disabilities and ADA accommodations for effective participation in the meeting should call 610-692-7574 at least two days prior to the meeting. All attempts will be made for reasonable accommodations.

Yerkes Associates, Inc
Michael Barbeiri
Borough of West Chester Zoning Officer
DLN 7/21; 1a

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LEGAL NOTICES

NOTICE

THE THORNBURY TOWNSHIP ZONING HEARING BOARD will meet at 7:00 p.m., prevailing time, on Tuesday, July 29, 2025 at the Thornbury Township Building, 800 E. Street Road, West Chester, Pennsylvania, to hear the following:

THE APPLICATION OF PENN OAKS TENNIS AND FITNESS CLUB. The properties are UPI Nos. 66-3H-4, 66-3H-5 and 66-3H-6, also known as 52, 58 and 60 Penn Oaks Drive, respectively. The parcels are owned by Sulzman Enterprises III, LLC and total approximately 6.98 acres in area. The properties are located in the R-1 – Residential/Agricultural District and are improved with two connected buildings, three outside tennis courts, and associated parking facilities. The Applicant seeks variances from the following sections of the Thornbury Township Zoning Ordinance to permit the construction of three exterior padel courts between the existing tennis courts and Penn Oaks Drive: §155-405.A(2)(Area and bulk regulations) to increase the impervious coverage on the property from the existing 35.63% to 38.51% where 20% is the maximum permitted impervious coverage; §155-1500.A(1)(Accessory structures) to permit an accessory structure that will not be located behind the front building line of the principal structure, as required, and will be located within the required 100 foot front yard setback; §155-1504.C.1(a)(Buffer planting strips) to permit a buffer planting strip of 27.41 feet where a 50 foot strip is required; §155-1616.B (Outdoor recreation) to permit impervious coverage that exceeds the maximum permitted lot coverage; §155-1616.C (Outdoor recreation) to permit an outdoor recreation area to be located within the 100 foot required setback from an adjacent residential use; and any other relief that may be necessary.

The Board may consider such other matters as may properly come before it.

All persons desiring to be heard may attend and be heard. If any person who wishes to attend the meeting has a disability and/or requires auxiliary aid, service or other accommodation to observe or participate in the proceedings, please contact the Township Secretary at (610) 399-1425 to discuss how those needs may best be accommodated.

THORNBURY TOWNSHIP, CHESTER COUNTY
ZONING HEARING BOARD
Patrick M. McKenna, Solicitor
DLN 7/14, 7/21; 1a

NOTICE

Notice is hereby given that on Monday, August 4, 2025, 7:00 p.m., the Borough Council for the Borough of Kennett Square shall hold a public hearing to consider the following amendments to the Borough's Zoning Ordinance, after which it shall consider for adoption (and may adopt), the same. The hearing on the ordinances will be held in the Borough's meeting room, 600 S. Broad Street, 3rd Floor, Kennett Square, PA 19348.

Ordinance Amendment 1 – Accessory Dwelling Units. Title: AN ORDINANCE OF THE BOROUGH OF KENNETT SQUARE, CHESTER COUNTY, PENNSYLVANIA, AMENDING CODE CHAPTER 23 OF THE KENNETT SQUARE BOROUGH ZONING ORDINANCE, AS IT RELATES TO ACCESSORY DWELLING UNITS, AND TO AMEND BOROUGH CODE CHAPTER VII RELATED TO PERMITTING FOR ACCESSORY DWELLING UNITS. Summary: The proposed Ordinance: Section 1: amends Code Section 23-7 to add or amend the definitions of abut, accessory apartment, accessory building, accessory dwelling unit and accessory structure; Section 2: amends Section 23-30 as to the regulations of accessory uses with respect to accessory habitation; Section 3: amends Section 23-30(c), with respect to the standards for accessory apartments and accessory buildings and structures, pertaining to the inclusion of accessory dwelling units; Section 4: amends Section 23-65, Table 7.1 as to parking for accessory units and other residential dwellings; Section 5: amends Borough Code Section 8-90, establishes a permit requirement for rental units, inclusive of accessory dwelling units; Section 6, provides for the severability of the ordinance provisions if any provisions are deemed invalid; Section 7, provides for the ef-

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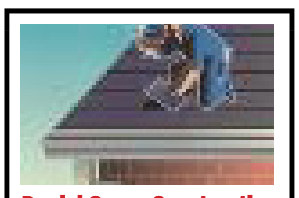

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FULL-TIME POLICE OFFICER
Valley Township is currently accepting applications for the **position** of Full-Time **Police** Officer. **Applicants** must be 21 years of age; be a U.S. **Citizen**; possess a **high school** diploma or GED; have **completed** a police academy certified by MPOETC and be able to **meet** the certification standards of MPOETC as required by PA **Act** 120; possess a PA driver's license; be physically and **mentally** fit to perform the duties of a police officer; and have **no** convictions of any state or federal offense that is classified as a misdemeanor or felony.

Additional information regarding selection process and benefits as well as the **application** form are available at the Valley Township Building at **1145** W Lincoln Hwy, Coatesville PA or on-line at www.valleyto**wnship.org**

Valley Township is an EOE; **applications** will be accepted until position is filled.

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BOROUGH OF WEST CHESTER

Overview of MS4 Permit Requirements

Goose Creek Watershed Pollution Reduction Plan (PRP) & Total Maximum Daily Load (TMDL) Plan

DRAFT

Presented By :
Kelly Goff, PE, CFM, Consulting Engineer
Will Williams, Sustainability Director

August 5, 2025

MS4 : *Municipal Separate Storm Sewer System*

Stormwater conveyance system conveys stormwater runoff from impervious surfaces to local waterways

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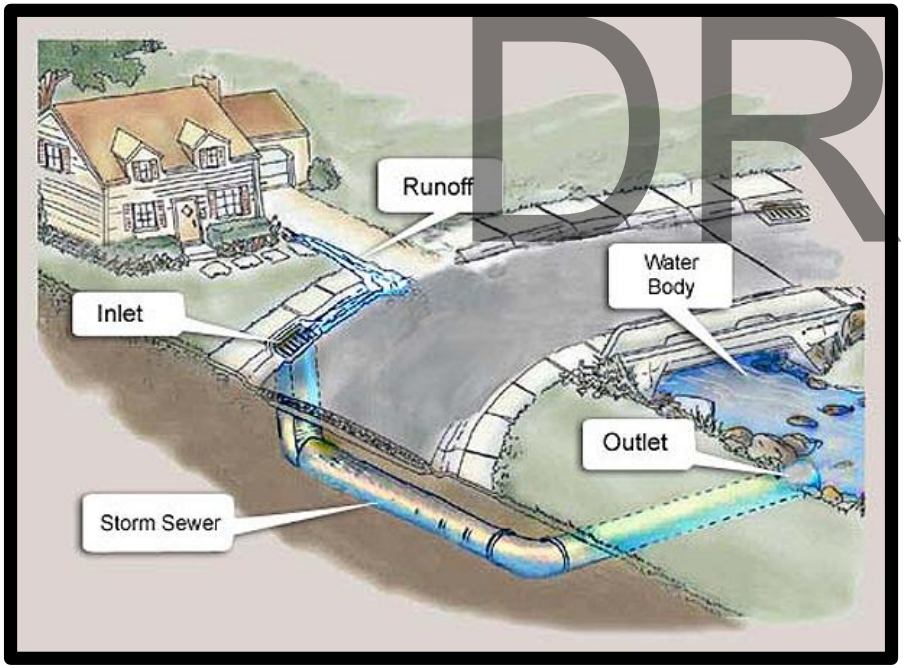

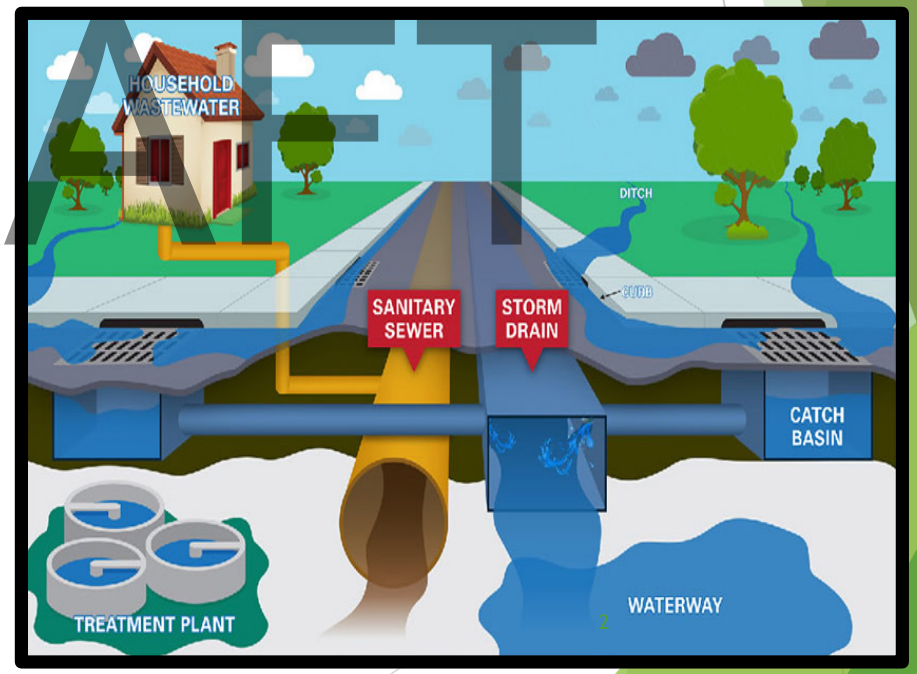

2

Why regulate MS4?



MINIMIZE FLOOD DAMAGES

MAINTAIN ECOLOGY OF STREAMS

REDUCTION IN SEWER REHABILITATION & WATER TREATMENT COSTS

MS4 Permit Program Overview

DRAFT

- **MANDATED** by the United States Environmental Protection Agency (EPA) under the Clean Water Act (CWA)
- PADEP administers the program in PA
- PADEP conducts inspections to ensure compliance
- Designed to reduce stormwater pollution from municipal storm sewer systems
- Over 1,000 Permittees in Pennsylvania

MS4 Permit Requirements: Minimum Control Measures

- MCM 1 – Public Education and Outreach
- MCM 2 – Public Involvement and Participation
- MCM 3 – Illicit Discharge Detection and Elimination
- MCM 4 – Construction Site Runoff Control
- MCM 5 – Post Construction Stormwater Management
- MCM 6 – Pollution Prevention & Good Housekeeping

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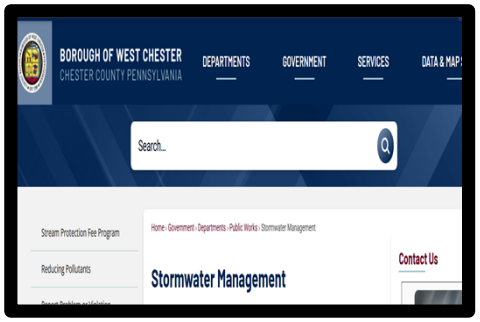

BOROUGH WEBSITE



OUTFALL INSPECTIONS



E&S CONTROLS



PCSM BMPS

MS4 Permit Requirements: Pollution Reduction Plan (PRP) Total Maximum Daily Load (TMDL) Plan

- The purpose of a TMDL Plan is to achieve pollutant load reductions based on EPA approved limits. A TMDL Plan is required when a waterbody has an EPA-approved TMDL
  - TMDL Borough requirements: Goose (Chester) Creek
- The purpose of a PRP is to reduce sediment pollution in PADEP designated impaired waters.
  - PRP Borough requirements: Taylor Run, Plum Run, Blackhorse Run, Brandywine Creek, Goose (Chester) Creek

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Goose Creek Watershed

PRP & TMDL Addenda Revisions
BMPs Eliminated

Location	BMP Type
Along Tributary	Streambank Stabilization & Restoration
Near S. Adams Street & E. Nields Street	Jellyfish Filter

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STREAMBANK STABILIZATION & RESTORATION



JELLYFISH FILTER

PRP & TMDL Addenda Revisions- BMPs retained

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Location	BMP Type
John O. Green Park*	Permeable Pavement
Fugett Park/Borough Hall*	Rain Gardens
Greenview Alley*	Bioswales
Various Locations*	Street Sweeping
Various Locations*	Tree Plantings

*Have been implemented



John O. Green Memorial Park



Borough Hall - Chestnut/Penn

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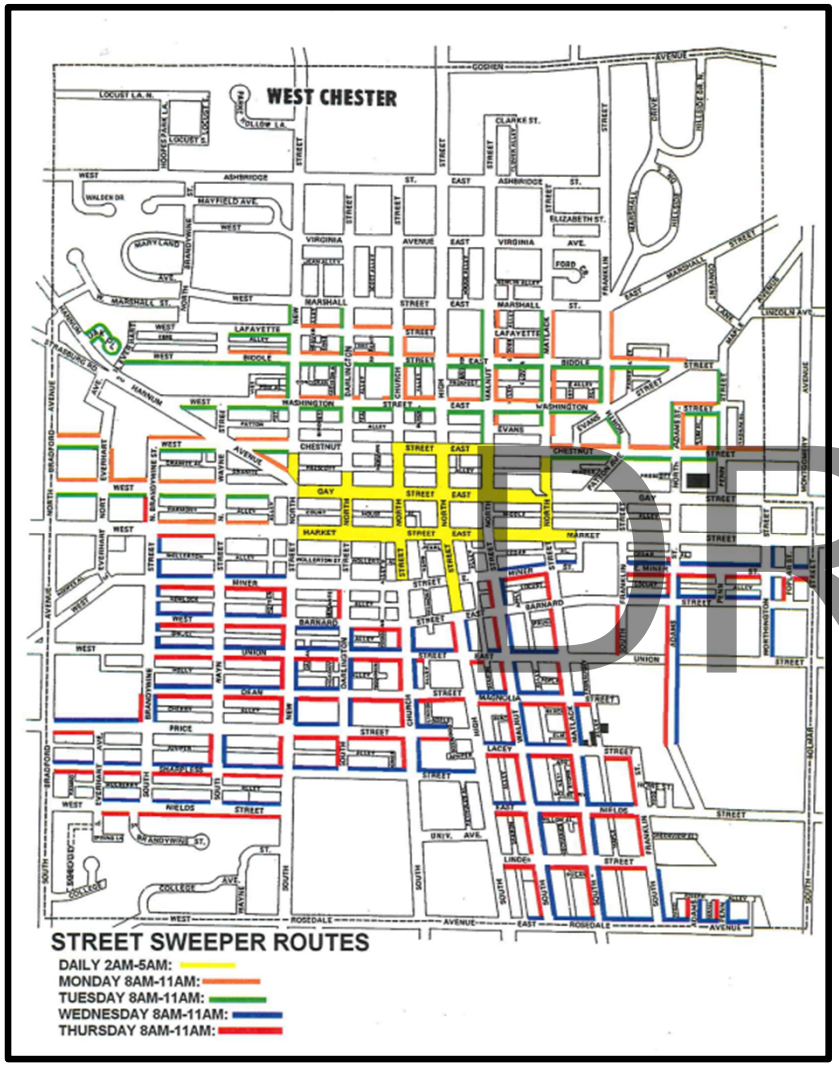
Borough Hall – Chestnut/Penn



Greenview Alley



Street Sweeping Schedule



Street Sweeping



Tree Plantings

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PRP & TMDL Addenda Revisions – BMPS Added



Location	BMP Type
Public Works Building*	Rain Garden/Bioswale
Magnolia Street & Maple Alley Intersection, Union Street & Worthington Street Intersection	Rain Garden
Good Will Fire Company, Bolmar Street & Miner Street Intersection	Bioswale
Matlack Street Intersections: Magnolia, Union, Linden, Lacey*, E. Nields, E. Miner Street	Rain Garden Curb Curb Bump-outs
Miner Street Intersections: Poplar, S. Adams Street, S. Franklin Street	
Market Street Midblock between Franklin Avenue & S Adams Street	
Linden Street & Maple Alley Intersection	
S. Walnut Street & E. Barnard Street Intersection	

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*Has been implemented


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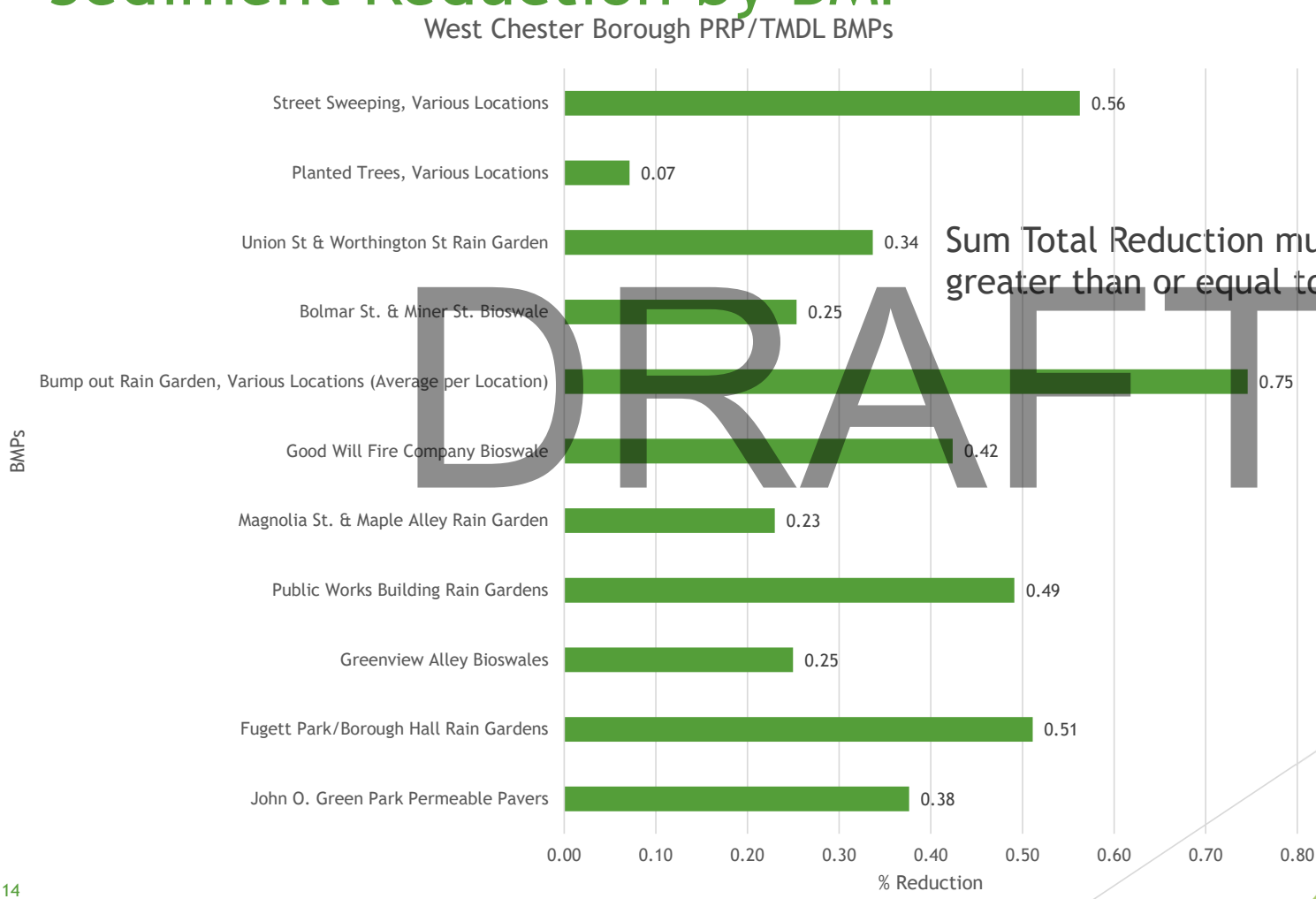
Public Works Building

Sediment Reduction by BMP



Sum Total Reduction must be greater than or equal to 10%

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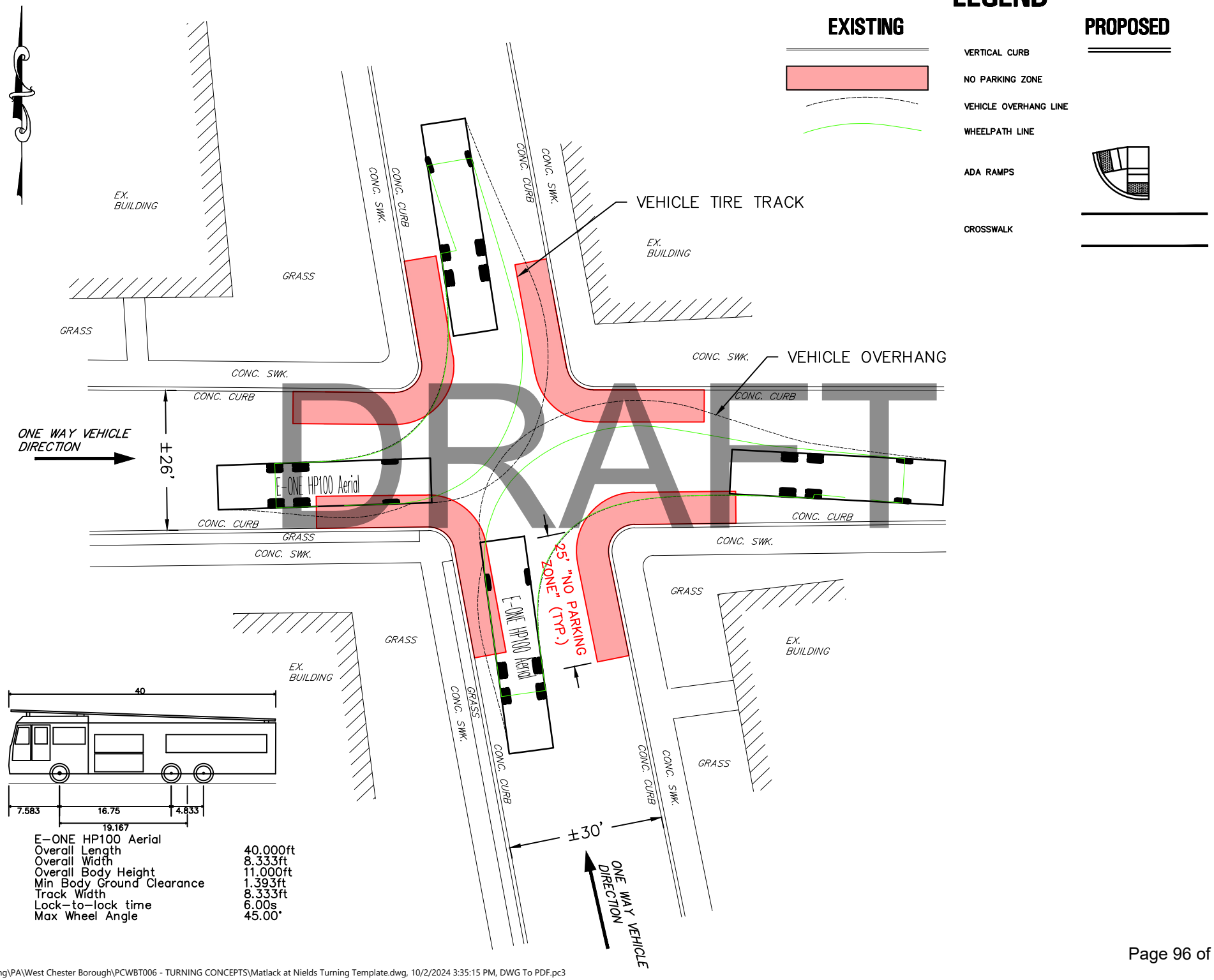
Questions?



Survey Link Above



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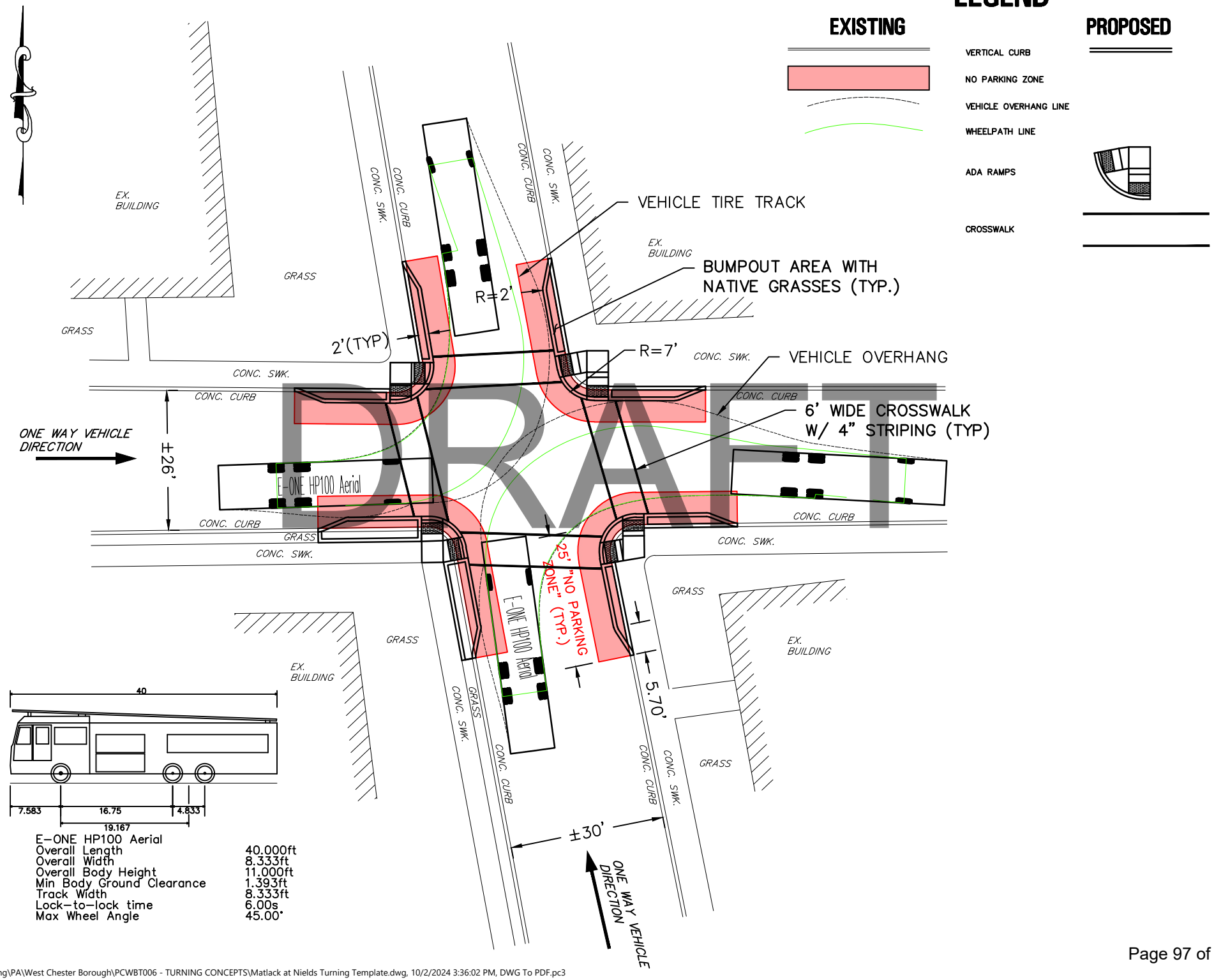

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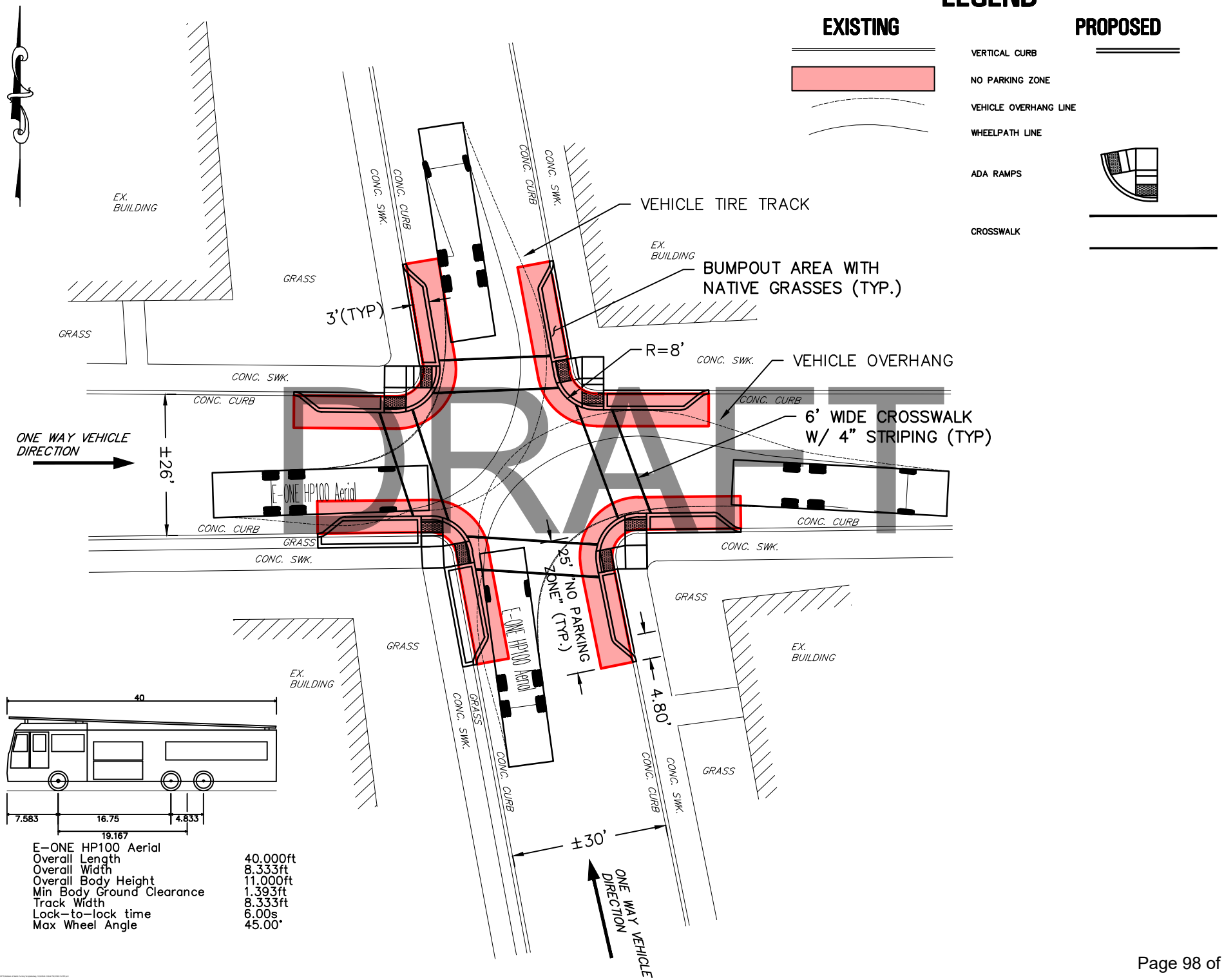
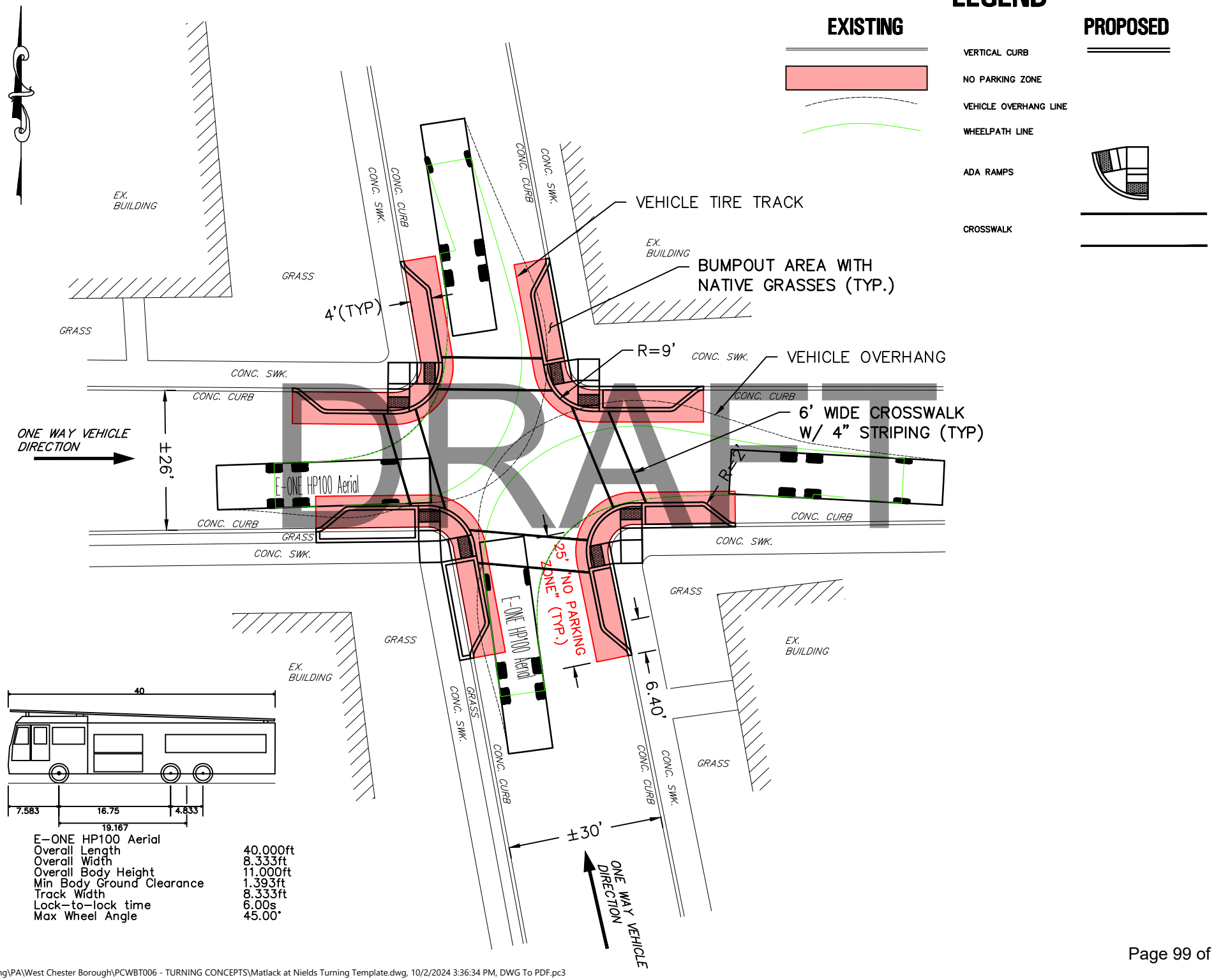

LEGEND
EXISTING
PROPOSED
VERTICAL CURB
NO PARKING ZONE
VEHICLE OVERHANG LINE
WHEELPATH LINE
ADA RAMPS
CROSSWALK
EX. BUILDING
GRASS
CONC. SWK.
CONC. CURB
VEHICLE TIRE TRACK
BUMPOUT AREA WITH NATIVE GRASSES (TYP.)
3'(TYP)
R=8'
VEHICLE OVERHANG
6' WIDE CROSSWALK W/ 4" STRIPING (TYP)
ONE WAY VEHICLE DIRECTION
±26'
E-ONE HP100 Aerial
25' "NO PARKING ZONE" (TYP.)
4.80'
±30'
ONE WAY VEHICLE DIRECTION
DRAFT
40
7.583
16.75
4.833
19.167
E-ONE HP100 Aerial
Overall Length 40.000ft
Overall Width 8.333ft
Overall Body Height 11.000ft
Min Body Ground Clearance 1.393ft
Track Width 8.333ft
Lock-to-lock time 6.00s
Max Wheel Angle 45.00°



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Summary of Public Comment Received

1. **Preference for Underground Retention Basins**
   Some residents expressed preference to underground basins in place of surface BMPs.

   The Borough recognizes the importance of flood mitigation and agree that underground retention basins can be highly effective. While these options are considered where space and budget allow, they are often significantly more costly and require extensive utility coordination. Rain gardens and bioswales remain critical for meeting MS4 permit requirements and improving water quality, but we will continue evaluating opportunities for underground storage in high-priority flood areas.

2. **Maintenance Concerns**
   Some residents expressed concerns over the maintenance required for surface BMPs.

   Section G of this report lists the Borough's maintenance plans. The Borough will develop maintenance programs for each BMP to ensure rain gardens and bump-outs remain functional and visually appealing. As outlined in Section G, all maintenance programs will follow the PA BMP Manual. During the design phase, the Borough will specify low maintenance plantings when feasible.

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3. **Safety & Traffic Issues**
   Residents expressed concern over the BMP bumpouts resulting in safety hazards.

   A sample turning template was shared with the public. All designs are reviewed for compliance with PennDOT and Borough safety standards

4. **General Feedback**
   Residents submitted positive feedback on the need for stormwater management throughout the Borough.

   No response required.

5. **Parking Concerns**
   Residents expressed concern over the BMP bumpouts eliminating parking spots.

   A sample turning template was shared with the public.

6. **Cost Concerns**
   Residents expressed concern over cost of these projects.

   The Borough will pursue grant funding and budget accordingly, as required.

7. **Flooding Concerns**

Some residents expressed concerns over flooding in certain areas or reviewing flooding issues over the entire watershed.

These BMPs are specifically required to improve water quality of stormwater runoff and the reduction of pollutants being delivered to the stream from stormwater runoff from Borough properties. A more comprehensive plan is needed to review and address flooding concerns.

8. **Most Liked BMPs**
   The following BMPs were considered the most desirable throughout the Borough.

   East Union Street & South Worthington Street Basin
   South Bolmar Street Basin
   South Bomar Street Bioswale

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PROPOSED BMP'S FOR WEST CHESTER TMDL AND PRP PLANS

WEST CHESTER

CHESTER COUNTY

DECEMBER, 2023

Legend

- Existing Outlet
- Existing Mahnole
- Existing Inlet
- Proposed Pipe
- Existing Storm Pipe
- Channel
- Existing Storm Basins

Proposed BMPs

Type

- Bio Retention Basin
- Bump-Out Rain Garden

N
W E
S

0 15 30 60 90 Feet

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PROPOSED BMP'S FOR WEST CHESTER TMDL AND PRP PLANS

WEST CHESTER

CHESTER COUNTY

DECEMBER, 2023

Legend

- Existing Inlet
- Proposed Pipe
- Existing Storm Pipe
- Existing Storm Basins

Proposed BMPs

Type

- Bio Retention Basin
- Bump-Out Rain Garden
- Basin Retrofit

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PROPOSED BMP'S FOR WEST CHESTER TMDL AND PRP PLANS

WEST CHESTER

CHESTER COUNTY

DECEMBER, 2023

Legend

- Outlet
- Mahnole
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- Existing Storm Pipes
- Channel
- Existing Storm Basins

Proposed BMPs

Type

- Bio Retention Basin
- Bump-Out Rain Garden

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0 10 20 40 60
Feet

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PROPOSED BMP'S FOR WEST CHESTER TMDL AND PRP PLANS

WEST CHESTER

CHESTER COUNTY

DECEMBER, 2023

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Proposed BMPs

Type

- Bio Retention Basin
- Bump-Out Rain Garden
- Basin Retrofit

N
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WEST CHESTER

CHESTER COUNTY

DECEMBER, 2023

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Type

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- Bump-Out Rain Garden

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PROPOSED BMP'S FOR WEST CHESTER TMDL AND PRP PLANS

WEST CHESTER

CHESTER COUNTY

DECEMBER, 2023

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- Existing Storm Basins

Proposed BMPs

Type

- Bio Retention Basin
- Bump-Out Rain Garden

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WEST CHESTER

CHESTER COUNTY

DECEMBER, 2023

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PROPOSED BMP'S FOR WEST CHESTER TMDL AND PRP PLANS

WEST CHESTER

CHESTER COUNTY

May, 2024

Legend

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- Mahnole
- Existing Storm
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- Existing Storm Pipes
- Existing Storm Basins

Proposed BMPs

Type

- Bio Retention Basin
- Bump-Out Rain Garden
- Basin Retrofit

N
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Feet

REMINGTON & VERNICK ENGINEERS
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PROPOSED BMP'S FOR WEST CHESTER TMDL AND PRP PLANS

WEST CHESTER

CHESTER COUNTY

DECEMBER, 2023

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- Existing Inlet
- Proposed Pipe
- Existing Storm Pipe
- Channel

Proposed BMPs

Type

- Bio Retention Basin
- Bump-Out Rain Garden
- Basin Retrofit
- Bioswale

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Feet

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PROPOSED BMP'S FOR WEST CHESTER TMDL AND PRP PLANS

WEST CHESTER

CHESTER COUNTY

May, 2024

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Proposed BMPs

Type

- Bio Retention Basin
- Bump-Out Rain Garden
- Basin Retrofit

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CHESTER COUNTY

May, 2024

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- Bump-Out Rain Garden
- Basin Retrofit
- Bioswale

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Feet

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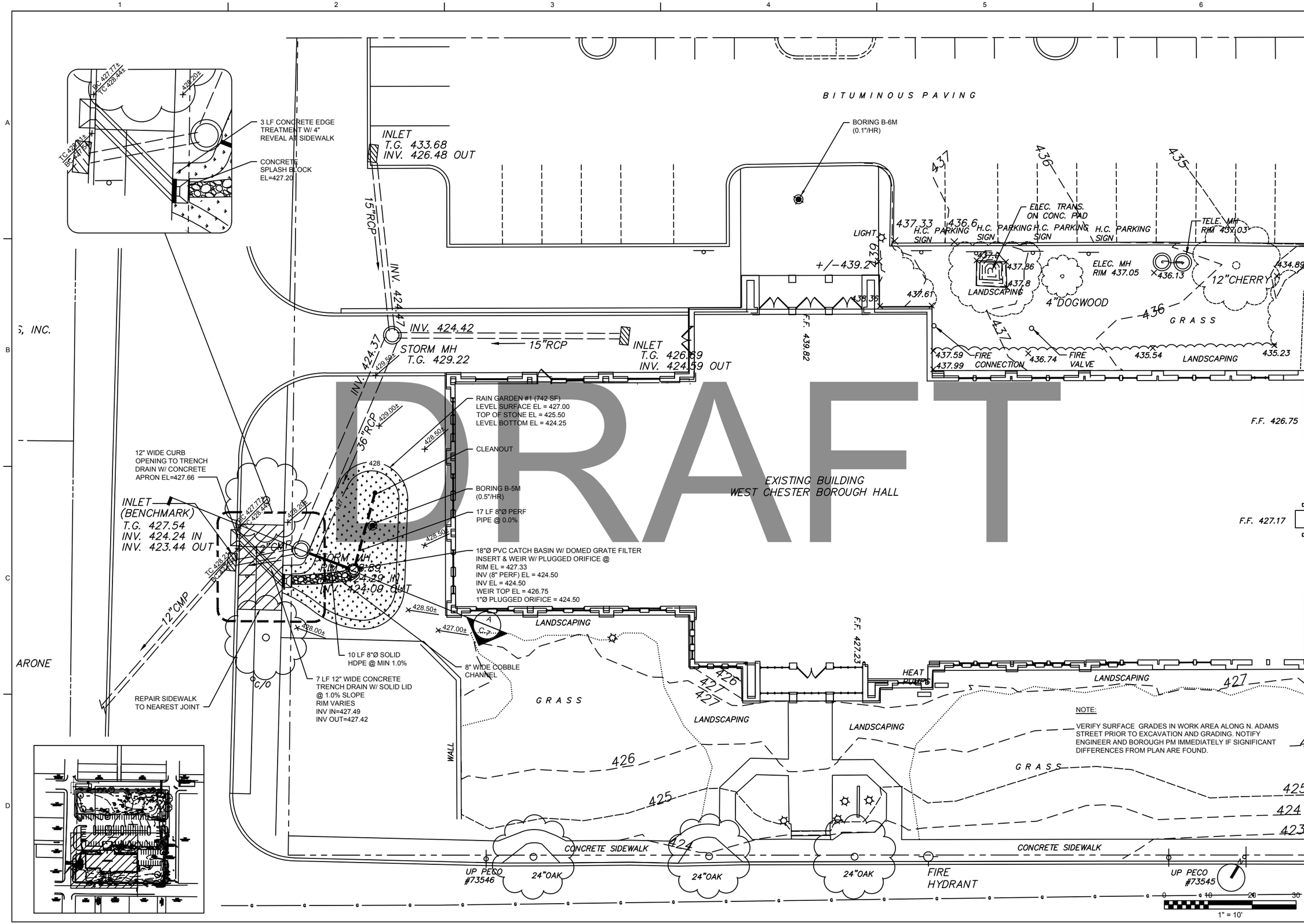

NOTE:

VERIFY SURFACE GRADES IN WORK AREA ALONG N. ADAMS STREET PRIOR TO EXCAVATION AND GRADING. NOTIFY ENGINEER AND BOROUGH PM IMMEDIATELY IF SIGNIFICANT DIFFERENCES FROM PLAN ARE FOUND.

DRAFT

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NO.	DATE	REVISION	BY	APVD

DSGN S BECK | DR B KLEIN | CHK A POTTS | APVD A POTTS

WEST CHESTER BOROUGH
STREAM PROTECTION PLAN STORMWATER MANAGEMENT IMPROVEMENTS
DEPARTMENT OF PUBLIC WORKS
WEST CHESTER BOROUGH, PENNSYLVANIA

CIVIL
GREEN INFRASTRUCTURE PLAN
SITE 016
N ADAMS ST AND E GAY ST

AS NOTED
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	JULY 2017
PROJ	473792
DWG	C-1
SHEET	3

BID DOCUMENTS

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FILENAME: $FILENAME PLOT DATE: $PLOTDATE PLOT TIME: $PLOTTIME

DRAFT

TYPE C INLET W/ FILTER INSERT
RIM EL = 434.50±
INV EL = 431.00

5 LF NEW STONE CURB; TAPER ENDS TO MATCH EXISTING

REPAIR SIDEWALK TO NEAREST JOINT

13 LF 8" Ø PERF HDPE @ 0%

47 LF 6" Ø SDR-35 PVC PIPE @ 2.1%

12" WIDE CURB OPENING TO TRENCH DRAIN APRON
EL=344.27

BC 434.44±
TC 434.94±

10 LF 12" CONCRETE TRENCH DRAIN W/ SOLID COVER @ 1.0%
INV IN = 434.10
INV OUT = 434.00

5 LF CONCRETE EDGE TREATMENT W/ 4" REVEAL AT SIDEWALK

RAIN GARDEN #2 (579 SF)
LEVEL SURFACE EL = 433.50
TOP OF STONE EL = 431.50
LEVEL BOTTOM EL = 429.50

18" Ø PVC CATCH BASIN W/DOMED GRATE, FILTER INSERT, AND GUTTER GUARD
PLUGGED ORIFICE
RIM EL = 434.00
INV (8" PERF) EL = 429.75
INV (OUT (8 SOLID) EL = 429.50
WEIR TOP EL = 433.50
1" PLUGGED ORIFICE EL = 429.50

CONCRETE SPLASH PAD

CONNECT EVERY DOWNSPOUT @ SPLASH BLOCK

CLEANOUT

ANTI-SEEP COLLAR

60 LF 8" Ø SOLID HDPE @ 1.8%

CLEANOUT

ANTI-SEEP COLLAR

12" Ø PVC CATCH BASIN W/ SOLID COVER
RIM EL = 432.00
INV EL = 428.45

CLEANOUT

20 LF 8" Ø PERF HDPE @ 0%

SUBSURFACE INFILTRATION TRENCH (597 SF)
LEVEL BOTTOM EL = 428.20
TOP OF STONE EL = 430.70

PROTECT EXST. LIGHT POLE

25 LF 8"Ø PERF HDPE @ 0%

EXIST. INLET #4
T.G. 431.49
INV. 427.84 OUT

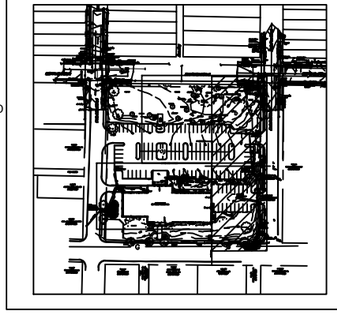
ANTI-SEEP COLLAR

5 LF 8" Ø SOLID HDPE @ MIN 1.0%

3 LF 8" Ø SOLID HDPE @ MIN 1.0%

TYPE C INLET W/ FILTER INSERT
RIM EL = 431.60±
INV IN EL = 428.45
INV OUT = 428.20
INSTALL SLOW RELEASE ORIFICE CAP ON OUTLET PIPE

NOTE:
VERIFY SURFACE GRADES AT CHESTNUT STREET AND ON SITE IN PROPOSED WORK AREAS PRIOR TO EXCAVATION AND GRADING.



EXIST. INLET #3
T.G. 431.41
INV. 426.71 IN
INV. 426.66 OUT

7 LF 8" Ø SOLID HDPE @ MIN. 1.0%

EX.STORM MH #2
RIM 427.79
INV. 421.99 IN
INV. 421.79 OUT

35 LF 8" Ø PERF HDPE @ 0%

5 LF 8" Ø SOLID HDPE @ 0%

TYPE C INLET W/ FILTER INSERT AND GUTTER GUARD
RIM EL = 425.50
INV EL = 423.75

ANTI-SEEP COLLAR

12" Ø PVC CATCH BASIN W/SOLID COVER AND SLOW RELEASE ORIFICE CAP ON SOLID OUTLET PIPE
RIM EL = 426.75
INV EL = 425.75

SUBSURFACE INFILTRATION TRENCH #2B (514 SF)
LEVEL BOTTOM EL = 423.50
TOP OF STONE EL = 425.50

INLET (TBR)
T.G. 425.78
INV. 420.78 OUT

EX. STORM MH #1
RIM 425.55
INV. IN 419.95 (FROM EX#2)
INV. IN 419.85 (36")
INV. OUT 418.95 (48")

STORM MH
RIM 423.90
INV. 418.90 IN
INV. 418.70 OUT

STORM MH
RIM 422.77
INV. 418.57 IN
INV. 417.27 OUT

INLET
T.G. 420.61
INV. 417.91 OUT

INV. 416.44
INV. 420.84

INV. 415.84 INV. 415.74

INLET
T.G. 420.84

NOT ABLE TO DETERMINE TYPE & SIZE OF PIPE

CONCRETE SIDEWALK

CONCRETE CURB

CONCRETE SIDEWALK

CONCRETE SIDEWALK

FIRE HYDR

FIRE WV

WV

WV

WV

4"DOGWOOD

16"OAK

32"GUM

42"OAK

10"OAK

4"MAPLE

4"CHERRY

BENCH

TRASH CAN

CHIONANTHUS (MULTI-STEM)

Stone Curb

Grass

Concrete Walk

Single White Line

Guy Wire

West Penn Street and East Chestnut Street

LIGHT

SAN. MH? RIM 426.69

SAN. MH? RIM 421.2

0 10 20 30
1" = 10'

..\d1083731\PE_Stamp-PA.jpg

NO.	DATE	DSGN	DR	CHK	APVD	BY
		S BECK	B.KLEIN	A.POTTS	A.POTTS	A POTTS

REVISION

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REUSE OF DOCUMENTS

WEST CHESTER BOROUGH
STREAM PROTECTION PLAN STORMWATER MANAGEMENT IMPROVEMENTS
DEPARTMENT OF PUBLIC WORKS
WEST CHESTER BOROUGH, PENNSYLVANIA

ch2m:

CIVIL

GREEN INFRASTRUCTURE PLAN
SITE 016 - E CHESTNUT AND N PENN ST
E GAY ST AND N PENN ST

BID DOCUMENTS

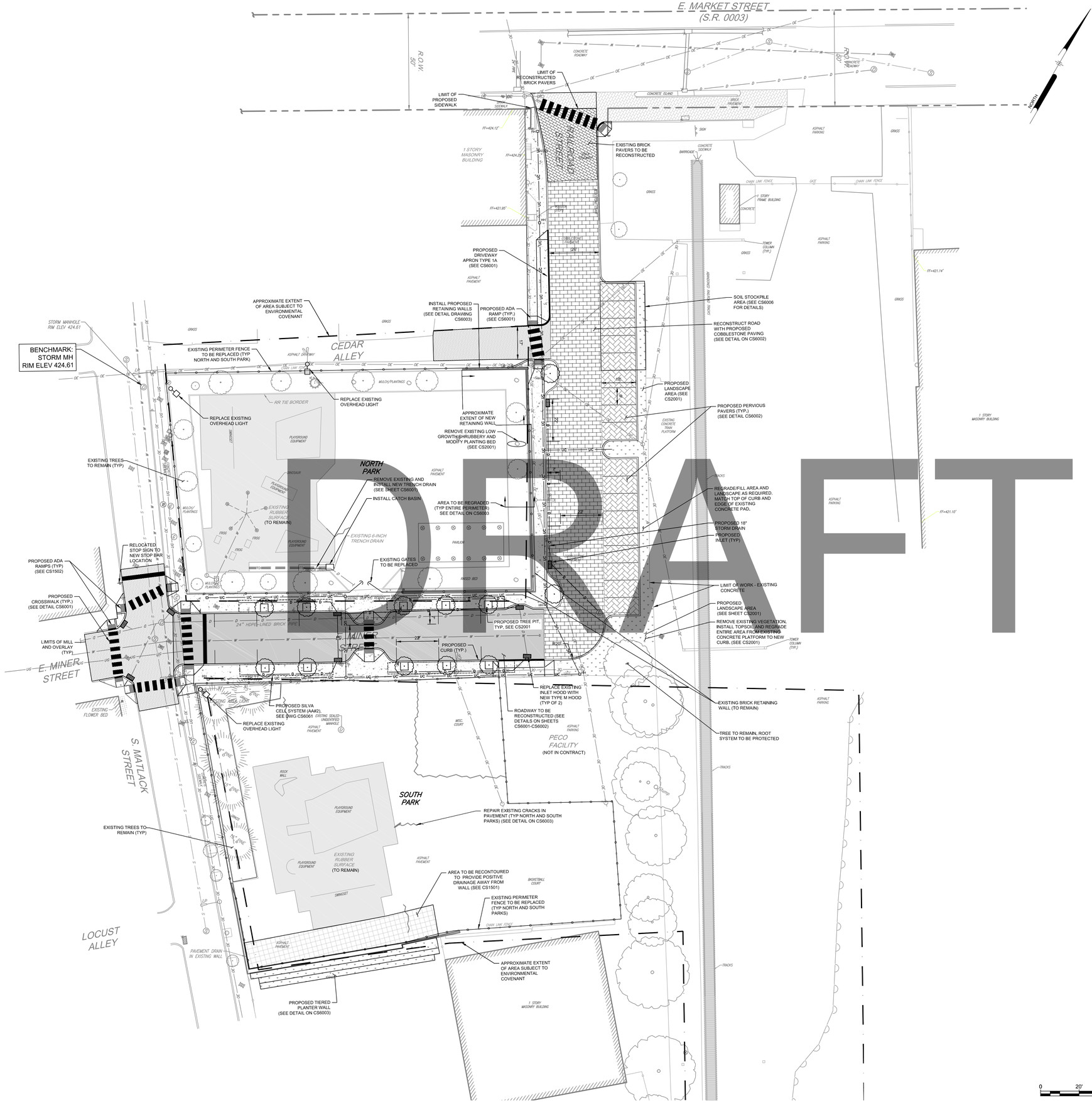
AS NOTED

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	JULY 2017
PROJ	473792
DWG	C-4
SHEET	5

FILENAME: $FILENAME PLOT DATE: $PLOTDATE PLOTTED BY: $PLOTTED



DRAFT

GENERAL NOTES:

1. SITE ADDRESS: SOUTH MATLACK STREET AND EAST MINER STREET
   WEST CHESTER, PA 19380
   TAX MAP #: 0109 0368000E AND TAX MAP #: 0109 0552000E
   BOOK #: 4345 PAGE #: 1636

   RECORD OWNER/APPLICANT: BOROUGH OF WEST CHESTER
   401 EAST GAY STREET
   WEST CHESTER, PA 19380

2. THE PURPOSE OF THIS PLAN IS TO DEPICT PARK AND ROADWAY IMPROVEMENTS.
3. THIS SITE IS CURRENTLY ZONED TC - TOWN CENTER DISTRICT BY THE BOROUGH OF WEST CHESTER ZONING MAP. FOR COMPLETE ZONING INFORMATION PLEASE REFER TO THE ZONING CODE OF THE BOROUGH OF WEST CHESTER.
4. BY GRAPHIC PLOTTING ONLY, SUBJECT PARCEL AREA IS LOCATED IN ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN) OF THE FLOOD INSURANCE RATE MAP, PANEL NO. 210 OF 380, COMMUNITY MAP NO. 42029C0210G WHICH BEARS AN EFFECTIVE DATE OF SEPTEMBER 29, 2017. NO FIELD SURVEYING WAS PERFORMED TO DETERMINE THIS ZONE AND AN ELEVATION CERTIFICATE MAY BE NEEDED TO VERIFY THIS DETERMINATION OR APPLY FOR A VARIANCE FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
5. UNLESS SPECIFICALLY STATED OR SHOWN HEREON TO THE CONTRARY, THIS SURVEY IS MADE SUBJECT TO AND DOES NOT LOCATE OR DELINEATE:
   A. RIGHTS OR INTERESTS OF THE UNITED STATES OF AMERICA OR COMMONWEALTH OF PENNSYLVANIA OVER LANDS NOW OR FORMERLY FLOWED BY TIDEWATER, BUT NO LONGER VISIBLE OR PHYSICALLY EVIDENT, OR LANDS CONTAINING ANY ANIMAL, MARINE, OR BOTANICAL SPECIES REGULATED BY OR UNDER THE JURISDICTION OF ANY FEDERAL, STATE, OR LOCAL AGENCY,
   B. BUILDING SETBACK LINES, ZONING REGULATIONS OR LINES ESTABLISHED BY ANY FEDERAL, STATE OR LOCAL AGENCY WHICH MAY AFFECT THE BUILDING OR DEVELOPMENT POTENTIAL OF THE SUBJECT PROPERTY,
   C. ANY SUBSURFACE OR SUBTERRANEAN CONDITION, EASEMENTS OR RIGHTS, INCLUDING, BUT NOT LIMITED TO MINERAL OR MINING RIGHTS, OR THE LOCATION OF OR RIGHTS TO ANY SUBSURFACE STRUCTURES, CONTAINERS OR FACILITIES OR ANY OTHER NATURAL OR MAN-MADE SUBSURFACE CONDITION WHICH MAY OR MAY NOT AFFECT THE USE OR DEVELOPMENT POTENTIAL OF THE SUBJECT PROPERTY,
7. THE LOCATION OF THE EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN HAVE BEEN TAKEN FROM EXISTING UTILITY RECORDS AVAILABLE AT THE TIME THESE PLANS WERE PREPARED AND FROM SURFACE OBSERVATION OF THE SITE,
8. COMPLETENESS OR ACCURACY OF LOCATION AND DEPTH OF UNDERGROUND UTILITIES AND STRUCTURES IS NOT GUARANTEED.
9. IN ACCORDANCE WITH PA ACT 287 OF 1974 AS AMENDED BY PA ACT 187 OF 1996, THE CONTRACTOR SHALL NOTIFY ALL UTILITIES WITHIN THE WORK AREA VIA THE PENNSYLVANIA ONE CALL SYSTEM, INC. (800-242-1776) A MINIMUM OF 3 WORKING DAYS BEFORE THE START OF EXCAVATION.
10. THE CONTRACTOR SHALL VERIFY LOCATIONS AND DEPTHS OF ALL UNDERGROUND UTILITIES AND STRUCTURES BEFORE THE START OF WORK,
11. REFERENCE IS MADE TO PENNSYLVANIA ONE CALL SYSTEM, ASSIGNED SERIAL NUMBER 20190811387 IN ACCORDANCE WITH PA ACT 287 OF 1974 AS AMENDED BY PA ACT 121 OF 2008 ENTITLED "UNDERGROUND UTILITY LINE PROTECTION LAW", (800-242-1776)
12. SEE DRAWING CS0002 AND SPECIFICATIONS FOR INFORMATION ON ENVIRONMENTAL COVENANT,

LEGEND:

- PROPERTY LINE
- LEGAL RIGHT-OF-WAY
- APPROXIMATE EXTENT OF ENVIRONMENTAL COVENTANT
- EX CONCRETE MONUMENT
- EX BUILDING
- EX CURB
- EX EDGE OF PAVEMENT
- EX WALL
- EX FENCE LINE
- EX SIGN
- EX LANDSCAPING
- 361 EX MINOR CONTOUR
- 360 EX MAJOR CONTOUR
- D D EX STORM SEWER LINES
- EX UTILITY MANHOLE
- EX STORM SEWER INLET
- EX STORMWATER MANHOLE
- OE OE EX OVERHEAD ELECTRICAL LINES
- UE UE EX UNDERGROUND ELECTRICAL LINES
- EX UTILITY POLE
- LP EX STREET LIGHT
- W W EX WATER LINES
- EX FIRE HYDRANT
- EX WATER VALVE
- S S EX SANITARY SEWER LINES
- EX SANITARY MANHOLE
- EX SANITARY CLEAN OUT
- G G EX GAS LINES
- EX ELECTRIC MANHOLE
- BENCHMARK
- PROPOSED CURB
- PROPOSED DEPRESSED CURB
- PROPOSED RETAINING WALL
- "0" PROPOSED SIGN
- 360 PROPOSED MAJOR CONTOUR
- 361 PROPOSED MINOR CONTOUR
- PROPOSED FENCE
- PROPOSED CONCRETE SIDEWALK
- PROPOSED STORM MANHOLE
- D D PROPOSED STORM SEWER
- PROPOSED TRENCH DRAIN
- PROPOSED INLET
- PROPOSED LIGHT POLE
- PROPOSED PERVIOUS PAVERS
- PROPOSED MILL AND OVERLAY
- PROPOSED RECONSTRUCTED ROADWAY
- PROPOSED RE-LEVELED COBBLESTONE PAVERS
- UC UC PROPOSED ELECTRICAL CONDUIT - 2 INCH
- HH PROPOSED ELECTRICAL HANDHOLE

PENNSYLVANIA ONE CALL SYSTEM INC. 1-800-242-1776 STOP - CALL BEFORE YOU DIG!

CALL BEFORE YOU DIG
BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA
CALL 1-800-242-1776
PA. ACT 287 OF 1974 REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL OR BLAST PENNSYLVANIA ONE-CALL SYSTEM, INC.
SERIAL NUMBER(S): 20190811387

Pennoni
PENNONI ASSOCIATES INC.
One South Church Street, 2nd Floor
West Chester, PA 19382
T 610.429.8987 F 610.429.8918

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

IMPROVEMENTS TO JOHN O. GREEN MEMORIAL PARK

SOUTH MATLACK STREET AND EAST MINER STREET
WEST CHESTER, PA 19380

IMPROVEMENTS PLAN

BOROUGH OF WEST CHESTER
401 EAST GAY STREET
WEST CHESTER, PA 19380

NO.	DATE	REVISIONS	BY
1	10/21/2019	ISSUED FOR BID	CF

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

PROJECT	WCHBO00008
DATE	2019-06-21
DRAWING SCALE	1"=20'
DRAWN BY	RMG
APPROVED BY	NMC

CS1001

SHEET 5 OF 17

U:\Accounts\WCBO\WCHBO00008 - John O Green Park GIS\ESRI\24_SHEETS\CS1001.dwg PLOTTED: 10/28/2019 11:09 AM BY: Tyler Olsen PLOTSTYLE: Pennoni NCS.ctb PROJECT STATUS: —

GOOSE CREEK GREEN STORMWATER

CONSTRUCTION PLANS

CHESTER COUNTY, PENNSYLVANIA
JUNE 7, 2024

PREPARED FOR:
OWNER/DEVELOPER

WEST CHESTER BOROUGH

401 EAST GAY STREET
WEST CHESTER, PA 19380

DRAFT



LOCATION MAP
Scale: 1" = 2000'

PREPARED BY:

PENNONI ASSOCIATES INC.

158 W Gay Street, Suite 300
West Chester, PA 19380
T 610.429.8907
F 610.429.8918

CALL BEFORE YOU DIG
BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA
CALL 1-800-242-1776
PA. ACT 287 OF 1974 REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL OR BLAST PENNSYLVANIA ONE-CALL SYSTEM, INC.
SERIAL NUMBER(S):

PENNONI ASSOCIATES INC.
158 W Gay Street, Suite 300
West Chester, PA 19382
T 610.429.8907 F 610.429.8918

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

GOOSE CREEK GREEN STORMWATER
205 LACEY STREET
PROJECT CITY, PROJECT STATE

COVER SHEET

WEST CHESTER BOROUGH
401 EAST GAY STREET
CLIENT CITY, CLIENT STATE ZIP

DATE	NO.	REVISIONS	BY

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PROJECT	WCHBO00030
DATE	2024-06-07
DRAWING SCALE	AS SHOWN
DRAWN BY	AGS
APPROVED BY	CRP

CS0001

SHEET 1 OF 21

GENERAL NOTES:

1. THE PURPOSE OF THESE PLANS IS TO DEPICT THE PROPOSED CONSTRUCTION OF NEW STORMWATER MANAGEMENT FACILITIES.
2. A FIELD SURVEY OF THE SITE WAS PERFORMED BY PENNONI ASSOCIATES INC. IN DECEMBER 2023.
3. UNLESS SPECIFICALLY STATED OR SHOWN HEREON TO THE CONTRARY, THIS SURVEY IS MADE SUBJECT TO AND DOES NOT LOCATE OR DELINEATE:
   - § RIGHTS OR INTERESTS OF THE UNITED STATES OF AMERICA OR COMMONWEALTH OF PENNSYLVANIA OVER LANDS NOW OR FORMERLY FLOWED BY TIDEWATER BUT NO LONGER VISIBLE OR PHYSICALLY EVIDENT, OR LANDS CONTAINING ANY ANIMAL, MARINE, OR BOTANICAL SPECIES REGULATED BY OR UNDER THE JURISDICTION OF ANY FEDERAL, STATE, OR LOCAL AGENCY.
   - § BUILDING SETBACK LINES, ZONING REGULATIONS OR LINES ESTABLISHED BY ANY FEDERAL, STATE, OR LOCAL AGENCY WHICH MAY AFFECT THE BUILDING OR DEVELOPMENT POTENTIAL OF THE SUBJECT PROPERTY.
   - § ANY SUBSURFACE OR SUBTERRANEAN CONDITION, EASEMENTS OR RIGHTS INCLUDING BUT NOT LIMITED TO MINERAL OR MINING RIGHTS, OR THE LOCATION OF OR RIGHTS TO ANY SUBSURFACE STRUCTURES, CONTAINERS, OR FACILITIES OR ANY OTHER NATURAL OR MAN-MADE SUBSURFACE CONDITION WHICH MAY OR MAY NOT AFFECT THE USE OR DEVELOPMENT POTENTIAL OF THE SUBJECT PROPERTY.
4. THIS PLAN IS NOT INTENDED TO CONSTITUTE A BOUNDARY SURVEY AS IDENTIFIED IN SECTION E - STANDARDS FOR BOUNDARY SURVEYS IN THE "STANDARDS OF PRACTICE FOR PROFESSIONAL LAND SURVEYORS IN THE COMMONWEALTH OF PENNSYLVANIA" AS ADOPTED BY THE PENNSYLVANIA SOCIETY OF LAND SURVEYORS ON NOVEMBER 19, 2021".
5. THE HORIZONTAL DATUM FOR THE PLANIMETRIC FEATURES AND COORDINATE VALUES INDICATED ON THIS PLAN REFERENCE THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE AS REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83) WITH THE 2011 ADJUSTMENT (PASPCS-S NAD83-2011)], AND WERE DETERMINED FROM OBSERVATIONS ON DECEMBER 26, 2023.
6. THE VERTICAL DATUM FOR THE ELEVATIONS AND CONTOURS INDICATED ON THIS PLAN REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88), AND WAS DETERMINED FROM GNSS OBSERVATIONS ON DECEMBER 26, 2023.
7. TEMPORARY SITE BENCHMARK NOTE:
   TEMPORARY BENCHMARK 103
   DESCRIPTION: PK NAIL SET
   ELEVATION = 407.04'
   TEMPORARY BENCHMARK 500
   DESCRIPTION: PK NAIL SET
   ELEVATION = 413.46'
8. PARKING SPACES SHOWN REPRESENT VISIBLE AND CLEARLY DELINEATED PAVEMENT MARKINGS AND SIGNS. THE SURVEYOR HAS NOT MEASURED INDIVIDUAL SPACES FOR CONFORMANCE WITH ZONING REGULATIONS OR ADA REGULATIONS.
9. LOCATIONS OF ON AND OFF-SITE UTILITIES AS SHOWN ARE APPROXIMATE AND MAY OR MAY NOT BE COMPLETE. THE NATURE AND EXACT LOCATION OF EXISTING UTILITIES SHOULD BE VERIFIED PRIOR TO INITIATING ANY ACTIVITY THAT MAY AFFECT THEIR USE OR LOCATION.
10. COMPLETENESS OR ACCURACY OF LOCATION AND DEPTH OF UNDERGROUND UTILITIES AND STRUCTURES IS NOT GUARANTEED.
11. IN ACCORDANCE WITH PA ACT 287 OF 1974 AS AMENDED BY PA ACT 121 OF 2008 ENTITLED "UNDERGROUND UTILITY LINE PROTECTION LAW". THE CONTRACTOR SHALL NOTIFY UTILITIES WITHIN THE WORK AREA VIA THE PENNSYLVANIA ONE CALL SYSTEM, INC. (800-242-1776) A MINIMUM OF 3 WORKING DAYS BEFORE THE START OF EXCAVATION.
12. THE CONTRACTOR SHALL VERIFY LOCATIONS AND DEPTHS OF UNDERGROUND UTILITIES AND STRUCTURES BEFORE THE START OF WORK.
13. ALL UNITS SHOWN ARE IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.
14. AT THE TIME OF SURVEY, THERE WAS NO OBSERVED EVIDENCE OF A WETLANDS DELINEATION HAVING BEEN COMPLETED NOR WAS THE SURVEYOR PROVIDED A WETLANDS DELINEATION REPORT.
15. THE LOCATION OF THE EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN HAVE BEEN TAKEN FROM EXISTING UTILITY RECORDS AVAILABLE AT THE TIME THESE PLANS WERE PREPARED AND FROM SURFACE OBSERVATION OF THE SITE.
16. COMPLETENESS OR ACCURACY OF LOCATION AND DEPTH OF UNDERGROUND UTILITIES AND STRUCTURES IS NOT GUARANTEED.
17. IN ACCORDANCE WITH PA ACT 287 OF 1974 AS AMENDED BY PA ACT 121 OF 2008 ENTITLED "UNDERGROUND UTILITY LINE PROTECTION LAW". THE CONTRACTOR SHALL NOTIFY UTILITIES WITHIN THE WORK AREA VIA THE PENNSYLVANIA ONE CALL SYSTEM, INC. (800-242-1776) A MINIMUM OF 3 WORKING DAYS BEFORE THE START OF EXCAVATION.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND STRUCTURES AND UTILITIES, SUCH AS WATER, SEWER, TELEPHONE AND ELECTRIC CONDUITS, ETC, AND ABOVE GROUND UTILITIES, WHICH MAY BE ENCOUNTERED DURING CONSTRUCTION OPERATIONS. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL EXISTING UTILITIES.
19. PRIOR TO CONSTRUCTION, CONTRACTOR IS TO FIELD LOCATE AND RECORD ANY DAMAGE TO EXISTING FENCING, SIDEWALKS, CURBS, OR OTHER ITEMS NOT INTENDED TO BE REMOVED OR REPLACED. ENGINEER TO VERIFY LOCATION AND EXTEND OF DAMAGE.
20. DAMAGE TO EXISTING PAVING, SIDEWALK, CURB OR OTHER ITEMS NOT INTENDED TO BE REPLACED OR REMOVED DURING CONSTRUCTION SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER. CONTRACTOR SHALL REPAIR OR REPLACE ALL DAMAGED ITEMS WITHOUT CHARGE TO THE OWNER.

FLOOD ZONE INFORMATION:

1. BY GRAPHIC PLOTTING ONLY, BASED UPON THE FLOOD INSURANCE RATE MAP, PANEL NO. 210 OF 380, COMMUNITY MAP NO. 42029C0210G, WHICH BEARS AN EFFECTIVE DATE OF SEPTEMBER 29, 2017. THE SITE IS LOCATED IN THE FOLLOWING ZONE(S):
   - § ZONE X *"AREA OF MINIMAL FLOOD HAZARD"*

   NO FIELD SURVEYING WAS PERFORMED TO DETERMINE THIS ZONE AND AN ELEVATION CERTIFICATE MAY BE NEEDED TO VERIFY THIS DETERMINATION OR TO APPLY FOR A VARIANCE FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

PLAN REFERENCES

1. RECORDED PLANS
   - § PLAN ENTITLED "FINAL PLAN, RECORD PLAN, WEST CHESTER PUBLIC WORKS CAMPUS", DRAWING NO. 09-07035T, PREPARED BY GILMORE & ASSOCIATES, INC., DATED 8/17/2010, AND LAST REVISED 2/1/2011, RECORDED IN THE CHESTER COUNTY RECORDER OF DEEDS OFFICE, PLAN BOOK 19061 PAGE 1.

TEMPORARY CONSTRUCTION FENCE AND ACCESS LOCATIONS:

1. TEMPORARY CONSTRUCTION FENCE SHALL BE 4' HIGH HEAVY DUTY ORANGE SAFETY FENCE, HIGH DENSITY POLYETHYLENE, SQUARE MESH, WITH SMOOTH TOP AND BOTTOM BORDERS (SEE DETAIL).
2. WORK AREA TO BE ACCESSED FROM THE MAIN PARK ENTRANCE ON SMITHBRIDGE ROAD.
3. CONTRACTOR MUST MAINTAIN COMPLETE ENCLOSURE AROUND THE WORK AREA FOR DURATION OF PROJECT. CLOSE CONSTRUCTION ACCESS POINTS AT ANY TIME CONTRACTORS ARE NOT ACTIVELY WORKING ON SITE.

SITE PREPARATION AND REMOVAL NOTES:

1. ALL SEDIMENT AND EROSION CONTROL MEASURES AND TREE PROTECTION FENCING MUST BE INSTALLED BEFORE EXCAVATION OR OTHER EARTH DISTURBANCE ACTIVITIES.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR SAFETY AND PROTECTION OF WORK AREA DURING CONSTRUCTION.
3. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL FIELD LOCATE AND RECORD ANY DAMAGE TO EXISTING PAVING, SIDEWALK, CURB, UTILITIES OR OTHER ITEMS IN THE WORK AREA. ENGINEER MUST VERIFY LOCATION AND EXTENT OF DAMAGE.
4. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING ITEMS WITHIN THE WORK AREA NOTED FOR REMOVAL. REMOVAL INCLUDES ALL FOUNDATIONS, SUBBASE MATERIALS AND OTHER ITEMS SPECIFICALLY IDENTIFIED FOR REMOVAL ON THE DRAWINGS AND AS NECESSARY TO CONSTRUCT NEW IMPROVEMENTS. AFTER REMOVALS, CONTRACTOR IS RESPONSIBLE FOR BACKFILL, COMPACTION, AND RESTORATION OF DISTURBED AREAS.
5. CONTRACTOR SHALL PROTECT ALL BUILDINGS, UTILITIES, FACADES, ENTRANCE PADS, FENCING, SIGNAGE, PLANT MATERIAL, AND OTHER ITEMS TO REMAIN FROM DAMAGE DURING CONSTRUCTION. THE CONTRACTOR SHALL REPLACE AND/OR RESTORE DAMAGED OR DISTURBED AREAS AS A RESULT OF HIS NEGLIGENCE AT NO ADDITIONAL COST TO THE OWNER TO THE OWNER'S SATISFACTION.
6. ALL DEBRIS SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF BY THE CONTRACTOR ON A DAILY BASIS.
7. ALL EXISTING UTILITY BOXES, METERS, MANHOLES, ETC. WITHIN THE WORK AREA ARE TO REMAIN UNLESS NOTED. REMOVE PAVING AROUND THESE STRUCTURES WITHOUT DISTURBANCE. ADJUST TOPS TO FINISHED GRADE AS NECESSARY.

TREE PROTECTION AND TRIMMING NOTES:

1. ALL TREES ON SITE ARE TO REMAIN AND BE PROTECTED, UNLESS OTHERWISE NOTED. AVOID OR LIMIT OPERATION OF HEAVY MACHINERY WITHIN DRIPLINE OF ALL TREES.
2. INSTALL TREE PROTECTION FENCE AS NECESSARY AROUND DRIPLINE OF TREES. LOCATIONS OF TREE PROTECTION FENCE MAY BE ADJUSTED IN FIELD TO INCLUDE THE AREA UNDER THE DRIP-LINE OF EXISTING TREES TO REMAIN.
3. IF TREE ROOTS ARE ENCOUNTERED DURING EXCAVATION, PROPER ROOT PRUNING MEASURES MUST BE FOLLOWED PER SPECIFICATIONS AND DIRECTION OF THE TOWNSHIP ARBORIST.
4. PRUNE EXISTING TREES TO REMAIN TO REMOVE DEAD AND BROKEN BRANCHES. ALL PRUNING SHALL FOLLOW THE MOST RECENT ANSI A300 PRUNING STANDARDS . REVIEW WITH THE ENGINEER AND TOWNSHIP ARBORIST BEFORE PRUNING.

LAYOUT NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR LAYOUT OF PROPOSED IMPROVEMENTS. THE ENGINEER MUST BE NOTIFIED OF ANY DISCREPANCIES BETWEEN FIELD CONDITIONS AND THIS PLAN WHICH WILL AFFECT THE LAYOUT OF THE PROPOSED IMPROVEMENTS PRIOR TO CONSTRUCTION. THE ENGINEER WILL PROVIDE DIRECTION TO RESOLVE CONFLICTS.
2. DIGITAL AUTOCAD FILES CAN BE SUPPLIED TO THE CONTRACTOR/CONTRACTOR'S SURVEYOR FOR LAYOUT OF SITE ELEMENTS.
3. PROPOSED PARKING LOT AND SIDEWALK LOCATIONS TO BE STAKED IN THE FIELD AND LOCATIONS VIEWED BY THE ENGINEER PRIOR TO INSTALLATION. MINOR ADJUSTMENTS MAY BE MADE IN THE FIELD BY THE ENGINEER TO AVOID CONFLICTS WITH UTILITIES, TREES, ETC.
4. NO WORK OR ACTIVITIES SHALL BE PERFORMED BEYOND THE LIMITS OF DISTURBANCE.

GRADING NOTES:

1. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING UTILITIES ON SITE PRIOR TO COMMENCEMENT OF WORK. SEE UTILITY NOTES ON THE DEMOLITION PLAN.
2. CONTRACTOR IS RESPONSIBLE FOR THE CONSTRUCTION LAYOUT OF ALL PROPOSED ELEVATIONS.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR GRADING PROPOSED GRADES INTO EXISTING GRADES WITH SMOOTH, EVEN TRANSITIONS, ROUNDING OUT ALL MOUNDS AND DEPRESSIONS.
4. FINISHED GRADE OF ALL NEW PAVEMENTS TO MEET THE GRADES OF THE EXISTING PAVEMENT. TRANSITIONS TO BE FLUSH AND SMOOTH.
5. MAIN SIDEWALK MUST BE ADA COMPLIANT. MAXIMUM LOGITUDINAL SLOPE NOT TO EXCEED 5%. PATH CROSS SLOPE TO BE BETWEEN 1% AND 2%. CONTACT THE ENGINEER IMMEDIATELY, BEFORE EXCAVATION, IF FIELD CONDITIONS ARE FOUND TO BE DIFFERENT THAN SHOWN ON THE PLAN. POSITIVE DRAINAGE WITH NO PONDING SHALL BE PROVIDED.
6. THE FINISHED GRADE OF THE LAWN ADJACENT TO THE PATH IS TO BE FLUSH WITH THE PATH. ALLOW TOPSOIL TO SETTLE, OR LIGHTLY COMPACT, BEFORE SEEDING TO ENSURE A FLUSH FINISHED CONDITION.

UTILITY NOTES:

1. ALL STORM DRAINAGE PIPE SHALL BE LAID ON SMOOTH CONTINUOUS GRADES WITH NO VISIBLE BENDS AT JOINTS.
2. BEDDING REQUIREMENTS SPECIFIED HEREIN ARE TO BE CONSIDERED AS MINIMUMS FOR RELATIVELY DRY, STABLE EARTH CONDITIONS. ADDITIONAL BEDDING SHALL BE REQUIRED FOR ROCK TRENCHES AND WET AREAS. CONTRACTOR SHALL HAVE THE RESPONSIBILITY TO PROVIDE SUCH ADDITIONAL BEDDING AS MAY BE REQUIRED TO PROPERLY CONSTRUCT THE WORK.
3. COMPACTION OF THE BACKFILL OF ALL TRENCHES SHALL BE COMPACTED TO THE DENSITY OF 95% OF THEORETICAL MAXIMUM DRY DENSITY (ASTM D698). BACKFILL MATERIAL SHALL BE FREE FROM ROOTS, STUMPS, OR OTHER FOREIGN DEBRIS AND SHALL BE PLACED IN LIFTS NOT TO EXCEED 6 INCHES IN COMPACTED FILL THICKNESS. A REPORT FROM A GEOTECHNICAL ENGINEER MAY BE REQUIRED BY THE PUBLIC WORKS INSPECTOR. CORRECTION OF ANY TRENCH SETTLEMENT WITHIN A YEAR FROM THE DATE OF APPROVAL WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
4. THE CONTRACTOR WILL INSURE THAT POSITIVE AND ADEQUATE DRAINAGE IS MAINTAINED AT ALL TIMES WITHIN THE PROJECT LIMITS. THIS MAY INCLUDE, BUT NOT BE LIMITED TO, REPLACEMENT OR RECONSTRUCTION OF EXISTING DRAINAGE STRUCTURES THAT HAVE BEEN DAMAGED OR REMOVED OR REGRADING AS REQUIRED BY THE ENGINEER, EXCEPT FOR THOSE DRAINAGE ITEMS SHOWN AT SPECIFIC LOCATIONS AND HAVING SPECIFIC PAY ITEMS IN THE DETAILED ESTIMATE. NO SEPARATE PAYMENT WILL BE MADE FOR ANY COSTS INCURRED TO COMPLY WITH THIS REQUIREMENT.
5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND TO TAKE WHATEVER STEPS NECESSARY TO PROVIDE FOR THEIR PROTECTION. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS OF UTILITIES SHOWN OR NOT SHOWN. THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANIES FOR EXACT LOCATION OF THEIR UTILITIES PRIOR TO STARTING CONSTRUCTION. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AND REPLACE ANY AND ALL DAMAGE MADE TO UTILITIES BY THE CONTRACTOR.
6. CONTRACTOR SHALL EXCAVATE ONLY AS MUCH TRENCH WHICH PIPE CAN BE INSTALLED AND TRENCH BACKFILLED BY THE END OF EACH WORK DAY.
7. ALL WATER LINES SHALL BE INSTALLED IN ACCORDANCE WITH CONCORD TOWNSHIP STANDARDS AND SPECIFICATIONS.
8. ALL UNDERGROUND UTILITY TRENCHES SHALL BE BACKFILLED WITH SAFE CLEAN FILL.
9. ALL EXISTING UTILITY COVERS, RIMS, CASTING AND INLET TOPS OR GRATES MUST BE ADJUSTED TO THE PROPOSED GRADE, UNLESS OTHERWISE INDICATED.

TOPSOIL DEFINITION & APPLICATION

TOPSOIL IS DEFINED AS FRIABLE CLAY LOAM SURFACE SOIL FOUND IN A DEPTH OF NOT LESS THAN FOUR (4") INCHES. TO BE SATISFACTORY, TOPSOIL SHALL BE FREE OF SUBSOIL, CLAY LUMPS, STONES, AND OTHER OBJECTS OVER THREE QUARTER (3/4") INCHES IN DIAMETER, AND WITHOUT WEEDS, ROOTS, AND OTHER OBJECTIONABLE MATERIALS. TOPSOIL SHALL CONTAIN AT LEAST FIVE (5%) PERCENT ORGANIC MATTER DETERMINED BY LOSS ON IGNITION OF MOISTURE FREE SAMPLES DRIED IN ACCORDANCE WITH THE CURRENT METHOD OF THE ASSOCIATION OF OFFICIAL AGRICULTURAL CHEMISTS. THE ACIDITY RANGE SHALL BE PH 5-0 TO PH 7.0 INCLUSIVE. TOPSOIL SHALL ALSO MEET THE REQUIREMENTS OF PENNDOT PUBLICATION 408 SPECIFICATIONS, SECTION 800, INCLUDING ALL SUBSECTIONS, LATEST EDITION.

GRADED AREAS SHOULD BE SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES TO PERMIT BONDING OF THE TOPSOIL TO THE SURFACE AREAS AND TO PROVIDE A ROUGHENED SURFACE TO PREVENT TOPSOIL FROM SLIDING DOWN SLOPE. TOPSOIL SHOULD BE UNIFORMLY DISTRIBUTED ACROSS THE DISTURBED AREA TO A DEPTH OF 4 TO 8 INCHES MINIMUM - 2 INCHES ON FILL OUTSLOPES. SPREADING SHOULD BE DONE IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL PREPARATION OR TILLAGE. IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOIL PLACEMENT SHOULD BE CORRECTED IN ORDER TO PREVENT FORMATION OF DEPRESSIONS UNLESS SUCH DEPRESSIONS ARE PART OF THE PCSM PLAN. TOPSOIL SHOULD NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDED PREPARATION. AREAS WHICH ARE TO BE TOP-SOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES. COMPACTED SOILS SHOULD BE SCARIFIED 6 TO 12 INCHES ALONG CONTOUR WHEREVER POSSIBLE PRIOR TO SEEDING. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING.

CUBIC YARDS OF TOPSOIL REQUIRED FOR APPLICATION TO VARIOUS DEPTHS

DEPTH (IN)	PER 1,000 SQUARE FEET	PER ACRE
1	3.1	134
2	6.2	268
3	9.3	403
4	12.4	537
5	15.5	672
6	18.6	806
7	21.7	940
8	24.8	1,074

SHEET LIST TABLE

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20	CS8501	EROSION & SEDIMENTATION CONTROL NOTES
21	CS8502	EROSION & SEDIMENTATION CONTROL DETAILS

LEGEND:

- PROPERTY LINE
- LEGAL RIGHT-OF-WAY
- APPROXIMATE EXTENT OF ENVIRONMENTAL COVENTANT
- EX CONCRETE MONUMENT
- EX BUILDING
- EX CURB
- EX EDGE OF PAVEMENT
- EX WALL
- EX FENCE LINE
- EX SIGN
- EX LANDSCAPING
- 361 EX MINOR CONTOUR
- 360 EX MAJOR CONTOUR
- D D EX STORM SEWER LINES
- EX UTILITY MANHOLE
- EX STORM SEWER INLET
- EX STORMWATER MANHOLE
- OE OE EX OVERHEAD ELECTRICAL LINES
- UE UE EX UNDERGROUND ELECTRICAL LINES
- EX UTILITY POLE
- LP EX STREET LIGHT
- W W EX WATER LINES
- EX FIRE HYDRANT
- EX WATER VALVE
- S S EX SANITARY SEWER LINES
- EX SANITARY MANHOLE
- C.O. EX SANITARY CLEAN OUT
- G G EX GAS LINES
- EX EXISTING ELECTRIC MANHOLE
- BENCHMARK
- PROPOSED CURB
- PROPOSED DEPRESSED CURB
- PROPOSED RETAINING WALL
- PROPOSED SIGN
- 360 PROPOSED MAJOR CONTOUR
- 361 PROPOSED MINOR CONTOUR
- PROPOSED FENCE
- PROPOSED CONCRETE SIDEWALK
- PROPOSED STORM MANHOLE
- D D PROPOSED STORM SEWER
- TD TD PROPOSED TRENCH DRAIN
- PROPOSED INLET
- PROPOSED LIGHT POLE
- PROPOSED PERVIOUS PAVERS
- PROPOSED MILL AND OVERLAY
- PROPOSED RECONSTRUCTED ROADWAY
- PROPOSED RE-LEVELED COBBLESTONE PAVERS
- UC UC PROPOSED ELECTRICAL CONDUIT - 2 INCH
- HH PROPOSED ELECTRICAL HANDHOLE

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GOOSE CREEK GREEN STORMWATER
205 LACEY STREET
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GENERAL NOTES

WEST CHESTER BOROUGH
401 EAST GAY STREET
WEST CHESTER, PA 19380

BY	REVISIONS	NO.	DATE

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CS0002

SHEET 2 OF 21

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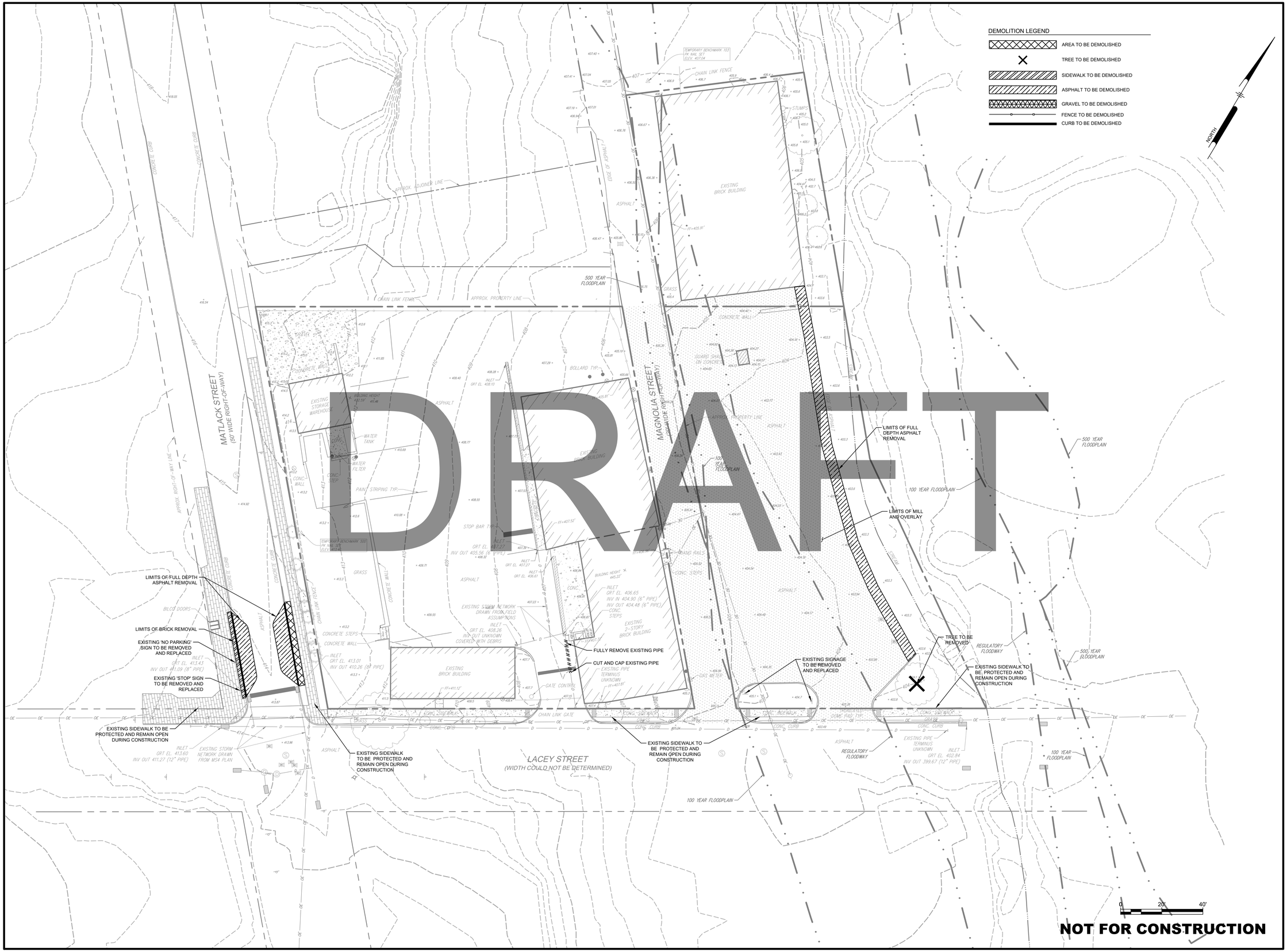

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EXISTING CONDITIONS AND DEMOLITION PLAN

WEST CHESTER BOROUGH
401 EAST GAY STREET
WEST CHESTER, PA 19380

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CS0201

SHEET 3 OF 21

PLOTTED: 6/7/2024 9:35 AM BY: Sturhi Moore PLOTSTYLE: Pennoni PCS.ctb PROJECT STATUS: —
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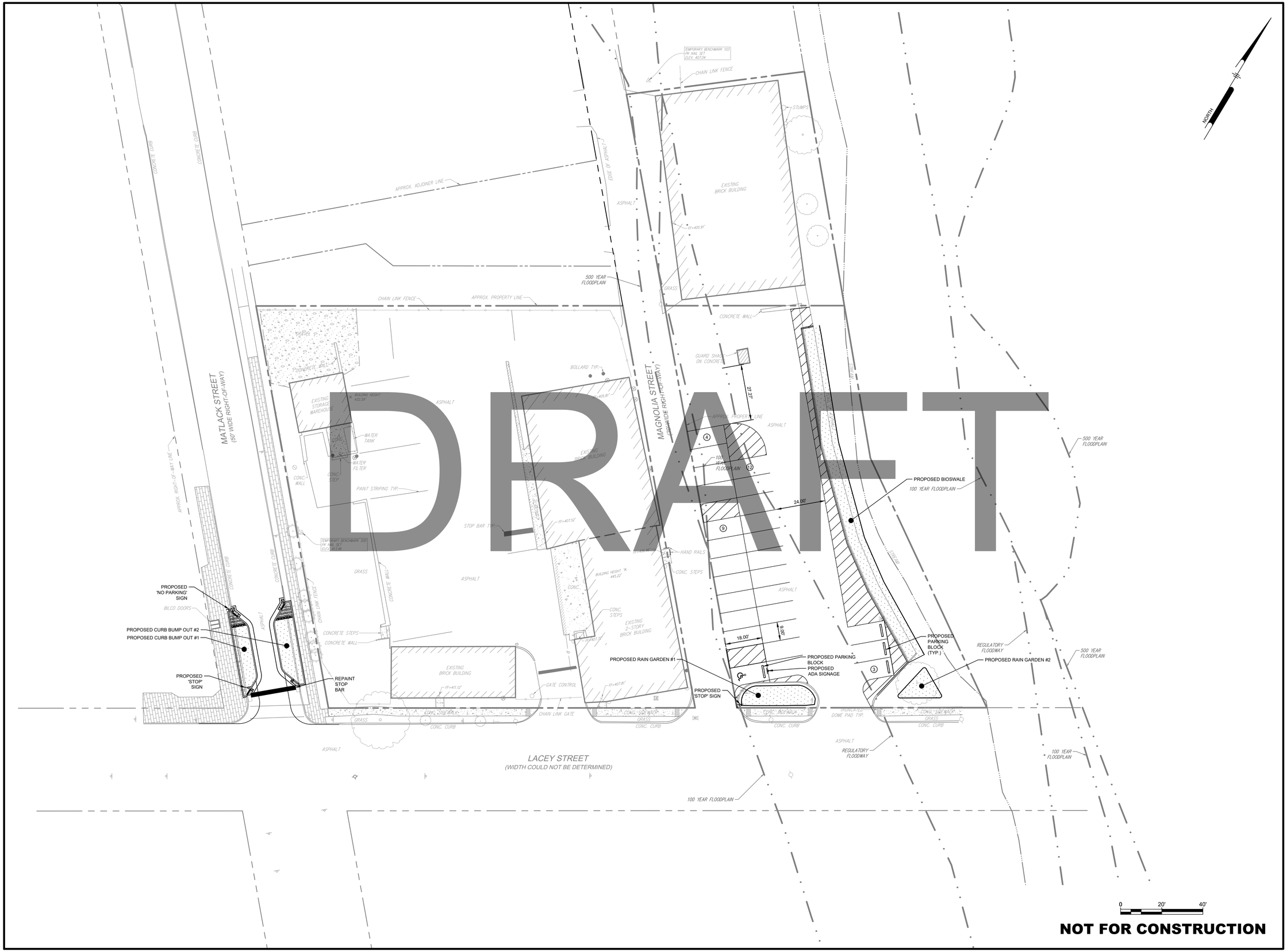

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GOOSE CREEK GREEN STORMWATER

205 LACEY STREET
WEST CHESTER, PA 19382

SITE PLAN

WEST CHESTER BOROUGH
401 EAST GAY STREET
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SHEET 4 OF 21

PROJECT STATUS: —
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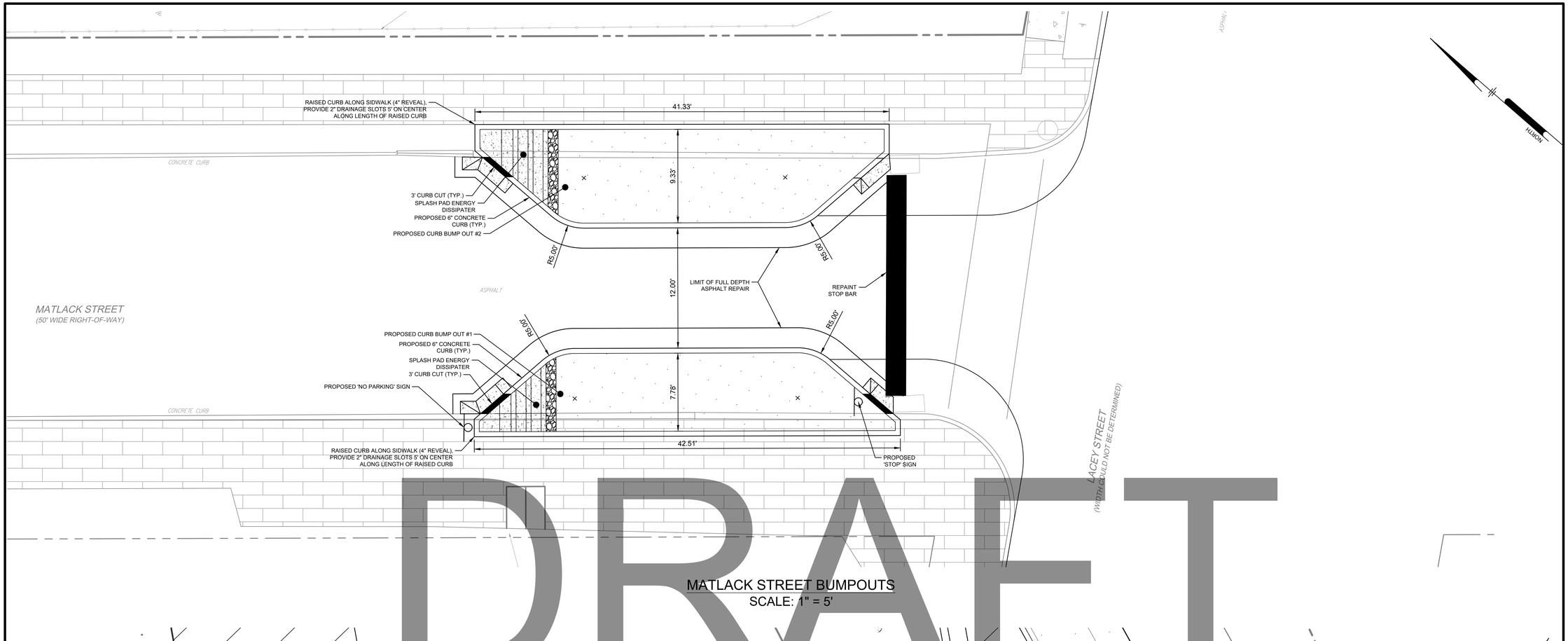

MATLACK STREET BUMPOUTS
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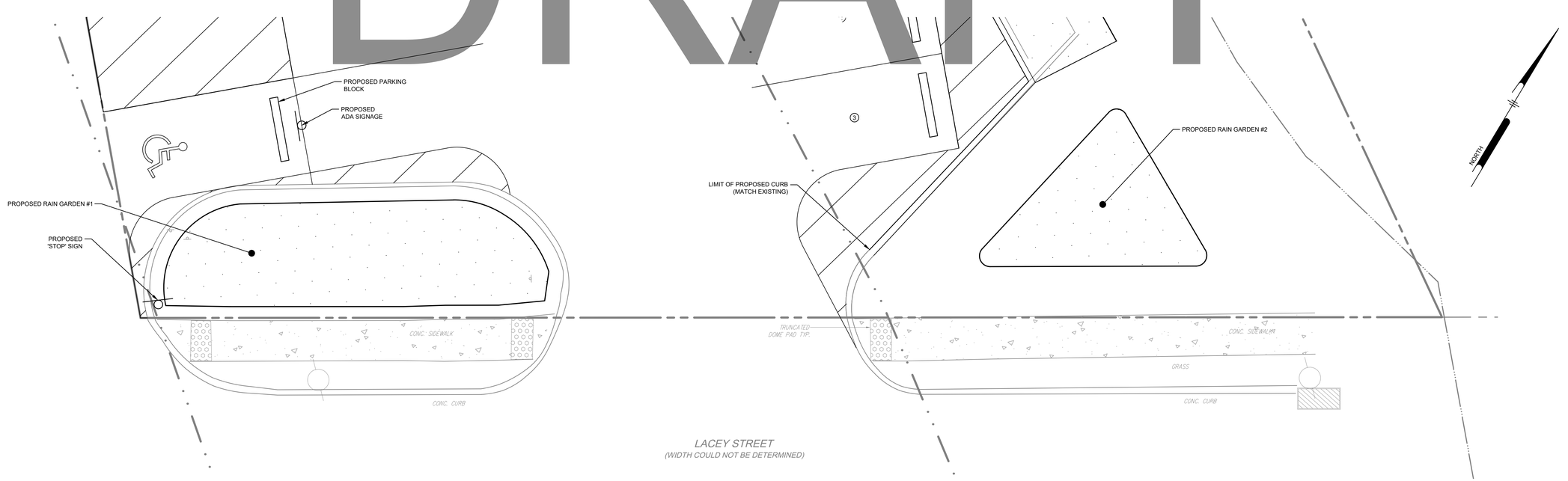

LACEY STREET RAIN GARDENS
SCALE: 1" = 5'

0 5' 10'

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SITE PLAN

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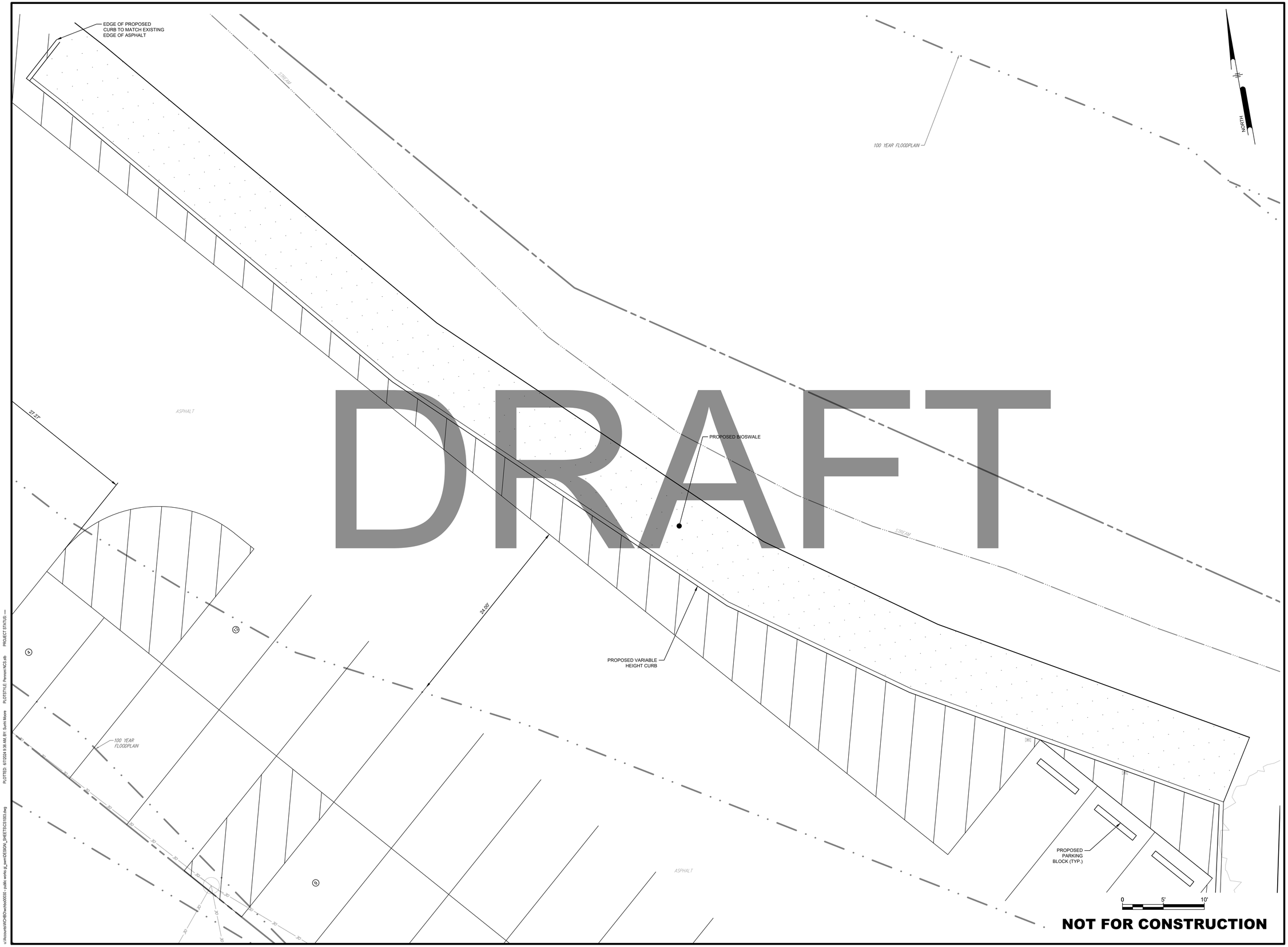

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SHEET 6 OF 21

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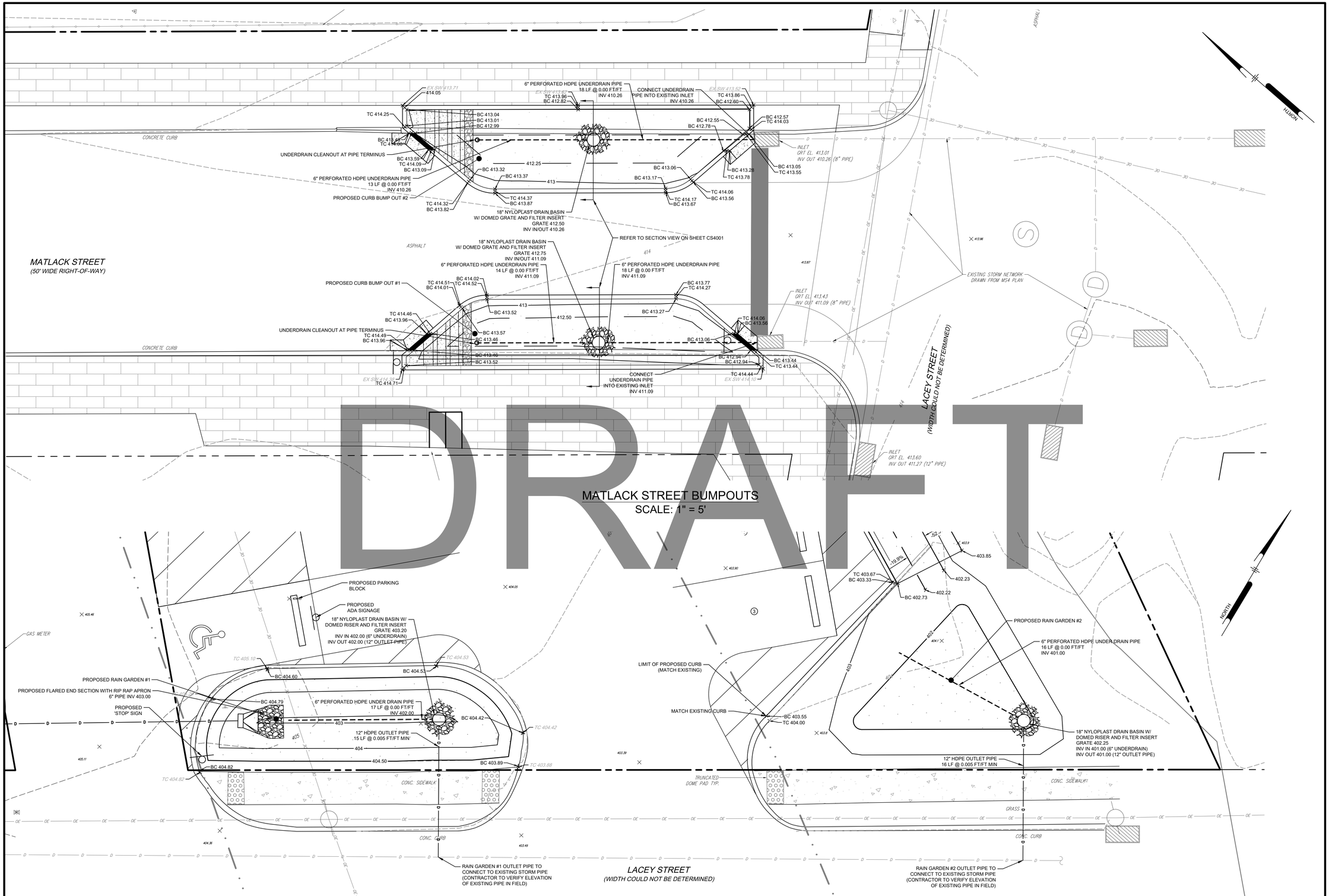

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GRADING & UTILITY PLAN

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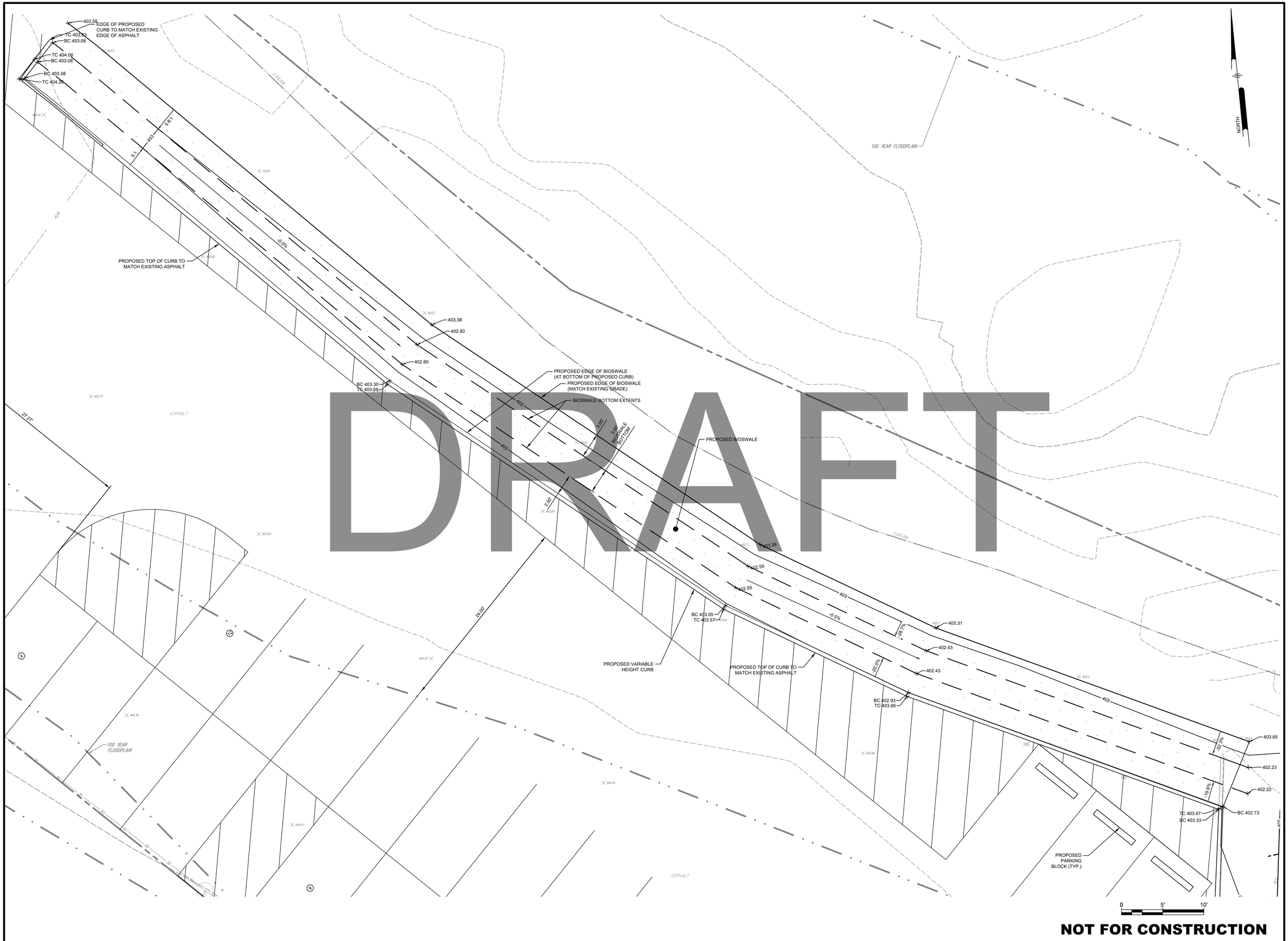

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GRADING & UTILITY PLAN

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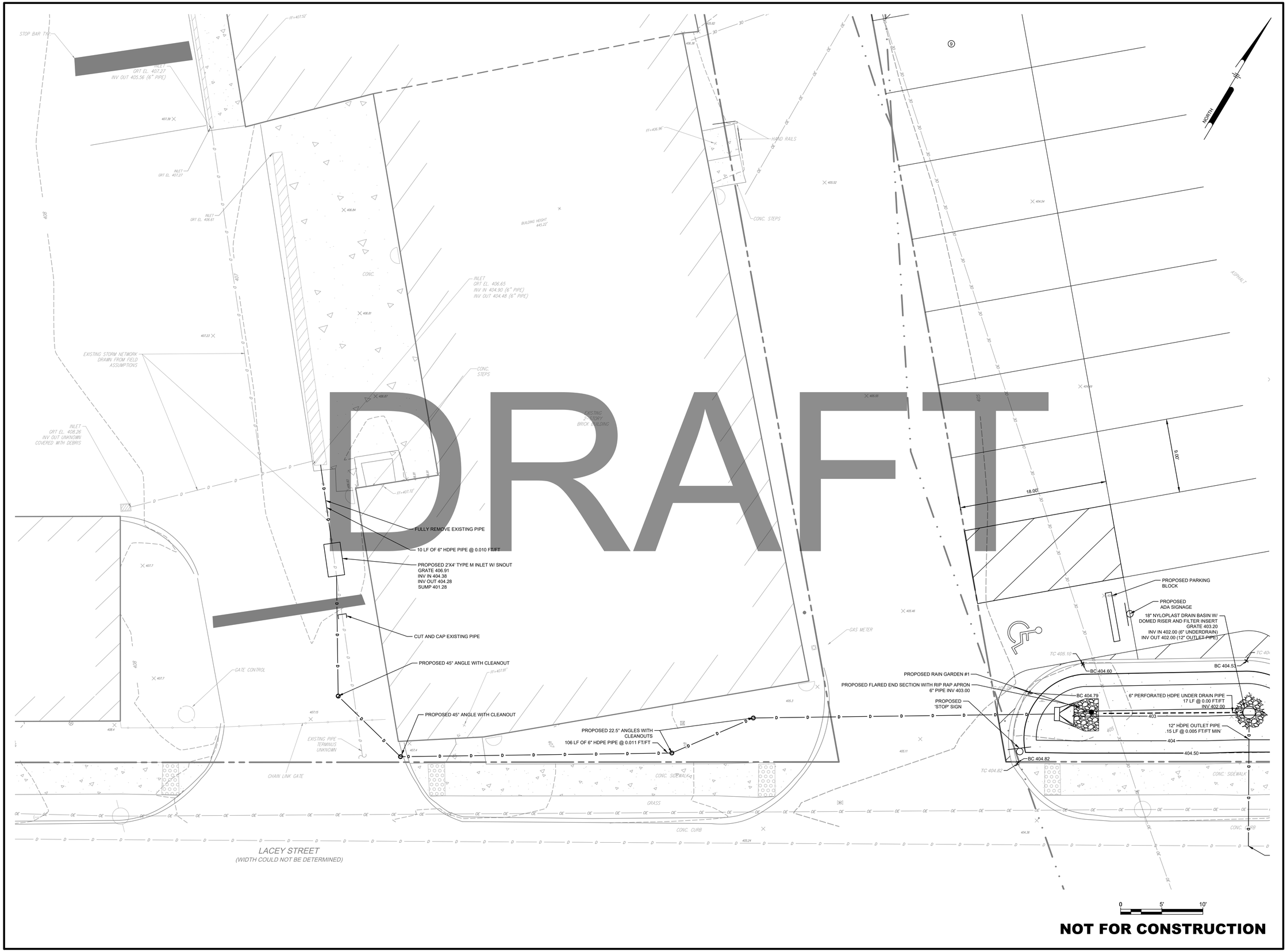

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GOOSE CREEK GREEN STORMWATER

205 LACEY STREET
WEST CHESTER, PA 19382

GRADING & UTILITY PLAN

WEST CHESTER BOROUGH
401 EAST GAY STREET
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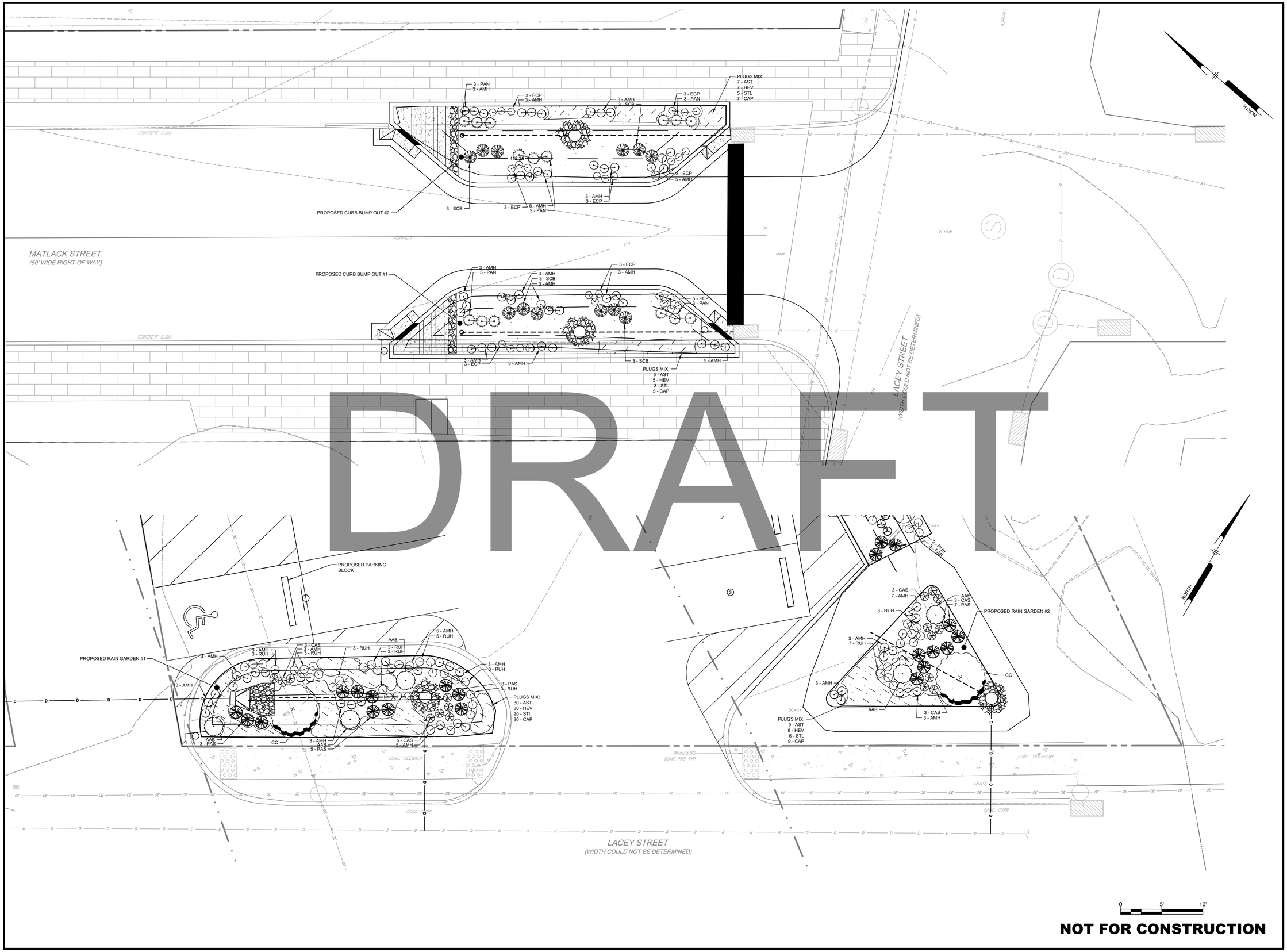
SHEET 9 OF 21



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PROJECT STATUS: —
PLOTSTYLE: Pennoni NCS.stb
PLOTTED: 07/2024 9:37 AM BY: Sumi Moore
u:\Accounts\WCHBO\wchbo00030 – public works gi_pen\DESIGN_SHEETS\CS2001.dwg

Pennoni

PENNONI ASSOCIATES INC.
158 W. Gay Street, Suite 300
West Chester, PA 19380
T 610.429.8907 **F** 610.429.8918

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

GOOSE CREEK GREEN STORMWATER

205 LACEY STREET
WEST CHESTER, PA 19382

LANDSAPING PLAN

WEST CHESTER BOROUGH

401 EAST GAY STREET
WEST CHESTER, PA 19380

NO.	DATE	REVISIONS	BY

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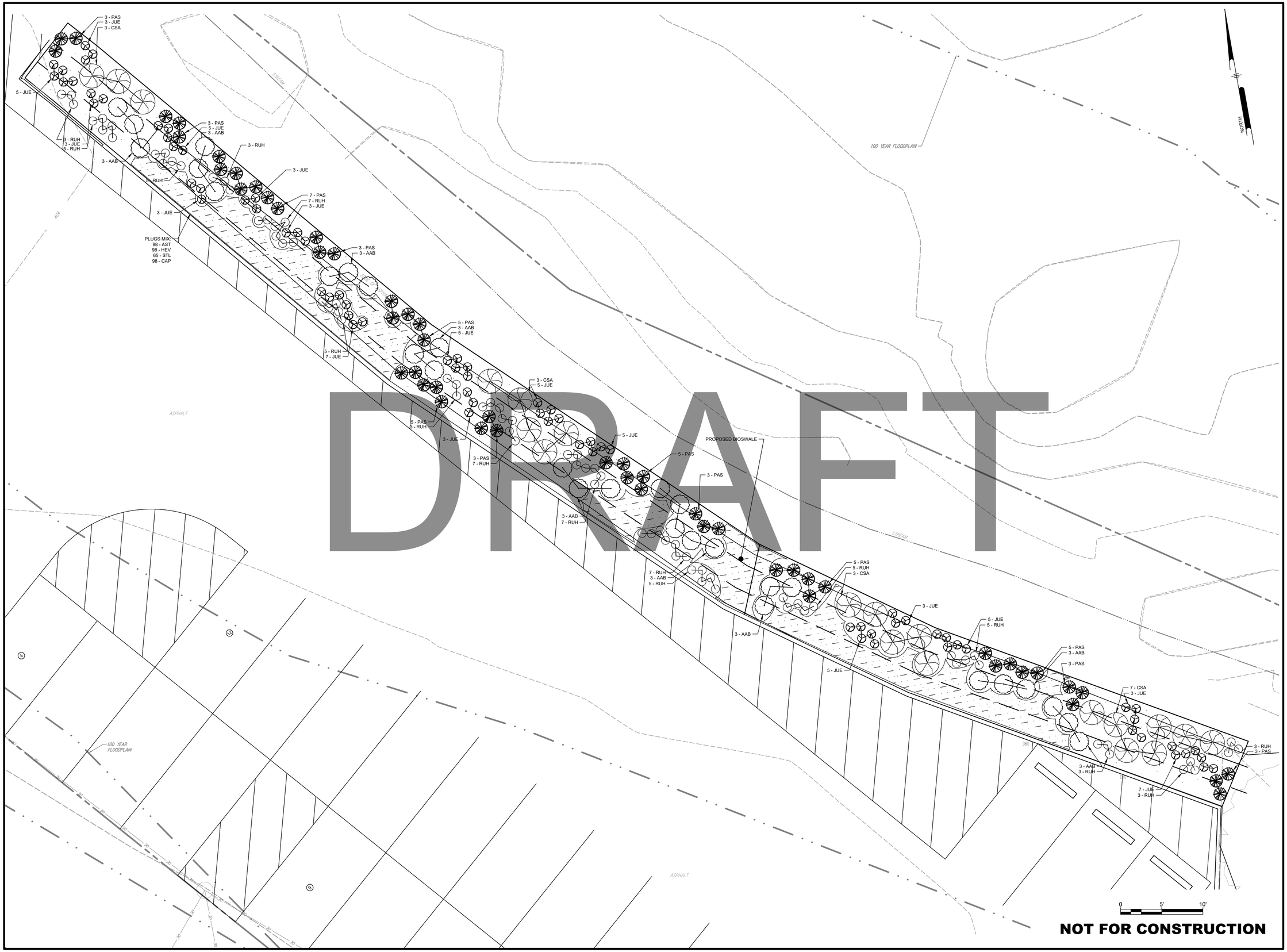
PROJECT	WCHBO00030
DATE	2024-06-07
DRAWING SCALE	1" = 5'
DRAWN BY	AGS
APPROVED BY	CRP

CS2001

SHEET 10 OF 21



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APPROVED BY	CRP

CS2002

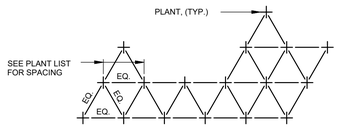
SHEET 11 OF 21

GOOSE CREEK PLANT SCHEDULE

SYMBOL	QTY	ABBR.	BOTANICAL NAME	COMMON NAME	SPACING	SIZE	NOTES
TREES							
	2	CC	CERCIS CANADENSIS	EASTERN REDBUD	AS SHOWN	1.5-2.5" CAL. B&B	
SHRUBS							
	34	AAB	ARONIA ARBUTIFOLIA 'BRILLANTISSIMA'	CHOKEBERRY	AS SHOWN	#3 CONTAINER	
	20	CSA	CORNUS SERICEA 'ARCTIC FIRE'	DWARF REDOSIER DOGWOOD	AS SHOWN	#3 CONTAINER	
PLUGS							
	87	AMH	AMSONIA HUBRICHTII	THREADLEAF BLUESTAR	AS SHOWN	2" PLUGS	
	17	CAS	CAREX STRICTA	UPRIGHT SEDGE	AS SHOWN	2" PLUGS	
	26	ECP	ECHINACEA PURPUREA	PURPLE CONEFLOWER	AS SHOWN	2" PLUGS	
	74	JUE	JUNCUS EFFUSUS	COMMON RUSH	AS SHOWN	2" PLUGS	
	15	PAN	PANICUM VIRGATUM 'HEAVY METAL'	BLUE SWITCHGRASS	AS SHOWN	2" PLUGS	
	85	PAS	PANICUM VIRGATUM 'SHENANDOAH'	SWITCHGRASS	AS SHOWN	2" PLUGS	
	124	RUH	RUDBECKIA HIRTA	BLACK-EYED SUSAN	AS SHOWN	2" PLUGS	
	12	SCB	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM 'THE BLUES'	AS SHOWN	2" PLUGS	
PLUG MIX							
	148	AST	ASCLEPIAS TUBEROSA	BUTTERFLY WEED	AS SHOWN	2" PLUGS	
	148	CAP	CAREX PENSYLVANICA	PENNSYLVANIA HEDGE	AS SHOWN	2" PLUGS	
	98	HEV	HEUCHERA VILLOSA 'CARAMEL'	CORAL BELLS	AS SHOWN	2" PLUGS	
	148	STL	STOKESIA LAEVIS	STOKES ASTER	AS SHOWN	2" PLUGS	

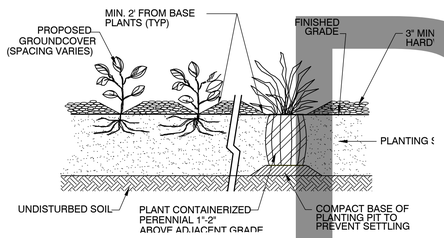
PLANTING NOTES

1. EXISTING TOPSOIL ON SITE MAY BE UNSUITABLE FOR REUSE. CONTRACTOR MUST PROVIDE IMPORTED TOPSOIL OR AMEND EXISTING TOPSOIL TO MEET REQUIREMENTS OUTLINED IN THE SPECIFICATIONS. CONTRACTOR MUST SUBMIT SOIL TEST ANALYSIS REPORT, INCLUDING AMENDMENT RECOMMENDATIONS, FOR EITHER IMPORTED TOPSOIL OR AMENDED EXISTING TOPSOIL. TOPSOIL MUST BE AMENDED AND RETESTED PRIOR TO PLANTING OPERATIONS.
2. ALL PLANT LOCATIONS SHALL BE STAKED IN THE FIELD AND LOCATIONS APPROVED BY LANDSCAPE ARCHITECT PRIOR TO PLANTING.
3. TOPSOIL WITH A QUALITY ORGANIC SOIL AMENDMENT SHALL BE USED FOR ALL PLANTING AND SEEDING OPERATIONS.
4. NOTIFY ALL UTILITY COMPANIES AND LOCATE ALL UTILITIES PRIOR TO EXCAVATING PLANT PITS. PLANT LOCATIONS MAY BE ADJUSTED IN THE FIELD TO AVOID INTERFERENCE WITH UNDERGROUND UTILITIES.
5. SHOULD ANY DISCREPANCY ARISE BETWEEN THE PLANTING PLAN AND THE PLANTING SCHEDULE, THE PLAN SHALL GOVERN AS TO THE QUANTITY OF PLANT MATERIAL.
6. ALL PLANT MATERIAL SHALL BE OF NURSERY STOCK QUALITY AS DEFINED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION. ALL PLANT MATERIAL SHALL BE GUARANTEED TO LIVE AT LEAST 18 MONTHS FOLLOWING INSTALLATION.
7. ALL NON-BIODEGRADABLE ROOT WRAPPING TO BE REMOVED COMPLETELY BEFORE PLANTING.
8. ALL TREES TO BE PRUNED OF SIDE BRANCHES TO A HEIGHT OF 6' ABOVE GRADE EXCEPT WHERE NOTED IN PLANT SCHEDULE.
9. ALL PLANT MATERIAL SHALL BE APPROVED UPON ARRIVAL TO THE SITE, UNLESS OTHERWISE NOTIFIED.
10. PROPOSED PLANT MATERIAL MAY BE SUBSTITUTED BY SIMILAR PLANTS PRIOR TO INSTALLATION, SUBJECT TO APPROVAL BY THE LANDSCAPE ARCHITECT.
11. DISTURBANCE OF EXISTING VEGETATION SHALL BE LIMITED TO WORK AREA CONTRACTOR IS RESPONSIBLE FOR FINE GRADING AND SEEDING ALL DISTURBED AREAS.
12. ALL PLANTS SPACED 7' O.C. OR CLOSER SHALL BE IN CONTINUOUS MULCHED BEDS.
13. SEED ALL DISTURBED AREAS WITH REQUIRED SEED MIX (SEEDING MIX SCHEDULE & SEEDING NOTES).
14. PLANTING SHALL BE DONE APRIL 15TH THRU MAY 31ST OR AUGUST 17TH THRU OCTOBER 15TH.
15. MULCH BEDS WILL BE CREATED AS MULCH ZONES THREE (3) FEET BEYOND THE TREE DRIP LINE. ALL OTHER ARES OF DISTURBANCE SHALL BE SEEDED.



PLANT SPACING DIAGRAM

NOT TO SCALE



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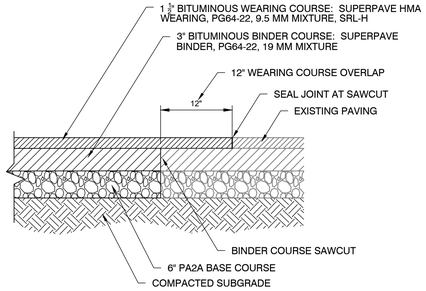
PAVING NOTES:

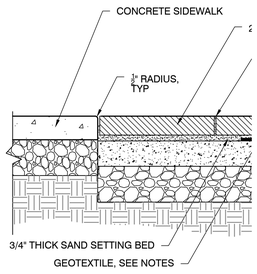
1. PATH LOCATION TO BE STAKED OUT IN THE FIELD BY THE CONTRACTOR, AND LAYOUT APPROVED BY THE ENGINEER PRIOR TO EXCAVATION. PATH LOCATION MAY BE ADJUSTED IN THE FIELD TO AVOID TREES, ETC.
2. NEW PATH MUST BE ADA COMPLIANT. LONGITUDINAL SLOPE MUST NOT EXCEED 5%. CROSS SLOPE MUST NOT EXCEED 2%.
3. FINISH GRADE LAWN AREA ADJACENT TO NEW PATH SO THAT FINISHED GRADE OF SOIL, AFTER SETTLEMENT, IS FLUSH WITH FINISHED GRADE OF TRAIL. LIGHTLY COMPACT TOPSOIL ALONG EDGE OF PATH TO ENSURE PROPER FINISHED GRADE BEFORE SEEDING.
4. PROVIDE 12" WIDE WEARING COURSE OVERLAP WHERE NEW PAVING MEETS EXISTING. SEAL ALL JOINTS WITH 4" WIDE HOT LIQUID ASPHALT SEALER PER SPECIFICATION. TRANSITION BETWEEN OLD AND NEW PAVING TO BE FLUSH AND SMOOTH.



HALT TRAIL PAVING

CONCRETE UNIT PAVER NOTES:

1. UNIT PAVERS TO BE 6" x 24" x 2⅜" THICK (NOMINA ARCHITECTURAL PRODUCTS.
   - COLOR: QUARRY RED
   - FINISH: TUDOR FINISH
   - PATTERN: STAGGERED RUNNING BOND PATTI
2. PAVERS TO HAVE HAND TIGHT JOINTS. SWEEP
3. 2" DIA. WEEPHOLE MAY BE FORMED IN SLAB OR SPACED 48" O.C. AND AT ALL LOW POINTS. INST TO FILLING, AND 12" SQUARE PIECE OF GEOTE
4. WHERE PAVERS ABUT LAWN AREA INSTALL A HE FOR PAVERS, INSTALLED PER MANUFACTURE
5. SEE SPECIFICATIONS FOR MORE INFORMATION



PAVERS AT WELCOME NODE

DDED MULCH.

X

NOTES:

SET PLANTS PLUMB AND FACE TO GIVE BEST APPEARANCE TO ADJACENT AREAS.

PRUNE ONLY TO REMOVE DEAD OR DAMAGED BRANCHES.

REMOVE EXCESS SOIL FROM TOP OF ROOT BALL AND SET TOP OF ROOT BALL AT FINISHED GRADE OR 1" TO 2" ABOVE IN POORLY DRAINED SOILS

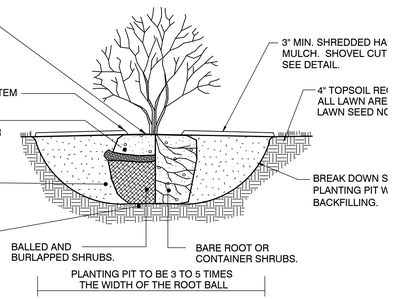
KEEP MULCH 3" AWAY FROM MAIN STEM

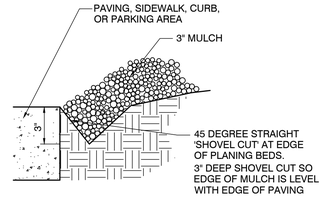
REMOVE BURLAP FROM TOP 1/2 OF ROOT BALL, OR WITH CONTAINER PLANTS REMOVE POTS AND SPLIT BALLS AS SPECIFIED.

PLANTING MIX, SEE SPECIFICATIONS. WATER THOROUGHLY TO ELIMINATE AIR POCKETS.

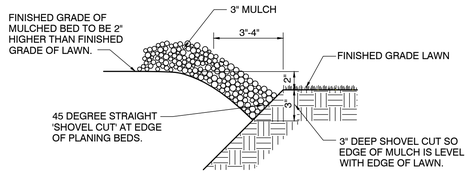
PLANT TO PLACED ON UNDISTURBED SUBGRADE

USE DIGGING FORK NOT SPADE TO PREVENT GLAZING OF PIT EDGES.





TYPICAL EDGE - MULCH TO PAVING



TYPICAL EDGE - MULCH TO LAWN

TYPICAL MULCH EDGES

ASP

0 20' 40'

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GOOSE CREEK GREEN STORMWATER

205 LACEY STREET
WEST CHESTER, PA 19382

LANDSCAPING NOTES AND DETAILS

WEST CHESTER BOROUGH
401 EAST GAY STREET
WEST CHESTER, PA 19380

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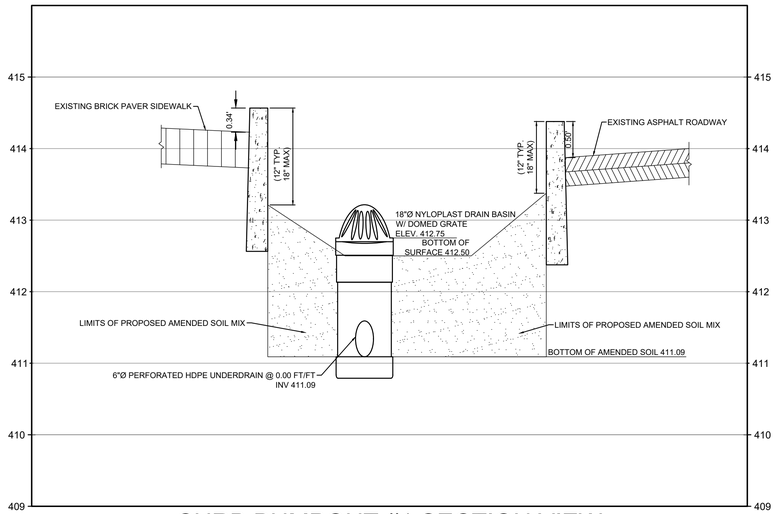
PROJECT	WCHBO00030
DATE	2024-06-07
DRAWING SCALE	N.T.S.
DRAWN BY	AGS
APPROVED BY	CRP

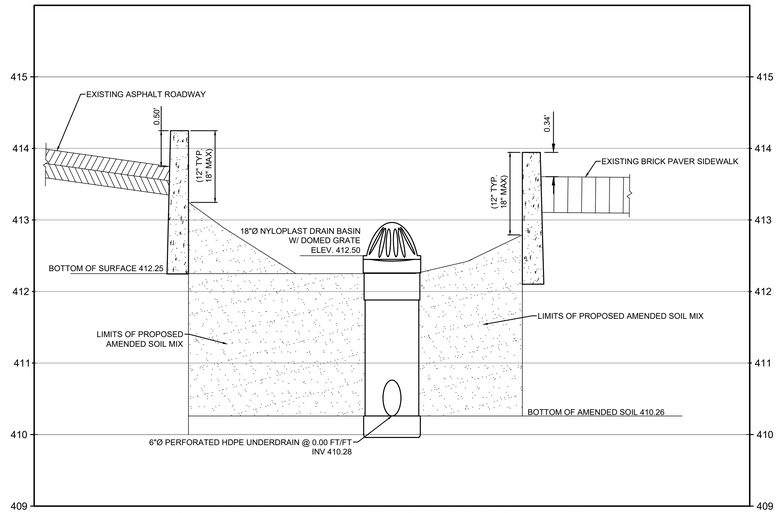
CS2003

SHEET 12 OF 21

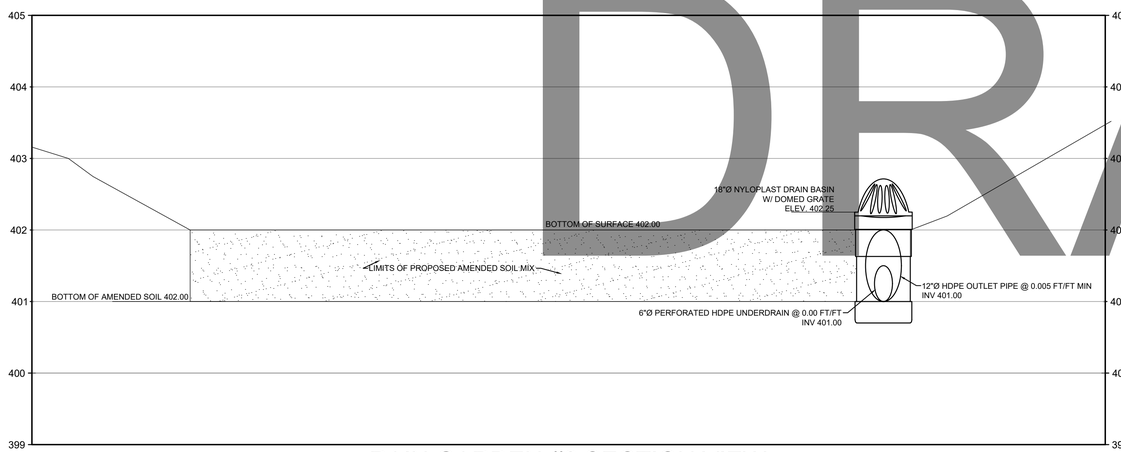
u:\Accounts\WCHBO\workbo00030 - public works sg_pwm\ZDESIGN_SHEETS\CS2003.dwg PLOTTED: 6/7/2024 3:39 AM BY: Sumi Moore PLOTSTYLE: Pennoni WCS.ctb PROJECT STATUS: —



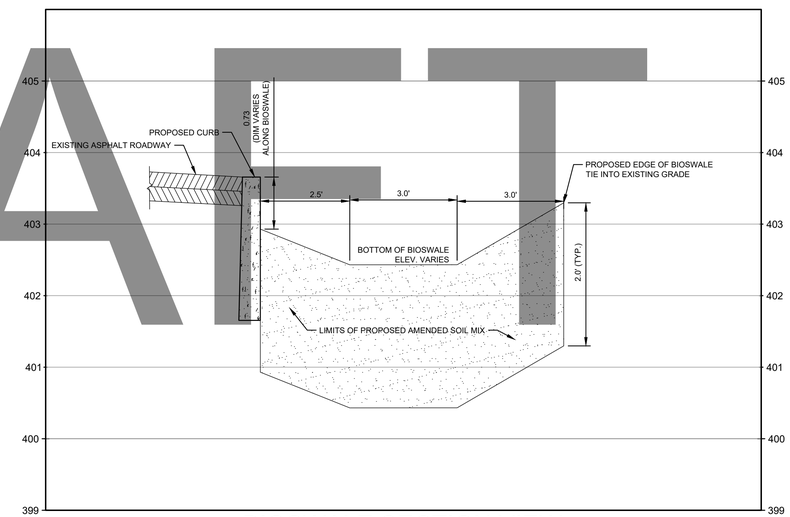
CURB BUMPOUT #1 SECTION VIEW



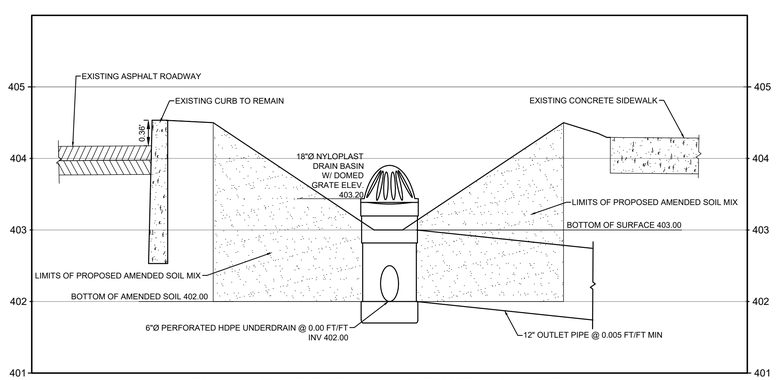
CURB BUMP OUT #2 SECTION VIEW



RAIN GARDEN #2 SECTION VIEW



BIOSWALE SECTION VIEW



RAIN GARDEN #1 SECTION VIEW

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SECTION VIEW HORIZONTAL SCALE: 1" = 2'

SECTION VIEW VERTICAL SCALE: 1" = 1'

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205 LACEY STREET
WEST CHESTER, PA 19382

SECTION VIEWS

WEST CHESTER BOROUGH
401 EAST GAY STREET
WEST CHESTER, PA 19380

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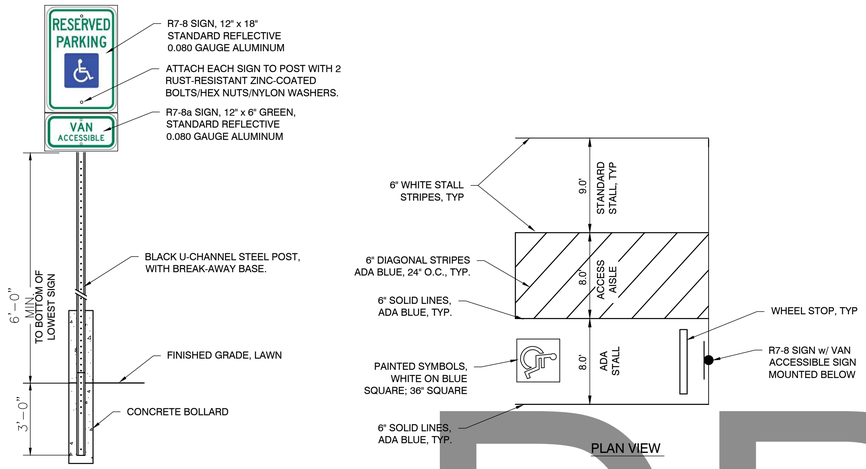
DATE	2024-06-07
DRAWING SCALE	1" = 2' (H) | 1" = 1' (V)
DRAWN BY	AGS
APPROVED BY	CRP

CS4001

SHEET 13 OF 21

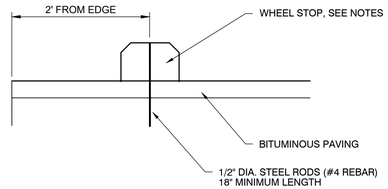
I:\Accounts\WCHBO\wchbo00030 - public works\g_pw\CS\SIGN_SHEETS\CS4001.dwg PLOTTED: 6/7/2024 9:39 AM BY: Sumi Moore PLOTSTYLE: Pennoni NCS.stb PROJECT STATUS: —



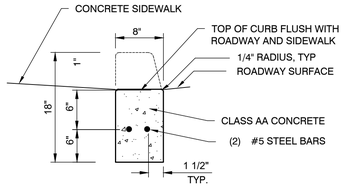
ADA PARKING STALL STRIPING AND SIGNAGE
N.T.S.

WHEEL STOP NOTES:

1. RECYCLED PLASTIC OR RUBBER WHEEL STOPS, 6' LENGTH x 4" HEIGHT x 6" WIDTH.
2. INSTALL WHEEL STOP IN CENTER OF PARKING STALL.
3. INSTALL MINIMUM 3 ANCHOR RODS PER STOP. COUNTERSINK ANCHOR RODS TO 1" BELOW TOP OF STOP.



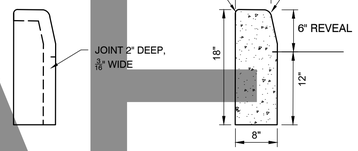
WHEEL STOP
N.T.S.



FLUSH CURB

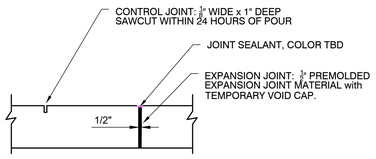
CURB AND SIDEWALK NOTES:

1. CURB AND SIDEWALK MUST MEET ADA REQUIREMENTS. NOTIFY ENGINEER BEFORE CONSTRUCTION OF CURB AND SIDEWALKS IF SLOPES INDICATED CANNOT BE MET.
2. DEPRESSED CURB TO BE FLUSH WITH PARKING LOT PAVING (NO REVEAL).
3. SIDEWALK TO SLOPE TOWARD PARKING AREA FOR A DISTANCE OF 6'. MAXIMUM SLOPE 4.8% (NOT A CURB RAMP). SEE GRADING PLAN.
4. MAXIMUM LONGITUDINAL SLOPE ON ALL SIDEWALKS 4.8%; MAXIMUM CROSS SLOPE 1.8%.
5. PAVEMENT WITH SLOPES THAT EXCEED THE MAXIMUM ALLOWED TO MEET ADA REQUIREMENTS WILL NOT BE ACCEPTED AND SHALL BE RECONSTRUCTED BY CONTRACTOR.
6. DETECTABLE WARNING SURFACE TO BE 48" x 24" CAST IN PLACE DETECTABLE WARNING PANELS, AS MANUFACTURED BY ADA SOLUTIONS OR APPROVED EQUAL. COLOR: BLUE. 12' WIDE DETECTABLE WARNING PANELS TO ALIGN WITH DEPRESSED CURB.



CONTRACTION JOINT TYPICAL CROSS SECTION

CONCRETE CURB
N.T.S.



SIDEWALK JOINTS

JOINTING NOTES:

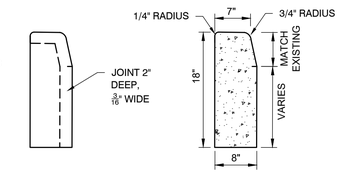
1. SEE LAYOUT PLAN FOR SCORING PATTERNS AND EXPANSION JOINT LOCATIONS. 30' MAXIMUM SPACING BETWEEN EXPANSION JOINTS. JOINT LOCATIONS MAY TO ADJUSTED IN FIELD TO PROVIDE EQUAL DISTANCES BETWEEN JOINTS, WITH APPROVAL OF ENGINEER.
2. PLACE EXPANSION JOINTS AT LOCATIONS AS SHOWN ON PLAN AND WHERE SIDEWALK MEETS A CURB, RAMP, SOLID OBJECT OR STRUCTURE.
3. CAULK ALL JOINTS WITH A MULTI-COMPONENT SELF-LEVELING POLYURETHANE SEALANT.

CONCRETE NOTES:

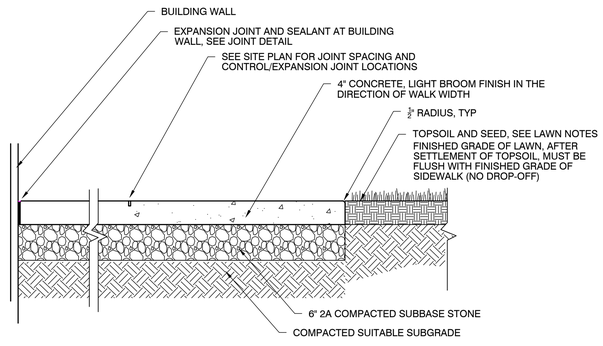
1. ALL CONCRETE SHALL BE 4,000 PSI AT 28 DAYS.
2. PROVIDE MATERIALS AND CONSTRUCTION IN ACCORDANCE WITH PENNDOT PUBLICATION 408.
3. SEE DETAIL FOR EXPANSION AND CONTROL JOINTS.
4. THE SIDEWALK CROSS SLOPE MUST BE BETWEEN 1.0% MINIMUM AND 2.0% MAXIMUM.

CURB NOTES:

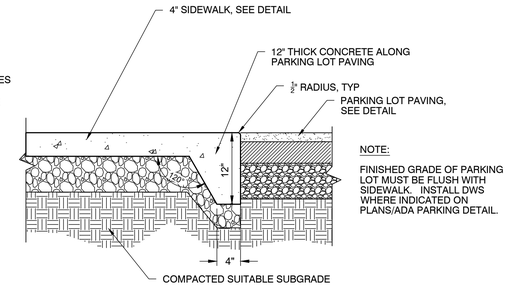
1. CURB REVEAL TO MATCH EXISTING UNLESS NOTED OTHERWISE ON GRADING PLAN.
2. PROVIDE CONTRACTION JOINT AT 10' INTERVALS BETWEEN EXPANSION JOINTS.
3. PROVIDE EXPANSION JOINTS BETWEEN CURB SECTIONS AT 50' INTERVALS, AT POINTS OF CURVATURE/TANGENTS, AND WHERE CURB MEETS AN EXISTING OBJECT. JOINT MATERIAL TO BE CUT TO MATCH PROFILE OF CURB.



CONTRACTION JOINT TYPICAL CROSS SECTION



TYPICAL SIDEWALK SECTION

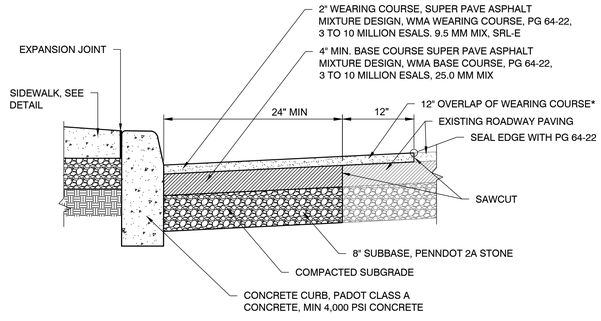


NOTE:

FINISHED GRADE OF PARKING LOT MUST BE FLUSH WITH SIDEWALK. INSTALL DWS WHERE INDICATED ON PLANS/ADA PARKING DETAIL.

TYPICAL SIDEWALK EDGE ADJACENT TO PARKING LOT (NO CURB)

CONCRETE SIDEWALK
N.T.S.



CONCRETE CURB and ROADWAY RESTORATION
N.T.S.

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PENNONI ASSOCIATES INC.
158 W. Gay Street, Suite 300
West Chester, PA 19380
T 610.429.8907 F 610.429.8918

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GOOSE CREEK GREEN STORMWATER
205 LACEY STREET
WEST CHESTER, PA 19382

CONSTRUCTION DETAILS

WEST CHESTER BOROUGH
401 EAST GAY STREET
WEST CHESTER, PA 19380

NO.	DATE	REVISIONS	BY

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PROJECT	WCHBO00030
DATE	2024-06-07
DRAWING SCALE	N.T.S.
DRAWN BY	AGS
APPROVED BY	CRP

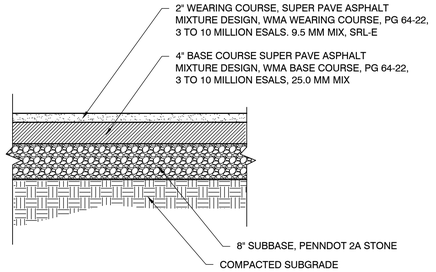
CS6001

SHEET 14 OF 21

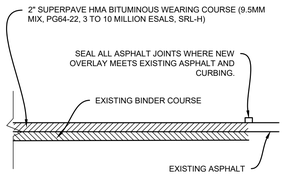
v:\Accounts\WCHBO\working\00030 - public works gi_jsm\DESIGN_SHEETS\CS6001.dwg PLOTTED: 6/7/2024 9:39 AM, BY: Sumi Moore PLOTSTYLE: Pennoni MCS.ctb PROJECT STATUS: —

PAVING NOTES

1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PADOT PUBLICATION 408, SECTIONS 210, 305, 320 AND 401, RESPECTIVELY, FOR SUBGRADE, AGGREGATE, AND FLEXIBLE PAVEMENT.
2. MODIFICATIONS TO THE PAVING THICKNESS AND MATERIALS MUST BE APPROVED BY THE MUNICIPAL ENGINEER BASED ON FIELD CONDITIONS.



BITUMINOUS DRIVE AND PARKING LOT PAVING
N.T.S.

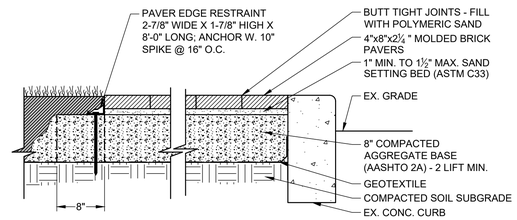


NOTE: THIS PAVING SECTION TO BE USED FOR ALL MILL AND OVERLAY SECTIONS, AS REQUIRED DURING CONSTRUCTION.

PAVING NOTES

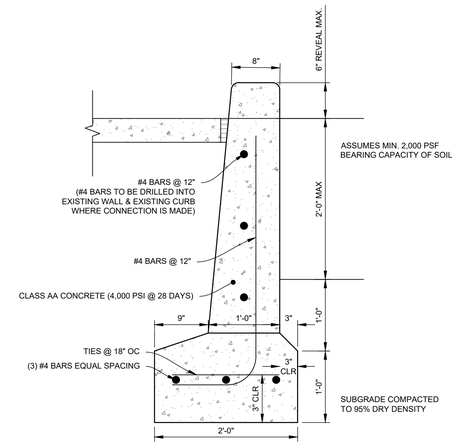
1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS FOR PADOT PUBLICATION 408, SECTION 210, 305, 320 AND 401, RESPECTIVELY, FOR SUBGRADE, AGGREGATE, AND FLEXIBLE PAVEMENT
2. MODIFICATIONS TO THE PAVING THICKNESS AND MATERIALS MUST BE APPROVED BY THE MUNICIPAL ENGINEER BASED UPON FIELD CONDITIONS.

MILL & OVERLAY SECTION
N.T.S.



NOTE:
1. PROVIDE PAVER EDGE RESTRAINT WHERE PAVERS DO NOT ABUT A FIRM VERTICAL SURFACE SUCH AS CONCRETE OR FACE OF BUILDING

BRICK PAVING
N.T.S.



TYPICAL EXTENDED CONCRETE CURB
N.T.S.

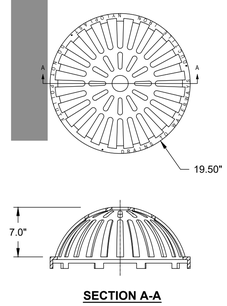
NOTES:
1. PROVIDE TRENCH SUPPORT SYSTEM AS REQUIRED FOR EXCAVATION PROTECTION AND TO ALLOW FOR REQUIRED COMPACTION.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING TRENCHES, IF REQUIRED, BEFORE PLACEMENT OR BEDDING MATERIAL.
3. BACKFILL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST (ASTMD-1557).
4. TERMINATE TRACER WIRE IN COPPERHEAD INDUSTRIES SNAKEPIT LITE DUTY ACCESS POINTS, OR EQUAL. PROVIDE MINIMUM ONE (1) GROUND ROD.

KEY:
Bc = OUTSIDE DIAMETER OF PIPE
D = INSIDE DIAMETER OF PIPE
d = 6" MIN.
e = 12" MIN.
f = 8" MIN. - 24" D AND SMALLER = 12" MIN. -> 24" D
g = Bc + 16" MIN. - 24" D AND SMALLER = Bc + 24" MIN. -> 24" D

TYPICAL PIPE TRENCH RESTORATION AND BACKFILL FOR PAVED AREAS
NTS

1. GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05, WITH THE EXCEPTION OF THE BRONZE GRATE.
2. FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
3. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065 FROM ADS
4. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER.
5. ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012 FROM ADS.

TYPICAL DRAIN BASIN ASSEMBLY



SECTION A-A

1. DIMENSIONS ARE FOR REFERENCE ONLY ACTUAL DIMENSIONS MAY VARY
2. GRATE MEETS H-20 LOAD RATING
3. QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
4. PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
5. LOCKING DEVICE AVAILABLE UPON REQUEST SEE DRAWING NO. 7001-110-215 FROM ADS

18 DOMED GRATE

18" NYLOPLAST DRAIN BASIN
N.T.S.

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CONSTRUCTION DETAILS

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NO.	DATE	REVISIONS	BY

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PROJECT	WCHBO00030
DATE	2024-06-07
DRAWING SCALE	N.T.S.
DRAWN BY	AGS
APPROVED BY	CRP

CS6002

SHEET 15 OF 21

PLOTTED: 6/7/2024 8:40 AM BY: Sumi Moore PLOTSTYLE: Pennoni NCS.stb PROJECT STATUS: —
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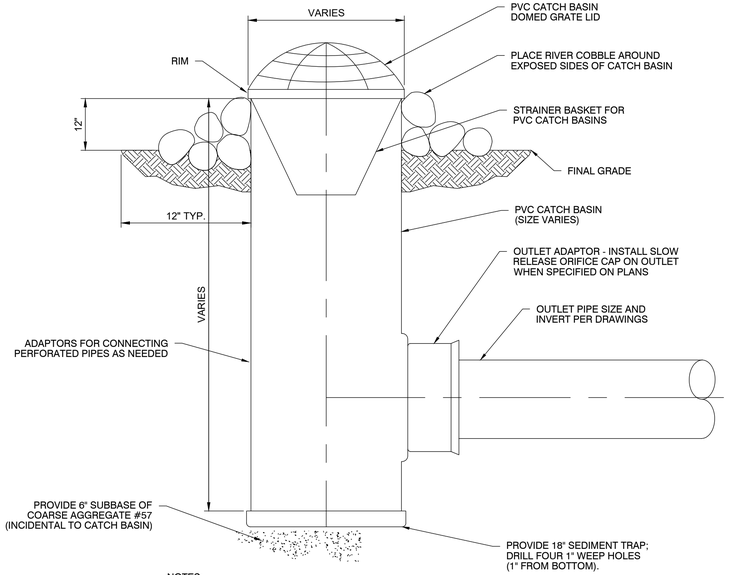
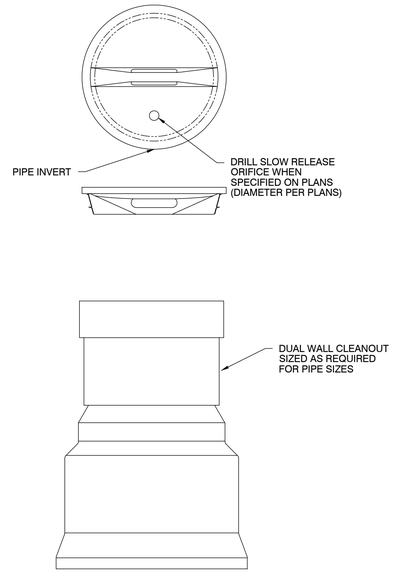


NOTES:

1. BASE AND BACKFILL SHALL BE HAND PLACED AND TAMPED IN 6" LIFTS. PLACE ALL CATCH BASINS ON 6" THICK AGGREGATE LEVELING COURSE ON COMPACTED SUBGRADE.
2. SEE DRAWINGS FOR RIM AND INVERT ELEVATIONS.

PVC CATCH BASIN W/ DOMED GRATE

N.T.S.



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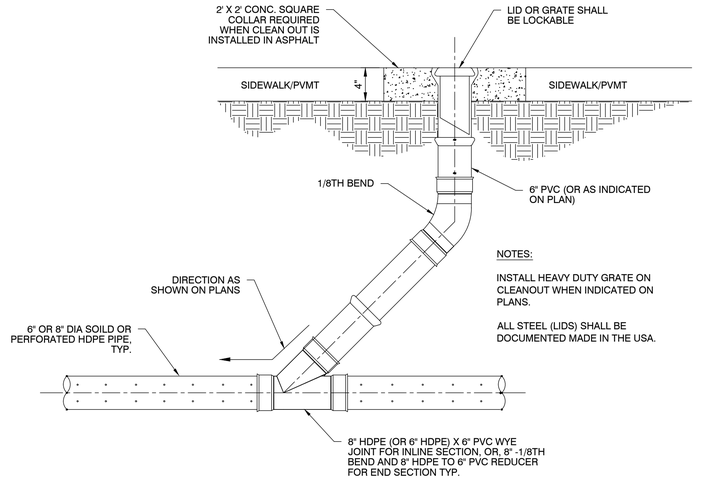


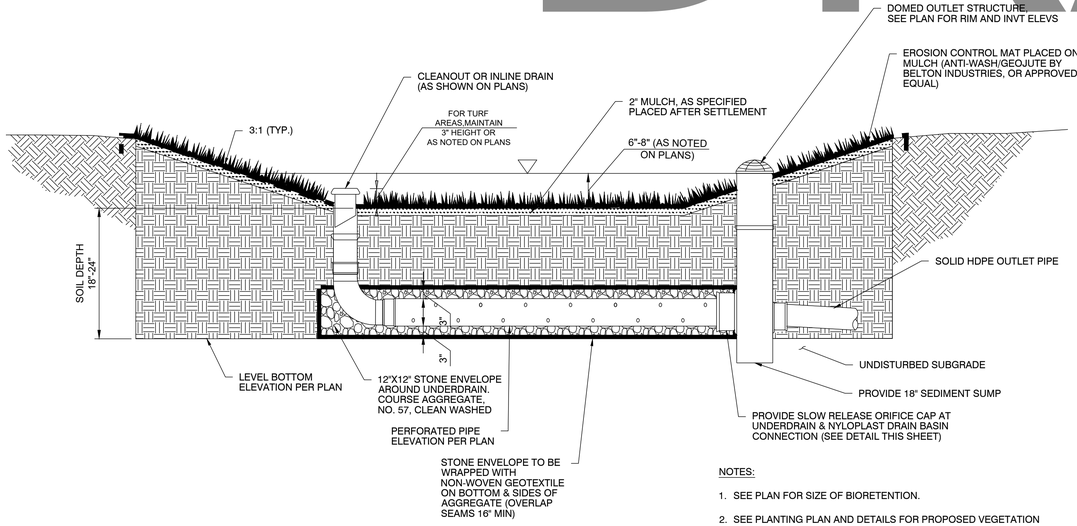
NOTES:

INSTALL HEAVY DUTY GRATE ON CLEANOUT WHEN INDICATED ON PLANS.

ALL STEEL (LIDS) SHALL BE DOCUMENTED MADE IN THE USA.

CLEANOUT, SOLID LID IN PAVED AREAS AND SOLID LID IN NON-PAVED AREAS

N.T.S.



NOTES:

1. SEE PLAN FOR SIZE OF BIORETENTION.
2. SEE PLANTING PLAN AND DETAILS FOR PROPOSED VEGETATION WITHIN BIORETENTION AREAS.

BIORETENTION

N.T.S.

RAIN GARDEN AREA CONSTRUCTION NOTES:

1. ALL CONSTRUCTION ACTIVITIES FOR THE BIO-RETENTION AREA SHOULD OCCUR WITHIN A SHORT TIME PERIOD TO ENSURE THAT SILT AND SEDIMENT DO NOT ENTER THE TRENCH.
2. APPROPRIATE MEASURES ARE TO BE TAKEN IN THE EVENT OF SEDIMENT ENTERING AND CLOGGING THE BIO-RETENTION AREA. SHOULD UNFAVORABLE CONDITIONS (I.E. GROUNDWATER AND/OR BEDROCK, ETC.) BE ENCOUNTERED DURING THE CONSTRUCTION PROCESS OF THE BIO RETENTION AREA, THE DESIGN ENGINEER SHOULD BE CONTACTED TO ADDRESS SUCH ISSUES.
3. IF INSPECTION INDICATES THAT SOIL OR SEDIMENT HAS ENTERED ANY OF THE BIO RETENTION AREA, APPROPRIATE MEASURES (I.E. CLEARING THE SOIL SEDIMENT FROM BIO RETENTION AREAS) SHOULD BE ADDRESSED.
4. PRIOR TO STONE AGGREGATE AND SOIL MIX BACKFILLING, THE BASIN EXCAVATION SHALL BE LINED WITH A PERMEABLE GEO-FABRIC LINER MEETING THE FOLLOWING SPECIFICATIONS, PER THE LATEST EDITION OF THE PA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S BEST MANAGEMENT PRACTICES MANUAL.

   NON-WOVEN GEOTEXTILE FABRIC:
   NEEDLED NON-WOVEN POLYPROPYLENE FIBERS MEETING THE FOLLOWING PROPERTIES:
   a. GRAB TENSILE STRENGTH (ASTM-D4632)>=120lbs
   b. MULLEN BURST STRENGTH (ASTM-D3786)>=225lbs
   c. FLOW RATE (ASTM-D4491) >=95gal/min/sf
   d. UV RESISTANCE AFTER 500 HRS (ASTM-D4355)>=70%
   e. HEAT-SET OR HEAT-CALENDARED FABRICS ORE NOT PERMITTED. ACCEPTABLE TYPES INCLUDE MIRAFI 140N, AMOCO 4547, AND GEOTEX 451.
5. RAIN GARDEN SOIL SPECIFICATIONS:
   a. THE RAINGARDEN SOIL MIXTURE SHALL BE A MIXTURE OF PLANTING SOIL, MULCH, AND SAND. THE MIXTURE SHALL CONFORM TO THE FOLLOWING:
      a.a. PLANTING SOIL 30% BY VOLUME
      a.b. DOUBLE SHREDDED HARDWOOD MULCH 20% BY VOLUME
      a.c. SAND 50% BY VOLUME
   b. THE PLANTING SOIL MIXTURE SHALL BE CLASSIFIED AS A SANDY LOAM, LOAMYSAND, OR LOAM (USDA) AND HAVE THE FOLLOWING CHARACTERISTICS:
      b.a. PH RANGE 5.5 TO 7.5
      b.b. ORGANIC MATTER 1.5 TO 7.0%
      b.c. MAGNESIUM 32 PPM (MINIMUM)
      b.d. PHOSPHORUS (P205) <= 69 PPM
      b.e. POTASSIUM (K20) 78 PPM (MINIMUM)
      b.f. SOLUBLE SALTS <= 500 PPM
      b.g. CLAY 10 TO 20%
      b.h. SILT 0 TO 50%
      b.i. SAND 50 TO 85%
      b.j. ORGANIC MATTER 1.5 TO 10%
      b.k. INFILTRATION RATE MIN. 0.1 IN./HR.
   c. THE RAIN GARDEN SOIL MIXTURE SHALL BE FREE OF STONES, INORGANIC MATERIAL, STUMPS, ROOTS, OR OTHER WOODY MATERIAL (EXCLUDING MULCH) OVER 1" IN DIAMETER.
6. AREAS WITH HIGHLY PERMEABLE MATERIALS, SHALL BE REPLACED WITH AMENDED SOIL OF USTA SAND LOAM.
   a. CLAY >= 7% AND CLAY < 20% AND SAND > 52% AND SILT + 2 * CLAY >= 30%
      OR
   b. CLAY < 7% AND SILT < 50% AND SILT + 2 * CLAY >= 30%)
7. CLEAN WASHED STONE IS DEFINED AS HAVING LESS THAN 0.5% WASH LOSS, BY MASS, WHEN TESTED PER THE AASHTO T-11 WASH LOSS TEST
8. ALL JOINTS SHALL BE INSTALLED SO AS TO BE WATERTIGHT.

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PENNONI ASSOCIATES INC.
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T 610.429.8907 F 610.429.8918

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WEST CHESTER, PA 19382

CONSTRUCTION DETAILS

WEST CHESTER BOROUGH
401 EAST GAY STREET
WEST CHESTER, PA 19380

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PROJECT	WCHBO00030
DATE	2024-06-07
DRAWING SCALE	N.T.S.
DRAWN BY	AGS
APPROVED BY	CRP

CS6003

SHEET 16 OF 21

PLOTTED: 6/7/2024 8:40 AM, BY: Sumi Manne PLOTSTYLE: Pennoni WCS.stb PROJECT STATUS: —

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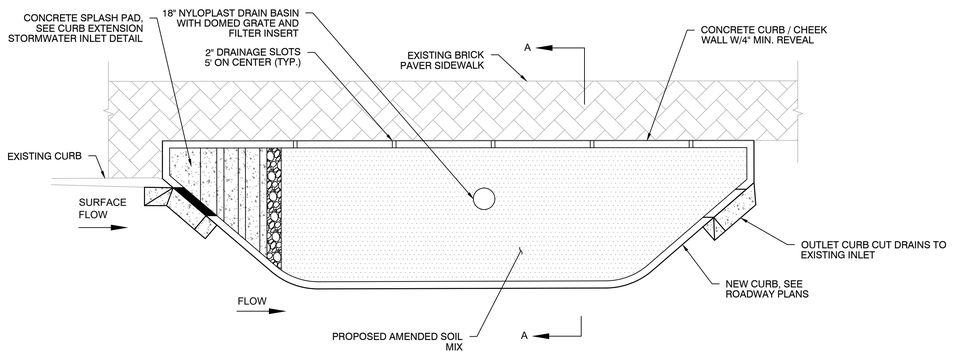
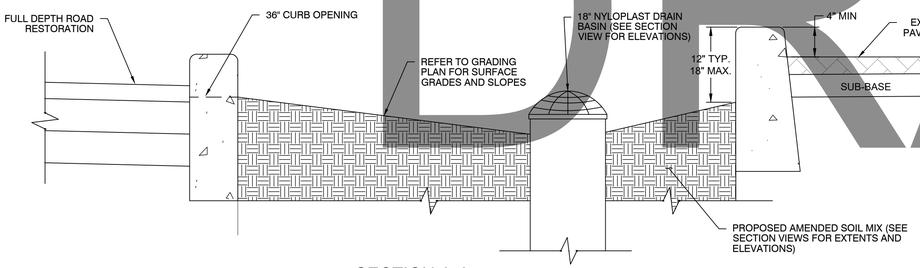


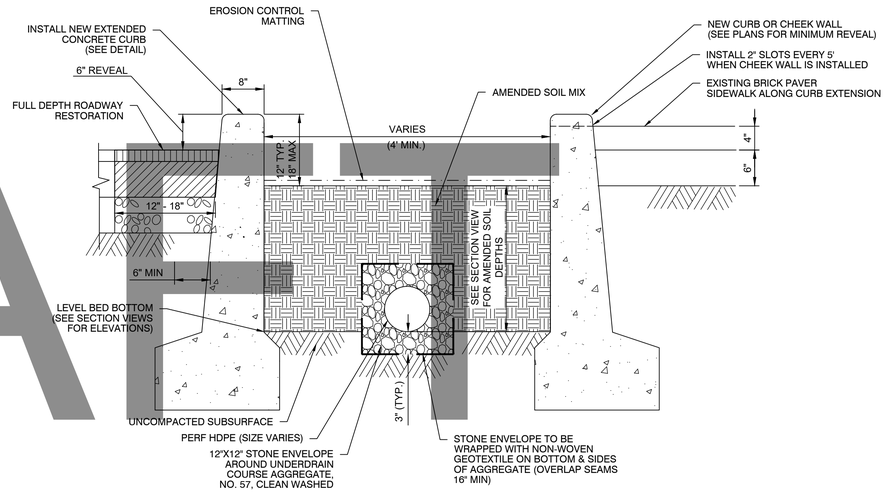
PLAN VIEW



SECTION A-A

TYPICAL CURB EXTENSION SURFACE SECTIONS W/ RELATIVE ELEVATIONS

N.T.S.



VEGETATED CURB EXTENSION SECTION

N.T.S.

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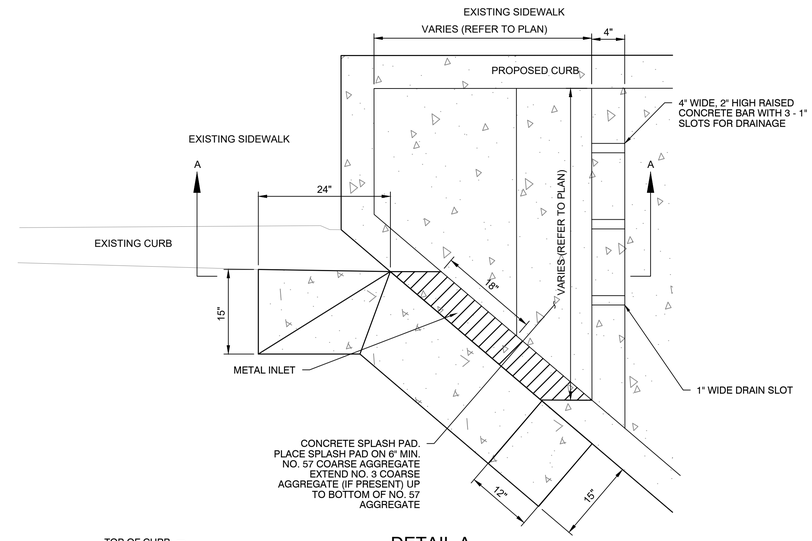
PROJECT	WCHBO00030
DATE	2024-06-07
DRAWING SCALE	N.T.S.
DRAWN BY	AGS
APPROVED BY	CRP

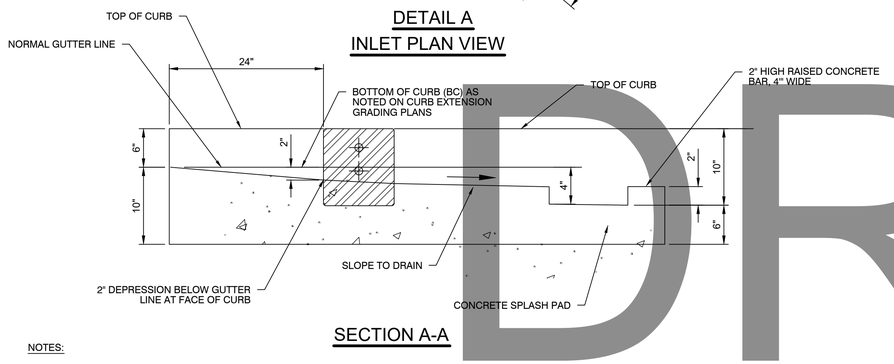
CS6004

SHEET 17 OF 21

I:\Accounts\WCHBO\wch00030 - public works dg_pen\DESIGN_SHEETS\CS6004.dwg PLOTTED: 6/7/2024 9:41 AM, BY: Sumi Moore PLOTSTYLE: Pennoni NCS.ctb PROJECT STATUS: —



DETAIL A
INLET PLAN VIEW



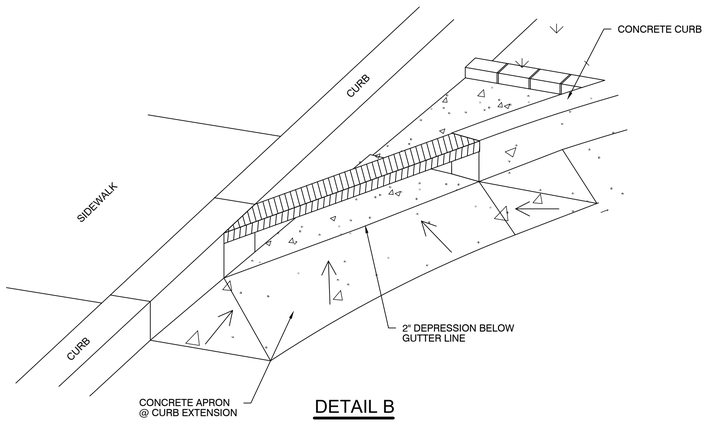
SECTION A-A

NOTES:

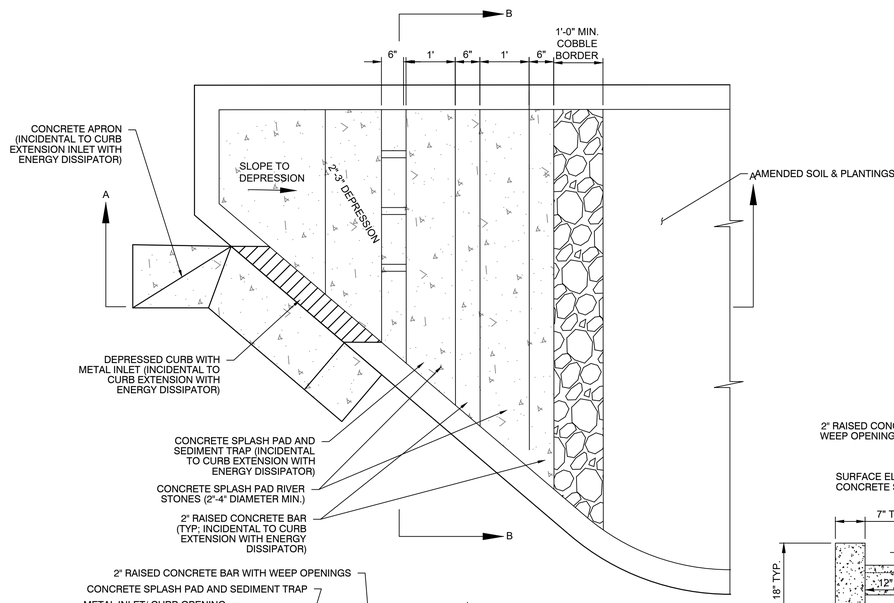
1. SAWCUT BEYOND FACILITY AND TRANSITION EXISTING CURB TO NEW CURB AND GUTTER AT 1" PER FOOT AS NECESSARY.
2. INLET MAY BE MODIFIED TO MAXIMIZE FLOW ENTRY TO STORM WATER FACILITY.
3. SEE PLANS FOR ACTUAL CONFIGURATION OF CURB EXTENSION INLETS.

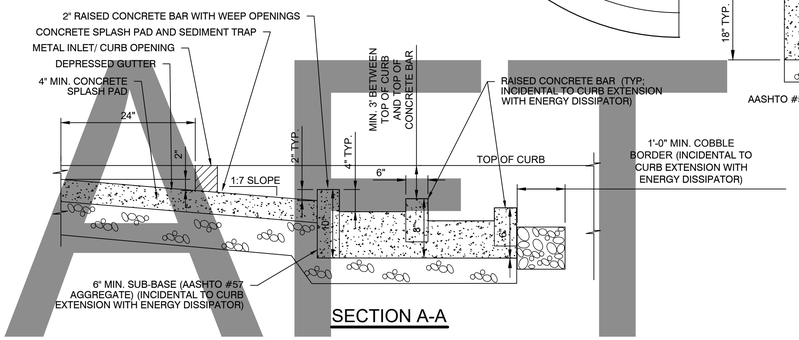
CURB EXTENSION STORMWATER INLET

N.T.S.

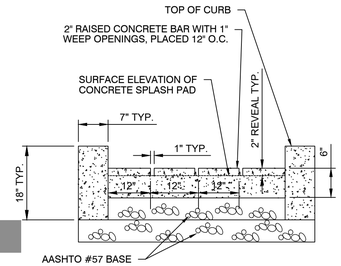


DETAIL B
INLET PERSPECTIVE VIEW





SECTION A-A



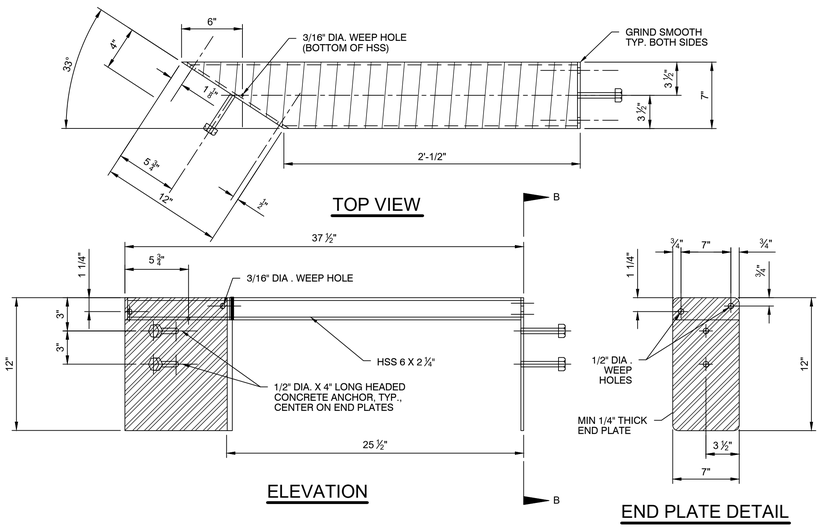
SECTION B-B

CURB EXTENSION STORMWATER INLET WITH DISSIPATER

N.T.S.

NOTES:

1. HEADED CONCRETE ANCHORS SHALL MEET THE REQUIREMENTS OF ASTM A-108.
2. HSS 6 X 2 ¼ CHANNEL SHALL MEET THE REQUIREMENTS OF ASTM A-500 GRADE B.
3. END PLATES SHALL MEET THE SHALL MEET THE REQUIREMENTS OF ASTM A-36.
4. ENTIRE ASSEMBLY SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH A-123.
5. SINGLE BEVEL GROOVE WELD.



METAL INLET

N.T.S.

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PENNONI ASSOCIATES INC.
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ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

GOOSE CREEK GREEN STORMWATER

205 LACEY STREET
WEST CHESTER, PA 19382

CONSTRUCTION DETAILS

WEST CHESTER BOROUGH
401 EAST GAY STREET
WEST CHESTER, PA 19380

NO.	DATE	REVISIONS	BY

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PROJECT	WCHBO00030
DATE	2024-06-07
DRAWING SCALE	N.T.S.
DRAWN BY	AGS
APPROVED BY	CRP

CS6005

SHEET 18 OF 21

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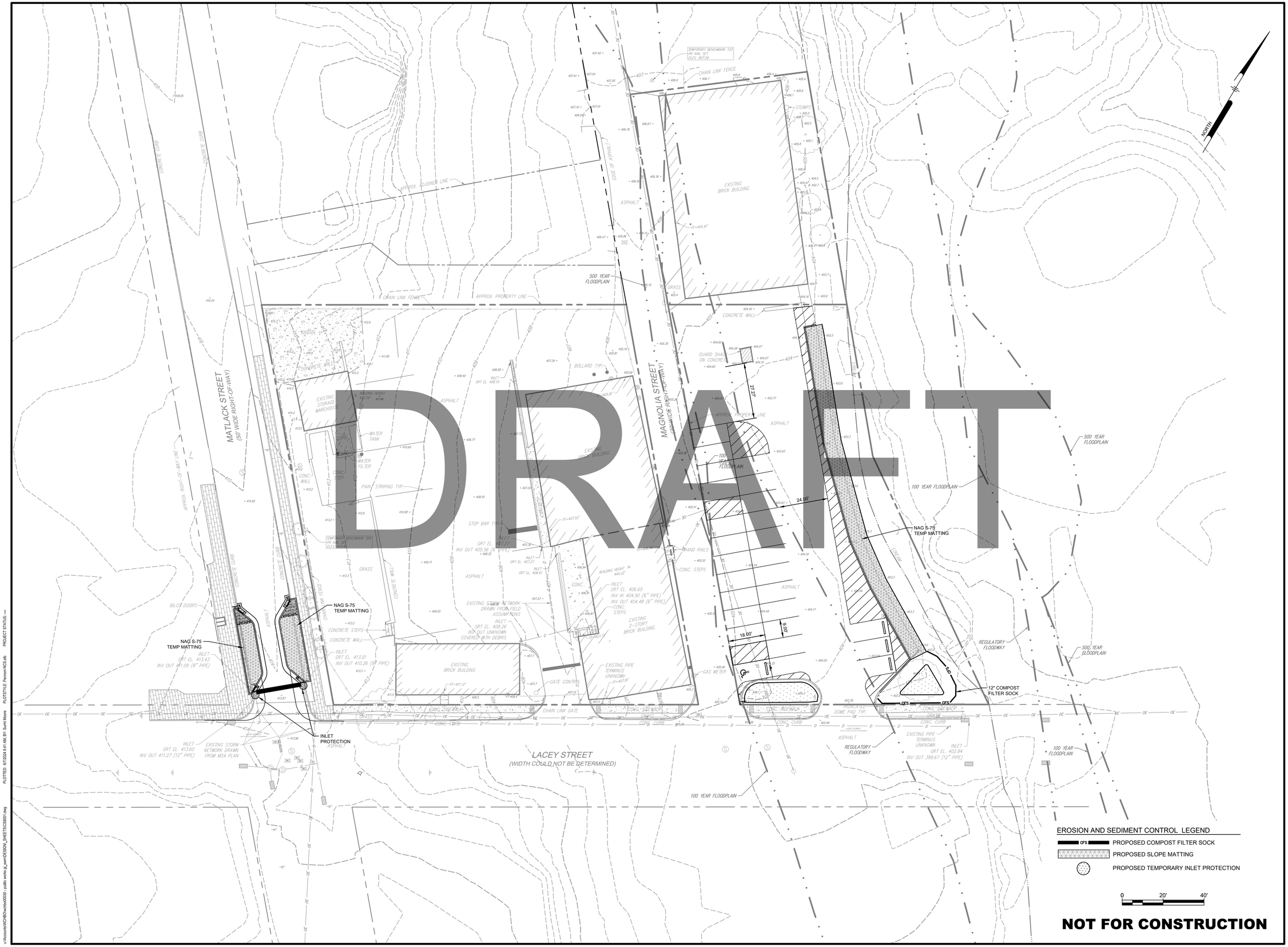

NOT FOR CONSTRUCTION

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GOOSE CREEK GREEN STORMWATER

205 LACEY STREET
WEST CHESTER, PA 19382

EROSION & SEDIMENTATION CONTROL PLAN

WEST CHESTER BOROUGH
401 EAST GAY STREET
WEST CHESTER, PA 19380

DATE	NO.	REVISIONS	BY

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PROJECT	WCHBO00030
DATE	2024-06-07
DRAWING SCALE	1" = 20'
DRAWN BY	AGS
APPROVED BY	CRP

CS8001

SHEET 19 OF 21

STANDARD E&S CONTROL PLAN NOTES

OWNER / OPERATOR WILL BE RESPONSIBLE FOR THE PROPER CONSTRUCTION, STABILIZATION, AND MAINTENANCE OF ALL EROSION AND SEDIMENTATION CONTROLS AND RELATED ITEMS INCLUDED WITHIN THESE PLANS

1. EROSION AND SEDIMENTATION CONTROLS MUST BE CONSTRUCED, STABILIZED AND FUNCTIONAL BEFORE GENERAL SITE DISTURBANCE WITHIN THE TRIBUTARY AREA OF THOSE CONTROLS BEGINS.
2. THE OPERATOR/CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF THE APPENDIX 64, EROSION CONTROL RULES AND REGULATIONS, TITLE 25, PART 1, DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUBPART C, PROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER RESOURCES, CHAPTER 102, EROSION CONTROL.
3. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE CHESTER COUNTY CONSERVATION DISTRICT, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATIONS.
4. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION & SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED.
5. AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENT CONTROL PLAN PREPARER, AND THE CHESTER COUNTY CONSERVATION DISTRICT TO AN ON-SITE MEETING. ALSO, AT LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT 1-800-242-1776 FOR BURIED UTILITIES LOCATIONS.
6. THE E&S CONTROL PLAN MAPPING MUST DISPLAY A PA ONE CALL SYSTEM INCORPORATED SYMBOL INCLUDING THE SITE IDENTIFICATION NUMBER.
7. SHOULD ANY MEASURES CONTAINED WITHIN THIS PLAN PROVE TO BE INCAPABLE OF ADEQUATELY CONTROLLING SEDIMENT FROM LEAVING THE SITE PRIOR TO THE DISCHARGE OF OR STABILIZING OF SURFACES INVOLVED, ADDITIONAL MEASURES MUST BE IMPLEMENTED IMMEDIATELY BY THE OWNER/ DEVELOPER TO ELIMINATE SUCH PROBLEMS.
8. THE LIMITS OF WORK SHOWN ON THIS PLAN ARE THE REAL EXTENT REQUIRED FOR CONSTRUCTION. THE CONTRACTOR SHALL ADHERE TO THESE LIMITS IN MINIMIZING DISTURBED LAND, AND ALL CONSTRUCTION SHALL BE CONDUCTED WITHIN THESE LIMITS.
9. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
10. BEFORE INITIATING ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE CHESTER COUNTY CONSERVATION DISTRICT. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
11. TOPSOIL TAKEN FROM CONSTRUCTION AREAS SHALL BE SEEDED WITH A VEGETATIVE COVER AND STOCKPILED FOR REUSE IN FINISH GRADING. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2:1 OR FLATTER. SILT FENCING SHALL BE INSTALLED ON THE LOW SIDE OF THE PILE. THERE SHALL BE NO EARTH DISTURBANCE WITHIN THE STOCKPILE AREA.
12. ALL PUMPING OF SEDIMENT LADEN WATER OR POTENTIALLY SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS.
13. ONLY LIMITED DISTURBANCE WILL BE PERMITTED TO PROVIDE ACCESS TO THE SEDIMENT TRAP FOR GRADING AND ACQUIRING BORROW TO CONSTRUCT THOSE BMP'S.
14. ANY DISTURBED AREA, ON WHICH ACTIVITY HAS CEASED FOR AN EXTENDED AMOUNT OF TIME, MUST BE SEEDED AND MULCHED IMMEDIATELY. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT RECOMMENDED RATES.
15. DISTURBED AREAS WHICH ARE NOT AT FINISH GRADE AND WHICH WILL BE RE-DISTURBED WITHIN ONE YEAR MAY BE SEEDED AND MULCHED WITH A QUICK GROWING TEMPORARY SEED MIXTURE AND MULCH. DISTURBED AREAS WHICH ARE EITHER AT FINISH GRADE OR WILL NOT BE RE-DISTURBED WITHIN ONE YEAR MUST BE SEEDED WITH A PERMANENT SEED MIXTURE AND MULCHED.
16. FILLS GREATER THAN 3:1 SLOPE AND CUTS GREATER THAN 3:1 SHALL BE SEEDED AND MULCHED, AND PROTECTED WITH EROSION CONTROL MATTING (SEE INSTALLATION INSTRUCTIONS). ALL DISTURBED AREAS WITHIN 50 FT OF A SURFACE WATER SHALL BE SEEDED AND MULCHED ACCORDINGLY.
17. CHANNELS, SEDIMENTATION BASINS, SEDIMENTATION TRAPS AND STOCKPILES MUST BE SEEDED AND MULCHED IMMEDIATELY.
18. THERE IS TO BE NO EARTH DISTURBANCE OR VEGETATIVE CLEARING IN AREAS OF STAKED (OR FENCED) WETLANDS. EARTH DISTURBANCE WITHIN THESE AREAS WITHOUT THE REQUIRED PERMITS WILL RESULT IN POTENTIAL VIOLATION OF COMMONWEALTH AND FEDERAL WETLANDS REGULATIONS.
19. DUST CONTROL SHALL BE PROVIDED BY THE CONTRACTOR AT ALL TIMES DURING CONSTRUCTION.
20. CONSTRUCTION VEHICLES LEAVING THE SITE SHALL NOT DEPOSIT ANY MATERIAL OUTSIDE OF THE PROJECT SITE BOUNDARIES AND/OR A PUBLIC RIGHT-OF-WAY. ANY MATERIAL DEPOSITED SHALL BE IMMEDIATELY REMOVED.
21. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE OF CONSTRUCTION. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.
22. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE OPERATOR SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITIES. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH ARE AT FINISHED GRADE OR WHICH WILL NOT BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.
23. UNTIL THE SITE ACHIEVES FINAL STABILIZATION, THE PERMITTEE AND COPERMITTEE SHALL ASSURE THAT THE BEST MANAGEMENT PRACTICES ARE IMPLEMENTED, OPERATED, AND MAINTAINED PROPERLY AND COMPLETELY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL BEST MANAGEMENT PRACTICE FACILITIES AND MAINTAIN AND MAKE AVAILABLE TO THE CHESTER COUNTY CONSERVATION DISTRICT COMPLETE, WRITTEN INSPECTION LOGS OF ALL THOSE INSPECTIONS. ALL MAINTENANCE WORK, INCLUDING CLEANING, REPAIR, REPLACEMENT, REGARDING, RESEEDING, AND RESTABILIZATION SHALL BE PERFORMED IMMEDIATELY.
24. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMP CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMP'S MUST BE STABILIZED IMMEDIATELY.
25. AT STREAM CROSSINGS, A 50' BUFFER AREA SHOULD BE MAINTAINED. WITHIN THE BUFFER, CLEARING, SOD DISTURBANCES, EXCAVATION AND EQUIPMENT TRAFFIC SHOULD BE MINIMIZED. ACTIVITIES SUCH AS STACKING LOGS, BURNING CLEARED BRUSH, DISCHARGING WATER FROM TRENCHES, WELDING PIPE SECTIONS, REFUELING AND MAINTAINING EQUIPMENT SHOULD BE ACCOMPLISHED OUTSIDE OF BUFFERS.
26. SEDIMENT TRACKED ONTO ANY ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORKDAY AND DISPOSED AS A MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED OR SWEPT INTO ANY ROAD SIDE DITCH, STORM SEWER OR SURFACE WATER.
27. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
28. SHOULD ANY AREAS OF EXCAVATION BE FOUND TO CONTAIN CONTAMINANTS THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE DESIGN ENGINEER.

TOPSOIL APPLICATION NOTE:

ALL TOPSOIL PLACEMENT SHALL BE IN ACCORDANCE WITH PA DEP REQUIREMENTS.

MAINTENANCE NOTES

GENERAL:

1. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION BMP'S MUST BE MAINTAINED PROPERLY. MAINTENTANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION BMP'S AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL SITE INSPECTIONS WILL BE DOCUMENTED IN AN INSPECTION REPORT LOG USING DEP FORM 3150-FM-BWEW0083 DATED 2/2012 KEPT FOR THIS PURPOSE. THE COMPLIANCE ACTIONS AND THE DATE, TIME AND NAME WILL BE KEPT ON THE SITE AT ALL TIMES AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST.

   ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING, MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENTATION BMP'S FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMP'S OR MODIFICATIONS OF THOSE INSTALLED WILL BE NEEDED.

   WHERE BMP'S ARE FOUND TO FAIL TO ALLEVIATE EROSION OR SEDIMENT POLLUTION THE PERMITTEE OR CO-PERMITTEE SHALL INCLUDE THE FOLLOWING INFORMATION:

   a. THE LOCATION AND SEVERITY OF THE BMP'S FAILURE AND ANY POLLUTION EVENTS.
   b. ALL STEPS TAKEN TO, REDUCE, ELIMINATE AND PREVENT THE RECURRENCE OF THE NON-COMPLIANCE.
   c. THE TIME FRAME TO CORRECT THE NON-COMPLIANCE, INCLUDING THE EXACT DATES WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE.
2. SEEDED AREAS THAT HAVE WASHED AWAY SHALL BE FILLED AND GRADED, AS NECESSARY, AND THEN RESSEDED. A STRAW COVER SHALL BE APPLIED TO RETAIN THE SEED ALONG WITH AN ANCHORING METHOD DESCRIBED ON THE ATTACHED MULCH ANCHORING GUIDE, UNTIL IT HAS A CHANCE TO ROOT PROPERLY.
3. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMP'S MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGARDING, RESEEDING, REMULCHING, AND RENETTING, MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
4. SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.

ROCK CONSTRUCTION ENTRANCE:

1. SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE.
2. ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK.
3. INSPECT AFTER EACH STORM EVENT AND ON A WEEKLY BASIS. NEEDED REPAIRS SHOULD BE INITIATED IMMEDIATELY AFTER INSPECTION.

FILTER SOCKS

1. INSPECT AFTER EACH STORM EVENT AND ON A WEEKLY BASIS. NEEDED REPAIRS SHOULD BE INITIATED IMMEDIATELY AFTER INSPECTION.
2. COMPOST FILTER SOCKS ARE TO BE MAINTAINED, AND REPLACED IF NECESSARY, DURING THE ENTIRE CONSTRUCTION PERIOD UNTIL A PERMANENT VEGETATIVE COVER WITHIN THE TRIBUTARY AREA IS ESTABLISHED.
3. CONSTRUCT COMPOST FILTER SOCKS ALONG THE DOWNSTREAM SIDE OF ALL PROPOSED CUT AND FILL ACTIVITIES.
4. THE CONTRACTOR SHALL REMOVE ACCUMULATED SILT WHEN THE SILT ACCUMULATIONS REACH ½ THE ABOVE GROUND HEIGHT OF THE SOCKS.

TEMPORARY STABILIZATION & PERMANENT STABILIZATION:

1. HAY OR STRAW MULCH MUST BE APPLIED AT 3.0 TONS PER ACRE.
2. MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON ALL SLOPES 3:1 AND STEEPER.
3. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.
4. GRADED AREAS ARE TO BE TEMPORARILY SEEDED AND MULCHED IMMEDIATELY FOLLOWING EARTHMOVING PROCEDURES. TEMPORARY SEED SHALL BE ANNUAL RYE GRASS APPLIED AT THE RATES SPECIFIED. MULCH SHALL BE HAY OR STRAW APPLIED AT THE RATE OF AT LEAST 3 TONS PER ACRE.
5. ESTABLISH PERMANENT SEEDING AS SOON AS POSSIBLE AFTER FINAL GRADING IS COMPLETED. PERMANENT SEEDING SHALL BE AT THE RATES SPECIFIED. FERTILZER AND LIME SHALL BE APPLIED AT THE MINIMUM RATES SPECIFIED.
6. PERMANENTLY SEEDED AREAS SHALL HAVE HAY OR STRAW APPLIED AT THE RATE OF AT LEAST 3 TONS PER ACRE. ANY AREAS WHERE HYDROSEED IS USED, MULCH IS NEEDED AT A MINIMUM RATE OF 3 TONS PER ACRE.
7. FILTER SOCKS PER EROSION AND SEDIMENT CONTROL MANUAL.

CONCRETE WASHOUT AREA:

1. FOR LARGER SITES, A BELOW-GRADE WASHOUT SHOULD BE A MINIMUM OF 10 FEET WIDE AND PROVIDE AT LEAST 12 INCHES OF FREEBOARD ABOVE THE LIQUID AND SOLID WASTE ANTICIPATED BETWEEN CLEANOUT INTERVALS. THE PIT SHOULD BE LINED WITH PLASTIC SHEETING OF AT LEAST 10-MIL THICKNESS (WITH NO HOLES OR TEARS) TO PREVENT LEACHING OF LIQUIDS INTO THE GROUND.
2. THE WASHOUT AREA SHALL BE MAINTAINED SUCH THAT THE 12 INCHES OF FREEBOARD IS AVAILABLE AT ALL TIMES.

INLET PROTECTION:

1. EARTHEN BERM TO BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM TO BE MAINTAINED UNTIL ROAD IS PAVED. SIX INCH ROADWAY ASPHALT BERM TO BE MAINTAINED UNTIL ROWADWAY SURFACE RECEIVES FINAL COAT.
2. INSPECT AFTER EACH STORM EVENT AND ON A WEEKLY BASIS. NEEDED REPAIRS SHOULD BE INITIATED IMMEDIATELY AFTER INSPECTION.
3. SEDIMENT MUST BE REMOVED FROM STORM WATER INLET PROTECTION AFTER EACH RUNOFF EVENT.

CLEAN FILL & ENVIRONMENTAL DUE DILIGENCE

1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING. IF THE SITE WILL NEED TO IMPORT OR EXPORT MATERIAL FROM THE SITE, THE RESPONSIBILITY FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND DETERMINATION OF CLEAN FILL WILL REST WITH THE CONTRACTOR.
2. CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE).
3. CLEAN FILL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE: FILL MATERIALS AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE STILL QUALIFIES AS CLEAN FILL PROVIDED THE TESTING REVEALS THAT THE FILL MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT ARE BELOW THE RESIDENTIAL LIMITS IN TABLES FP-1A AND FP-1B FOUND IN THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL".
4. ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FP-001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL. A COPY OF FORM FP-001 CAN BE FOUND AT THE END OF THESE INSTRUCTIONS.
5. ENVIRONMENTAL DUE DILIGENCE: THE APPLICANT MUST PERFORM ENVIRONMENTAL DUE DILIGENCE TO DETERMINE IF THE FILL MATERIALS ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FILL. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL".
6. FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE DEPARTMENT'S MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA. CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE. THESE REGULATIONS ARE AVAILABLE ON-LINE AT WWW.PACODE.COM.

RECYCLE & DISPOSAL OF MATERIALS

1. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTE IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET DEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE.
2. ANY WASTE OR BORROW AREA MUST HAVE AN E&S PLAN REVIEWED AND APPROVED BY CHESTER COUNTY CONSERVATION DISTRICT PRIOR TO BEING ACTIVATED.

UNFORSEEN EROSIVE CONDITIONS

1. SHOULD UNFORSEEN EROSIVE CONDITIONS DEVELOP DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ACTION TO REMEDY SUCH CONDITIONS AND TO PREVENT DAMAGE TO ADJACENT PROPERTIES AS A RESULT OF INCREASED RUNOFF AND/OR SEDIMENT DISPLACEMENT. STOCKPILES OF WOOD CHIPS, HAY BALES, CRUSHED STONE, AND OTHER MULCHES SHALL BE HELD IN READINESS TO DEAL IMMEDIATELY WITH EMERGENCY PROBLEMS OF EROSION.

UTILITY TRENCH NOTES

1. LIMIT ADVANCED CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
2. WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS.
3. ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
4. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.
5. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING BEFORE PIPE PLACEMENT AND/OR BACKFILLING BEGINS. WATER REMOVED FROM THE TRENCH SHALL BE PUMPED THROUGH A FILTRATION DEVICE.
6. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND IMMEDIATELY STABILIZED.

TEMPORARY STABILIZATION & PERMANENT STABILIZATION

1. AREAS WHICH ARE TO BE TOP-SOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 12 INCHES PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 12 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING, I.E. YARDS.
2. HAY OR STRAW MULCH MUST BE APPLIED AT 3.0 TONS PER ACRE.
3. MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON ALL SLOPES 3:1 AND STEEPER.
4. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.
5. GRADED AREAS ARE TO BE TEMPORARILY SEEDED AND MULCHED IMMEDIATELY FOLLOWING EARTHMOVING PROCEDURES. TEMPORARY SEED SHALL BE ANNUAL RYE GRASS APPLIED AT THE RATES SPECIFIED. MULCH SHALL BE HAY OR STRAW APPLIED AT THE RATE OF AT LEAST 3 TONS PER ACRE.
6. PERMANENTLY SEEDED AREAS SHALL HAVE HAY OR STRAW APPLIED AT THE RATE OF AT LEAST 3 TONS PER ACRE.
7. ANY AREAS WHERE HYDROSEED IS USED, MULCH IS NEEDED AT A MINIMUM RATE OF 3 TONS PER ACRE.

MULCH ANCHORING GUIDE

Anchoring Method or Material	Kind of Mulch to be Anchored	How to Apply
MANUAL Mulch Netting	Hay or Straw	Staple Anti-Wash/Geojute netting to soil surface according to manufacturer's recommendations.

TEMPORARY SEEDINGS FOR CRITICAL AREAS

SPECIES OR MIXTURE	PERCENT BY WEIGHT	PERCENT PURE LIVE SEED	PERCENT GERMINATION	SEEDING RATE		RECOMMENDED SEEDING DATES	ADAPTION TO SOIL-SITE CONDITIONS				
				LBS/1,000-SF	LBS/AC		SHALLOW WELL DRAINED	MOD. DEEP WELL DRAINED	DEEP WELL DRAINED	MOD. WELL DRAINED	SOMEWHAT POORLY TO POORLY DRAINED
ANNUAL RYEGRASS (PENN DOT FORMULA E)	100.0%	98.0%	90.0%	21	915	MAR. 15 TO OCT. 15	X	X	X	X	X

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PENNONI ASSOCIATES INC.
158 W. Gay Street, Suite 300
West Chester, PA 19380
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GOOSE CREEK GREEN STORMWATER EROSION & SEDIMENTATION CONTROL NOTES

205 LACEY STREET
WEST CHESTER, PA 19382

401 EAST GAY STREET
WEST CHESTER, PA 19380

WEST CHESTER BOROUGH

NO.	REVISIONS	BY	DATE

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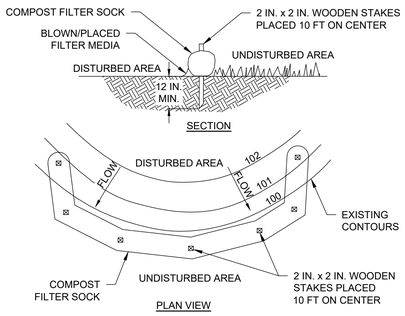
PROJECT	WCHBO00030
DATE	2024-06-07
DRAWING SCALE	N.T.S.
DRAWN BY	AGS
APPROVED BY	CRP

CS8501

SHEET 20 OF 21

u:\Accounts\WCHBO\wchbo00030 - public works ig_part\DESIGN_SHEETS\CS8501.dwg PLOTTED: 6/7/2024 9:42 AM BY: Sushi Moore PLOTSTYLE: Pennoni-MCS.ctb PROJECT STATUS: —



NOTES:

SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.

TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

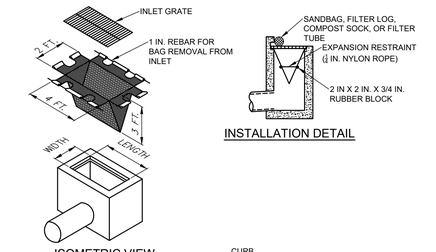
COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.

BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

COMPOST FILTER SOCK

NTS STANDARD CONSTRUCTION DETAIL #4-1



NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

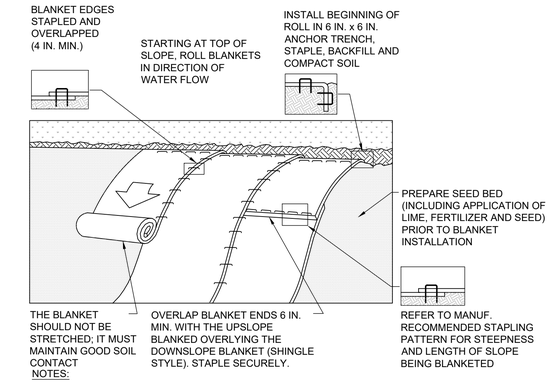
ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.
AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND REPLACED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

FILTER BAG INLET PROTECTION - TYPE C INLET

NTS STANDARD CONSTRUCTION DETAIL #4-15



NOTES:

SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.

PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.

SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.

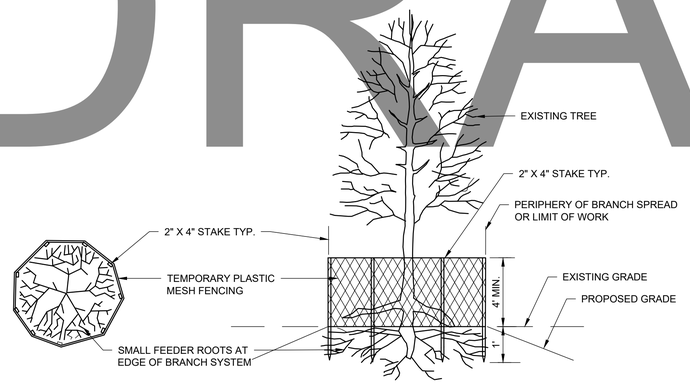
BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.

THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

EROSION CONTROL BLANKET INSTALLATION

NTS STANDARD CONSTRUCTION DETAIL #11-1

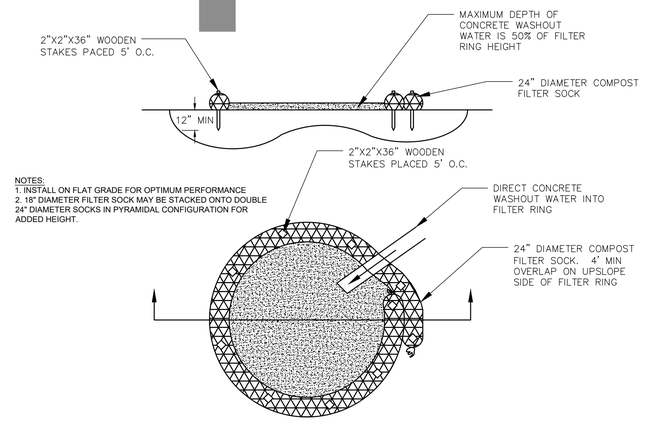


NOTES:

1. THOSE TREES WHICH ARE WITHIN TWENTY-FIVE (25) FEET OF ANY PROPOSED EXCAVATION OR GRADING OPERATION, OR IN ANY OTHER LOCATION DEEMED APPROPRIATE BY THE ENGINEER, SHALL BE PROTECTED BY INSTALLING AND MAINTAINING A FENCE AT THE DRIP LINE.
2. NO BOARDS OR OTHER MATERIAL SHALL BE NAILED TO TREES DURING CONSTRUCTION.
3. HEAVY EQUIPMENT OPERATORS SHALL AVOID DAMAGING EXISTING TREE TRUNKS AND ROOTS. FEEDER ROOTS SHALL NOT BE CUT CLOSER THAN TWENTY-FIVE (25) FEE FROM TREE TRUNKS.
4. TREE TRUNKS AND EXPOSED ROOTS DAMAGED DURING CONSTRUCTION SHALL BE PROTECTED FROM FURTHER DAMAGE BY BEING TREATED IMMEDIATELY.
5. TREE LIMBS DAMAGED DURING CONSTRUCTION SHALL BE PROPERLY PRUNED ANDTREATED IMMEDIATELY.
6. THE OPERATION OF HEAVY EQUIPMENT OVER ROOT SYSTEMS OF SUCH TREES SHALLBE MINIMIZED IN ORDER TO PREVENT SOIL COMPACTION.
7. DAMAGED TREES SHALL BE FERTILIZED TO AID IN THEIR RECOVERY.
8. CONSTRUCTION DEBRIS SHALL NOT BE DISPOSED OF NEAR OR AROUND TREES.

TREE PROTECTION FENCE

NTS



NOTES:
1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE
2. 18" DIAMETER FILTER SOCK MAY BE STACKED ONTO DOUBLE 24" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.

A SUITABLE IMPERVIOUS GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE SOCKS.

CONCRETE WASHOUT FACILITIES DETAIL

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West Chester, PA 19380
T 610.429.8907 F 610.429.8918

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GOOSE CREEK GREEN STORMWATER
205 LACEY STREET
WEST CHESTER, PA 19382

EROSION & SEDIMENTATION CONTROL DETAILS

WEST CHESTER BOROUGH
401 EAST GAY STREET
WEST CHESTER, PA 19380

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PROJECT	WCHBO00030
DATE	2024-06-07
DRAWING SCALE	N.T.S.
DRAWN BY	AGS
APPROVED BY	CRP

CS8502

SHEET 21 OF 21

v:\Accounts\WCHBO\workbox\00030 - public works gi_pen\DESIGN_SHEETS\CS8502.dwg PLOTTED: 6/7/2024 9:42 AM, BY: Sumi Moore PLOTSTYLE: Pennoni NCS.ctb PROJECT STATUS: —

ADDENDUM NO. 1
Date: 4/11/2025
Revision: 11/19/2025

Total Maximum Daily Load Plan
Borough of West Chester
Chester County, PA

The information enclosed in this addendum has been issued in order to include revisions to the Total Maximum Daily Load (TMDL) Plan that was originally approved by PADEP in 2018.

Specifically, Addendum No. 1 includes additional proposed BMP's. Enclosed herein, are the amended sections of the original report.

DRAFT

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Section G, Select BMPs to Achieve the Minimum Required Reductions in Pollutant Load 4
Section G, Identify Responsible Parties for Operation and Maintenance (O&M) of BMPs 8

DRAFT

Section A, Public Participation.

The following section shall be appended to Section A, Public Participation.

Public Participation – Addendum No. 1
The Borough of West Chester has completed the Public Participation measures for Addendum No. 1. All required documentation of public participation for Addendum No. 1 is included in Appendix A of this Addendum.

- Proposed PRP Plan Addendum No. 1 public notice was published in: Daily Local News
- Proposed PRP Plan Addendum No. 1 public notice was published in newspaper: 7/21/2025
- Proposed PRP Plan Addendum No. 1 was made available for public review/comment: 7/21/2025
- Proposed PRP Plan Addendum No. 1 comments were accepted at a public meeting: 8/5/2025
- End date for receipt of written comments: 9/15/2025

A summary of the comments received and respective responses have been enclosed in Appendix A.

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Section G, Select BMPs to Achieve the Minimum Required Reductions in Pollutant Load

***The following section shall be appended to Section* G. Select BMPs To Achieve the Minimum Required Reductions in Pollutant Load**

Additional BMPs– Addendum No. 1

Proposed BMPs being added via this addendum are listed below.

- Bio Swale at the Public Works Building
- Rain Garden at the Public Works Building
- Bio Retention Garden at the end of Magnolia & Maple Avenue
- Rain Garden at the Good Will Fire Company No. 2 Building
- Bio Swales at the intersection of Bolmar Street & Miner Street
- Nineteen (19) Roadway Bump-out Rain Gardens to collect roadway stormwater runoff at twelve (12) intersections
    - S. Matlack Street & Magnolia Street
    - S. Matlack Street & Union Street
    - S. Matlack Street & Linden Street
    - S. Matlack Street & Lacey Street
    - S. Matlack Street & E. Nields Street
    - S. Matlack Street & E. Miner Street
    - Linden Street & Maple Alley
    - E. Miner Street & Poplar
    - S. Adams Street & E. Miner Street
    - S. Franklin Street & E. Miner Street
    - Market Street Midblock between Franklin Avenue & S Adams Street
    - S. Walnut Street & E. Barnard Street
- Basin Retrofit to convert Detention Basin at Union & Worthington Street into a Bioretention Rain Garden
- Streetscape Project along S. Bolmar Street near E. Miner Street

DRAFT

Drainage Areas for each were delineated using contours provided by Pennsylvania Spatial Data Access (PASDA). The BMP efficiencies were determined by using the PA DEP BMP Effectiveness Values Table. The total phosphorus load, drainage area and loading rate was determined from the previous MapShed calculations for the Goose Creek Drainage area in West Chester Borough. At the time of this addendum, the version of MapShed was no longer available for public use. A loading rate of 0.26 lbs./ac/year was previously determined in the MapShed software and used for the initial TMDL reduction calculations. For consistency, these same loading rates will be used in the updated reduction calculations. Sketches for these proposed BMPs can be found in the Appendices of this addendum. A summary of the reductions for the structural BMPs can be found in Table 1 on the next page.

Table 1 – Calculation Methodology: Structural BMPs, Addendum No. 1

Location	BMP Type	Drainage area (ac)	Land Use	TP Loading (lbs./ac/yr)	Efficiency (%)	Reduction (lbs./yr)
John O. Green Park	Permeable Pavement w/o Sand or Veg (A/B Soils w/o underdrain)	1.12	HD Mixed	0.26	80%	0.23
Fugett Park/Borough Hall	Raingarden (A/B soils w/ underdrain)	1.07	HD Mixed	0.26	75%	0.21
	Filtering Practices	0.55	HD Mixed	0.26	60%	0.09
Greenview Alley	Bioretention (A/B soils w/o underdrain)	0.47	HD Mixed	0.26	85%	0.10
	Bioretention (A/B soils w/o underdrain)	0.22	MD Mixed	0.26	85%	0.05
	Bioretention (A/B soils w/o underdrain)	0.06	LD Mixed	0.06	85%	0.003
					Subtotal	0.68
2023 Additional Proposed BMPs						
Public Works Building	Bioswale	0.67	HD Mixed	0.26	75%	0.13
	Raingarden (A/B soils w/o underdrain)	0.8	HD Mixed	0.26	85%	0.18
Magnolia St. & Maple Alley	Bioretention (A/B soils w/o underdrain)	0.65	HD Residential	0.26	85%	0.14
Good Will Fire Company	Bioswale	1.34	HD Mixed	0.26	75%	0.26
Various Intersections	"Bump-out" Rain Gardens (A/B soils w underdrain)	28.52	HD Residential	0.26	75%	5.56
Bolmar St. & Miner St.	Bioswale	0.80	HD Residential	0.26	75%	0.16
Union St & Worthington St*	Bioretention (A/B soils w/ underdrain)	4.25	HD Residential	0.26	55%	0.61
					Subtotal	7.04
					Total Reduction	**7.72**

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***Union St Bio Retention is a basin retrofit of a Dry Extended Detention Basin, as such the calculated reduction/efficiency is the difference between the two types of BMPs**

The Street Sweeping load reduction was calculated using the loading rate (0.26 lbs./ac/yr) and the efficiency rate was determined from the PA DEP BMP Effectiveness Values Table (3%). The miles swept and their area equivalent is 16 miles, or 16 acres. A reduction of 0.13 lbs./yr of phosphorous was calculated for sweeping 25 times a year. A summary of the street sweeping phosphorous reduction can be found in Table 2 on the next page.

Table 2 – Calculation Methodology: Street Sweeping, Addendum No. 1

BMP Type	Miles Swept	TP Loading (lbs./ac/yr)	Efficiency	Reduction (lbs./yr)
Street Sweeping	16	0.26	3%	0.13

A summary of the tree planting phosphorous load reduction calculations can be found in *Table 3*.

Table 3 – Calculation Methodology: Tree Plantings, Addendum No. 1

BMP Type	Trees	Effective DA (Acres)	Loading (lbs./ac/yr)	Efficiency	Reduction (lbs./yr)
Planted Trees	90	0.9	0.26	15%	0.04

A summary of all proposed BMPs in the previous TMDL plan can be found in Table 4. The streambank restoration and stabilization BMP and jellyfish endwall BMPs were found to be infeasible and will not be included in the MS4 BMP Strategy.

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~~*Table 4 – The Previous TMDL Strategy Summary, to be replaced with Table 5*~~

~~Adjusted MS4 LR in the TMDL Study (lb/year)~~	~~39.18~~
~~Required Short-Term Reduction: 5% of the existing load for TP at the time of the TMDL Plan submission~~	~~4.57 lbs/yr~~
~~Proposed Potential Reduction (lbs./yr)~~	~~1.20 (Three BMP Locations)~~ ~~1.54 (Street Sweeping)~~ ~~0.04(Plant Street Trees)~~ ~~13.6 (Streambank Restoration)~~ ~~1.68 (Endwall 13)~~ ~~1.34 (Endwall 37)~~ ~~Potential Total of 19.40~~

A summary of all the revised proposed BMPs can be found in Table 5.

Table 5 – Revised TMDL Strategy Summary, Addendum No. 1

Adjusted MS4 LR in the TMDL Study (lbs./yr)	39.18
Required Short term Reduction: 5% of the existing load for TP at the time of TMDL Plan submission	1.96 lbs./yr
Proposed Potential Reduction (lbs./yr)	0.23 (John O. Green Park BMP's) 0.30 (Fugett Park/Borough Hall BMP's) 0.153 (Greenview Alley BMP's) 0.13 (Public Works Bioswale) 0.18 (Public Works Rain Garden) 0.14 (Magnolia & Maple Bio Retention) 5.56 (Bump Out" Rain Gardens) 0.26 (Good Will Fire Company Bio Swale) 0.13 (Street Sweeping) 0.04 (Plant Street Trees) 0.61 (Union St & Worthington Bio Retention) 0.16 (Bolmar & Miner Bio Swales) <u>Potential total of 7.89 lbs./yr</u>

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Section I, Identify Responsible Parties for Operation and Maintenance (O&M) of BMPs

The following section shall be appended to Section I, Identify Responsible Parties for Operation and Maintenance (O&M) of BMPs

Table 6 – Summary of Operation & Maintenance of BMPs, Revised via Addendum No. 1

NAME OF BMP	RESPONSIBLE PARTY	O&M ACTIVITY & FREQUENCY
Street Sweeping	West Chester Borough	Per PA BMP Manual (latest revision) BMP 5.9.1 pg 94-97
Street Tree Planting	West Chester Borough	Per PA BMP Manual (latest revision) BMP 5.6.3 pg 63-67
~~Streambank Restoration~~	~~West Chester Borough~~	~~Per PA BMP Manual (latest revision) BMP6.7.1 pg 191-210~~
Proposed Infiltration Facilities	West Chester Borough	Per PA BMP Manual (latest revision) BMP 6.4.3/6.4.4 pg 33-47
~~Jellyfish Filters~~	~~West Chester Borough~~	~~Per Manufactures Instructions~~
Inlet Cleaning	West Chester Borough	Per PA DEP Direction and Applicable Manufacturer's Instructions
Public Works Bio Swale	West Chester Borough	Per PA DEP Manual (latest Revision) BMP 6.4.1
Public Works Rain Garden	West Chester Borough	Per PA DEP Manual (latest Revision) BMP 6.4.1
Magnolia & Maple Bio Retention	West Chester Borough	Per PA DEP Manual (latest Revision) BMP 6.4.1
Good Will Fire Company Bio Swale	West Chester Borough	Per PA DEP Manual (latest Revision) BMP 6.4.1
"Bump Out" Rain Gardens	West Chester Borough	Per PA DEP Manual (latest Revision) BMP 6.4.2
Bolmar & Miner Bio Swale	West Chester Borough	Per PA DEP Manual (latest Revision) BMP 6.4.3
Union St & Worthington Bio Retention	West Chester Borough	Per PA DEP Manual (latest Revision) BMP 6.4.4

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YARD & GARAGE SALES



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Rte. 252 and Media Line Road Media, PA 19063

October 5th
Rain Date October 12th
8:00 am to 3;00 pm

For more information
Email:
optimistfleamarket@gmail.com



Rose Tree Media Optimist Club Flea Markets at DCCC (formerly sponsored by Town Talk)

Rte. 252 and Media Line Road Media, PA 19063

September 7th
Rain Date September 14th
8:00 am to 3;00 pm

For more information
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LEGAL NOTICES

Notice

Goose Creek Pollution Reduction Plan (PRP) & Total Maximum Daily Load Plan (TMDL) Addenda
West Chester Borough

The West Chester Borough will consider Addenda to the Borough's Pollution Reduction Plan (PRP) and Total Maximum Daily Load (TMDL) Plan, as part of the Borough's Stormwater Management Program and MS4 Permit, during an Open House held at the Borough Hall, located at 401 East Gay Street in West Chester Borough, on Tuesday August 5th, 2025 at 5:00 PM. The PRP/TMDL Addenda and its presentation at an open house are a requirement of the Pennsylvania DEP in consideration of the Borough's MS4 permit renewal.
There will be a 30-day public comment period after which the addenda will be finalized and submitted to the Pennsylvania DEP for approval. The draft PRP/TMDL Addenda will be available for public inspection at the West Chester Borough building between the hours of 8:00 AM and 4:00 PM Monday through Friday beginning July 7, 2025. The Addenda will also be available on the Borough's webpage: https://west-chester.com/187/Stormwater-Management
Comments regarding the draft PRP/TMDL Addenda may be received via email at comments@west-chester.com. Comments may be mailed to West Chester Borough at 401 East Gay Street, West Chester, PA, Attn: Sean Metrick, PRP/TMDL Addenda. All comments shall include the name and address of the commenter.
DLN 7/21; 1a

NOTICE IS HEREBY GIVEN that the Zoning Hearing Board of the Borough of West Chester, Pennsylvania has scheduled a Meeting at 6:00 pm, on July 28, 2025. The purpose of this meeting is to hear following appeal:

Appeal # 1031
Applicant
Charles A. Melton Arts & Education Center
Site Address
501 E. Miner Street
Zoning District
CS Customer Service
Parcel's # 1-5-478-E and 1-5-478.1

The Applicant, Charles A. Melton Arts & Education Center is requesting a variance for relief from Section 112-702.B(2)(o)(8) of the West Chester Zoning Ordinance to allow a changeable sign a distance 465 feet from an existing changeable sign, not the required 500 feet.
In addition, the Zoning Hearing Board will hear such other relief deemed necessary per the Application.
The Application is available for public review at the Department of Building & Housing at 401 E. Gay St., West Chester, Pennsylvania or online at www.west-chester.com. All interested persons will be given an opportunity to be heard at this Public Meeting.
Those individuals with disabilities and ADA accommodations for effective participation in the meeting should call 610-692-7574 at least two days prior to the meeting. All attempts will be made for reasonable accommodations.

Yerkes Associates, Inc
Michael Barbeiri
Borough of West Chester Zoning Officer
DLN 7/14, 7/21; 1a

REMEMBER - when placing a classified to get fast results be sure to include:
1) all the details
2) include the price
3) be available to callers
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LEGAL NOTICES

NOTICE IS GIVEN that the Board of Supervisors of East Brandywine Township will conduct a public hearing as part of their regularly scheduled public meeting on Thursday, August 7, 2025 at 9:00 a.m., prevailing time, in the Meeting Hall at the East Brandywine Township Building located at 1214 Horseshoe Pike, Downingtown, Pennsylvania 19335 to consider and possibly enact an Ordinance with the following title and summary:

AN ORDINANCE OF THE TOWNSHIP OF EAST BRANDYWINE, CHESTER COUNTY, PENNSYLVANIA, AMENDING THE EAST BRANDYWINE TOWNSHIP CODE, PART III, TITLED LAND USE LEGISLATION, CHAPTER 399, TITLED ZONING, BY DELETING IN ITS ENTIRETY SECTION 399-102.1, TITLED WOODLAND PROTECTION AND LOGGING STANDARDS; DELETING REFERENCES TO FORESTRY IN VARIOUS ZONING DISTRICTS; ADDING A NEW SECTION 399-87.1 TO PERMIT FORESTRY IN ALL ZONING DISTRICTS; AND AMENDING PART II OF THE CODE, TITLED GENERAL LEGISLATION, BY ENACTING A NEW CODE CHAPTER 165 TITLED FORESTRY REGULATIONS.

The Ordinance amends the Zoning Ordinance by deleting woodland protection and forestry regulations, deleting references to forestry as a use in individual zoning districts, and adding a new section which permits forestry by right in all zoning districts. The Ordinance also enacts a new Chapter 165 of the Township Code which regulates forestry. The provisions of the Ordinance are severable, conflicting ordinances are repealed, and the Ordinance is effective immediately upon enactment.

A complete verbatim text of the proposed Ordinance is available for public inspection and may be examined without charge or obtained for a charge not greater than the cost thereof at the Township's administrative offices, 1214 Horseshoe Pike, Downingtown, PA 19335 during normal business hours, 9:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays. If any person requires an accommodation to participate in the hearing or meeting, please contact the Township building at least 24 hours in advance of the meeting and hearing at 610-269-8230.
DLN 7/21, 7/28; 1a

NOTICE OF PUBLIC SALE:
The following self-storage Cube contents containing household and other goods will be sold for cash by CubeSmart 641 Lancaster Ave. Frazer, Pa. 19355 at approx. 7PM at www.storagetreasures.com

Cube D13A Michael Singleton
Cube G56 David Anders
Cube F63 Justin Dehart
Cube D16 Joe Fox
Cube C85A Jay Jackson
DLN - July 21 -1a

NOTICE IS HEREBY GIVEN that on July 28, 2025 at 7:00 P.M, the Zoning Hearing Board of West Goshen Township will conduct a public hearing at the Township Administration Building, 1025 Paoli Pike, West Chester, PA 19380 on the following application:

Application of 849 WCP, LLC for a variance from Section 84-72.M of the West Goshen Township Zoning Ordinance ("Zoning Ordinance") which requires an applicant to obtain a building permit within one year from the date of the Zoning Hearing Board's decision. The Applicant in this case requests an extension of the expiration time for approvals previously granted by the Zoning Hearing Board, which include a special exception pursuant to Section 84-15.E(1) of the Zoning Ordinance to construct a multi-family dwelling and variance from Section 84-16.B(1) of the Zoning Ordinance, which requires a one-acre minimum lot size. The Applicant is requesting approval to proceed with the plan previously approved in 2021and requests an extension of the previous approvals and/or a reinstatement of the previous Zoning Hearing Board Decision approving the Applicant's plan. The property that is the subject of the application consists of two parcels of land located at 847 West Chester Pike and 849 West Chester Pike both in the R-4 Residential Zoning District. One lot consists of 0.5245-acres identified at UPI No. 52-5F-77 and is unimproved. The other lot consists of 0.329-identified as UPI No. 52-5G-2 and is improved with a single-family home and detached garage.

The Zoning Hearing Board will also consider decisions on: 1) the Application of Richard and Emma Smith d/b/a R. Smith Paving, Inc. to develop a property located at 315 Snyder Avenue. consisting of approximately 2.76-acres identified as Tax Parcel Nos. 52-5-218 and located in the I-2 District. The Applicant is proposing to develop the property for storage of equipment, material and vehicles for the paving business and requested a variance from Section 84-54.E(1) of the West Goshen Township Zoning Ordinance in order to permit a disturbance of precautionary steep slopes and a variance from Section 84-54.F(1) of the Zoning Ordinance in order to permit a disturbance of prohibitive steep slopes; and 2) the Application of JAS Real Estate Holdings, LLC to develop the property located at 328 Westtown Road identified as Tax Parcel No. 52-5K-16, currently used as a car dealership, the property located at 721 E. Nields Street identified as Tax Parcel No. 52-5K-18 consisting of 2.1-acres and 739 E. Nields Street identified as Tax Parcel No. 52-5K-17 consisting of 0.49-acres. The applicant requested a variance from Section 84-38.B.(6) of the Zoning Ordinance in connection with the redevelopment of the three parcels including the construction of the new building.

All interested persons are invited to attend the hearings. Should any person require special accommodations to attend this meeting or wish to view the applications, please contact the West Goshen Township Administration Office at 610-696-5266 in advance of the hearing.
DLN 7/15, 7/21; 1a

NOTICE IS HEREBY GIVEN that the Zoning Hearing Board of the Borough of West Chester, Pennsylvania has scheduled a Meeting at 6:00 pm, on July 28, 2025. The purpose of this meeting is to hear following appeal:

Appeal # 1029
Applicant
Daniel A. & Melissa Jean Hollander
Site Address
531 Marshall Drive
Zoning District
NC-1 Neighborhood Conservation
Parcel # 1-2-89

The Applicants, Daniel A. Hollander and Melissa Jean Hollander are requesting a variance from § 112-306.B (Dimensional Requirements) for the construction of a one-story attached garage encroaching approximately 12.6 feet into the 15 foot required side yard, §112-602.L (General Regulation and Design Standards) for the construction of driveway and parking encroaching approximately 3.7 feet into the required 5 feet setback and §112-602.K (Parking in Front of Building) to allow parking in front of the proposed garage within the required front yard. Each of the Borough of West Chester Zoning Ordinance.
In addition, the Zoning Hearing Board will hear such other relief deemed necessary per the Application.
The Application is available for public review at the Department of Building & Housing at 401 E. Gay St., West Chester, Pennsylvania or online at www.west-chester.com. All interested persons will be given an opportunity to be heard at this Public Meeting.
Those individuals with disabilities and ADA accommodations for effective participation in the meeting should call 610-692-7574 at least two days prior to the meeting. All attempts will be made for reasonable accommodations.

Yerkes Associates, Inc
Michael Barbeiri
Borough of West Chester Zoning Officer
DLN 7/21; 1a

CAN'T FIND IT? Find it the easy, effective way. Use a low cost "Wanted to Buy" classified ad.

LEGAL NOTICES

NOTICE

THE THORNBURY TOWNSHIP ZONING HEARING BOARD will meet at 7:00 p.m., prevailing time, on Tuesday, July 29, 2025 at the Thornbury Township Building, 800 E. Street Road, West Chester, Pennsylvania, to hear the following:

THE APPLICATION OF PENN OAKS TENNIS AND FITNESS CLUB. The properties are UPI Nos. 66-3H-4, 66-3H-5 and 66-3H-6, also known as 52, 58 and 60 Penn Oaks Drive, respectively. The parcels are owned by Sulzman Enterprises III, LLC and total approximately 6.98 acres in area. The properties are located in the R-1 – Residential/Agricultural District and are improved with two connected buildings, three outside tennis courts, and associated parking facilities. The Applicant seeks variances from the following sections of the Thornbury Township Zoning Ordinance to permit the construction of three exterior padel courts between the existing tennis courts and Penn Oaks Drive: §155-405.A(2)(Area and bulk regulations) to increase the impervious coverage on the property from the existing 35.63% to 38.51% where 20% is the maximum permitted impervious coverage; §155-1500.A(1)(Accessory structures) to permit an accessory structure that will not be located behind the front building line of the principal structure, as required, and will be located within the required 100 foot front yard setback; §155-1504.C.1(a)(Buffer planting strips) to permit a buffer planting strip of 27.41 feet where a 50 foot strip is required; §155-1616.B (Outdoor recreation) to permit impervious coverage that exceeds the maximum permitted lot coverage; §155-1616.C (Outdoor recreation) to permit an outdoor recreation area to be located within the 100 foot required setback from an adjacent residential use; and any other relief that may be necessary.

The Board may consider such other matters as may properly come before it.

All persons desiring to be heard may attend and be heard. If any person who wishes to attend the meeting has a disability and/or requires auxiliary aid, service or other accommodation to observe or participate in the proceedings, please contact the Township Secretary at (610) 399-1425 to discuss how those needs may best be accommodated.

THORNBURY TOWNSHIP,
CHESTER COUNTY
ZONING HEARING BOARD
Patrick M. McKenna, Solicitor
DLN 7/14, 7/21; 1a

NOTICE

Notice is hereby given that on Monday, August 4, 2025, 7:00 p.m., the Borough Council for the Borough of Kennett Square shall hold a public hearing to consider the following amendments to the Borough's Zoning Ordinance, after which it shall consider for adoption (and may adopt), the same. The hearing on the ordinances will be held in the Borough's meeting room, 600 S. Broad Street, 3rd Floor, Kennett Square, PA 19348.

Ordinance Amendment 1 – Accessory Dwelling Units. Title: AN ORDINANCE OF THE BOROUGH OF KENNETT SQUARE, CHESTER COUNTY, PENNSYLVANIA, AMENDING CODE CHAPTER 23 OF THE KENNETT SQUARE BOROUGH ZONING ORDINANCE, AS IT RELATES TO ACCESSORY DWELLING UNITS, AND TO AMEND BOROUGH CODE CHAPTER VII RELATED TO PERMITTING FOR ACCESSORY DWELLING UNITS. Summary: The proposed Ordinance: Section 1: amends Code Section 23-7 to add or amend the definitions of abut, accessory apartment, accessory building, accessory dwelling unit and accessory structure; Section 2: amends Section 23-30 as to the regulations of accessory uses with respect to accessory habitation; Section 3: amends Section 23-30(c), with respect to the standards for accessory apartments and accessory buildings and structures, pertaining to the inclusion of accessory dwelling units; Section 4: amends Section 23-65, Table 7.1 as to parking for accessory units and other residential dwellings; Section 5: amends Borough Code Section 8-90, establishes a permit requirement for rental units, inclusive of accessory dwelling units; Section 6, provides for the severability of the ordinance provisions if any provisions are deemed invalid; Section 7, provides for the ef-

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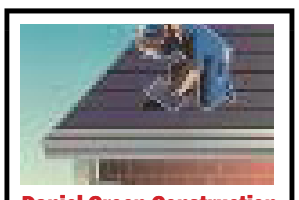

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FULL-TIME POLICE OFFICER
Valley Township is currently accepting applications for the **position** of Full-Time **Police** Officer. **Applicants** must be 21 years of age; be a U.S. **Citizen**; possess a high school diploma or GED; have **completed** a police academy certified by MPOETC and be able to **meet** the certification standards of MPOETC as required by PA **Act** 120; possess a PA driver's license; be physically and **mentally** fit to perform the duties of a police officer; and have **no** convictions of any state or federal offense that is classified as a misdemeanor or felony.

Additional information regarding selection process and benefits as well as the **application** form are available at the Valley Township Building at **1145** W Lincoln Hwy, Coatesville PA or on-line at www.valleyto**wnship.org**

Valley Township is an EOE; **applications** will be accepted until position is filled.

DRAFT

BOROUGH OF WEST CHESTER

Overview of MS4 Permit Requirements

Goose Creek Watershed Pollution Reduction Plan (PRP) & Total Maximum Daily Load (TMDL) Plan

DRAFT

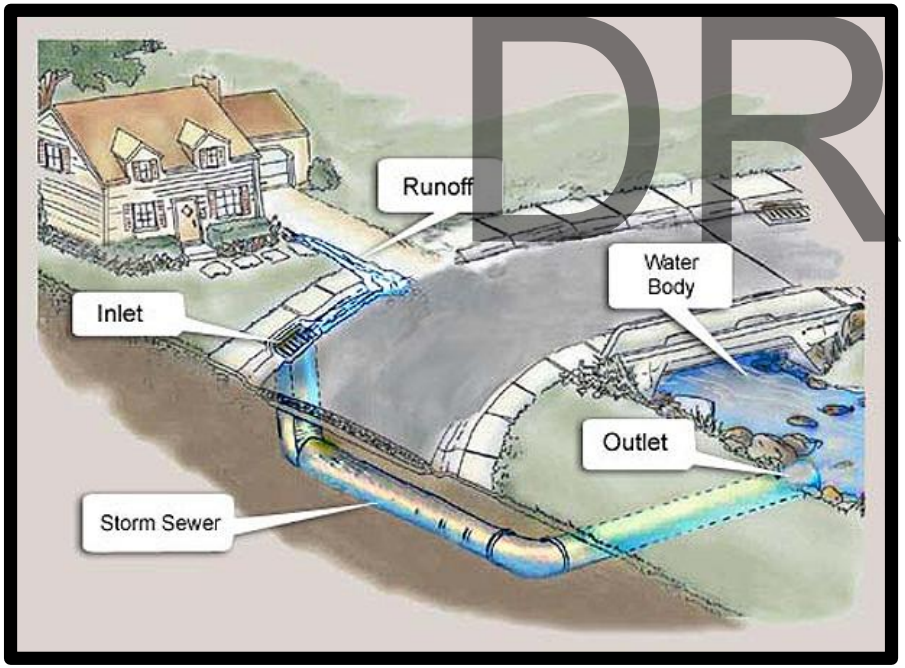
Presented By :
Kelly Goff, PE, CFM, Consulting Engineer
Will Williams, Sustainability Director

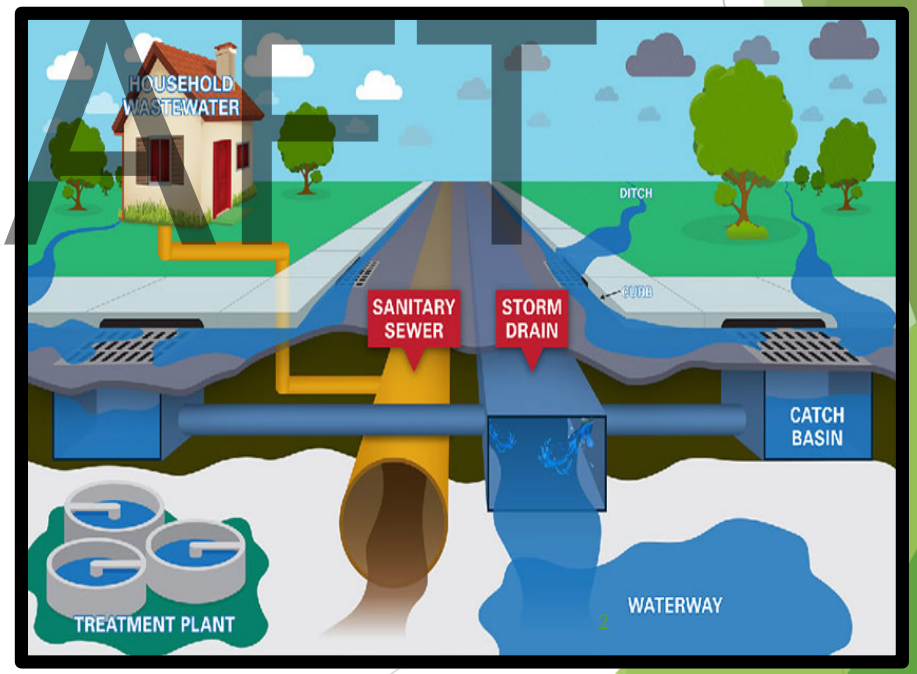
August 5, 2025

MS4 : *Municipal Separate Storm Sewer System*

Stormwater conveyance system conveys stormwater runoff from impervious surfaces to local waterways

DRAFT





2

Why regulate MS4?



MINIMIZE FLOOD DAMAGES

MAINTAIN ECOLOGY OF STREAMS

REDUCTION IN SEWER REHABILITATION & WATER TREATMENT COSTS

MS4 Permit Program Overview

DRAFT

- **MANDATED** by the United States Environmental Protection Agency (EPA) under the Clean Water Act (CWA)
- PADEP administers the program in PA
- PADEP conducts inspections to ensure compliance
- Designed to reduce stormwater pollution from municipal storm sewer systems
- Over 1,000 Permittees in Pennsylvania

MS4 Permit Requirements: Minimum Control Measures

- MCM 1 – Public Education and Outreach
- MCM 2 – Public Involvement and Participation
- MCM 3 – Illicit Discharge Detection and Elimination
- MCM 4 – Construction Site Runoff Control
- MCM 5 – Post Construction Stormwater Management
- MCM 6 – Pollution Prevention & Good Housekeeping

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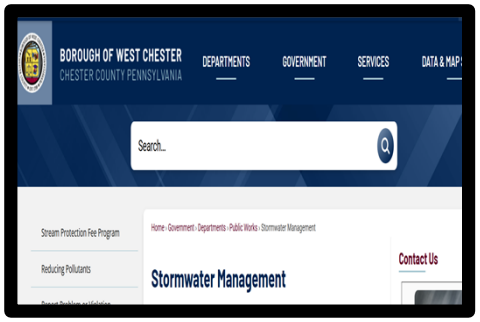


BOROUGH WEBSITE



OUTFALL INSPECTIONS



E&S CONTROLS



PCSM BMPS

MS4 Permit Requirements: Pollution Reduction Plan (PRP) Total Maximum Daily Load (TMDL) Plan

- The purpose of a TMDL Plan is to achieve pollutant load reductions based on EPA approved limits. A TMDL Plan is required when a waterbody has an EPA-approved TMDL
  - TMDL Borough requirements: Goose (Chester) Creek
- The purpose of a PRP is to reduce sediment pollution in PADEP designated impaired waters.
  - PRP Borough requirements: Taylor Run, Plum Run, Blackhorse Run, Brandywine Creek, Goose (Chester) Creek

DRAFT



Borough of West Chester
MS4

Goose Creek Watershed

DRAFT

PRP & TMDL Addenda Revisions
BMPs Eliminated

Location	BMP Type
Along Tributary	Streambank Stabilization & Restoration
Near S. Adams Street & E. Nields Street	Jellyfish Filter

DRAFT



STREAMBANK STABILIZATION & RESTORATION



JELLYFISH FILTER

PRP & TMDL Addenda Revisions- BMPs retained

DRAFT

Location	BMP Type
John O. Green Park*	Permeable Pavement
Fugett Park/Borough Hall*	Rain Gardens
Greenview Alley*	Bioswales
Various Locations*	Street Sweeping
Various Locations*	Tree Plantings

*Have been implemented



John O. Green Memorial Park



Borough Hall - Chestnut/Penn

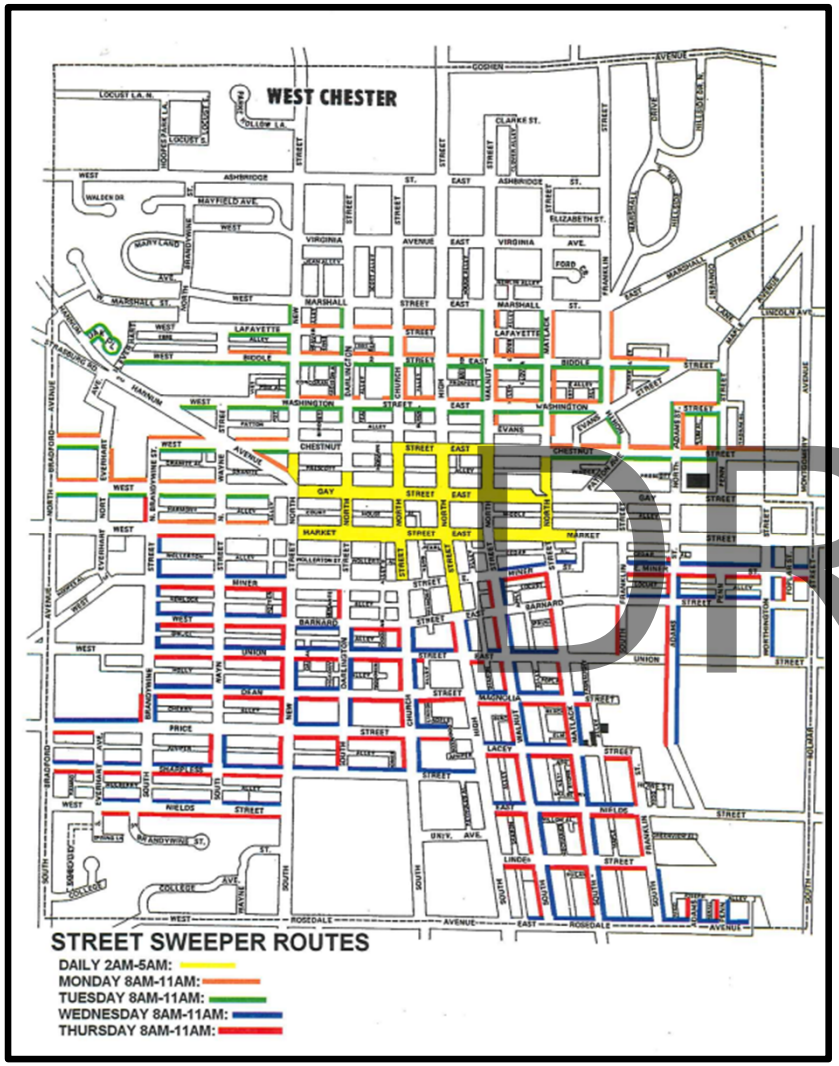
DRAFT



Borough Hall – Chestnut/Penn



Greenview Alley



Street Sweeping Schedule



Street Sweeping



Tree Plantings

DRAFT

PRP & TMDL Addenda Revisions – BMPS Added



Location	BMP Type
Public Works Building*	Rain Garden/Bioswale
Magnolia Street & Maple Alley Intersection, Union Street & Worthington Street Intersection	Rain Garden
Good Will Fire Company, Bolmar Street & Miner Street Intersection	Bioswale
Matlack Street Intersections: Magnolia, Union, Linden, Lacey*, E. Nields, E. Miner Street	Rain Garden Curb Curb Bump-outs
Miner Street Intersections: Poplar, S. Adams Street, S. Franklin Street	
Market Street Midblock between Franklin Avenue & S Adams Street	
Linden Street & Maple Alley Intersection	
S. Walnut Street & E. Barnard Street Intersection	

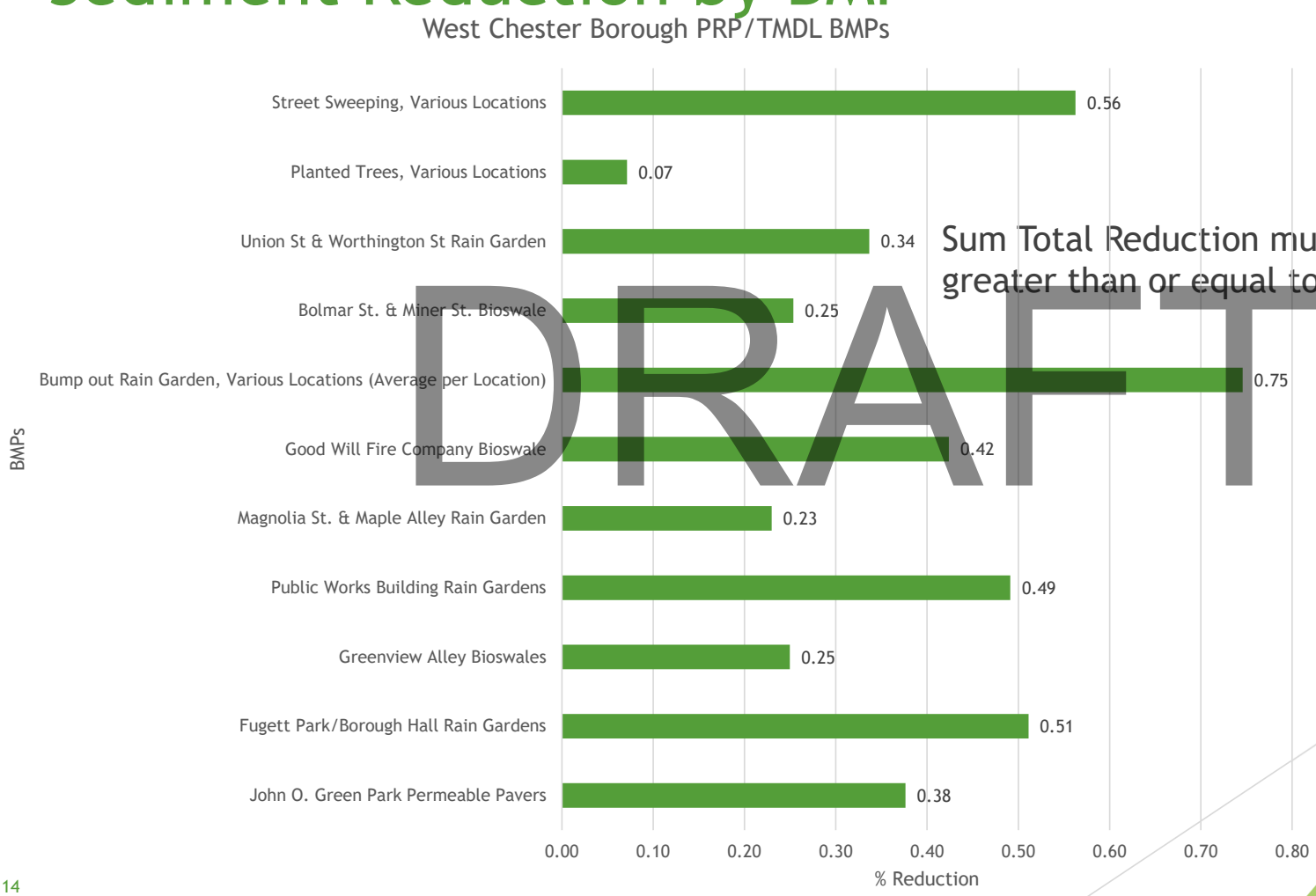
DRAFT

*Has been implemented



Public Works Building

Sediment Reduction by BMP



Sum Total Reduction must be greater than or equal to 10%

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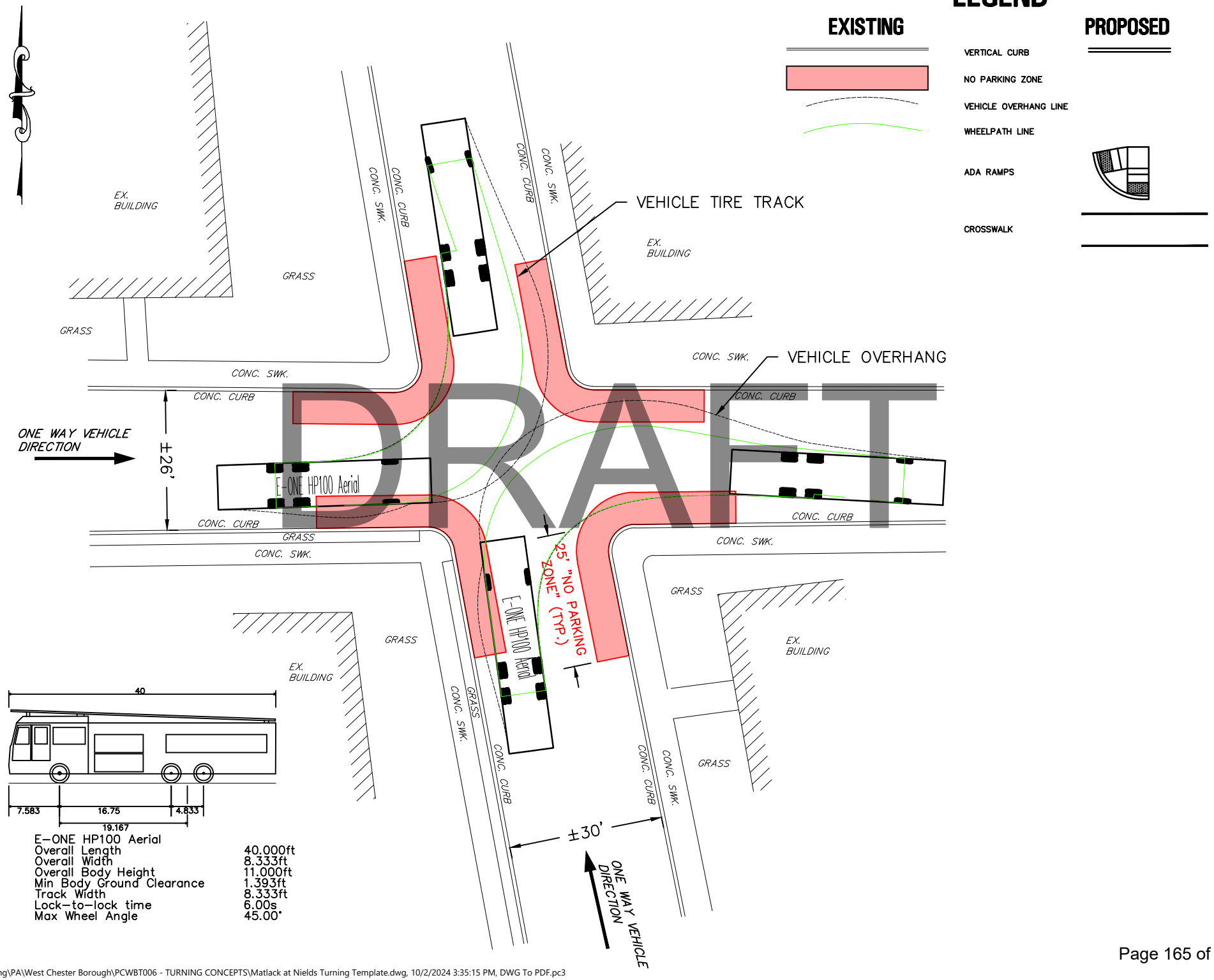
Questions?



Survey Link Above



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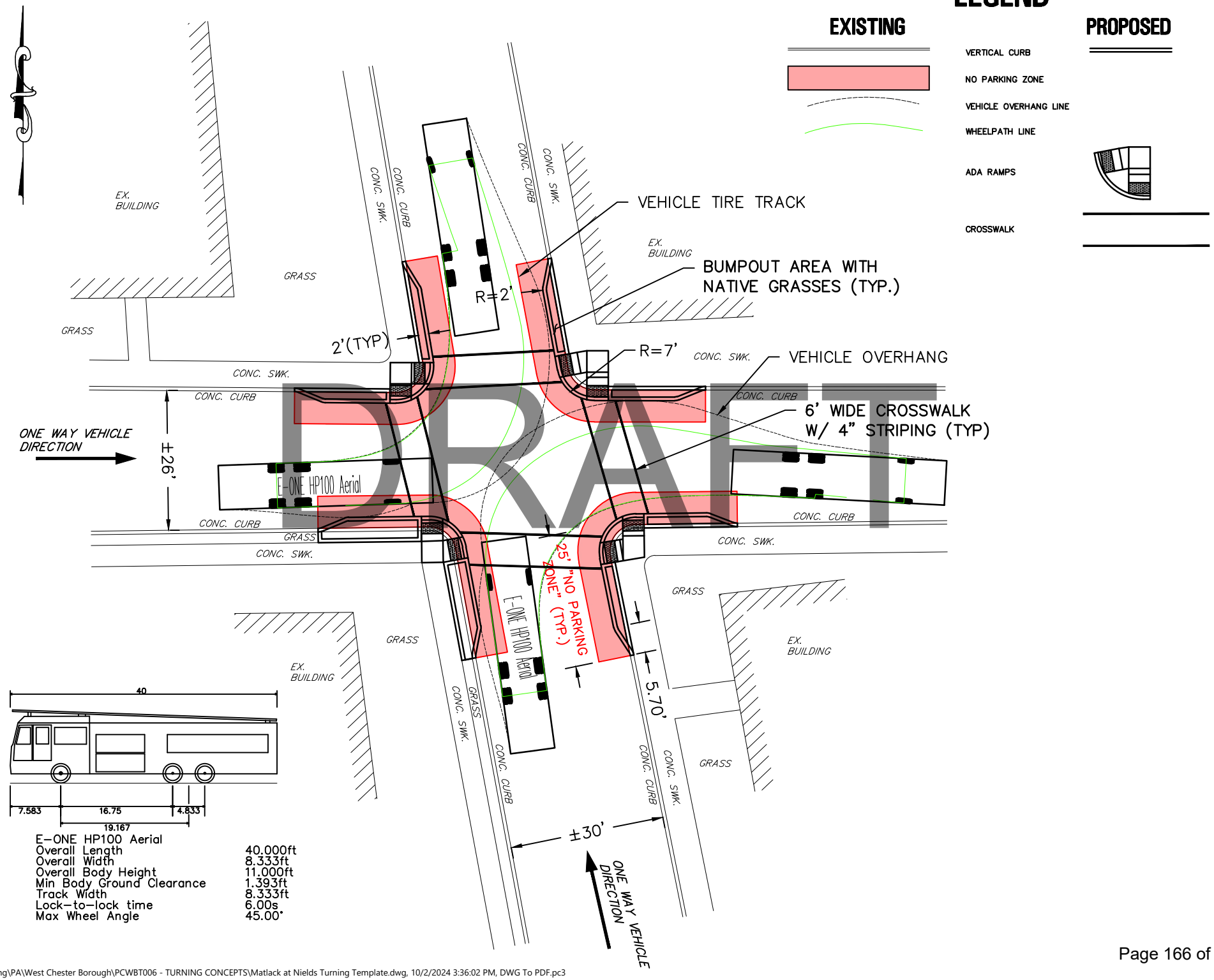
LEGEND
EXISTING
PROPOSED
VERTICAL CURB
NO PARKING ZONE
VEHICLE OVERHANG LINE
WHEELPATH LINE
ADA RAMPS
CROSSWALK
VEHICLE TIRE TRACK
BUMPOUT AREA WITH NATIVE GRASSES (TYP.)
VEHICLE OVERHANG
6' WIDE CROSSWALK W/ 4" STRIPING (TYP)
R=2'
R=7'
2'(TYP)
ONE WAY VEHICLE DIRECTION
±26'
E-ONE HP100 Aerial
25' "NO PARKING ZONE" (TYP.)
5.70'
±30'
ONE WAY VEHICLE DIRECTION
EX. BUILDING
GRASS
CONC. SWK.
CONC. CURB
40
7.583
16.75
4.833
19.167
E-ONE HP100 Aerial
Overall Length 40.000ft
Overall Width 8.333ft
Overall Body Height 11.000ft
Min Body Ground Clearance 1.393ft
Track Width 8.333ft
Lock-to-lock time 6.00s
Max Wheel Angle 45.00°

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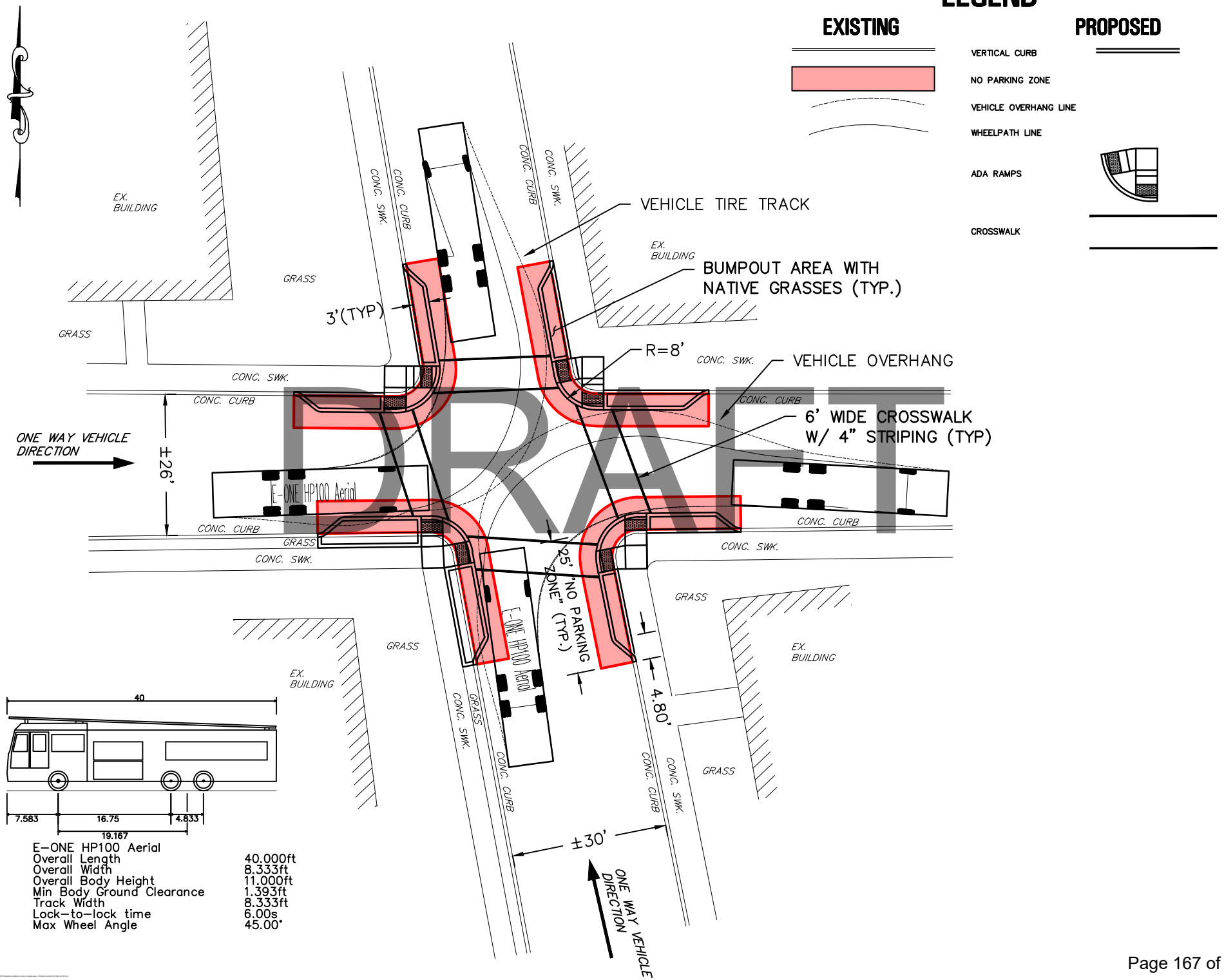
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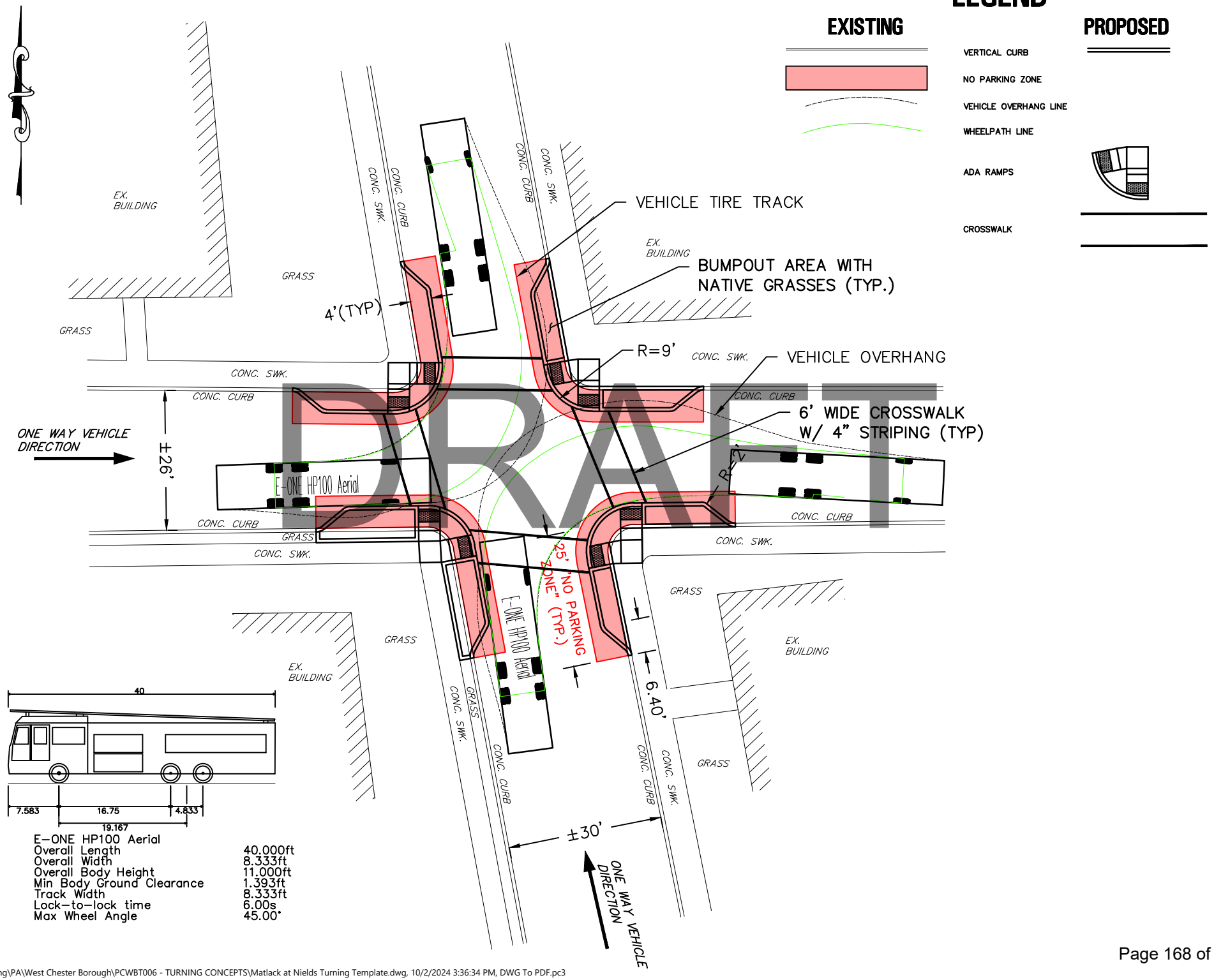
GRASS
CONC. SWK.
CONC. CURB
VEHICLE TIRE TRACK
BUMPOUT AREA WITH NATIVE GRASSES (TYP.)
3'(TYP)
R=8'
VEHICLE OVERHANG
6' WIDE CROSSWALK W/ 4" STRIPING (TYP)
ONE WAY VEHICLE DIRECTION
±26'
E-ONE HP100 Aerial
25' "NO PARKING ZONE" (TYP.)
4.80'
±30'
ONE WAY VEHICLE DIRECTION
DRAFT
40
7.583
16.75
4.833
19.167
E-ONE HP100 Aerial
Overall Length 40.000ft
Overall Width 8.333ft
Overall Body Height 11.000ft
Min Body Ground Clearance 1.393ft
Track Width 8.333ft
Lock-to-lock time 6.00s
Max Wheel Angle 45.00°



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Summary of Public Comment Received

1. **Preference for Underground Retention Basins**
   Some residents expressed preference to underground basins in place of surface BMPs.

   The Borough recognizes the importance of flood mitigation and agree that underground retention basins can be highly effective. While these options are considered where space and budget allow, they are often significantly more costly and require extensive utility coordination. Rain gardens and bioswales remain critical for meeting MS4 permit requirements and improving water quality, but we will continue evaluating opportunities for underground storage in high-priority flood areas.

2. **Maintenance Concerns**
   Some residents expressed concerns over the maintenance required for surface BMPs.

   Section G of this report lists the Borough's maintenance plans. The Borough will develop maintenance programs for each BMP to ensure rain gardens and bump-outs remain functional and visually appealing. As outlined in Section G, all maintenance programs will follow the PA BMP Manual. During the design phase, the Borough will specify low maintenance plantings when feasible.

DRAFT

3. **Safety & Traffic Issues**
   Residents expressed concern over the BMP bumpouts resulting in safety hazards.

   A sample turning template was shared with the public. All designs are reviewed for compliance with PennDOT and Borough safety standards

4. **General Feedback**
   Residents submitted positive feedback on the need for stormwater management throughout the Borough.

   No response required.

5. **Parking Concerns**
   Residents expressed concern over the BMP bumpouts eliminating parking spots.

   A sample turning template was shared with the public.

6. **Cost Concerns**
   Residents expressed concern over cost of these projects.

   The Borough will pursue grant funding and budget accordingly, as required.

7. **Flooding Concerns**

Some residents expressed concerns over flooding in certain areas or reviewing flooding issues over the entire watershed.

These BMPs are specifically required to improve water quality of stormwater runoff and the reduction of pollutants being delivered to the stream from stormwater runoff from Borough properties. A more comprehensive plan is needed to review and address flooding concerns.

8. **Most Liked BMPs**
   The following BMPs were considered the most desirable throughout the Borough.

   East Union Street & South Worthington Street Basin
   South Bolmar Street Basin
   South Bomar Street Bioswale

DRAFT

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PROPOSED BMP'S FOR WEST CHESTER TMDL AND PRP PLANS

WEST CHESTER

CHESTER COUNTY

DECEMBER, 2023

Legend

- Existing Outlet
- Existing Mahnole
- Existing Inlet
- Proposed Pipe
- Existing Storm Pipe
- Channel
- Existing Storm Basins

Proposed BMPs

Type

- Bio Retention Basin
- Bump-Out Rain Garden

N
W E
S

0 15 30 60 90 Feet

REMINGTON & VERNICK ENGINEERS
2059 SPRINGDALE ROAD, CHERRY HILL, NJ 08033
(856) 795-9595, FAX (856) 795-1882, WWW.RVE.COM
Certificate of Authorization: 24 GA 28003300
~ENGINEERING EXCELLENCE~



PROPOSED BMP'S FOR WEST CHESTER TMDL AND PRP PLANS

WEST CHESTER

CHESTER COUNTY

DECEMBER, 2023

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Proposed BMPs

Type

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- Bump-Out Rain Garden
- Basin Retrofit

N

W E

S

0 12.5 25 50 75 Feet

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PROPOSED BMP'S FOR WEST CHESTER TMDL AND PRP PLANS

WEST CHESTER

CHESTER COUNTY

DECEMBER, 2023

Legend

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- Existing Storm
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Proposed BMPs

Type

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- Bump-Out Rain Garden

N
W E
S

0 10 20 40 60
Feet

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PROPOSED BMP'S FOR WEST CHESTER TMDL AND PRP PLANS

WEST CHESTER

CHESTER COUNTY

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0 10 20 40 60 Feet

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WEST CHESTER

CHESTER COUNTY

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PROPOSED BMP'S FOR WEST CHESTER TMDL AND PRP PLANS

WEST CHESTER

CHESTER COUNTY

May, 2024

Legend

- Outlet
- Mahnole
- Existing Storm
- Proposed Pipes
- Existing Storm Pipes
- Existing Storm Basins

Proposed BMPs

Type

- Bio Retention Basin
- Bump-Out Rain Garden
- Basin Retrofit

N
W E
S

0 12.5 25 50 75
Feet

REMINGTON & VERNICK ENGINEERS
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PROPOSED BMP'S FOR WEST CHESTER TMDL AND PRP PLANS

WEST CHESTER

CHESTER COUNTY

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Proposed BMPs

Type

- Bio Retention Basin
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- Basin Retrofit
- Bioswale

N
W E
S

0 5 10 20 30
Feet

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WEST CHESTER

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CHESTER COUNTY

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N
W E
S

0 20 40 80 120
Feet

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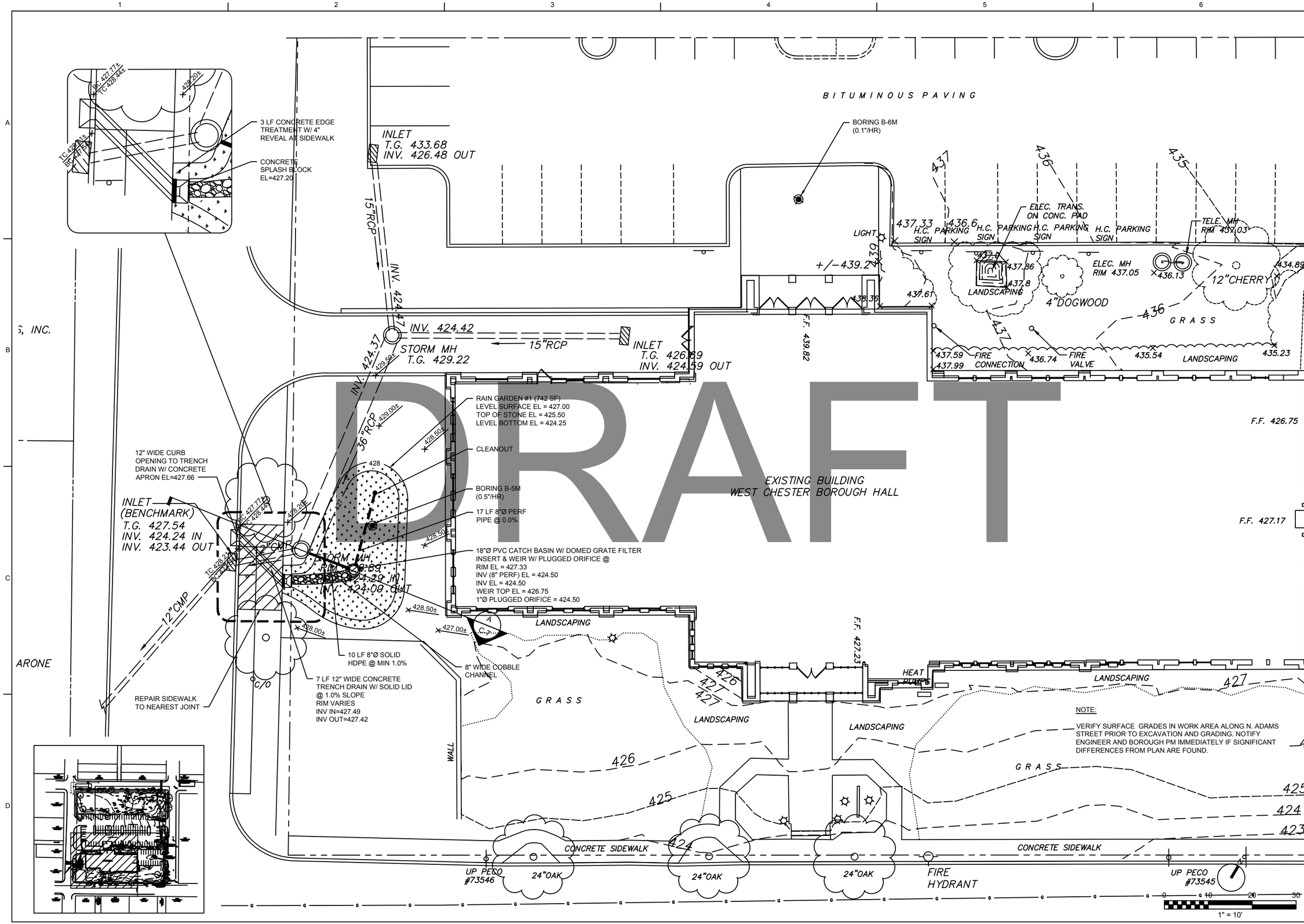

NOTE:

VERIFY SURFACE GRADES IN WORK AREA ALONG N. ADAMS STREET PRIOR TO EXCAVATION AND GRADING. NOTIFY ENGINEER AND BOROUGH PM IMMEDIATELY IF SIGNIFICANT DIFFERENCES FROM PLAN ARE FOUND.

DRAFT

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NO.	DATE	REVISION	BY	APVD

DSGN S BECK | DR B KLEIN | CHK A POTTS | APVD A POTTS

WEST CHESTER BOROUGH
STREAM PROTECTION PLAN STORMWATER MANAGEMENT IMPROVEMENTS
DEPARTMENT OF PUBLIC WORKS
WEST CHESTER BOROUGH, PENNSYLVANIA

CIVIL
GREEN INFRASTRUCTURE PLAN
SITE 016
N ADAMS ST AND E GAY ST

AS NOTED
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	JULY 2017
PROJ	473792
DWG	C-1
SHEET	3

BID DOCUMENTS

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FILENAME: $FILENAME PLOT DATE: $PLOTDATE PLOT TIME: $PLOTTIME

DRAFT

TYPE C INLET W/ FILTER INSERT
RIM EL = 434.50±
INV EL = 431.00

47 LF 6" Ø SDR-35 PVC PIPE @ 2.1%

12" WIDE CURB OPENING TO TRENCH DRAIN APRON
EL=344.27

BC 434.44±
TC 434.94±

5 LF NEW STONE CURB; TAPER ENDS TO MATCH EXISTING

REPAIR SIDEWALK TO NEAREST JOINT

13 LF 8" Ø PERF HDPE @ 0%

10 LF 12" CONCRETE TRENCH DRAIN W/ SOLID COVER @ -1.0%
INV IN = 434.10
INV OUT = 434.00

5 LF CONCRETE EDGE TREATMENT W/ 4" REVEAL AT SIDEWALK

RAIN GARDEN #2 (579 SF)
LEVEL SURFACE EL = 433.50
TOP OF STONE EL = 431.50
LEVEL BOTTOM EL = 429.50

18" Ø PVC CATCH BASIN W/DOMED GRATE, FILTER INSERT, AND 1" PLUGGED ORIFICE
RIM EL = 434.00
INV (8" PERF) EL = 429.75
INV OUT (8" SOLID) EL = 429.50
WEIR TOP EL = 433.50
1" PLUGGED ORIFICE EL = 429.50

CONCRETE SPLASH PAD

CONNECT EVERY DOWNSPOUT @ SPLASH BLOCK

CLEANOUT

ANTI-SEEP COLLAR

60 LF 8" Ø SOLID HDPE @ 1.5%

CLEANOUT

ANTI-SEEP COLLAR

12" Ø PVC CATCH BASIN W/ SOLID COVER
RIM EL = 432.00
INV EL = 428.45

20 LF 8" Ø PERF HDPE @ 0%

CLEANOUT

PROTECT EXST. LIGHT POLE

SUBSURFACE INFILTRATION TRENCH (597 SF)
LEVEL BOTTOM EL = 428.20
TOP OF STONE EL = 430.70

EXIST. INLET #4
T.G. 431.49
INV. 427.84 OUT

25 LF 8"Ø PERF HDPE @ 0%

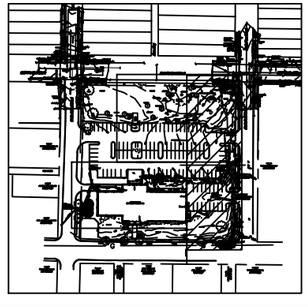
ANTI-SEEP COLLAR

5 LF 8" Ø SOLID HDPE @ MIN 1.0%

3 LF 8" Ø SOLID HDPE @ MIN 1.0%

TYPE C INLET W/ FILTER INSERT
RIM EL = 431.60±
INV IN EL = 428.45
INV OUT = 428.20
INSTALL SLOW RELEASE ORIFICE CAP ON OUTLET PIPE

NOTE:
VERIFY SURFACE GRADES AT CHESTNUT STREET AND ON SITE IN PROPOSED WORK AREAS PRIOR TO EXCAVATION AND GRADING.



EXIST. INLET #3
T.G. 431.41
INV. 426.71 IN
INV. 426.66 OUT

7 LF 8" Ø SOLID HDPE @ MIN. 1.0%

EX.STORM MH #2
RIM 427.79
INV. 421.99 IN
INV. 421.79 OUT

35 LF 8" Ø PERF HDPE @ 0%

5 LF 8" Ø SOLID HDPE @ 0%

TYPE C INLET W/ FILTER INSERT AND GUTTER GUARD
RIM EL = 425.50
INV EL = 423.75

ANTI-SEEP COLLAR

CLEANOUT

CONNECT OUTLET PIPE TO MANHOLE @ FL = 425.68

12" Ø PVC CATCH BASIN W/SOLID COVER AND SLOW RELEASE ORIFICE CAP ON SOLID OUTLET PIPE
RIM EL = 426.75
INV EL = 425.75

SUBSURFACE INFILTRATION TRENCH #2B (514 SF)
LEVEL BOTTOM EL = 423.50
TOP OF STONE EL = 425.50

INLET (TBR)
T.G. 425.78
INV. 420.78 OUT

EX. STORM MH #1
RIM 425.55
INV. IN 419.95 (FROM EX#2)
INV. IN 419.85 (36")
INV. OUT 418.95 (48")

STORM MH
RIM 423.90
INV. 418.90 IN
INV. 418.70 OUT

STORM MH
RIM 422.77
INV. 418.57 IN
INV. 417.27 OUT

INLET
T.G. 420.61
INV. 417.91 OUT

INV. 416.44
INV. 420.84

INV. 415.84
INV. 415.74

INLET
T.G. 420.84

NOT ABLE TO DETERMINE TYPE & SIZE OF PIPE

0 10 20 30
1" = 10'

..\d1083731\PE_Stamp-PA.jpg

NO.	DATE	DSGN	REVISION	BY	APVD
		S BECK	B.KLEIN	A.POTTS	A.POTTS

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WEST CHESTER BOROUGH
STREAM PROTECTION PLAN STORMWATER MANAGEMENT IMPROVEMENTS
DEPARTMENT OF PUBLIC WORKS
WEST CHESTER BOROUGH, PENNSYLVANIA

CIVIL

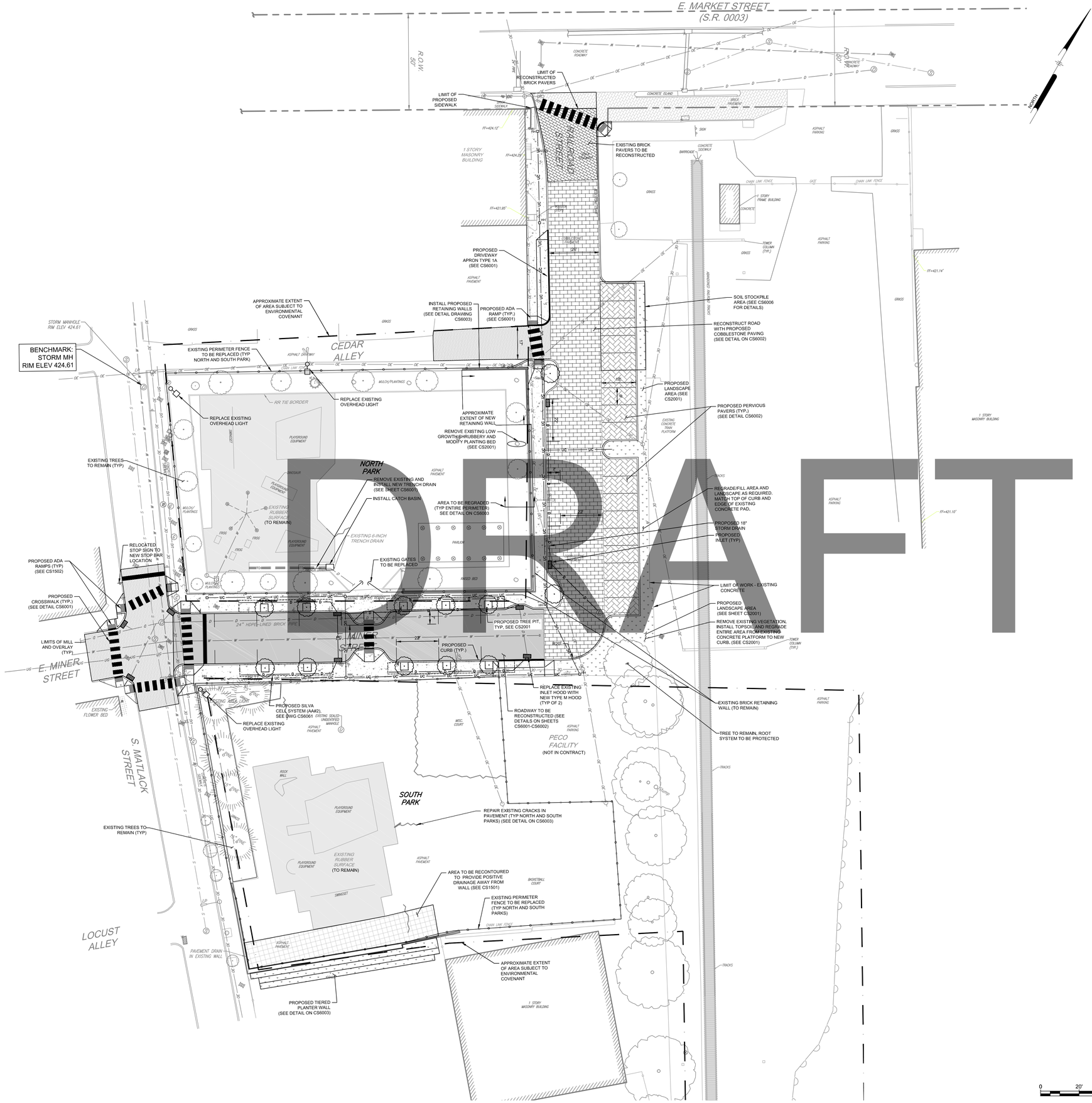
GREEN INFRASTRUCTURE PLAN
SITE 016 - E CHESTNUT AND N PENN ST
E GAY ST AND N PENN ST

AS NOTED
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING. 0 1"

DATE	JULY 2017
PROJ	473792
DWG	C-4
SHEET	5

BID DOCUMENTS

FILENAME: $FILENAME PLOT DATE: $PLOTDATE PLOTTED BY: $PLOTUSER



DRAFT

GENERAL NOTES:

1. SITE ADDRESS: SOUTH MATLACK STREET AND EAST MINER STREET
   WEST CHESTER, PA 19380
   TAX MAP #: 0109 0368000E AND TAX MAP #: 0109 0552000E
   BOOK #: 4345 PAGE #: 1636

   RECORD OWNER/APPLICANT: BOROUGH OF WEST CHESTER
   401 EAST GAY STREET
   WEST CHESTER, PA 19380

2. THE PURPOSE OF THIS PLAN IS TO DEPICT PARK AND ROADWAY IMPROVEMENTS.
3. THIS SITE IS CURRENTLY ZONED TC - TOWN CENTER DISTRICT BY THE BOROUGH OF WEST CHESTER ZONING MAP. FOR COMPLETE ZONING INFORMATION PLEASE REFER TO THE ZONING CODE OF THE BOROUGH OF WEST CHESTER.
4. BY GRAPHIC PLOTTING ONLY, SUBJECT PARCEL AREA IS LOCATED IN ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN) OF THE FLOOD INSURANCE RATE MAP, PANEL NO. 210 OF 380, COMMUNITY MAP NO. 42029C0210G WHICH BEARS AN EFFECTIVE DATE OF SEPTEMBER 29, 2017. NO FIELD SURVEYING WAS PERFORMED TO DETERMINE THIS ZONE AND AN ELEVATION CERTIFICATE MAY BE NEEDED TO VERIFY THIS DETERMINATION OR APPLY FOR A VARIANCE FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
5. UNLESS SPECIFICALLY STATED OR SHOWN HEREON TO THE CONTRARY, THIS SURVEY IS MADE SUBJECT TO AND DOES NOT LOCATE OR DELINEATE:
   A. RIGHTS OR INTERESTS OF THE UNITED STATES OF AMERICA OR COMMONWEALTH OF PENNSYLVANIA OVER LANDS NOW OR FORMERLY FLOWED BY TIDEWATER, BUT NO LONGER VISIBLE OR PHYSICALLY EVIDENT, OR LANDS CONTAINING ANY ANIMAL, MARINE, OR BOTANICAL SPECIES REGULATED BY OR UNDER THE JURISDICTION OF ANY FEDERAL, STATE, OR LOCAL AGENCY,
   B. BUILDING SETBACK LINES, ZONING REGULATIONS OR LINES ESTABLISHED BY ANY FEDERAL, STATE OR LOCAL AGENCY WHICH MAY AFFECT THE BUILDING OR DEVELOPMENT POTENTIAL OF THE SUBJECT PROPERTY,
   C. ANY SUBSURFACE OR SUBTERRANEAN CONDITION, EASEMENTS OR RIGHTS, INCLUDING, BUT NOT LIMITED TO MINERAL OR MINING RIGHTS, OR THE LOCATION OF OR RIGHTS TO ANY SUBSURFACE STRUCTURES, CONTAINERS OR FACILITIES OR ANY OTHER NATURAL OR MAN-MADE SUBSURFACE CONDITION WHICH MAY OR MAY NOT AFFECT THE USE OR DEVELOPMENT POTENTIAL OF THE SUBJECT PROPERTY,
7. THE LOCATION OF THE EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN HAVE BEEN TAKEN FROM EXISTING UTILITY RECORDS AVAILABLE AT THE TIME THESE PLANS WERE PREPARED AND FROM SURFACE OBSERVATION OF THE SITE.
8. COMPLETENESS OR ACCURACY OF LOCATION AND DEPTH OF UNDERGROUND UTILITIES AND STRUCTURES IS NOT GUARANTEED.
9. IN ACCORDANCE WITH PA ACT 287 OF 1974 AS AMENDED BY PA ACT 187 OF 1996, THE CONTRACTOR SHALL NOTIFY ALL UTILITIES WITHIN THE WORK AREA VIA THE PENNSYLVANIA ONE CALL SYSTEM, INC. (800-242-1776) A MINIMUM OF 3 WORKING DAYS BEFORE THE START OF EXCAVATION.
10. THE CONTRACTOR SHALL VERIFY LOCATIONS AND DEPTHS OF ALL UNDERGROUND UTILITIES AND STRUCTURES BEFORE THE START OF WORK.
11. REFERENCE IS MADE TO PENNSYLVANIA ONE CALL SYSTEM, ASSIGNED SERIAL NUMBER 20190811387 IN ACCORDANCE WITH PA ACT 287 OF 1974 AS AMENDED BY PA ACT 121 OF 2008 ENTITLED "UNDERGROUND UTILITY LINE PROTECTION LAW". (800-242-1776)
12. SEE DRAWING CS0002 AND SPECIFICATIONS FOR INFORMATION ON ENVIRONMENTAL COVENANT.

LEGEND:

- PROPERTY LINE
- LEGAL RIGHT-OF-WAY
- APPROXIMATE EXTENT OF ENVIRONMENTAL COVENTANT
- EX CONCRETE MONUMENT
- EX BUILDING
- EX CURB
- EX EDGE OF PAVEMENT
- EX WALL
- EX FENCE LINE
- EX SIGN
- EX LANDSCAPING
- 361 EX MINOR CONTOUR
- 360 EX MAJOR CONTOUR
- D EX STORM SEWER LINES
- EX UTILITY MANHOLE
- EX STORM SEWER INLET
- EX STORMWATER MANHOLE
- OE EX OVERHEAD ELECTRICAL LINES
- UE EX UNDERGROUND ELECTRICAL LINES
- LP EX UTILITY POLE
- EX STREET LIGHT
- W EX WATER LINES
- EX FIRE HYDRANT
- EX WATER VALVE
- S EX SANITARY SEWER LINES
- EX SANITARY MANHOLE
- C.O. EX SANITARY CLEAN OUT
- G EX GAS LINES
- EX ELECTRIC MANHOLE
- BENCHMARK
- PROPOSED CURB
- PROPOSED DEPRESSED CURB
- PROPOSED RETAINING WALL
- "S" PROPOSED SIGN
- 360 PROPOSED MAJOR CONTOUR
- 361 PROPOSED MINOR CONTOUR
- PROPOSED FENCE
- PROPOSED CONCRETE SIDEWALK
- PROPOSED STORM MANHOLE
- D PROPOSED STORM SEWER
- PROPOSED TRENCH DRAIN
- PROPOSED INLET
- PROPOSED LIGHT POLE
- PROPOSED PERVIOUS PAVERS
- PROPOSED MILL AND OVERLAY
- PROPOSED RECONSTRUCTED ROADWAY
- PROPOSED RE-LEVELED COBBLESTONE PAVERS
- UC PROPOSED ELECTRICAL CONDUIT - 2 INCH
- HH PROPOSED ELECTRICAL HANDHOLE

PENNSYLVANIA ONE CALL SYSTEM INC. 1-800-242-1776 STOP - CALL BEFORE YOU DIG!

CALL BEFORE YOU DIG
BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA
CALL 1-800-242-1776
PA. ACT 287 OF 1974 REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL OR BLAST PENNSYLVANIA ONE-CALL SYSTEM, INC.
SERIAL NUMBER(S): 20190811387

Pennoni
PENNONI ASSOCIATES INC.
One South Church Street, 2nd Floor
West Chester, PA 19382
T 610.429.8987 F 610.429.8918

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

IMPROVEMENTS TO JOHN O. GREEN MEMORIAL PARK
SOUTH MATLACK STREET AND EAST MINER STREET
WEST CHESTER, PA 19380

IMPROVEMENTS PLAN

BOROUGH OF WEST CHESTER
401 EAST GAY STREET
WEST CHESTER, PA 19380

NO.	DATE	REVISIONS	BY
1	10/21/2019	ISSUED FOR BID	CF

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

PROJECT	WCHBO00008
DATE	2019-06-21
DRAWING SCALE	1"=20'
DRAWN BY	RMG
APPROVED BY	NMC

CS1001

SHEET 5 OF 17

U:\Accounts\WCBO\WCHBO00008 - John O Green Park GMD\ESIGN_SHEETS\CS1001.dwg PLOTTED: 10/28/2019 11:09 AM BY: Tyler Olsen PLOTSTYLE: Pennoni NCS.ctb PROJECT STATUS: —

GOOSE CREEK GREEN STORMWATER

CONSTRUCTION PLANS

CHESTER COUNTY, PENNSYLVANIA
JUNE 7, 2024

PREPARED FOR:
OWNER/DEVELOPER

WEST CHESTER BOROUGH

401 EAST GAY STREET
WEST CHESTER, PA 19380

DRAFT



LOCATION MAP
Scale: 1" = 2000'

PREPARED BY:

PENNONI ASSOCIATES INC.

158 W Gay Street, Suite 300
West Chester, PA 19380
T 610.429.8907
F 610.429.8918

CALL BEFORE YOU DIG
BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA
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SERIAL NUMBER(S):

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West Chester, PA 19382
T 610.429.8907 F 610.429.8918

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GOOSE CREEK GREEN STORMWATER
205 LACEY STREET
PROJECT CITY, PROJECT STATE

COVER SHEET

WEST CHESTER BOROUGH
401 EAST GAY STREET
CLIENT CITY, CLIENT STATE ZIP

DATE	NO.	REVISIONS	BY

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PROJECT	WCHBO00030
DATE	2024-06-07
DRAWING SCALE	AS SHOWN
DRAWN BY	AGS
APPROVED BY	CRP

CS0001

SHEET 1 OF 21

GENERAL NOTES:

1. THE PURPOSE OF THESE PLANS IS TO DEPICT THE PROPOSED CONSTRUCTION OF NEW STORMWATER MANAGEMENT FACILITIES.

2. A FIELD SURVEY OF THE SITE WAS PERFORMED BY PENNONI ASSOCIATES INC. IN DECEMBER 2023.

3. UNLESS SPECIFICALLY STATED OR SHOWN HEREON TO THE CONTRARY, THIS SURVEY IS MADE SUBJECT TO AND DOES NOT LOCATE OR DELINEATE:

   - § RIGHTS OR INTERESTS OF THE UNITED STATES OF AMERICA OR COMMONWEALTH OF PENNSYLVANIA OVER LANDS NOW OR FORMERLY FLOWED BY TIDEWATER BUT NO LONGER VISIBLE OR PHYSICALLY EVIDENT, OR LANDS CONTAINING ANY ANIMAL, MARINE, OR BOTANICAL SPECIES REGULATED BY OR UNDER THE JURISDICTION OF ANY FEDERAL, STATE, OR LOCAL AGENCY.
   - § BUILDING SETBACK LINES, ZONING REGULATIONS OR LINES ESTABLISHED BY ANY FEDERAL, STATE, OR LOCAL AGENCY WHICH MAY AFFECT THE BUILDING OR DEVELOPMENT POTENTIAL OF THE SUBJECT PROPERTY.
   - § ANY SUBSURFACE OR SUBTERRANEAN CONDITION, EASEMENTS OR RIGHTS INCLUDING BUT NOT LIMITED TO MINERAL OR MINING RIGHTS, OR THE LOCATION OF OR RIGHTS TO ANY SUBSURFACE STRUCTURES, CONTAINERS, OR FACILITIES OR ANY OTHER NATURAL OR MAN-MADE SUBSURFACE CONDITION WHICH MAY OR MAY NOT AFFECT THE USE OR DEVELOPMENT POTENTIAL OF THE SUBJECT PROPERTY.

4. THIS PLAN IS NOT INTENDED TO CONSTITUTE A BOUNDARY SURVEY AS IDENTIFIED IN SECTION E - STANDARDS FOR BOUNDARY SURVEYS IN THE "STANDARDS OF PRACTICE FOR PROFESSIONAL LAND SURVEYORS IN THE COMMONWEALTH OF PENNSYLVANIA" AS ADOPTED BY THE PENNSYLVANIA SOCIETY OF LAND SURVEYORS ON NOVEMBER 19, 2021".

5. THE HORIZONTAL DATUM FOR THE PLANIMETRIC FEATURES AND COORDINATE VALUES INDICATED ON THIS PLAN REFERENCE THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE AS REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83) WITH THE 2011 ADJUSTMENT (PASPCS-S NAD83-2011)], AND WERE DETERMINED FROM OBSERVATIONS ON DECEMBER 26, 2023.

6. THE VERTICAL DATUM FOR THE ELEVATIONS AND CONTOURS INDICATED ON THIS PLAN REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88), AND WAS DETERMINED FROM GNSS OBSERVATIONS ON DECEMBER 26, 2023.

7. TEMPORARY SITE BENCHMARK NOTE:
   TEMPORARY BENCHMARK 103
   DESCRIPTION: PK NAIL SET
   ELEVATION = 407.04'

   TEMPORARY BENCHMARK 500
   DESCRIPTION: PK NAIL SET
   ELEVATION = 413.46'

8. PARKING SPACES SHOWN REPRESENT VISIBLE AND CLEARLY DELINEATED PAVEMENT MARKINGS AND SIGNS. THE SURVEYOR HAS NOT MEASURED INDIVIDUAL SPACES FOR CONFORMANCE WITH ZONING REGULATIONS OR ADA REGULATIONS.

9. LOCATIONS OF ON AND OFF-SITE UTILITIES AS SHOWN ARE APPROXIMATE AND MAY OR MAY NOT BE COMPLETE. THE NATURE AND EXACT LOCATION OF EXISTING UTILITIES SHOULD BE VERIFIED PRIOR TO INITIATING ANY ACTIVITY THAT MAY AFFECT THEIR USE OR LOCATION.

10. COMPLETENESS OR ACCURACY OF LOCATION AND DEPTH OF UNDERGROUND UTILITIES AND STRUCTURES IS NOT GUARANTEED.

11. IN ACCORDANCE WITH PA ACT 287 OF 1974 AS AMENDED BY PA ACT 121 OF 2008 ENTITLED "UNDERGROUND UTILITY LINE PROTECTION LAW". THE CONTRACTOR SHALL NOTIFY UTILITIES WITHIN THE WORK AREA VIA THE PENNSYLVANIA ONE CALL SYSTEM, INC. (800-242-1776) A MINIMUM OF 3 WORKING DAYS BEFORE THE START OF EXCAVATION.

12. THE CONTRACTOR SHALL VERIFY LOCATIONS AND DEPTHS OF UNDERGROUND UTILITIES AND STRUCTURES BEFORE THE START OF WORK.

13. ALL UNITS SHOWN ARE IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

14. AT THE TIME OF SURVEY, THERE WAS NO OBSERVED EVIDENCE OF A WETLANDS DELINEATION HAVING BEEN COMPLETED NOR WAS THE SURVEYOR PROVIDED A WETLANDS DELINEATION REPORT.

15. THE LOCATION OF THE EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN HAVE BEEN TAKEN FROM EXISTING UTILITY RECORDS AVAILABLE AT THE TIME THESE PLANS WERE PREPARED AND FROM SURFACE OBSERVATION OF THE SITE.

16. COMPLETENESS OR ACCURACY OF LOCATION AND DEPTH OF UNDERGROUND UTILITIES AND STRUCTURES IS NOT GUARANTEED.

17. IN ACCORDANCE WITH PA ACT 287 OF 1974 AS AMENDED BY PA ACT 121 OF 2008 ENTITLED "UNDERGROUND UTILITY LINE PROTECTION LAW". THE CONTRACTOR SHALL NOTIFY UTILITIES WITHIN THE WORK AREA VIA THE PENNSYLVANIA ONE CALL SYSTEM, INC. (800-242-1776) A MINIMUM OF 3 WORKING DAYS BEFORE THE START OF EXCAVATION.

18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND STRUCTURES AND UTILITIES, SUCH AS WATER, SEWER, TELEPHONE AND ELECTRIC CONDUITS, ETC, AND ABOVE GROUND UTILITIES, WHICH MAY BE ENCOUNTERED DURING CONSTRUCTION OPERATIONS. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL EXISTING UTILITIES.

19. PRIOR TO CONSTRUCTION, CONTRACTOR IS TO FIELD LOCATE AND RECORD ANY DAMAGE TO EXISTING FENCING, SIDEWALKS, CURBS, OR OTHER ITEMS NOT INTENDED TO BE REMOVED OR REPLACED. ENGINEER TO VERIFY LOCATION AND EXTEND OF DAMAGE.

20. DAMAGE TO EXISTING PAVING, SIDEWALK, CURB OR OTHER ITEMS NOT INTENDED TO BE REPLACED OR REMOVED DURING CONSTRUCTION SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER. CONTRACTOR SHALL REPAIR OR REPLACE ALL DAMAGED ITEMS WITHOUT CHARGE TO THE OWNER.

FLOOD ZONE INFORMATION:

1. BY GRAPHIC PLOTTING ONLY, BASED UPON THE FLOOD INSURANCE RATE MAP, PANEL NO. 210 OF 380, COMMUNITY MAP NO. 42029C0210G, WHICH BEARS AN EFFECTIVE DATE OF SEPTEMBER 29, 2017. THE SITE IS LOCATED IN THE FOLLOWING ZONE(S):
   - § ZONE X *"AREA OF MINIMAL FLOOD HAZARD"*

   NO FIELD SURVEYING WAS PERFORMED TO DETERMINE THIS ZONE AND AN ELEVATION CERTIFICATE MAY BE NEEDED TO VERIFY THIS DETERMINATION OR TO APPLY FOR A VARIANCE FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

PLAN REFERENCES

1. RECORDED PLANS
   - § PLAN ENTITLED "FINAL PLAN, RECORD PLAN, WEST CHESTER PUBLIC WORKS CAMPUS", DRAWING NO. 09-07035T, PREPARED BY GILMORE & ASSOCIATES, INC., DATED 8/17/2010, AND LAST REVISED 2/1/2011, RECORDED IN THE CHESTER COUNTY RECORDER OF DEEDS OFFICE, PLAN BOOK 19061 PAGE 1.

TEMPORARY CONSTRUCTION FENCE AND ACCESS LOCATIONS:

1. TEMPORARY CONSTRUCTION FENCE SHALL BE 4' HIGH HEAVY DUTY ORANGE SAFETY FENCE, HIGH DENSITY POLYETHYLENE, SQUARE MESH, WITH SMOOTH TOP AND BOTTOM BORDERS (SEE DETAIL).

2. WORK AREA TO BE ACCESSED FROM THE MAIN PARK ENTRANCE ON SMITHBRIDGE ROAD.

3. CONTRACTOR MUST MAINTAIN COMPLETE ENCLOSURE AROUND THE WORK AREA FOR DURATION OF PROJECT. CLOSE CONSTRUCTION ACCESS POINTS AT ANY TIME CONTRACTORS ARE NOT ACTIVELY WORKING ON SITE.

SITE PREPARATION AND REMOVAL NOTES:

1. ALL SEDIMENT AND EROSION CONTROL MEASURES AND TREE PROTECTION FENCING MUST BE INSTALLED BEFORE EXCAVATION OR OTHER EARTH DISTURBANCE ACTIVITIES.

2. CONTRACTOR SHALL BE RESPONSIBLE FOR SAFETY AND PROTECTION OF WORK AREA DURING CONSTRUCTION.

3. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL FIELD LOCATE AND RECORD ANY DAMAGE TO EXISTING PAVING, SIDEWALK, CURB, UTILITIES OR OTHER ITEMS IN THE WORK AREA. ENGINEER MUST VERIFY LOCATION AND EXTENT OF DAMAGE.

4. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING ITEMS WITHIN THE WORK AREA NOTED FOR REMOVAL. REMOVAL INCLUDES ALL FOUNDATIONS, SUBBASE MATERIALS AND OTHER ITEMS SPECIFICALLY IDENTIFIED FOR REMOVAL ON THE DRAWINGS AND AS NECESSARY TO CONSTRUCT NEW IMPROVEMENTS. AFTER REMOVALS, CONTRACTOR IS RESPONSIBLE FOR BACKFILL, COMPACTION, AND RESTORATION OF DISTURBED AREAS.

5. CONTRACTOR SHALL PROTECT ALL BUILDINGS, UTILITIES, FACADES, ENTRANCE PADS, FENCING, SIGNAGE, PLANT MATERIAL, AND OTHER ITEMS TO REMAIN FROM DAMAGE DURING CONSTRUCTION. THE CONTRACTOR SHALL REPLACE AND/OR RESTORE DAMAGED OR DISTURBED AREAS AS A RESULT OF HIS NEGLIGENCE AT NO ADDITIONAL COST TO THE OWNER TO THE OWNER'S SATISFACTION.

6. ALL DEBRIS SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF BY THE CONTRACTOR ON A DAILY BASIS.

7. ALL EXISTING UTILITY BOXES, METERS, MANHOLES, ETC. WITHIN THE WORK AREA ARE TO REMAIN UNLESS NOTED. REMOVE PAVING AROUND THESE STRUCTURES WITHOUT DISTURBANCE. ADJUST TOPS TO FINISHED GRADE AS NECESSARY.

TREE PROTECTION AND TRIMMING NOTES:

1. ALL TREES ON SITE ARE TO REMAIN AND BE PROTECTED, UNLESS OTHERWISE NOTED. AVOID OR LIMIT OPERATION OF HEAVY MACHINERY WITHIN DRIPLINE OF ALL TREES.

2. INSTALL TREE PROTECTION FENCE AS NECESSARY AROUND DRIPLINE OF TREES. LOCATIONS OF TREE PROTECTION FENCE MAY BE ADJUSTED IN FIELD TO INCLUDE THE AREA UNDER THE DRIP-LINE OF EXISTING TREES TO REMAIN.

3. IF TREE ROOTS ARE ENCOUNTERED DURING EXCAVATION, PROPER ROOT PRUNING MEASURES MUST BE FOLLOWED PER SPECIFICATIONS AND DIRECTION OF THE TOWNSHIP ARBORIST.

4. PRUNE EXISTING TREES TO REMAIN TO REMOVE DEAD AND BROKEN BRANCHES. ALL PRUNING SHALL FOLLOW THE MOST RECENT ANSI A300 PRUNING STANDARDS . REVIEW WITH THE ENGINEER AND TOWNSHIP ARBORIST BEFORE PRUNING.

LAYOUT NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR LAYOUT OF PROPOSED IMPROVEMENTS. THE ENGINEER MUST BE NOTIFIED OF ANY DISCREPANCIES BETWEEN FIELD CONDITIONS AND THIS PLAN WHICH WILL AFFECT THE LAYOUT OF THE PROPOSED IMPROVEMENTS PRIOR TO CONSTRUCTION. THE ENGINEER WILL PROVIDE DIRECTION TO RESOLVE CONFLICTS.

2. DIGITAL AUTOCAD FILES CAN BE SUPPLIED TO THE CONTRACTOR/CONTRACTOR'S SURVEYOR FOR LAYOUT OF SITE ELEMENTS.

3. PROPOSED PARKING LOT AND SIDEWALK LOCATIONS TO BE STAKED IN THE FIELD AND LOCATIONS VIEWED BY THE ENGINEER PRIOR TO INSTALLATION. MINOR ADJUSTMENTS MAY BE MADE IN THE FIELD BY THE ENGINEER TO AVOID CONFLICTS WITH UTILITIES, TREES, ETC.

4. NO WORK OR ACTIVITIES SHALL BE PERFORMED BEYOND THE LIMITS OF DISTURBANCE.

GRADING NOTES:

1. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING UTILITIES ON SITE PRIOR TO COMMENCEMENT OF WORK. SEE UTILITY NOTES ON THE DEMOLITION PLAN.

2. CONTRACTOR IS RESPONSIBLE FOR THE CONSTRUCTION LAYOUT OF ALL PROPOSED ELEVATIONS.

3. CONTRACTOR SHALL BE RESPONSIBLE FOR GRADING PROPOSED GRADES INTO EXISTING GRADES WITH SMOOTH, EVEN TRANSITIONS, ROUNDING OUT ALL MOUNDS AND DEPRESSIONS.

4. FINISHED GRADE OF ALL NEW PAVEMENTS TO MEET THE GRADES OF THE EXISTING PAVEMENT. TRANSITIONS TO BE FLUSH AND SMOOTH.

5. MAIN SIDEWALK MUST BE ADA COMPLIANT. MAXIMUM LOGITUDINAL SLOPE NOT TO EXCEED 5%. PATH CROSS SLOPE TO BE BETWEEN 1% AND 2%. CONTACT THE ENGINEER IMMEDIATELY, BEFORE EXCAVATION, IF FIELD CONDITIONS ARE FOUND TO BE DIFFERENT THAN SHOWN ON THE PLAN. POSITIVE DRAINAGE WITH NO PONDING SHALL BE PROVIDED.

6. THE FINISHED GRADE OF THE LAWN ADJACENT TO THE PATH IS TO BE FLUSH WITH THE PATH. ALLOW TOPSOIL TO SETTLE, OR LIGHTLY COMPACT, BEFORE SEEDING TO ENSURE A FLUSH FINISHED CONDITION.

UTILITY NOTES:

1. ALL STORM DRAINAGE PIPE SHALL BE LAID ON SMOOTH CONTINUOUS GRADES WITH NO VISIBLE BENDS AT JOINTS.

2. BEDDING REQUIREMENTS SPECIFIED HEREIN ARE TO BE CONSIDERED AS MINIMUMS FOR RELATIVELY DRY, STABLE EARTH CONDITIONS. ADDITIONAL BEDDING SHALL BE REQUIRED FOR ROCK TRENCHES AND WET AREAS. CONTRACTOR SHALL HAVE THE RESPONSIBILITY TO PROVIDE SUCH ADDITIONAL BEDDING AS MAY BE REQUIRED TO PROPERLY CONSTRUCT THE WORK.

3. COMPACTION OF THE BACKFILL OF ALL TRENCHES SHALL BE COMPACTED TO THE DENSITY OF 95% OF THEORETICAL MAXIMUM DRY DENSITY (ASTM D698). BACKFILL MATERIAL SHALL BE FREE FROM ROOTS, STUMPS, OR OTHER FOREIGN DEBRIS AND SHALL BE PLACED IN LIFTS NOT TO EXCEED 6 INCHES IN COMPACTED FILL THICKNESS. A REPORT FROM A GEOTECHNICAL ENGINEER MAY BE REQUIRED BY THE PUBLIC WORKS INSPECTOR. CORRECTION OF ANY TRENCH SETTLEMENT WITHIN A YEAR FROM THE DATE OF APPROVAL WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

4. THE CONTRACTOR WILL INSURE THAT POSITIVE AND ADEQUATE DRAINAGE IS MAINTAINED AT ALL TIMES WITHIN THE PROJECT LIMITS. THIS MAY INCLUDE, BUT NOT BE LIMITED TO, REPLACEMENT OR RECONSTRUCTION OF EXISTING DRAINAGE STRUCTURES THAT HAVE BEEN DAMAGED OR REMOVED OR REGRADING AS REQUIRED BY THE ENGINEER, EXCEPT FOR THOSE DRAINAGE ITEMS SHOWN AT SPECIFIC LOCATIONS AND HAVING SPECIFIC PAY ITEMS IN THE DETAILED ESTIMATE. NO SEPARATE PAYMENT WILL BE MADE FOR ANY COSTS INCURRED TO COMPLY WITH THIS REQUIREMENT.

5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND TO TAKE WHATEVER STEPS NECESSARY TO PROVIDE FOR THEIR PROTECTION. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS OF UTILITIES SHOWN OR NOT SHOWN. THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANIES FOR EXACT LOCATION OF THEIR UTILITIES PRIOR TO STARTING CONSTRUCTION. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AND REPLACE ANY AND ALL DAMAGE MADE TO UTILITIES BY THE CONTRACTOR.

6. CONTRACTOR SHALL EXCAVATE ONLY AS MUCH TRENCH WHICH PIPE CAN BE INSTALLED AND TRENCH BACKFILLED BY THE END OF EACH WORK DAY.

7. ALL WATER LINES SHALL BE INSTALLED IN ACCORDANCE WITH CONCORD TOWNSHIP STANDARDS AND SPECIFICATIONS.

8. ALL UNDERGROUND UTILITY TRENCHES SHALL BE BACKFILLED WITH SAFE CLEAN FILL.

9. ALL EXISTING UTILITY COVERS, RIMS, CASTING AND INLET TOPS OR GRATES MUST BE ADJUSTED TO THE PROPOSED GRADE, UNLESS OTHERWISE INDICATED.

TOPSOIL DEFINITION & APPLICATION

TOPSOIL IS DEFINED AS FRIABLE CLAY LOAM SURFACE SOIL FOUND IN A DEPTH OF NOT LESS THAN FOUR (4") INCHES. TO BE SATISFACTORY, TOPSOIL SHALL BE FREE OF SUBSOIL, CLAY LUMPS, STONES, AND OTHER OBJECTS OVER THREE QUARTER (3/4") INCHES IN DIAMETER, AND WITHOUT WEEDS, ROOTS, AND OTHER OBJECTIONABLE MATERIALS. TOPSOIL SHALL CONTAIN AT LEAST FIVE (5%) PERCENT ORGANIC MATTER DETERMINED BY LOSS ON IGNITION OF MOISTURE FREE SAMPLES DRIED IN ACCORDANCE WITH THE CURRENT METHOD OF THE ASSOCIATION OF OFFICIAL AGRICULTURAL CHEMISTS. THE ACIDITY RANGE SHALL BE PH 5-0 TO PH 7.0 INCLUSIVE. TOPSOIL SHALL ALSO MEET THE REQUIREMENTS OF PENNDOT PUBLICATION 408 SPECIFICATIONS, SECTION 800, INCLUDING ALL SUBSECTIONS, LATEST EDITION.

GRADED AREAS SHOULD BE SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES TO PERMIT BONDING OF THE TOPSOIL TO THE SURFACE AREAS AND TO PROVIDE A ROUGHENED SURFACE TO PREVENT TOPSOIL FROM SLIDING DOWN SLOPE. TOPSOIL SHOULD BE UNIFORMLY DISTRIBUTED ACROSS THE DISTURBED AREA TO A DEPTH OF 4 TO 8 INCHES MINIMUM - 2 INCHES ON FILL OUTSLOPES. SPREADING SHOULD BE DONE IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL PREPARATION OR TILLAGE. IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOIL PLACEMENT SHOULD BE CORRECTED IN ORDER TO PREVENT FORMATION OF DEPRESSIONS UNLESS SUCH DEPRESSIONS ARE PART OF THE PCSM PLAN. TOPSOIL SHOULD NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDED PREPARATION. AREAS WHICH ARE TO BE TOP-SOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES. COMPACTED SOILS SHOULD BE SCARIFIED 6 TO 12 INCHES ALONG CONTOUR WHEREVER POSSIBLE PRIOR TO SEEDING. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING.

CUBIC YARDS OF TOPSOIL REQUIRED FOR APPLICATION TO VARIOUS DEPTHS

DEPTH (IN)	PER 1,000 SQUARE FEET	PER ACRE
1	3.1	134
2	6.2	268
3	9.3	403
4	12.4	537
5	15.5	672
6	18.6	806
7	21.7	940
8	24.8	1,074

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LEGEND:

- PROPERTY LINE
- LEGAL RIGHT-OF-WAY
- APPROXIMATE EXTENT OF ENVIRONMENTAL COVENTANT
- EX CONCRETE MONUMENT
- EX BUILDING
- EX CURB
- EX EDGE OF PAVEMENT
- EX WALL
- EX FENCE LINE
- EX SIGN
- EX LANDSCAPING
- 361 EX MINOR CONTOUR
- 360 EX MAJOR CONTOUR
- D D EX STORM SEWER LINES
- T EX UTILITY MANHOLE
- EX STORM SEWER INLET
- D EX STORMWATER MANHOLE
- OE OE EX OVERHEAD ELECTRICAL LINES
- UE UE EX UNDERGROUND ELECTRICAL LINES
- EX UTILITY POLE
- LP EX STREET LIGHT
- W W EX WATER LINES
- EX FIRE HYDRANT
- EX WATER VALVE
- S S EX SANITARY SEWER LINES
- S EX SANITARY MANHOLE
- C.O. EX SANITARY CLEAN OUT
- G G EX GAS LINES
- E EXISTING ELECTRIC MANHOLE
- BENCHMARK
- PROPOSED CURB
- PROPOSED DEPRESSED CURB
- PROPOSED RETAINING WALL
- PROPOSED SIGN
- 360 PROPOSED MAJOR CONTOUR
- 361 PROPOSED MINOR CONTOUR
- PROPOSED FENCE
- PROPOSED CONCRETE SIDEWALK
- D PROPOSED STORM MANHOLE
- D D PROPOSED STORM SEWER
- TD TD PROPOSED TRENCH DRAIN
- PROPOSED INLET
- PROPOSED LIGHT POLE
- PROPOSED PERVIOUS PAVERS
- PROPOSED MILL AND OVERLAY
- PROPOSED RECONSTRUCTED ROADWAY
- PROPOSED RE-LEVELED COBBLESTONE PAVERS
- UC UC PROPOSED ELECTRICAL CONDUIT - 2 INCH
- HH PROPOSED ELECTRICAL HANDHOLE

NOT FOR CONSTRUCTION

DRAFT

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ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

GOOSE CREEK GREEN STORMWATER
205 LACEY STREET
WEST CHESTER, PA 19382

GENERAL NOTES

WEST CHESTER BOROUGH
401 EAST GAY STREET
WEST CHESTER, PA 19380

BY	REVISIONS	NO.	DATE

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PROJECT	WCHBO00030
DATE	2024-06-07
DRAWING SCALE	N.T.S.
DRAWN BY	AGS
APPROVED BY	CRP

CS0002

SHEET 2 OF 21

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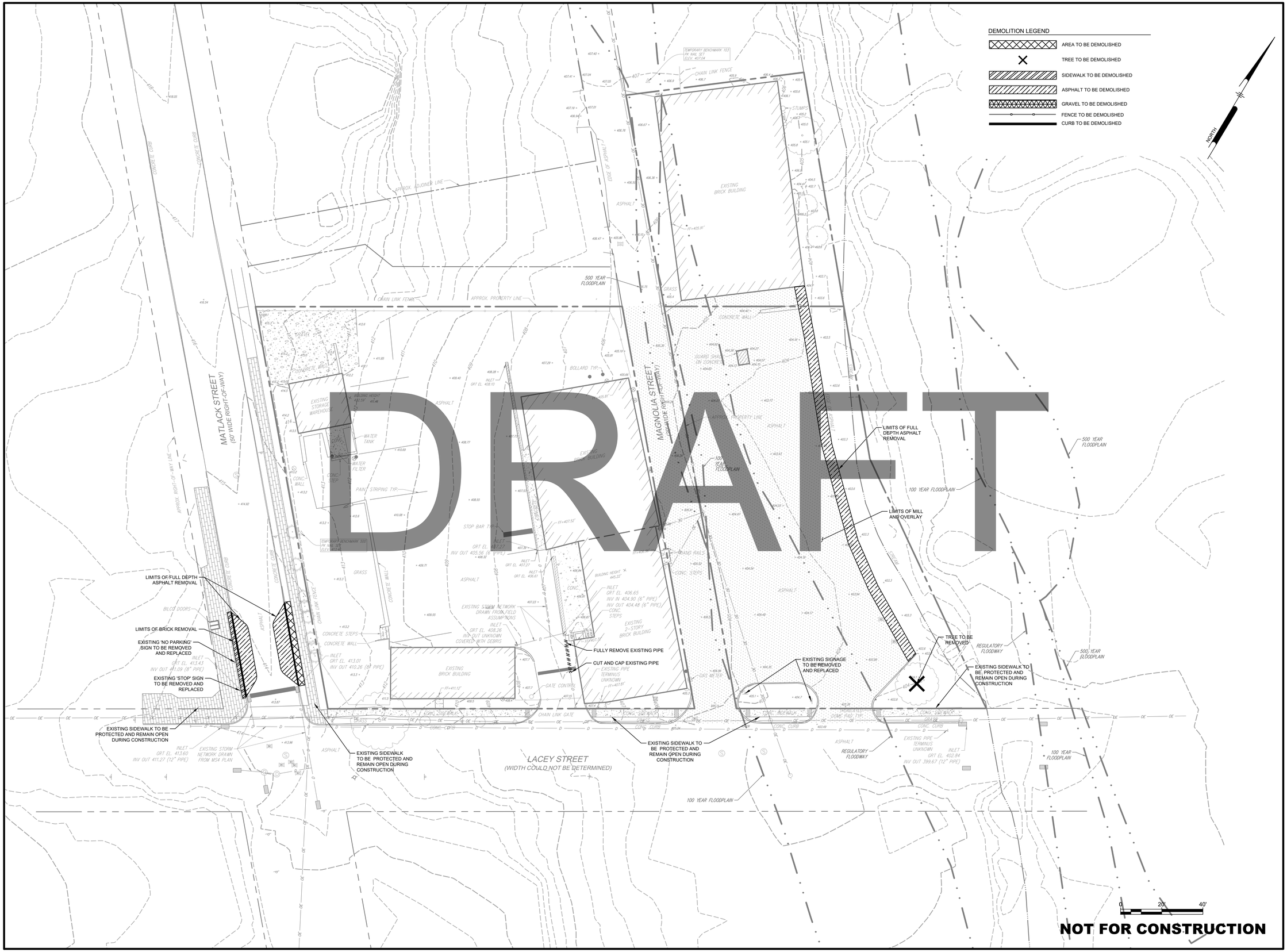
PLOTTED: 6/7/2024 9:55 AM, BY: Sumi Moore PLOTSTYLE: Pennoni WCS.ctb PROJECT STATUS: —



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205 LACEY STREET
WEST CHESTER, PA 19382

WEST CHESTER BOROUGH
401 EAST GAY STREET
WEST CHESTER, PA 19380

EXISTING CONDITIONS AND DEMOLITION PLAN

NO.	DATE	REVISIONS	BY

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PROJECT	WCHBO00030
DATE	2024-06-07
DRAWING SCALE	1" = 20'
DRAWN BY	AGS
APPROVED BY	CRP

CS0201

SHEET 3 OF 21

PLOTTED: 6/7/2024 9:35 AM BY: Sturhi Moore PLOTSTYLE: Pennoni NCS.stb PROJECT STATUS: —
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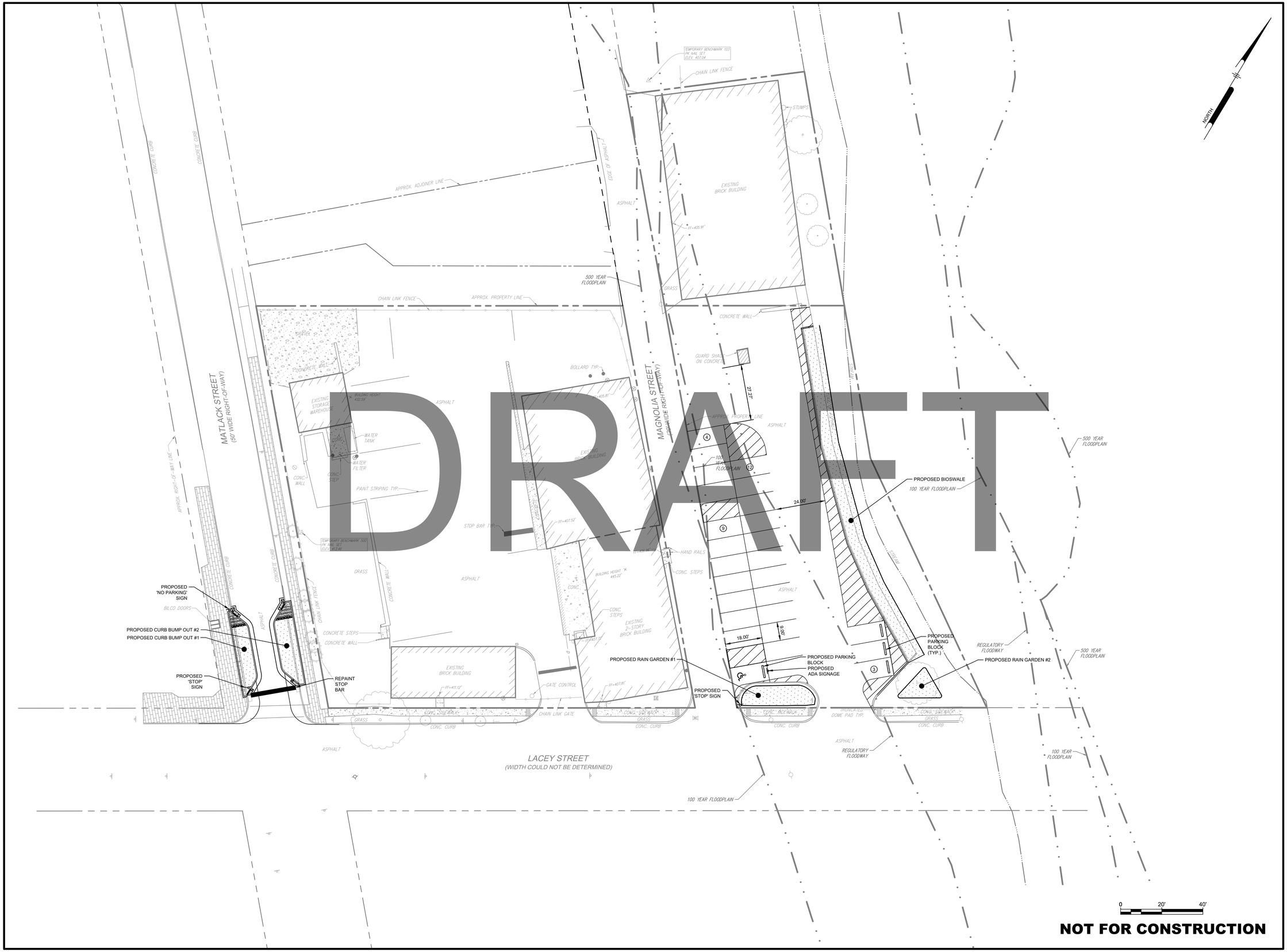

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NOT FOR CONSTRUCTION

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ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

GOOSE CREEK GREEN STORMWATER
205 LACEY STREET
WEST CHESTER, PA 19382

SITE PLAN

WEST CHESTER BOROUGH
401 EAST GAY STREET
WEST CHESTER, PA 19380

NO.	DATE	REVISIONS	BY

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PROJECT	WCHBO00030
DATE	2024-06-07
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DRAWN BY	AGS
APPROVED BY	CRP

CS1001

SHEET 4 OF 21

PLOTTED: 6/7/2024 9:35 AM, BY: Sumi Moore PLOTSTYLE: Pennoni NCS.stb PROJECT STATUS: —
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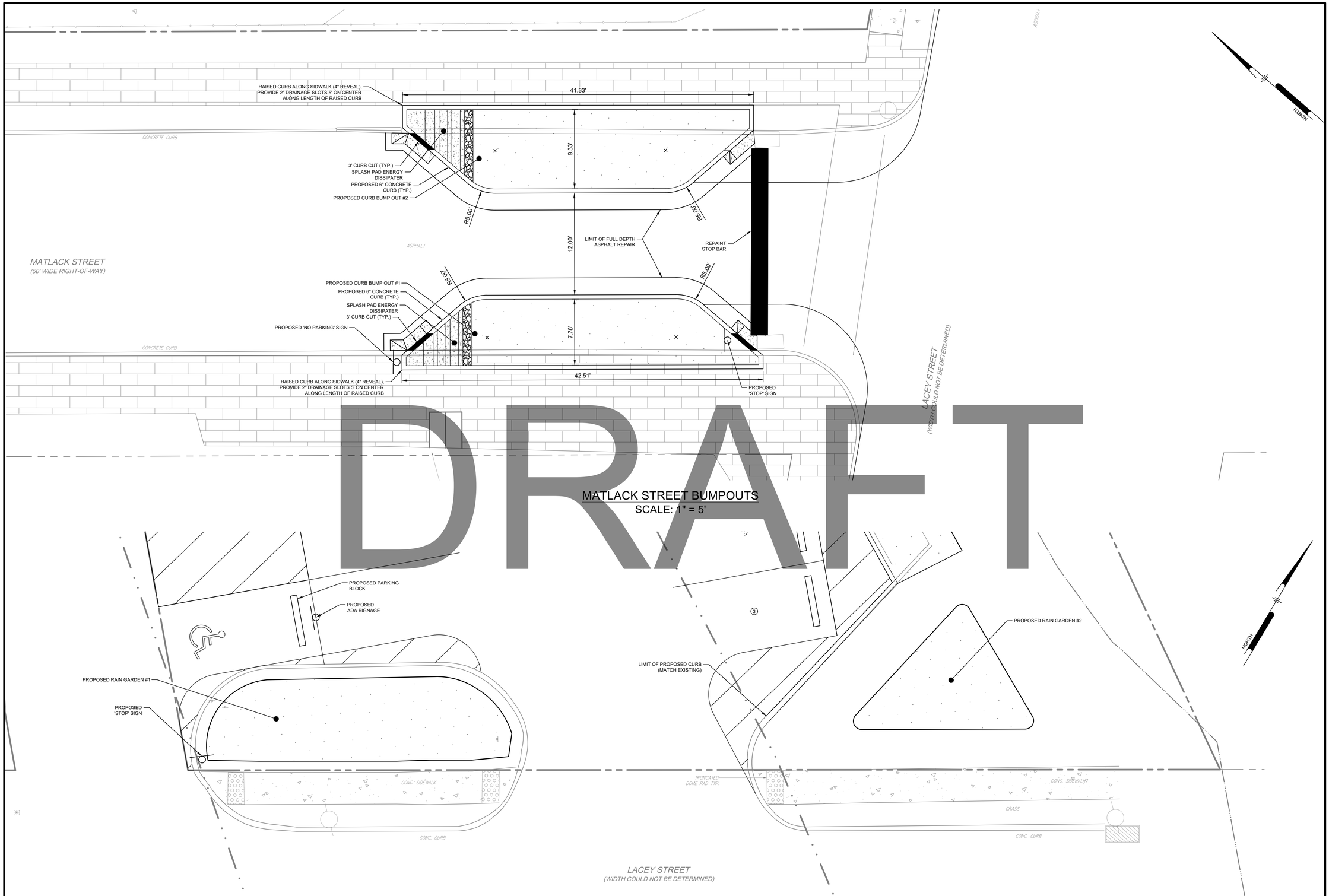

MATLACK STREET BUMPOUTS
SCALE: 1" = 5'

LACEY STREET RAIN GARDENS
SCALE: 1" = 5'

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Pennoni
PENNONI ASSOCIATES INC.
158 W. Gay Street, Suite 300
West Chester, PA 19380
T 610.429.8907 F 610.429.8918

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

GOOSE CREEK GREEN STORMWATER
205 LACEY STREET
WEST CHESTER, PA 19382

SITE PLAN

WEST CHESTER BOROUGH
401 EAST GAY STREET
WEST CHESTER, PA 19380

DATE	NO.	REVISIONS	BY

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DRAWING SCALE	1" = 5'
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CS1002

SHEET 5 OF 21

DRAFT

EDGE OF PROPOSED CURB TO MATCH EXISTING EDGE OF ASPHALT

STREAM

100 YEAR FLOODPLAIN

NORTH

ASPHALT

97.20'

PROPOSED BIOSWALE

24.00'

PROPOSED VARIABLE HEIGHT CURB

100 YEAR FLOODPLAIN

PROPOSED PARKING BLOCK (TYP.)

0 5' 10'

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PLOTTED: 6/7/2024 9:36 AM BY: Sumi Moore PLOTSTYLE: Pennoni NCS.stb PROJECT STATUS: —

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APPROVED BY	CRP

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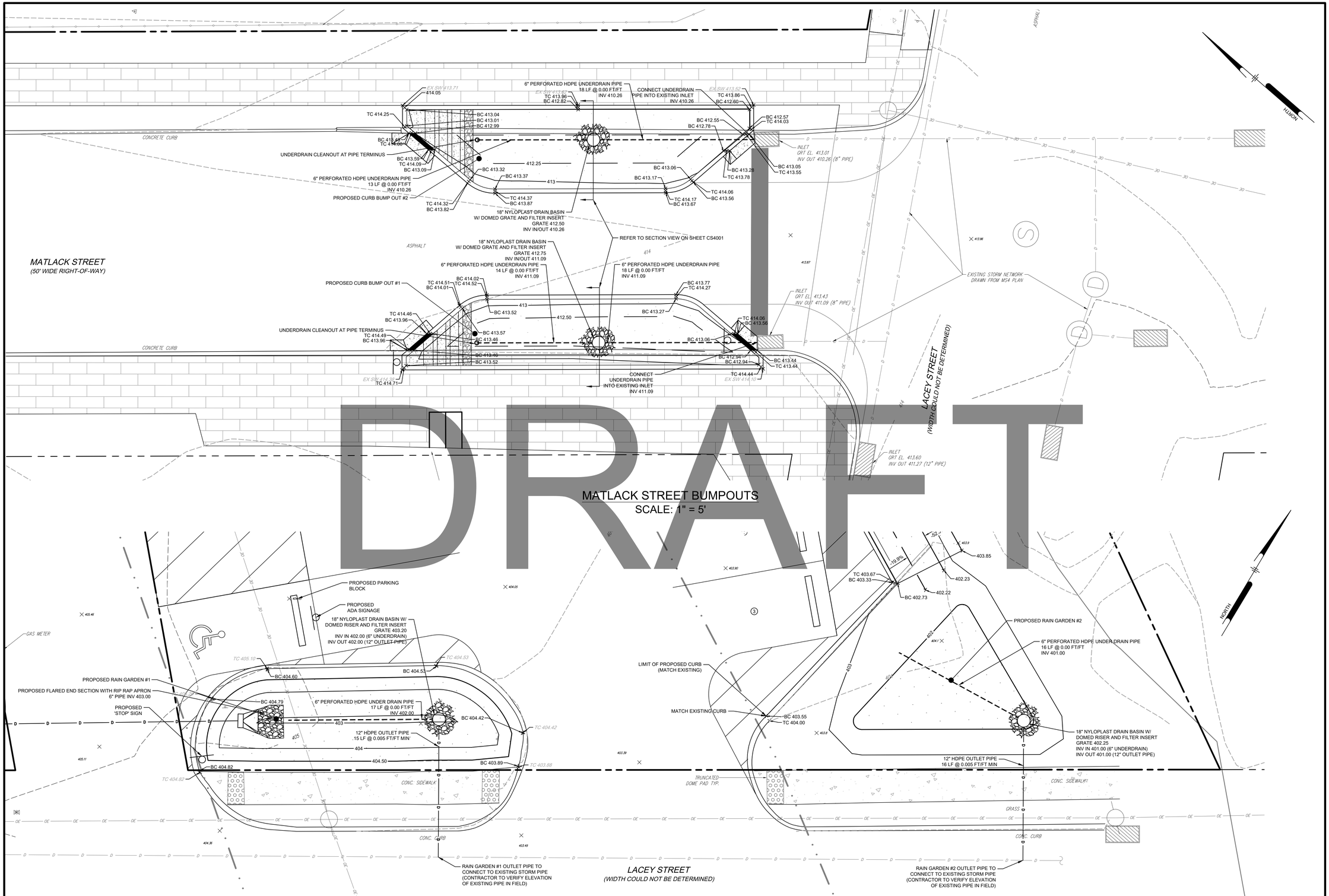
SHEET 6 OF 21



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GRADING & UTILITY PLAN

WEST CHESTER BOROUGH
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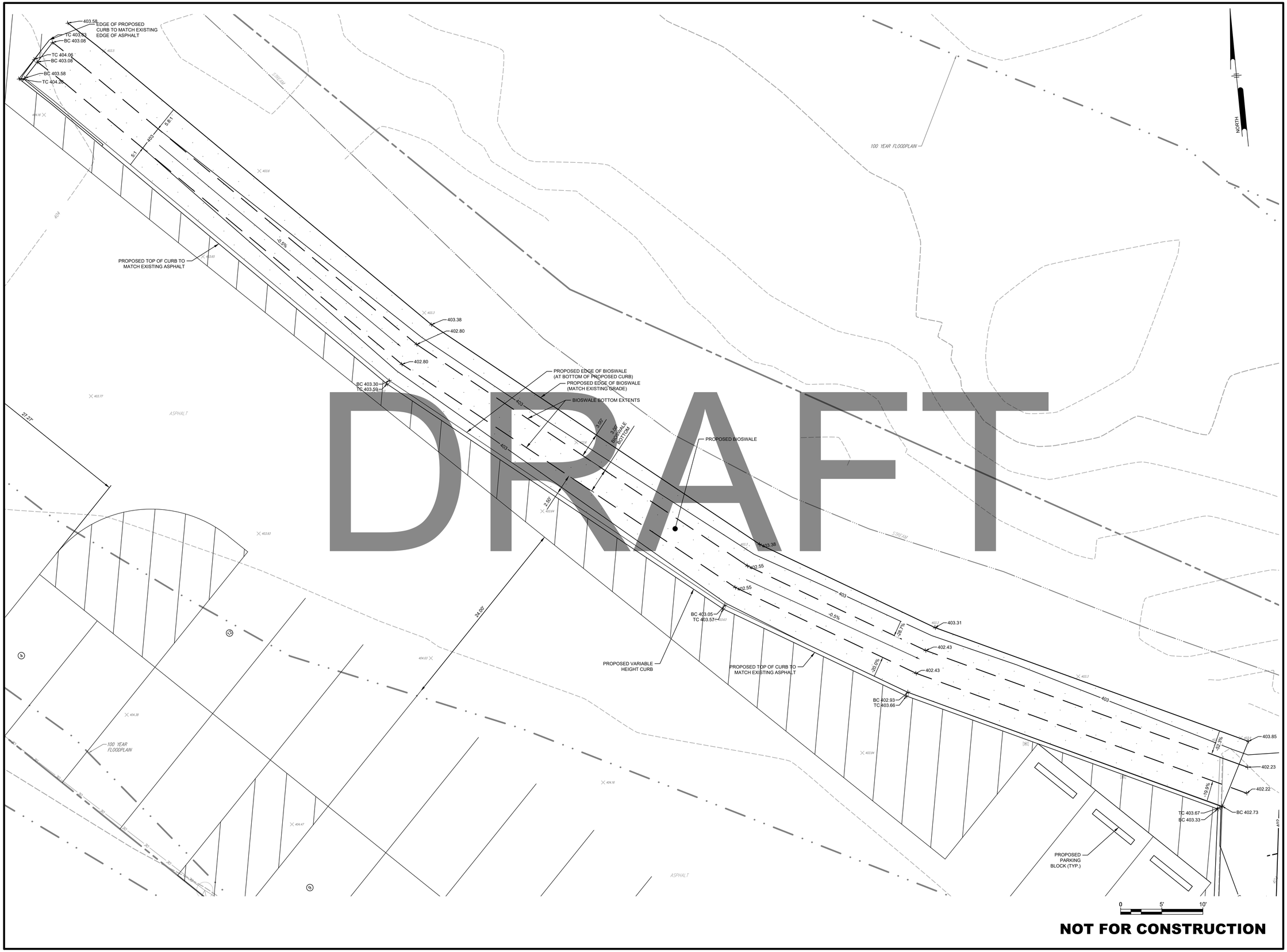
SHEET 7 OF 21



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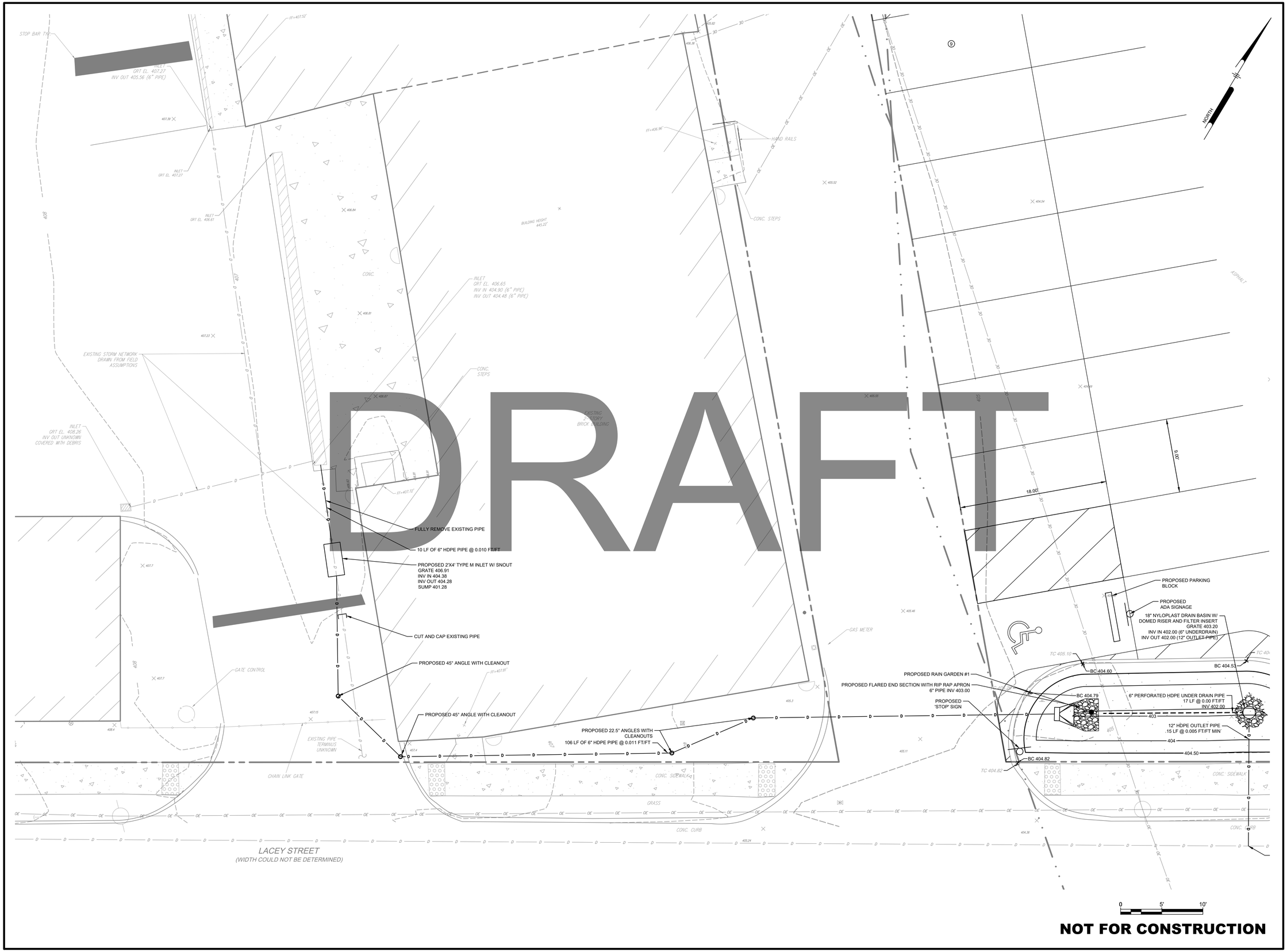
CS1702

SHEET 8 OF 21



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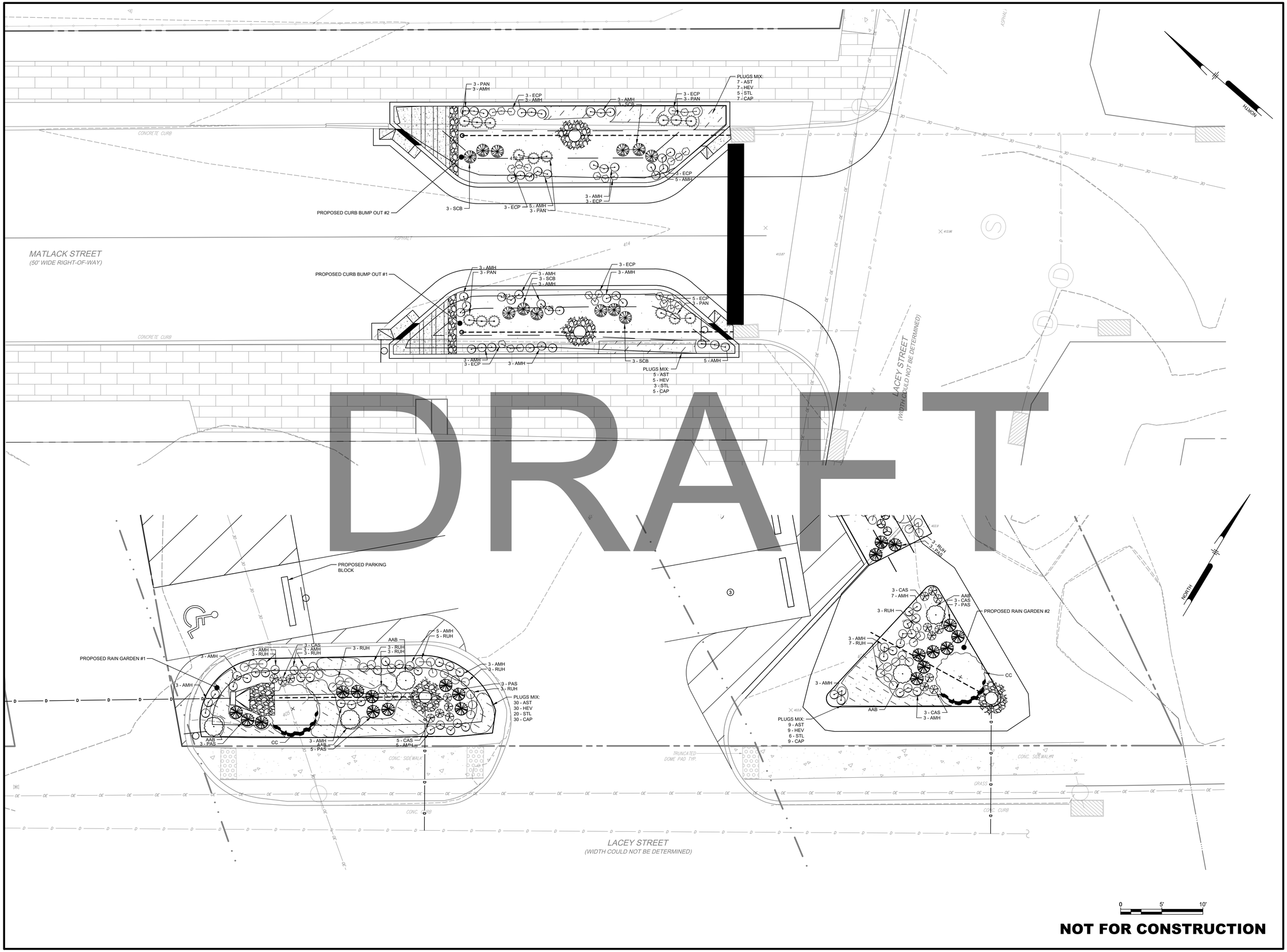
SHEET 9 OF 21



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LANDSAPING PLAN

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CS2001

SHEET 10 OF 21

PROJECT STATUS: —
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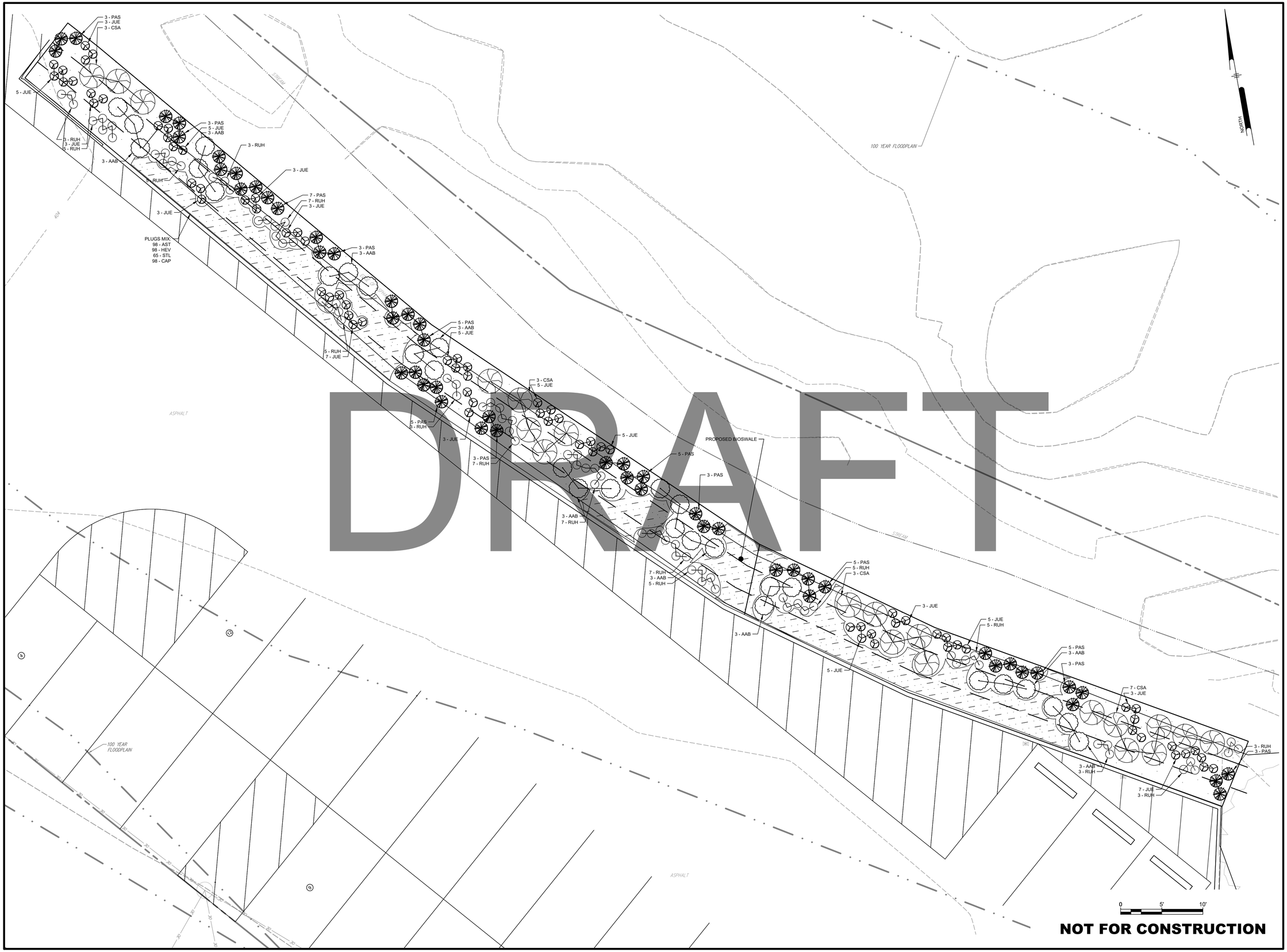

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CS2002

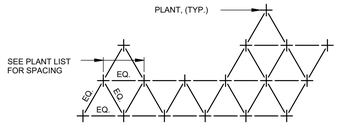
SHEET 11 OF 21

GOOSE CREEK PLANT SCHEDULE

SYMBOL	QTY	ABBR.	BOTANICAL NAME	COMMON NAME	SPACING	SIZE	NOTES
TREES							
	2	CC	CERCIS CANADENSIS	EASTERN REDBUD	AS SHOWN	1.5-2.5" CAL. B&B	
SHRUBS							
	34	AAB	ARONIA ARBUTIFOLIA 'BRILLANTISSIMA'	CHOKEBERRY	AS SHOWN	#3 CONTAINER	
	20	CSA	CORNUS SERICEA 'ARCTIC FIRE'	DWARF REDOSIER DOGWOOD	AS SHOWN	#3 CONTAINER	
PLUGS							
	87	AMH	AMSONIA HUBRICHTII	THREADLEAF BLUESTAR	AS SHOWN	2" PLUGS	
	17	CAS	CAREX STRICTA	UPRIGHT SEDGE	AS SHOWN	2" PLUGS	
	26	ECP	ECHINACEA PURPUREA	PURPLE CONEFLOWER	AS SHOWN	2" PLUGS	
	74	JUE	JUNCUS EFFUSUS	COMMON RUSH	AS SHOWN	2" PLUGS	
	15	PAN	PANICUM VIRGATUM 'HEAVY METAL'	BLUE SWITCHGRASS	AS SHOWN	2" PLUGS	
	85	PAS	PANICUM VIRGATUM 'SHENANDOAH'	SWITCHGRASS	AS SHOWN	2" PLUGS	
	124	RUH	RUDBECKIA HIRTA	BLACK-EYED SUSAN	AS SHOWN	2" PLUGS	
	12	SCB	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM 'THE BLUES'	AS SHOWN	2" PLUGS	
PLUG MIX							
	148	AST	ASCLEPIAS TUBEROSA	BUTTERFLY WEED	AS SHOWN	2" PLUGS	
	148	CAP	CAREX PENSYLVANICA	PENNSYLVANIA HEDGE	AS SHOWN	2" PLUGS	
	98	HEV	HEUCHERA VILLOSA 'CARAMEL'	CORAL BELLS	AS SHOWN	2" PLUGS	
	148	STL	STOKESIA LAEVIS	STOKES ASTER	AS SHOWN	2" PLUGS	

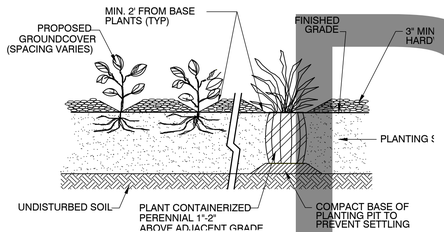
PLANTING NOTES

1. EXISTING TOPSOIL ON SITE MAY BE UNSUITABLE FOR REUSE. CONTRACTOR MUST PROVIDE IMPORTED TOPSOIL OR AMEND EXISTING TOPSOIL TO MEET REQUIREMENTS OUTLINED IN THE SPECIFICATIONS. CONTRACTOR MUST SUBMIT SOIL TEST ANALYSIS REPORT, INCLUDING AMENDMENT RECOMMENDATIONS, FOR EITHER IMPORTED TOPSOIL OR AMENDED EXISTING TOPSOIL. TOPSOIL MUST BE AMENDED AND RETESTED PRIOR TO PLANTING OPERATIONS.
2. ALL PLANT LOCATIONS SHALL BE STAKED IN THE FIELD AND LOCATIONS APPROVED BY LANDSCAPE ARCHITECT PRIOR TO PLANTING.
3. TOPSOIL WITH A QUALITY ORGANIC SOIL AMENDMENT SHALL BE USED FOR ALL PLANTING AND SEEDING OPERATIONS.
4. NOTIFY ALL UTILITY COMPANIES AND LOCATE ALL UTILITIES PRIOR TO EXCAVATING PLANT PITS. PLANT LOCATIONS MAY BE ADJUSTED IN THE FIELD TO AVOID INTERFERENCE WITH UNDERGROUND UTILITIES.
5. SHOULD ANY DISCREPANCY ARISE BETWEEN THE PLANTING PLAN AND THE PLANTING SCHEDULE, THE PLAN SHALL GOVERN AS TO THE QUANTITY OF PLANT MATERIAL.
6. ALL PLANT MATERIAL SHALL BE OF NURSERY STOCK QUALITY AS DEFINED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION. ALL PLANT MATERIAL SHALL BE GUARANTEED TO LIVE AT LEAST 18 MONTHS FOLLOWING INSTALLATION.
7. ALL NON-BIODEGRADABLE ROOT WRAPPING TO BE REMOVED COMPLETELY BEFORE PLANTING.
8. ALL TREES TO BE PRUNED OF SIDE BRANCHES TO A HEIGHT OF 6' ABOVE GRADE EXCEPT WHERE NOTED IN PLANT SCHEDULE.
9. ALL PLANT MATERIAL SHALL BE APPROVED UPON ARRIVAL TO THE SITE, UNLESS OTHERWISE NOTIFIED.
10. PROPOSED PLANT MATERIAL MAY BE SUBSTITUTED BY SIMILAR PLANTS PRIOR TO INSTALLATION, SUBJECT TO APPROVAL BY THE LANDSCAPE ARCHITECT.
11. DISTURBANCE OF EXISTING VEGETATION SHALL BE LIMITED TO WORK AREA CONTRACTOR IS RESPONSIBLE FOR FINE GRADING AND SEEDING ALL DISTURBED AREAS.
12. ALL PLANTS SPACED 7' O.C. OR CLOSER SHALL BE IN CONTINUOUS MULCHED BEDS.
13. SEED ALL DISTURBED AREAS WITH REQUIRED SEED MIX (SEEDING MIX SCHEDULE & SEEDING NOTES).
14. PLANTING SHALL BE DONE APRIL 15TH THRU MAY 31ST OR AUGUST 17TH THRU OCTOBER 15TH.
15. MULCH BEDS WILL BE CREATED AS MULCH ZONES THREE (3) FEET BEYOND THE TREE DRIP LINE. ALL OTHER ARES OF DISTURBANCE SHALL BE SEEDED.



PLANT SPACING DIAGRAM

NOT TO SCALE



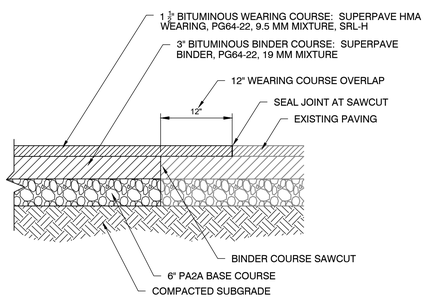
DRAFT

CONCRETE UNIT PAVER NOTES:

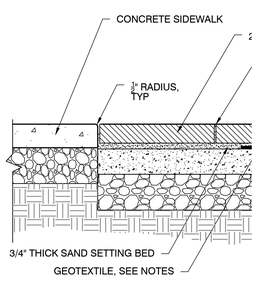
1. UNIT PAVERS TO BE 6" x 24" x 2⅜" THICK (NOMINA ARCHITECTURAL PRODUCTS.
   - COLOR: QUARRY RED
   - FINISH: TUDOR FINISH
   - PATTERN: STAGGERED RUNNING BOND PATTI
2. PAVERS TO HAVE HAND TIGHT JOINTS. SWEEP
3. 2" DIA. WEEPHOLE MAY BE FORMED IN SLAB OR SPACED 48" O.C. AND AT ALL LOW POINTS. INST TO FILLING, AND 12" SQUARE PIECE OF GEOTE
4. WHERE PAVERS ABUT LAWN AREA INSTALL A HE FOR PAVERS, INSTALLED PER MANUFACTURE
5. SEE SPECIFICATIONS FOR MORE INFORMATION

PAVING NOTES:

1. PATH LOCATION TO BE STAKED OUT IN THE FIELD BY THE CONTRACTOR, AND LAYOUT APPROVED BY THE ENGINEER PRIOR TO EXCAVATION. PATH LOCATION MAY BE ADJUSTED IN THE FIELD TO AVOID TREES, ETC.
2. NEW PATH MUST BE ADA COMPLIANT. LONGITUDINAL SLOPE MUST NOT EXCEED 5%. CROSS SLOPE MUST NOT EXCEED 2%.
3. FINISH GRADE LAWN AREA ADJACENT TO NEW PATH SO THAT FINISHED GRADE OF SOIL, AFTER SETTLEMENT, IS FLUSH WITH FINISHED GRADE OF TRAIL. LIGHTLY COMPACT TOPSOIL ALONG EDGE OF PATH TO ENSURE PROPER FINISHED GRADE BEFORE SEEDING.
4. PROVIDE 12" WIDE WEARING COURSE OVERLAP WHERE NEW PAVING MEETS EXISTING. SEAL ALL JOINTS WITH 4" WIDE HOT LIQUID ASPHALT SEALER PER SPECIFICATION. TRANSITION BETWEEN OLD AND NEW PAVING TO BE FLUSH AND SMOOTH.



HALT TRAIL PAVING



PAVERS AT WELCOME NODE

DDED MULCH.

X

NOTES:

SET PLANTS PLUMB AND FACE TO GIVE BEST APPEARANCE TO ADJACENT AREAS.

PRUNE ONLY TO REMOVE DEAD OR DAMAGED BRANCHES.

REMOVE EXCESS SOIL FROM TOP OF ROOT BALL AND SET TOP OF ROOT BALL AT FINISHED GRADE OR 1" TO 2" ABOVE IN POORLY DRAINED SOILS

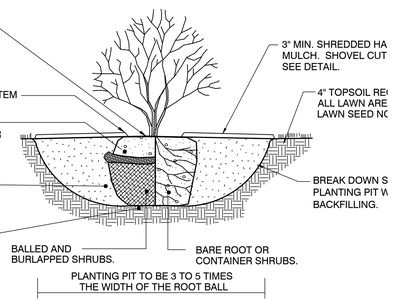
KEEP MULCH 3" AWAY FROM MAIN STEM

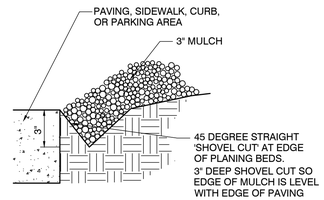
REMOVE BURLAP FROM TOP 1/2 OF ROOT BALL, OR WITH CONTAINER PLANTS REMOVE POTS AND SPLIT BALLS AS SPECIFIED.

PLANTING MIX, SEE SPECIFICATIONS, WATER THOROUGHLY TO ELIMINATE AIR POCKETS.

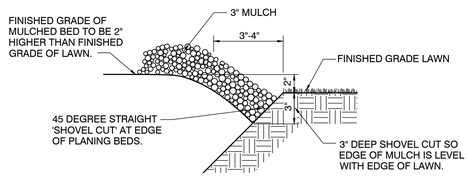
PLANT TO PLACED ON UNDISTURBED SUBGRADE

USE DIGGING FORK NOT SPADE TO PREVENT GLAZING OF PIT EDGES.





TYPICAL EDGE - MULCH TO PAVING



TYPICAL EDGE - MULCH TO LAWN

TYPICAL MULCH EDGES

ASP

0 20' 40'

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DRAWN BY	AGS
APPROVED BY	CRP

CS2003

SHEET 12 OF 21

PROJECT STATUS: —
PLOTSTYLE: Pennoni MCS.stb
PLOTTED: 6/7/2024 9:39 AM, BY: Sumi Moore
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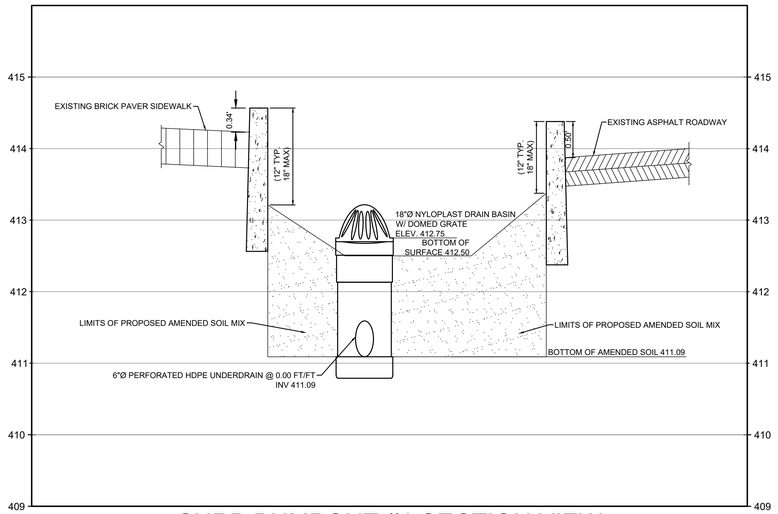
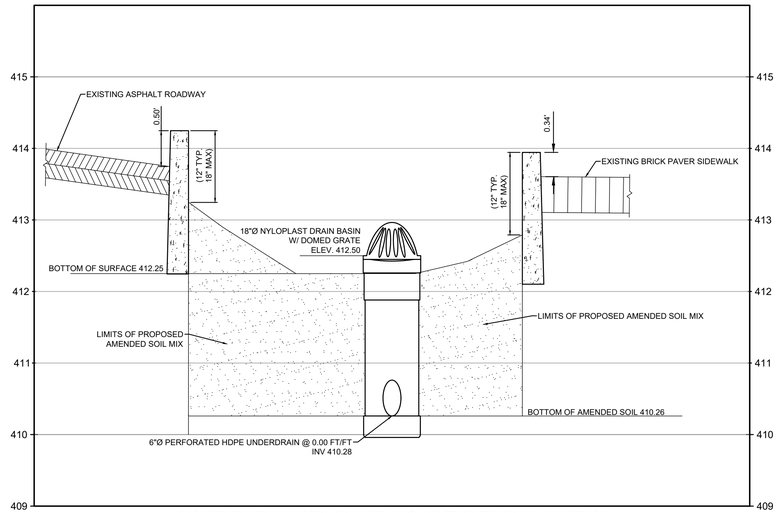
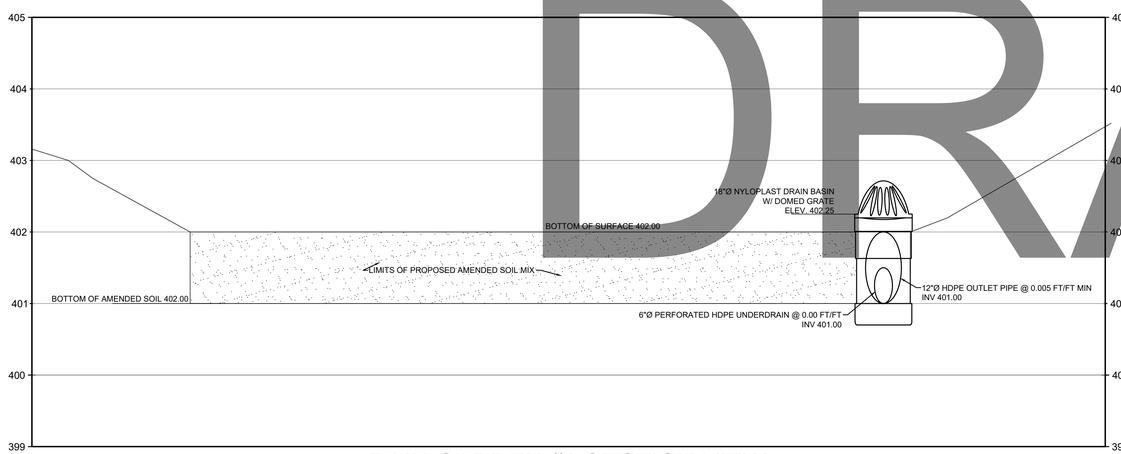


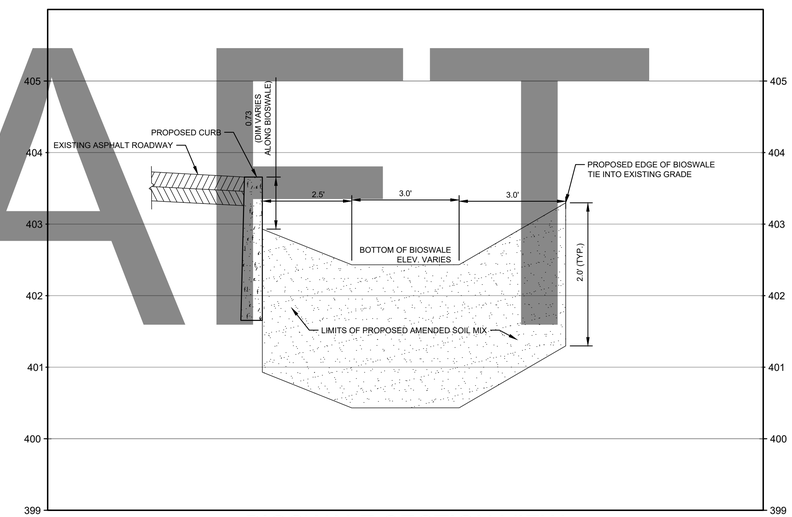
CURB BUMPOUT #1 SECTION VIEW



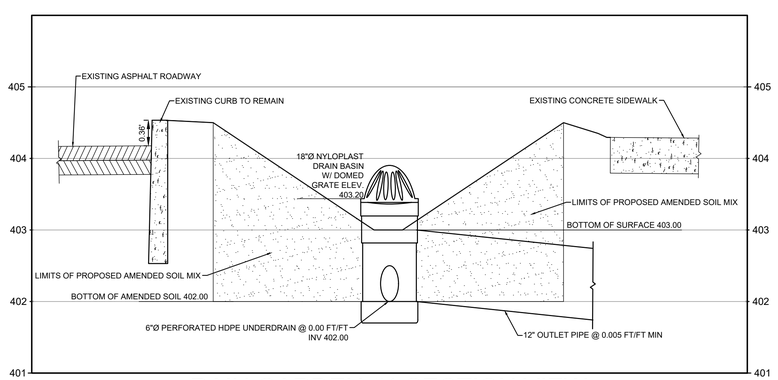
CURB BUMP OUT #2 SECTION VIEW



RAIN GARDEN #2 SECTION VIEW



BIOSWALE SECTION VIEW



RAIN GARDEN #1 SECTION VIEW

DRAFT

0 2' 4'
SECTION VIEW HORIZONTAL SCALE: 1" = 2'

0 1' 2'
SECTION VIEW VERTICAL SCALE: 1" = 1'

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158 W. Gay Street, Suite 300
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GOOSE CREEK GREEN STORMWATER
205 LACEY STREET
WEST CHESTER, PA 19382

SECTION VIEWS

WEST CHESTER BOROUGH
401 EAST GAY STREET
WEST CHESTER, PA 19380

NO.	DATE	REVISIONS	BY

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PROJECT	WCHBO00030
DATE	2024-06-07
DRAWING SCALE	1" = 2' (H) | 1" = 1' (V)
DRAWN BY	AGS
APPROVED BY	CRP

CS4001

SHEET 13 OF 21

PLOTTED: 6/7/2024 9:39 AM BY: Sumi Moore PLOTSTYLE: Pennoni NCS.stb PROJECT STATUS: —
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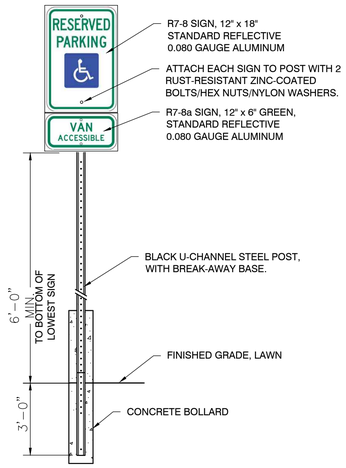
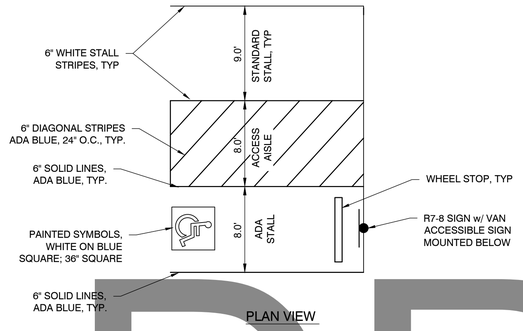


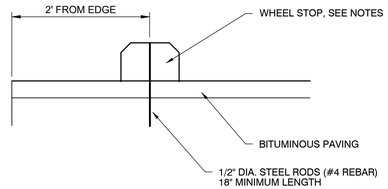


PLAN VIEW

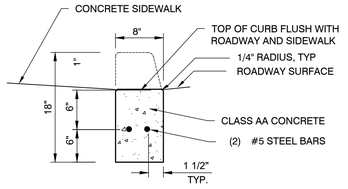
ADA PARKING STALL STRIPING AND SIGNAGE
N.T.S.

WHEEL STOP NOTES:

1. RECYCLED PLASTIC OR RUBBER WHEEL STOPS, 6' LENGTH x 4" HEIGHT x 6" WIDTH.
2. INSTALL WHEEL STOP IN CENTER OF PARKING STALL.
3. INSTALL MINIMUM 3 ANCHOR RODS PER STOP. COUNTERSINK ANCHOR RODS TO 1" BELOW TOP OF STOP.



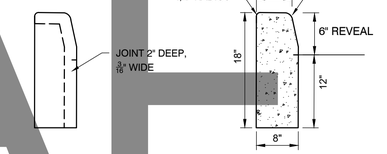
WHEEL STOP
N.T.S.



FLUSH CURB

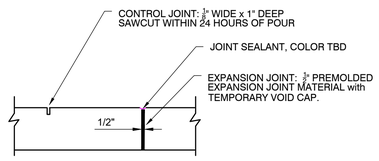
CURB AND SIDEWALK NOTES:

1. CURB AND SIDEWALK MUST MEET ADA REQUIREMENTS. NOTIFY ENGINEER BEFORE CONSTRUCTION OF CURB AND SIDEWALKS IF SLOPES INDICATED CANNOT BE MET.
2. DEPRESSED CURB TO BE FLUSH WITH PARKING LOT PAVING (NO REVEAL).
3. SIDEWALK TO SLOPE TOWARD PARKING AREA FOR A DISTANCE OF 6'. MAXIMUM SLOPE 4.8% (NOT A CURB RAMP). SEE GRADING PLAN.
4. MAXIMUM LONGITUDINAL SLOPE ON ALL SIDEWALKS 4.8%; MAXIMUM CROSS SLOPE 1.8%.
5. PAVEMENT WITH SLOPES THAT EXCEED THE MAXIMUM ALLOWED TO MEET ADA REQUIREMENTS WILL NOT BE ACCEPTED AND SHALL BE RECONSTRUCTED BY CONTRACTOR.
6. DETECTABLE WARNING SURFACE TO BE 48" x 24" CAST IN PLACE DETECTABLE WARNING PANELS, AS MANUFACTURED BY ADA SOLUTIONS OR APPROVED EQUAL. COLOR: BLUE. 12' WIDE DETECTABLE WARNING PANELS TO ALIGN WITH DEPRESSED CURB.



CONTRACTION JOINT TYPICAL CROSS SECTION

CONCRETE CURB
N.T.S.



SIDEWALK JOINTS

JOINTING NOTES:

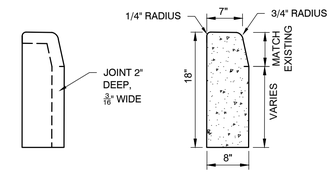
1. SEE LAYOUT PLAN FOR SCORING PATTERNS AND EXPANSION JOINT LOCATIONS. 30' MAXIMUM SPACING BETWEEN EXPANSION JOINTS. JOINT LOCATIONS MAY TO ADJUSTED IN FIELD TO PROVIDE EQUAL DISTANCES BETWEEN JOINTS, WITH APPROVAL OF ENGINEER.
2. PLACE EXPANSION JOINTS AT LOCATIONS AS SHOWN ON PLAN AND WHERE SIDEWALK MEETS A CURB, RAMP, SOLID OBJECT OR STRUCTURE.
3. CAULK ALL JOINTS WITH A MULTI-COMPONENT SELF-LEVELING POLYURETHANE SEALANT.

CONCRETE NOTES:

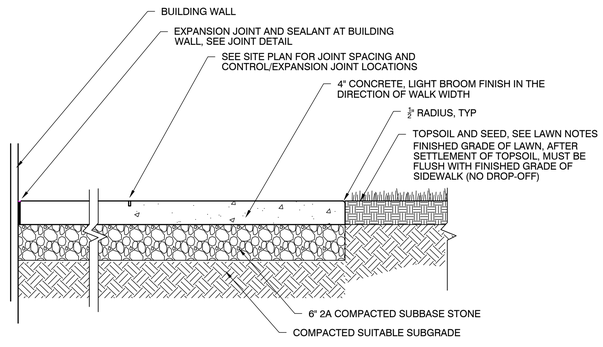
1. ALL CONCRETE SHALL BE 4,000 PSI AT 28 DAYS.
2. PROVIDE MATERIALS AND CONSTRUCTION IN ACCORDANCE WITH PENNDOT PUBLICATION 408.
3. SEE DETAIL FOR EXPANSION AND CONTROL JOINTS.
4. THE SIDEWALK CROSS SLOPE MUST BE BETWEEN 1.0% MINIMUM AND 2.0% MAXIMUM.

CURB NOTES:

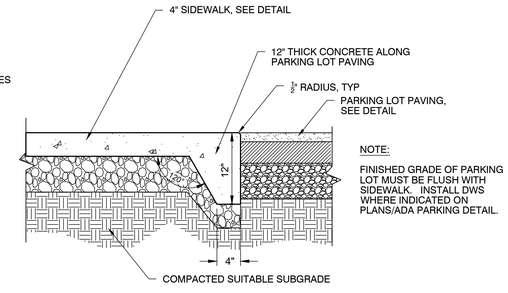
1. CURB REVEAL TO MATCH EXISTING UNLESS NOTED OTHERWISE ON GRADING PLAN.
2. PROVIDE CONTRACTION JOINT AT 10' INTERVALS BETWEEN EXPANSION JOINTS.
3. PROVIDE EXPANSION JOINTS BETWEEN CURB SECTIONS AT 50' INTERVALS, AT POINTS OF CURVATURE/TANGENTS, AND WHERE CURB MEETS AN EXISTING OBJECT. JOINT MATERIAL TO BE CUT TO MATCH PROFILE OF CURB.



CONTRACTION JOINT TYPICAL CROSS SECTION



TYPICAL SIDEWALK SECTION

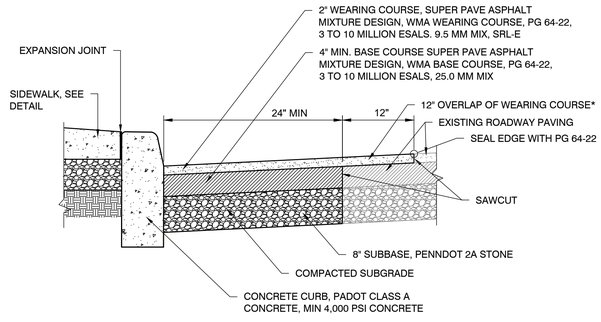


NOTE:

FINISHED GRADE OF PARKING LOT MUST BE FLUSH WITH SIDEWALK. INSTALL DWS WHERE INDICATED ON PLANS/ADA PARKING DETAIL.

TYPICAL SIDEWALK EDGE ADJACENT TO PARKING LOT (NO CURB)

CONCRETE SIDEWALK
N.T.S.



CONCRETE CURB and ROADWAY RESTORATION
N.T.S.

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West Chester, PA 19380
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GOOSE CREEK GREEN STORMWATER
205 LACEY STREET
WEST CHESTER, PA 19382

CONSTRUCTION DETAILS

WEST CHESTER BOROUGH
401 EAST GAY STREET
WEST CHESTER, PA 19380

NO.	DATE	REVISIONS	BY

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PROJECT	WCHBO00030
DATE	2024-06-07
DRAWING SCALE	N.T.S.
DRAWN BY	AGS
APPROVED BY	CRP

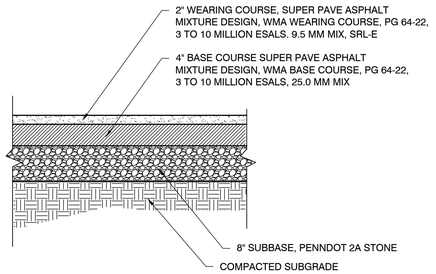
CS6001

SHEET 14 OF 21

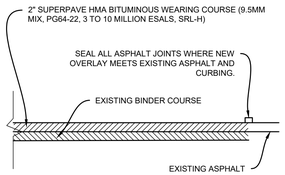
PROJECT STATUS: —
PLOTSTYLE: Pennoni WCS.stb
PLOTTED: 6/7/2024 9:39 AM, BY: Sumi Moore
V:\Accounts\WCHBO\workbo00030 - public works gi_jsm\DESIGN_SHEETS\CS6001.dwg

PAVING NOTES

1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PADOT PUBLICATION 408, SECTIONS 210, 305, 320 AND 401, RESPECTIVELY, FOR SUBGRADE, AGGREGATE, AND FLEXIBLE PAVEMENT.
2. MODIFICATIONS TO THE PAVING THICKNESS AND MATERIALS MUST BE APPROVED BY THE MUNICIPAL ENGINEER BASED ON FIELD CONDITIONS.



BITUMINOUS DRIVE AND PARKING LOT PAVING
N.T.S.

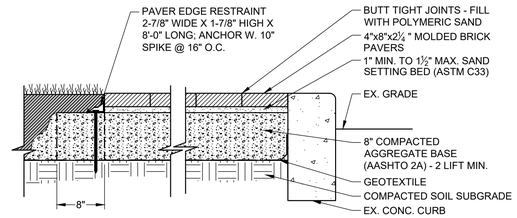


NOTE: THIS PAVING SECTION TO BE USED FOR ALL MILL AND OVERLAY SECTIONS, AS REQUIRED DURING CONSTRUCTION.

PAVING NOTES

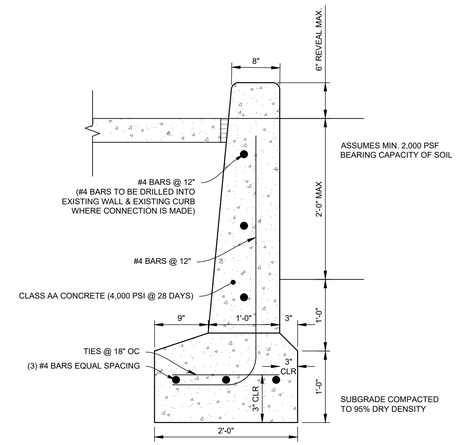
1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS FOR PADOT PUBLICATION 408, SECTION 210, 305, 320 AND 401, RESPECTIVELY, FOR SUBGRADE, AGGREGATE, AND FLEXIBLE PAVEMENT
2. MODIFICATIONS TO THE PAVING THICKNESS AND MATERIALS MUST BE APPROVED BY THE MUNICIPAL ENGINEER BASED UPON FIELD CONDITIONS.

MILL & OVERLAY SECTION
N.T.S.



NOTE:
1. PROVIDE PAVER EDGE RESTRAINT WHERE PAVERS DO NOT ABUT A FIRM VERTICAL SURFACE SUCH AS CONCRETE OR FACE OF BUILDING

BRICK PAVING
N.T.S.



TYPICAL EXTENDED CONCRETE CURB
N.T.S.

NOTES:
1. PROVIDE TRENCH SUPPORT SYSTEM AS REQUIRED FOR EXCAVATION PROTECTION AND TO ALLOW FOR REQUIRED COMPACTION.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING TRENCHES, IF REQUIRED, BEFORE PLACEMENT OR BEDDING MATERIAL.
3. BACKFILL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST (ASTMD-1557).
4. TERMINATE TRACER WIRE IN COPPERHEAD INDUSTRIES SNAKEPIT LITE DUTY ACCESS POINTS, OR EQUAL. PROVIDE MINIMUM ONE (1) GROUND ROD.

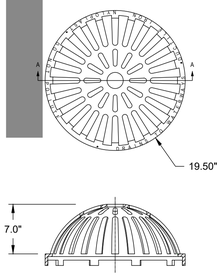
KEY:
Bc = OUTSIDE DIAMETER OF PIPE
D = INSIDE DIAMETER OF PIPE
d = 6" MIN.
e = 12" MIN.
f = 8" MIN. - 24" D AND SMALLER = 12" MIN. -> 24" D
g = Bc + 16" MIN. - 24" D AND SMALLER = Bc + 24" MIN. -> 24" D

TYPICAL PIPE TRENCH RESTORATION AND BACKFILL FOR PAVED AREAS
NTS

1. GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05, WITH THE EXCEPTION OF THE BRONZE GRATE.
2. FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
3. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065 FROM ADS
4. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER.
5. ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012 FROM ADS.

TYPICAL DRAIN BASIN ASSEMBLY

18" NYLOPLAST DRAIN BASIN
N.T.S.



SECTION A-A

1. DIMENSIONS ARE FOR REFERENCE ONLY ACTUAL DIMENSIONS MAY VARY
2. GRATE MEETS H-20 LOAD RATING
3. QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
4. PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
5. LOCKING DEVICE AVAILABLE UPON REQUEST SEE DRAWING NO. 7001-110-215 FROM ADS

18 DOMED GRATE

DRAFT

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205 LACEY STREET
WEST CHESTER, PA 19382

CONSTRUCTION DETAILS

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401 EAST GAY STREET
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BY	NO.	DATE
	REVISIONS	

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PROJECT	WCHBO00030
DATE	2024-06-07
DRAWING SCALE	N.T.S.
DRAWN BY	AGS
APPROVED BY	CRP

CS6002

SHEET 15 OF 21

PLOTTED: 6/7/2024 8:40 AM BY: Sumi Moore PLOTSTYLE: Pennoni NCS.stb PROJECT STATUS: —
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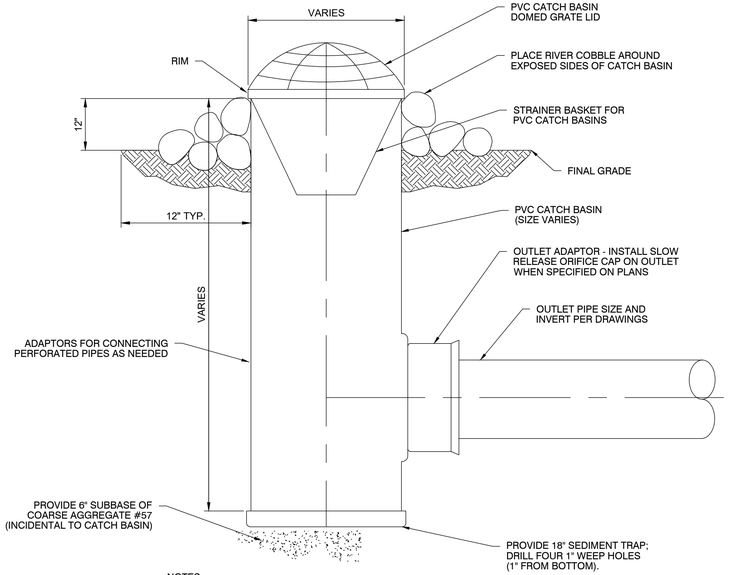
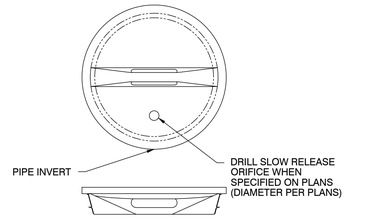


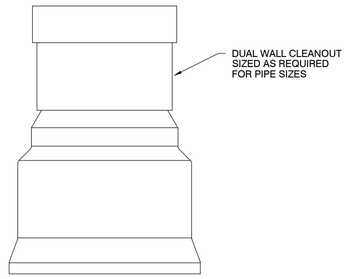
NOTES:

1. BASE AND BACKFILL SHALL BE HAND PLACED AND TAMPED IN 6" LIFTS. PLACE ALL CATCH BASINS ON 6" THICK AGGREGATE LEVELING COURSE ON COMPACTED SUBGRADE.
2. SEE DRAWINGS FOR RIM AND INVERT ELEVATIONS.

PVC CATCH BASIN W/ DOMED GRATE

N.T.S.





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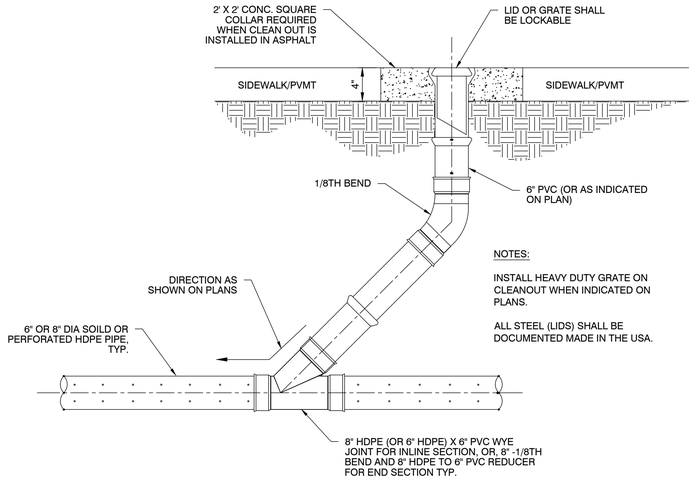


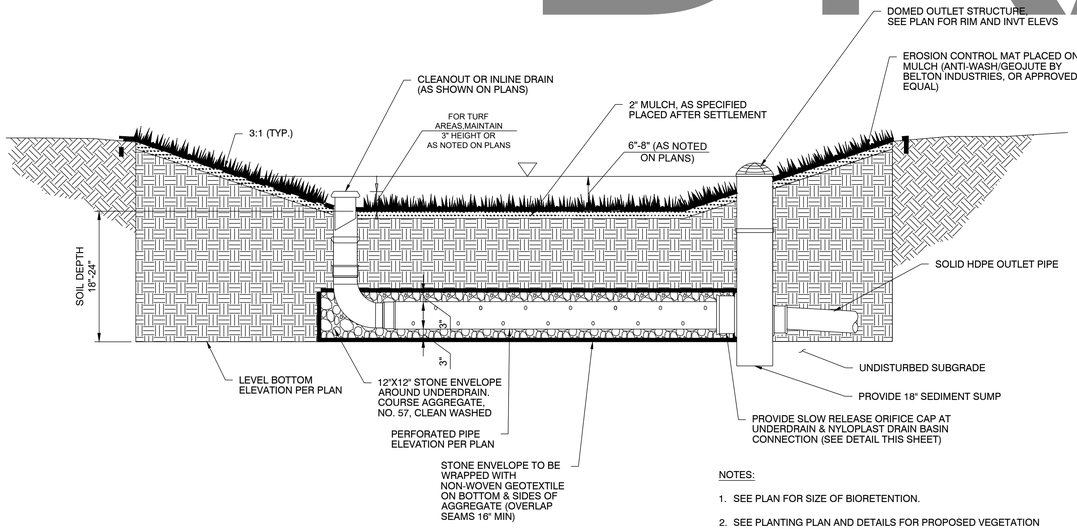
NOTES:

INSTALL HEAVY DUTY GRATE ON CLEANOUT WHEN INDICATED ON PLANS.

ALL STEEL (LIDS) SHALL BE DOCUMENTED MADE IN THE USA.

CLEANOUT, SOLID LID IN PAVED AREAS AND SOLID LID IN NON-PAVED AREAS

N.T.S.



NOTES:

1. SEE PLAN FOR SIZE OF BIORETENTION.
2. SEE PLANTING PLAN AND DETAILS FOR PROPOSED VEGETATION WITHIN BIORETENTION AREAS.

BIORETENTION

N.T.S.

RAIN GARDEN AREA CONSTRUCTION NOTES:

1. ALL CONSTRUCTION ACTIVITIES FOR THE BIO-RETENTION AREA SHOULD OCCUR WITHIN A SHORT TIME PERIOD TO ENSURE THAT SILT AND SEDIMENT DO NOT ENTER THE TRENCH.
2. APPROPRIATE MEASURES ARE TO BE TAKEN IN THE EVENT OF SEDIMENT ENTERING AND CLOGGING THE BIO-RETENTION AREA. SHOULD UNFAVORABLE CONDITIONS (I.E. GROUNDWATER AND/OR BEDROCK, ETC.) BE ENCOUNTERED DURING THE CONSTRUCTION PROCESS OF THE BIO RETENTION AREA, THE DESIGN ENGINEER SHOULD BE CONTACTED TO ADDRESS SUCH ISSUES.
3. IF INSPECTION INDICATES THAT SOIL OR SEDIMENT HAS ENTERED ANY OF THE BIO RETENTION AREA, APPROPRIATE MEASURES (I.E. CLEARING THE SOIL SEDIMENT FROM BIO RETENTION AREAS) SHOULD BE ADDRESSED.
4. PRIOR TO STONE AGGREGATE AND SOIL MIX BACKFILLING, THE BASIN EXCAVATION SHALL BE LINED WITH A PERMEABLE GEO-FABRIC LINER MEETING THE FOLLOWING SPECIFICATIONS, PER THE LATEST EDITION OF THE PA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S BEST MANAGEMENT PRACTICES MANUAL.

   NON-WOVEN GEOTEXTILE FABRIC:
   NEEDLED NON-WOVEN POLYPROPYLENE FIBERS MEETING THE FOLLOWING PROPERTIES:
   a. GRAB TENSILE STRENGTH (ASTM-D4632)>=120lbs
   b. MULLEN BURST STRENGTH (ASTM-D3786)>=225lbs
   c. FLOW RATE (ASTM-D4491) >=95gal/min/sf
   d. UV RESISTANCE AFTER 500 HRS (ASTM-D4355)>=70%
   e. HEAT-SET OR HEAT-CALENDARED FABRICS ORE NOT PERMITTED. ACCEPTABLE TYPES INCLUDE MIRAFI 140N, AMOCO 4547, AND GEOTEX 451.
5. RAIN GARDEN SOIL SPECIFICATIONS:
   a. THE RAINGARDEN SOIL MIXTURE SHALL BE A MIXTURE OF PLANTING SOIL, MULCH, AND SAND. THE MIXTURE SHALL CONFORM TO THE FOLLOWING:

a.a.	PLANTING SOIL	30% BY VOLUME
a.b.	DOUBLE SHREDDED HARDWOOD MULCH	20% BY VOLUME
a.c.	SAND	50% BY VOLUME

   b. THE PLANTING SOIL MIXTURE SHALL BE CLASSIFIED AS A SANDY LOAM, LOAMYSAND, OR LOAM (USDA) AND HAVE THE FOLLOWING CHARACTERISTICS:

b.a.	PH RANGE	5.5 TO 7.5
b.b.	ORGANIC MATTER	1.5 TO 7.0%
b.c.	MAGNESIUM	32 PPM (MINIMUM)
b.d.	PHOSPHORUS (P205)	<= 69 PPM
b.e.	POTASSIUM (K20)	78 PPM (MINIMUM)
b.f.	SOLUBLE SALTS	<= 500 PPM
b.g.	CLAY	10 TO 20%
b.h.	SILT	0 TO 50%
b.i.	SAND	50 TO 85%
b.j.	ORGANIC MATTER	1.5 TO 10%
b.k.	INFILTRATION RATE	MIN. 0.1 IN./HR.

   c. THE RAIN GARDEN SOIL MIXTURE SHALL BE FREE OF STONES, INORGANIC MATERIAL, STUMPS, ROOTS, OR OTHER WOODY MATERIAL (EXCLUDING MULCH) OVER 1" IN DIAMETER.
6. AREAS WITH HIGHLY PERMEABLE MATERIALS, SHALL BE REPLACED WITH AMENDED SOIL OF USTA SAND LOAM.
   a. CLAY >= 7% AND CLAY < 20% AND SAND > 52% AND SILT + 2 * CLAY >= 30%
      OR
   b. CLAY < 7% AND SILT < 50% AND SILT + 2 * CLAY >= 30%)
7. CLEAN WASHED STONE IS DEFINED AS HAVING LESS THAN 0.5% WASH LOSS, BY MASS, WHEN TESTED PER THE AASHTO T-11 WASH LOSS TEST
8. ALL JOINTS SHALL BE INSTALLED SO AS TO BE WATERTIGHT.

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ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

GOOSE CREEK GREEN STORMWATER
205 LACEY STREET
WEST CHESTER, PA 19382

CONSTRUCTION DETAILS

WEST CHESTER BOROUGH
401 EAST GAY STREET
WEST CHESTER, PA 19380

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PROJECT	WCHBO00030
DATE	2024-06-07
DRAWING SCALE	N.T.S.
DRAWN BY	AGS
APPROVED BY	CRP

CS6003

SHEET 16 OF 21

PLOTTED: 6/7/2024 8:40 AM, BY: Sumi Moore PLOTSTYLE: Pennoni-WCS.stb PROJECT STATUS: —
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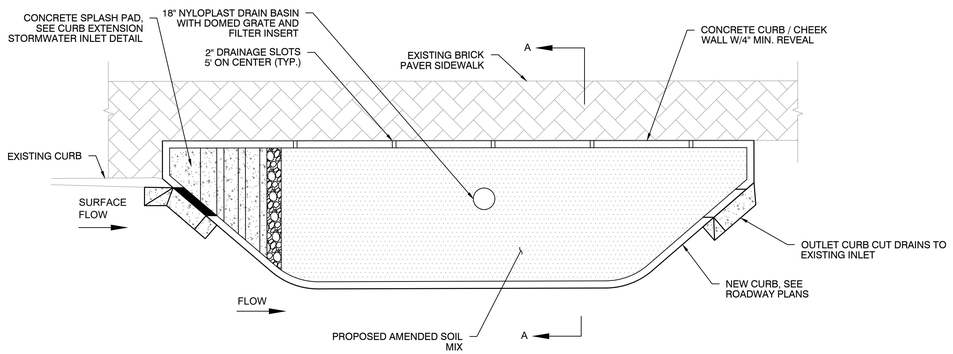
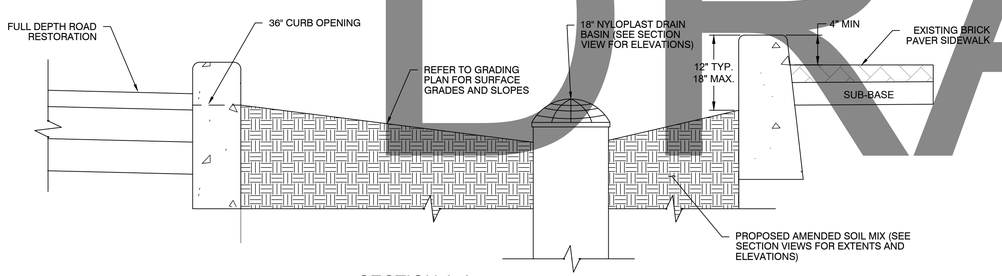


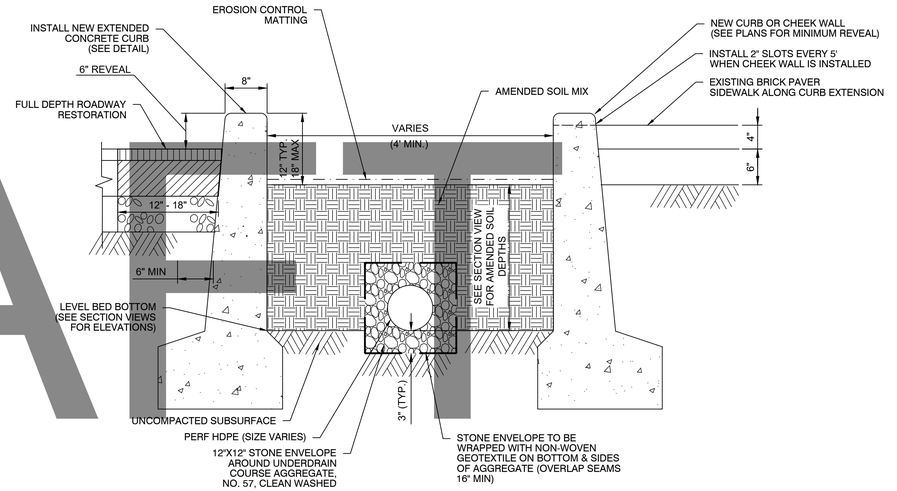
PLAN VIEW



SECTION A-A

TYPICAL CURB EXTENSION SURFACE SECTIONS W/ RELATIVE ELEVATIONS

N.T.S.



VEGETATED CURB EXTENSION SECTION

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205 LACEY STREET
WEST CHESTER, PA 19382

CONSTRUCTION DETAILS

WEST CHESTER BOROUGH
401 EAST GAY STREET
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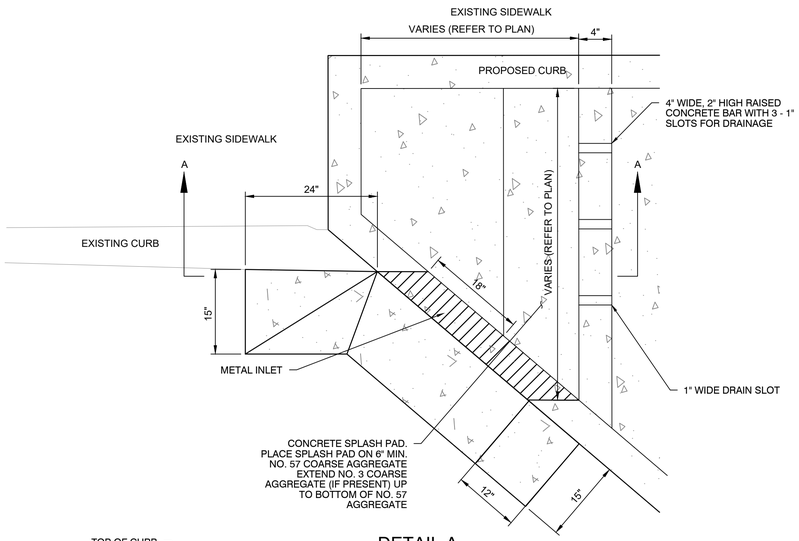
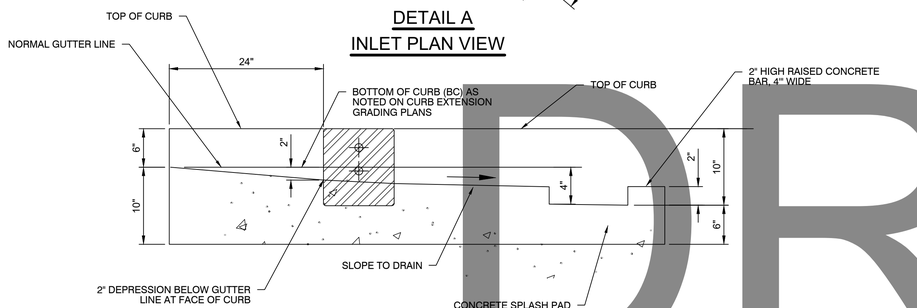
PROJECT	WCHBO00030
DATE	2024-06-07
DRAWING SCALE	N.T.S.
DRAWN BY	AGS
APPROVED BY	CRP

CS6004

SHEET 17 OF 21



DETAIL A
INLET PLAN VIEW



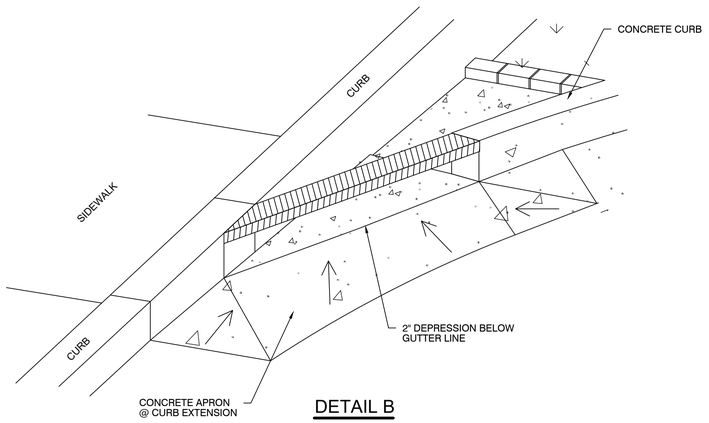
SECTION A-A

NOTES:

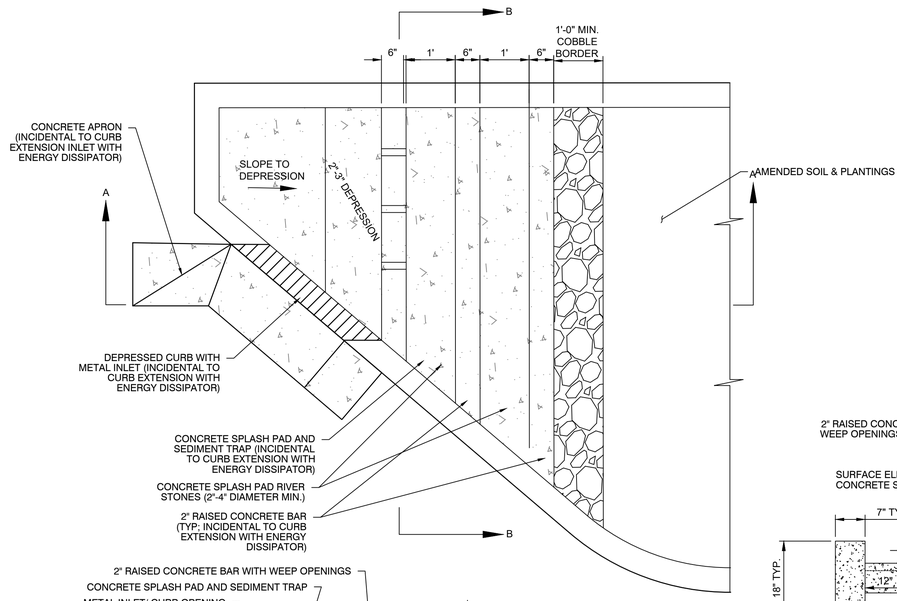
1. SAWCUT BEYOND FACILITY AND TRANSITION EXISTING CURB TO NEW CURB AND GUTTER AT 1" PER FOOT AS NECESSARY.
2. INLET MAY BE MODIFIED TO MAXIMIZE FLOW ENTRY TO STORM WATER FACILITY.
3. SEE PLANS FOR ACTUAL CONFIGURATION OF CURB EXTENSION INLETS.

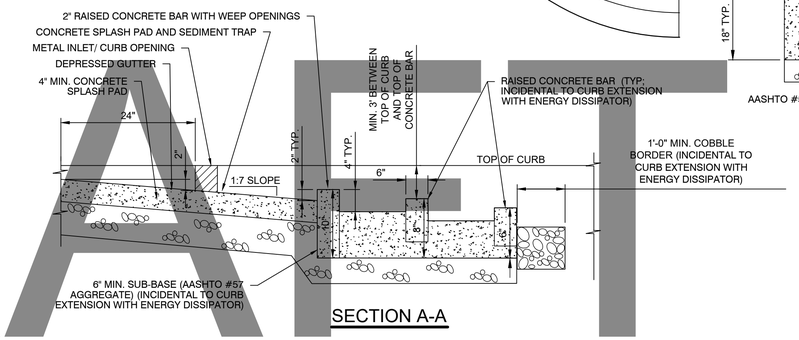
CURB EXTENSION STORMWATER INLET

N.T.S.

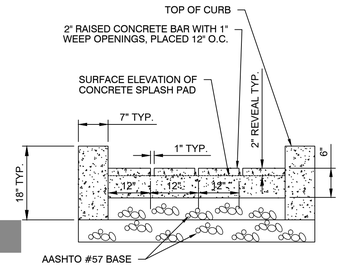


DETAIL B
INLET PERSPECTIVE VIEW





SECTION A-A



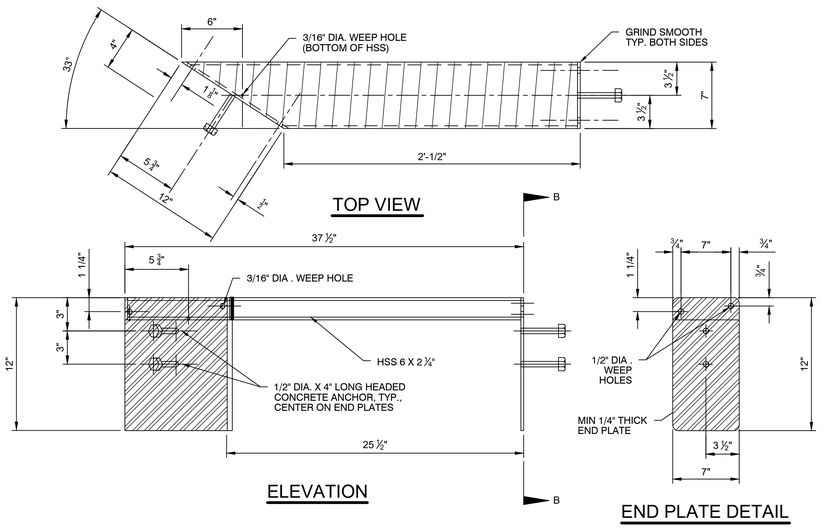
SECTION B-B

CURB EXTENSION STORMWATER INLET WITH DISSIPATER

N.T.S.

NOTES:

1. HEADED CONCRETE ANCHORS SHALL MEET THE REQUIREMENTS OF ASTM A-108.
2. HSS 6 X 2 ¼ CHANNEL SHALL MEET THE REQUIREMENTS OF ASTM A-500 GRADE B.
3. END PLATES SHALL MEET THE SHALL MEET THE REQUIREMENTS OF ASTM A-36.
4. ENTIRE ASSEMBLY SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH A-123.
5. SINGLE BEVEL GROOVE WELD.



METAL INLET

N.T.S.

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CONSTRUCTION DETAILS

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WEST CHESTER, PA 19380

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PROJECT	WCHBO00030
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DRAWN BY	AGS
APPROVED BY	CRP

CS6005

SHEET 18 OF 21

PLOTTED: 6/7/2024 8:41 AM BY: Sumi Moore PLOTSTYLE: Pennoni N/CS.stb PROJECT STATUS: —
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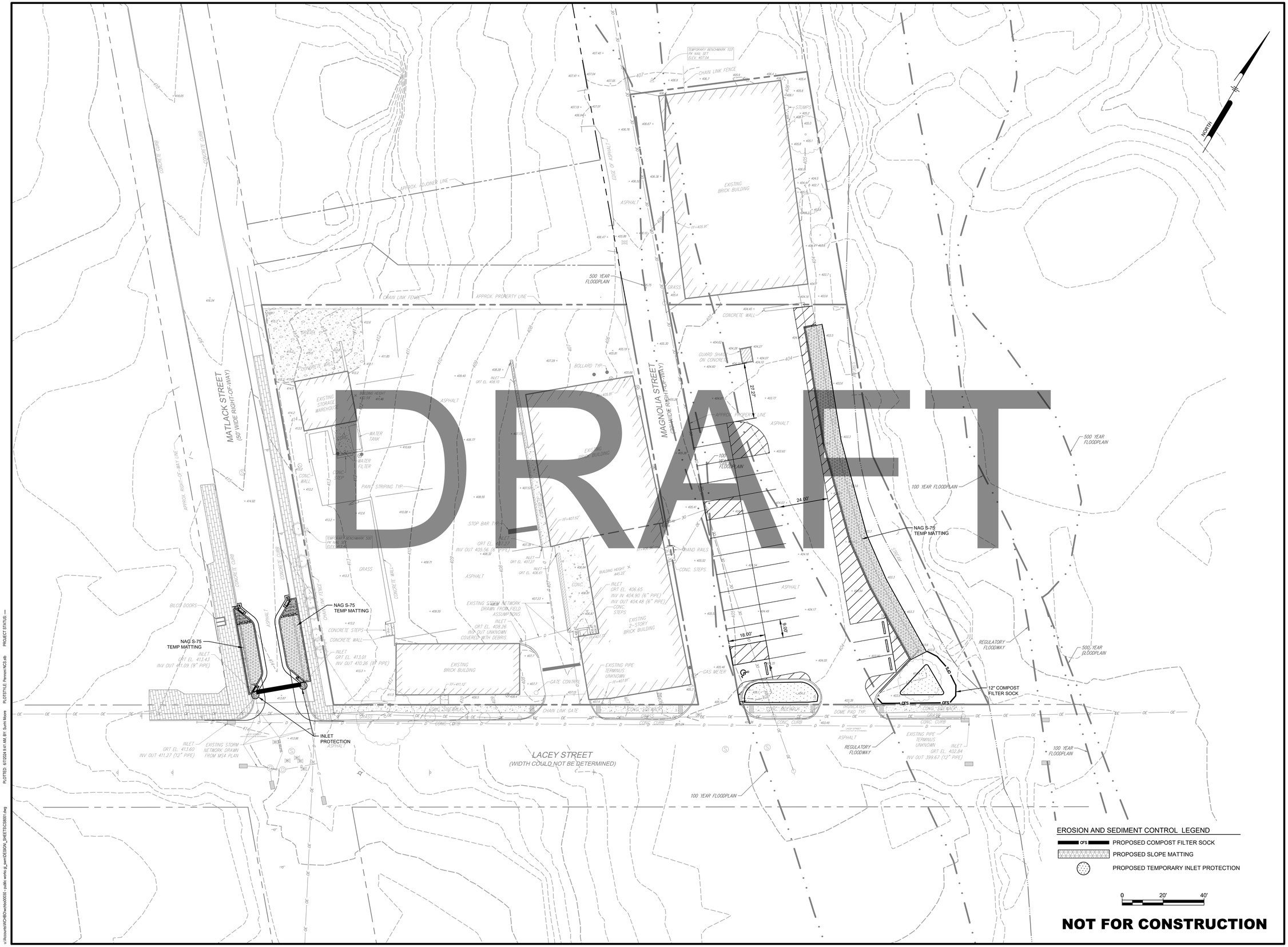

EROSION AND SEDIMENT CONTROL LEGEND

- PROPOSED COMPOST FILTER SOCK
- PROPOSED SLOPE MATTING
- PROPOSED TEMPORARY INLET PROTECTION

0 20' 40'

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205 LACEY STREET
WEST CHESTER, PA 19382

EROSION & SEDIMENTATION CONTROL PLAN

WEST CHESTER BOROUGH
401 EAST GAY STREET
WEST CHESTER, PA 19380

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PROJECT	WCHBO00030
DATE	2024-06-07
DRAWING SCALE	1" = 20'
DRAWN BY	AGS
APPROVED BY	CRP

CS8001

SHEET 19 OF 21

PLOTTED: 6/7/2024 9:41 AM BY: Sushi Moore PLOTSTYLE: Pennoni NCS.stb PROJECT STATUS: —
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STANDARD E&S CONTROL PLAN NOTES

OWNER / OPERATOR WILL BE RESPONSIBLE FOR THE PROPER CONSTRUCTION, STABILIZATION, AND MAINTENANCE OF ALL EROSION AND SEDIMENTATION CONTROLS AND RELATED ITEMS INCLUDED WITHIN THESE PLANS

1. EROSION AND SEDIMENTATION CONTROLS MUST BE CONSTRUCED, STABILIZED AND FUNCTIONAL BEFORE GENERAL SITE DISTURBANCE WITHIN THE TRIBUTARY AREA OF THOSE CONTROLS BEGINS.
2. THE OPERATOR/CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF THE APPENDIX 64, EROSION CONTROL RULES AND REGULATIONS, TITLE 25, PART 1, DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUBPART C, PROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER RESOURCES, CHAPTER 102, EROSION CONTROL.
3. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE CHESTER COUNTY CONSERVATION DISTRICT, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATIONS.
4. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION & SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED.
5. AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENT CONTROL PLAN PREPARER, AND THE CHESTER COUNTY CONSERVATION DISTRICT TO AN ON-SITE MEETING. ALSO, AT LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT 1-800-242-1776 FOR BURIED UTILITIES LOCATIONS.
6. THE E&S CONTROL PLAN MAPPING MUST DISPLAY A PA ONE CALL SYSTEM INCORPORATED SYMBOL INCLUDING THE SITE IDENTIFICATION NUMBER.
7. SHOULD ANY MEASURES CONTAINED WITHIN THIS PLAN PROVE TO BE INCAPABLE OF ADEQUATELY CONTROLLING SEDIMENT FROM LEAVING THE SITE PRIOR TO THE DISCHARGE OF OR STABILIZING OF SURFACES INVOLVED, ADDITIONAL MEASURES MUST BE IMPLEMENTED IMMEDIATELY BY THE OWNER/ DEVELOPER TO ELIMINATE SUCH PROBLEMS.
8. THE LIMITS OF WORK SHOWN ON THIS PLAN ARE THE REAL EXTENT REQUIRED FOR CONSTRUCTION. THE CONTRACTOR SHALL ADHERE TO THESE LIMITS IN MINIMIZING DISTURBED LAND, AND ALL CONSTRUCTION SHALL BE CONDUCTED WITHIN THESE LIMITS.
9. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
10. BEFORE INITIATING ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE CHESTER COUNTY CONSERVATION DISTRICT. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
11. TOPSOIL TAKEN FROM CONSTRUCTION AREAS SHALL BE SEEDED WITH A VEGETATIVE COVER AND STOCKPILED FOR REUSE IN FINISH GRADING. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2:1 OR FLATTER. SILT FENCING SHALL BE INSTALLED ON THE LOW SIDE OF THE PILE. THERE SHALL BE NO EARTH DISTURBANCE WITHIN THE STOCKPILE AREA.
12. ALL PUMPING OF SEDIMENT LADEN WATER OR POTENTIALLY SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS.
13. ONLY LIMITED DISTURBANCE WILL BE PERMITTED TO PROVIDE ACCESS TO THE SEDIMENT TRAP FOR GRADING AND ACQUIRING BORROW TO CONSTRUCT THOSE BMP'S.
14. ANY DISTURBED AREA, ON WHICH ACTIVITY HAS CEASED FOR AN EXTENDED AMOUNT OF TIME, MUST BE SEEDED AND MULCHED IMMEDIATELY. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT RECOMMENDED RATES.
15. DISTURBED AREAS WHICH ARE NOT AT FINISH GRADE AND WHICH WILL BE RE-DISTURBED WITHIN ONE YEAR MAY BE SEEDED AND MULCHED WITH A QUICK GROWING TEMPORARY SEED MIXTURE AND MULCH. DISTURBED AREAS WHICH ARE EITHER AT FINISH GRADE OR WILL NOT BE RE-DISTURBED WITHIN ONE YEAR MUST BE SEEDED WITH A PERMANENT SEED MIXTURE AND MULCHED.
16. FILLS GREATER THAN 3:1 SLOPE AND CUTS GREATER THAN 3:1 SHALL BE SEEDED AND MULCHED, AND PROTECTED WITH EROSION CONTROL MATTING (SEE INSTALLATION INSTRUCTIONS). ALL DISTURBED AREAS WITHIN 50 FT OF A SURFACE WATER SHALL BE SEEDED AND MULCHED ACCORDINGLY.
17. CHANNELS, SEDIMENTATION BASINS, SEDIMENTATION TRAPS AND STOCKPILES MUST BE SEEDED AND MULCHED IMMEDIATELY.
18. THERE IS TO BE NO EARTH DISTURBANCE OR VEGETATIVE CLEARING IN AREAS OF STAKED (OR FENCED) WETLANDS. EARTH DISTURBANCE WITHIN THESE AREAS WITHOUT THE REQUIRED PERMITS WILL RESULT IN POTENTIAL VIOLATION OF COMMONWEALTH AND FEDERAL WETLANDS REGULATIONS.
19. DUST CONTROL SHALL BE PROVIDED BY THE CONTRACTOR AT ALL TIMES DURING CONSTRUCTION.
20. CONSTRUCTION VEHICLES LEAVING THE SITE SHALL NOT DEPOSIT ANY MATERIAL OUTSIDE OF THE PROJECT SITE BOUNDARIES AND/OR A PUBLIC RIGHT-OF-WAY. ANY MATERIAL DEPOSITED SHALL BE IMMEDIATELY REMOVED.
21. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE OF CONSTRUCTION. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.
22. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE OPERATOR SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITIES. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH ARE AT FINISHED GRADE OR WHICH WILL NOT BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.
23. UNTIL THE SITE ACHIEVES FINAL STABILIZATION, THE PERMITTEE AND COPERMITTEE SHALL ASSURE THAT THE BEST MANAGEMENT PRACTICES ARE IMPLEMENTED, OPERATED, AND MAINTAINED PROPERLY AND COMPLETELY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL BEST MANAGEMENT PRACTICE FACILITIES AND MAINTAIN AND MAKE AVAILABLE TO THE CHESTER COUNTY CONSERVATION DISTRICT COMPLETE, WRITTEN INSPECTION LOGS OF ALL THOSE INSPECTIONS. ALL MAINTENANCE WORK, INCLUDING CLEANING, REPAIR, REPLACEMENT, REGARDING, RESEEDING, AND RESTABILIZATION SHALL BE PERFORMED IMMEDIATELY.
24. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMP CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMP'S MUST BE STABILIZED IMMEDIATELY.
25. AT STREAM CROSSINGS, A 50' BUFFER AREA SHOULD BE MAINTAINED. WITHIN THE BUFFER, CLEARING, SOD DISTURBANCES, EXCAVATION AND EQUIPMENT TRAFFIC SHOULD BE MINIMIZED. ACTIVITIES SUCH AS STACKING LOGS, BURNING CLEARED BRUSH, DISCHARGING WATER FROM TRENCHES, WELDING PIPE SECTIONS, REFUELING AND MAINTAINING EQUIPMENT SHOULD BE ACCOMPLISHED OUTSIDE OF BUFFERS.
26. SEDIMENT TRACKED ONTO ANY ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORKDAY AND DISPOSED AS A MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED OR SWEPT INTO ANY ROAD SIDE DITCH, STORM SEWER OR SURFACE WATER.
27. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
28. SHOULD ANY AREAS OF EXCAVATION BE FOUND TO CONTAIN CONTAMINANTS THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE DESIGN ENGINEER.

TOPSOIL APPLICATION NOTE:

ALL TOPSOIL PLACEMENT SHALL BE IN ACCORDANCE WITH PA DEP REQUIREMENTS.

MAINTENANCE NOTES

GENERAL:

1. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION BMP'S MUST BE MAINTAINED PROPERLY. MAINTENTANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION BMP'S AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL SITE INSPECTIONS WILL BE DOCUMENTED IN AN INSPECTION REPORT LOG USING DEP FORM 3150-FM-BWEW0083 DATED 2/2012 KEPT FOR THIS PURPOSE. THE COMPLIANCE ACTIONS AND THE DATE, TIME AND NAME WILL BE KEPT ON THE SITE AT ALL TIMES AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST.

   ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING, MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENTATION BMP'S FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMP'S OR MODIFICATIONS OF THOSE INSTALLED WILL BE NEEDED.

   WHERE BMP'S ARE FOUND TO FAIL TO ALLEVIATE EROSION OR SEDIMENT POLLUTION THE PERMITTEE OR CO-PERMITTEE SHALL INCLUDE THE FOLLOWING INFORMATION:

   a. THE LOCATION AND SEVERITY OF THE BMP'S FAILURE AND ANY POLLUTION EVENTS.
   b. ALL STEPS TAKEN TO, REDUCE, ELIMINATE AND PREVENT THE RECURRENCE OF THE NON-COMPLIANCE.
   c. THE TIME FRAME TO CORRECT THE NON-COMPLIANCE, INCLUDING THE EXACT DATES WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE.
2. SEEDED AREAS THAT HAVE WASHED AWAY SHALL BE FILLED AND GRADED, AS NECESSARY, AND THEN RESSEDED. A STRAW COVER SHALL BE APPLIED TO RETAIN THE SEED ALONG WITH AN ANCHORING METHOD DESCRIBED ON THE ATTACHED MULCH ANCHORING GUIDE, UNTIL IT HAS A CHANCE TO ROOT PROPERLY.
3. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMP'S MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGARDING, RESEEDING, REMULCHING, AND RENETTING, MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
4. SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.

ROCK CONSTRUCTION ENTRANCE:

1. SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE.
2. ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK.
3. INSPECT AFTER EACH STORM EVENT AND ON A WEEKLY BASIS. NEEDED REPAIRS SHOULD BE INITIATED IMMEDIATELY AFTER INSPECTION.

FILTER SOCKS

1. INSPECT AFTER EACH STORM EVENT AND ON A WEEKLY BASIS. NEEDED REPAIRS SHOULD BE INITIATED IMMEDIATELY AFTER INSPECTION.
2. COMPOST FILTER SOCKS ARE TO BE MAINTAINED, AND REPLACED IF NECESSARY, DURING THE ENTIRE CONSTRUCTION PERIOD UNTIL A PERMANENT VEGETATIVE COVER WITHIN THE TRIBUTARY AREA IS ESTABLISHED.
3. CONSTRUCT COMPOST FILTER SOCKS ALONG THE DOWNSTREAM SIDE OF ALL PROPOSED CUT AND FILL ACTIVITIES.
4. THE CONTRACTOR SHALL REMOVE ACCUMULATED SILT WHEN THE SILT ACCUMULATIONS REACH ½ THE ABOVE GROUND HEIGHT OF THE SOCKS.

TEMPORARY STABILIZATION & PERMANENT STABILIZATION:

1. HAY OR STRAW MULCH MUST BE APPLIED AT 3.0 TONS PER ACRE.
2. MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON ALL SLOPES 3:1 AND STEEPER.
3. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.
4. GRADED AREAS ARE TO BE TEMPORARILY SEEDED AND MULCHED IMMEDIATELY FOLLOWING EARTHMOVING PROCEDURES. TEMPORARY SEED SHALL BE ANNUAL RYE GRASS APPLIED AT THE RATES SPECIFIED. MULCH SHALL BE HAY OR STRAW APPLIED AT THE RATE OF AT LEAST 3 TONS PER ACRE.
5. ESTABLISH PERMANENT SEEDING AS SOON AS POSSIBLE AFTER FINAL GRADING IS COMPLETED. PERMANENT SEEDING SHALL BE AT THE RATES SPECIFIED. FERTILZER AND LIME SHALL BE APPLIED AT THE MINIMUM RATES SPECIFIED.
6. PERMANENTLY SEEDED AREAS SHALL HAVE HAY OR STRAW APPLIED AT THE RATE OF AT LEAST 3 TONS PER ACRE. ANY AREAS WHERE HYDROSEED IS USED, MULCH IS NEEDED AT A MINIMUM RATE OF 3 TONS PER ACRE.
7. FILTER SOCKS PER EROSION AND SEDIMENT CONTROL MANUAL.

CONCRETE WASHOUT AREA:

1. FOR LARGER SITES, A BELOW-GRADE WASHOUT SHOULD BE A MINIMUM OF 10 FEET WIDE AND PROVIDE AT LEAST 12 INCHES OF FREEBOARD ABOVE THE LIQUID AND SOLID WASTE ANTICIPATED BETWEEN CLEANOUT INTERVALS. THE PIT SHOULD BE LINED WITH PLASTIC SHEETING OF AT LEAST 10-MIL THICKNESS (WITH NO HOLES OR TEARS) TO PREVENT LEACHING OF LIQUIDS INTO THE GROUND.
2. THE WASHOUT AREA SHALL BE MAINTAINED SUCH THAT THE 12 INCHES OF FREEBOARD IS AVAILABLE AT ALL TIMES.

INLET PROTECTION:

1. EARTHEN BERM TO BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM TO BE MAINTAINED UNTIL ROAD IS PAVED. SIX INCH ROADWAY ASPHALT BERM TO BE MAINTAINED UNTIL ROWADWAY SURFACE RECEIVES FINAL COAT.
2. INSPECT AFTER EACH STORM EVENT AND ON A WEEKLY BASIS. NEEDED REPAIRS SHOULD BE INITIATED IMMEDIATELY AFTER INSPECTION.
3. SEDIMENT MUST BE REMOVED FROM STORM WATER INLET PROTECTION AFTER EACH RUNOFF EVENT.

CLEAN FILL & ENVIRONMENTAL DUE DILIGENCE

1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING. IF THE SITE WILL NEED TO IMPORT OR EXPORT MATERIAL FROM THE SITE, THE RESPONSIBILITY FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND DETERMINATION OF CLEAN FILL WILL REST WITH THE CONTRACTOR.
2. CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE).
3. CLEAN FILL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE: FILL MATERIALS AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE STILL QUALIFIES AS CLEAN FILL PROVIDED THE TESTING REVEALS THAT THE FILL MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT ARE BELOW THE RESIDENTIAL LIMITS IN TABLES FP-1A AND FP-1B FOUND IN THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL".
4. ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FP-001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL. A COPY OF FORM FP-001 CAN BE FOUND AT THE END OF THESE INSTRUCTIONS.
5. ENVIRONMENTAL DUE DILIGENCE: THE APPLICANT MUST PERFORM ENVIRONMENTAL DUE DILIGENCE TO DETERMINE IF THE FILL MATERIALS ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FILL. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL".
6. FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE DEPARTMENT'S MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA. CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE. THESE REGULATIONS ARE AVAILABLE ON-LINE AT WWW.PACODE.COM.

RECYCLE & DISPOSAL OF MATERIALS

1. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTE IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET DEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE.
2. ANY WASTE OR BORROW AREA MUST HAVE AN E&S PLAN REVIEWED AND APPROVED BY CHESTER COUNTY CONSERVATION DISTRICT PRIOR TO BEING ACTIVATED.

UNFORSEEN EROSIVE CONDITIONS

1. SHOULD UNFORSEEN EROSIVE CONDITIONS DEVELOP DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ACTION TO REMEDY SUCH CONDITIONS AND TO PREVENT DAMAGE TO ADJACENT PROPERTIES AS A RESULT OF INCREASED RUNOFF AND/OR SEDIMENT DISPLACEMENT. STOCKPILES OF WOOD CHIPS, HAY BALES, CRUSHED STONE, AND OTHER MULCHES SHALL BE HELD IN READINESS TO DEAL IMMEDIATELY WITH EMERGENCY PROBLEMS OF EROSION.

UTILITY TRENCH NOTES

1. LIMIT ADVANCED CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
2. WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS.
3. ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
4. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.
5. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING BEFORE PIPE PLACEMENT AND/OR BACKFILLING BEGINS. WATER REMOVED FROM THE TRENCH SHALL BE PUMPED THROUGH A FILTRATION DEVICE.
6. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND IMMEDIATELY STABILIZED.

TEMPORARY STABILIZATION & PERMANENT STABILIZATION

1. AREAS WHICH ARE TO BE TOP-SOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 12 INCHES PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 12 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING, I.E. YARDS.
2. HAY OR STRAW MULCH MUST BE APPLIED AT 3.0 TONS PER ACRE.
3. MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON ALL SLOPES 3:1 AND STEEPER.
4. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.
5. GRADED AREAS ARE TO BE TEMPORARILY SEEDED AND MULCHED IMMEDIATELY FOLLOWING EARTHMOVING PROCEDURES. TEMPORARY SEED SHALL BE ANNUAL RYE GRASS APPLIED AT THE RATES SPECIFIED. MULCH SHALL BE HAY OR STRAW APPLIED AT THE RATE OF AT LEAST 3 TONS PER ACRE.
6. PERMANENTLY SEEDED AREAS SHALL HAVE HAY OR STRAW APPLIED AT THE RATE OF AT LEAST 3 TONS PER ACRE.
7. ANY AREAS WHERE HYDROSEED IS USED, MULCH IS NEEDED AT A MINIMUM RATE OF 3 TONS PER ACRE.

MULCH ANCHORING GUIDE

Anchoring Method or Material	Kind of Mulch to be Anchored	How to Apply
MANUAL Mulch Netting	Hay or Straw	Staple Anti-Wash/Geojute netting to soil surface according to manufacturer's recommendations.

TEMPORARY SEEDINGS FOR CRITICAL AREAS

SPECIES OR MIXTURE	PERCENT BY WEIGHT	PERCENT PURE LIVE SEED	PERCENT GERMINATION	SEEDING RATE		RECOMMENDED SEEDING DATES	ADAPTION TO SOIL-SITE CONDITIONS				
				LBS/1,000-SF	LBS/AC		SHALLOW WELL DRAINED	MOD. DEEP WELL DRAINED	DEEP WELL DRAINED	MOD. WELL DRAINED	SOMEWHAT POORLY TO POORLY DRAINED
ANNUAL RYEGRASS (PENN DOT FORMULA E)	100.0%	98.0%	90.0%	21	915	MAR. 15 TO OCT. 15	X	X	X	X	X

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PENNONI ASSOCIATES INC.
158 W. Gay Street, Suite 300
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ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

GOOSE CREEK GREEN STORMWATER EROSION & SEDIMENTATION CONTROL NOTES

205 LACEY STREET
WEST CHESTER, PA 19382

401 EAST GAY STREET
WEST CHESTER, PA 19380

WEST CHESTER BOROUGH

NO.	REVISIONS	BY	DATE

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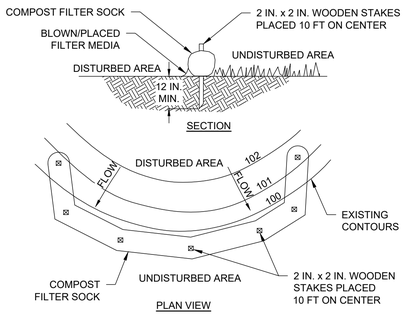
PROJECT	WCHBO00030
DATE	2024-06-07
DRAWING SCALE	N.T.S.
DRAWN BY	AGS
APPROVED BY	CRP

CS8501

SHEET 20 OF 21

u:\Accounts\WCHBO\wchbo00030 - public works\g_pw\DESIGN_SHEETS\CS8501.dwg PLOTTED: 6/7/2024 8:42 AM BY: Sushi Moore PLOTSTYLE: Pennoni-MCS.ctb PROJECT STATUS: —



NOTES:

SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.

TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

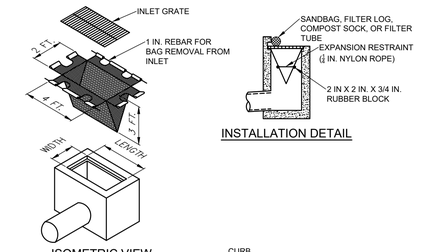
COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.

BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

COMPOST FILTER SOCK

NTS STANDARD CONSTRUCTION DETAIL #4-1



NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

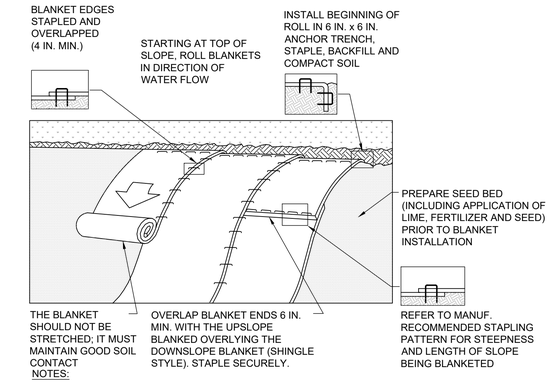
ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.
AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND REPLACED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

FILTER BAG INLET PROTECTION - TYPE C INLET

NTS STANDARD CONSTRUCTION DETAIL #4-15



NOTES:

SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.

PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.

SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.

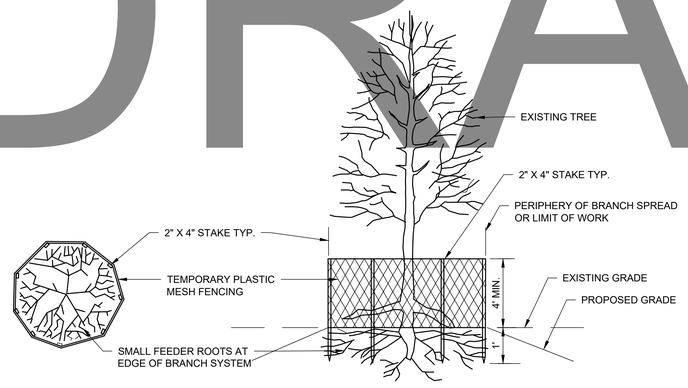
BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.

THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

EROSION CONTROL BLANKET INSTALLATION

NTS STANDARD CONSTRUCTION DETAIL #11-1

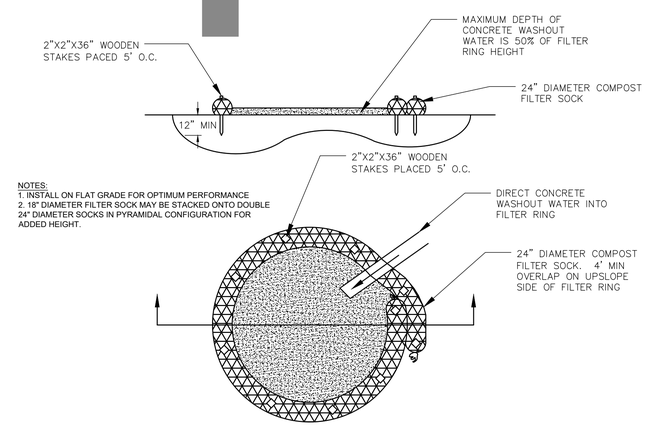


NOTES:

1. THOSE TREES WHICH ARE WITHIN TWENTY-FIVE (25) FEET OF ANY PROPOSED EXCAVATION OR GRADING OPERATION, OR IN ANY OTHER LOCATION DEEMED APPROPRIATE BY THE ENGINEER, SHALL BE PROTECTED BY INSTALLING AND MAINTAINING A FENCE AT THE DRIP LINE.
2. NO BOARDS OR OTHER MATERIAL SHALL BE NAILED TO TREES DURING CONSTRUCTION.
3. HEAVY EQUIPMENT OPERATORS SHALL AVOID DAMAGING EXISTING TREE TRUNKS AND ROOTS. FEEDER ROOTS SHALL NOT BE CUT CLOSER THAN TWENTY-FIVE (25) FEE FROM TREE TRUNKS.
4. TREE TRUNKS AND EXPOSED ROOTS DAMAGED DURING CONSTRUCTION SHALL BE PROTECTED FROM FURTHER DAMAGE BY BEING TREATED IMMEDIATELY.
5. TREE LIMBS DAMAGED DURING CONSTRUCTION SHALL BE PROPERLY PRUNED ANDTREATED IMMEDIATELY.
6. THE OPERATION OF HEAVY EQUIPMENT OVER ROOT SYSTEMS OF SUCH TREES SHALLBE MINIMIZED IN ORDER TO PREVENT SOIL COMPACTION.
7. DAMAGED TREES SHALL BE FERTILIZED TO AID IN THEIR RECOVERY.
8. CONSTRUCTION DEBRIS SHALL NOT BE DISPOSED OF NEAR OR AROUND TREES.

TREE PROTECTION FENCE

NTS



NOTES:
1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE
2. 18" DIAMETER FILTER SOCK MAY BE STACKED ONTO DOUBLE 24" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.

A SUITABLE IMPERVIOUS GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE SOCKS.

CONCRETE WASHOUT FACILITIES DETAIL

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T 610.429.8907 F 610.429.8918

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GOOSE CREEK GREEN STORMWATER

205 LACEY STREET
WEST CHESTER, PA 19382

EROSION & SEDIMENTATION CONTROL DETAILS

WEST CHESTER BOROUGH

401 EAST GAY STREET
WEST CHESTER, PA 19380

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PROJECT	WCHBO00030
DATE	2024-06-07
DRAWING SCALE	N.T.S.
DRAWN BY	AGS
APPROVED BY	CRP

CS8502

SHEET 21 OF 21

v:\Accounts\WCHBO\wchbo00030 - public works gi_pen\DESIGN_SHEETS\CS8502.dwg PLOTTED: 6/7/2024 9:42 AM, BY: Sumi Moore PLOTSTYLE: Pennoni NCS.stb PROJECT STATUS: —

Goose Creek Revised Stormwater PRP & TMDL

December 2025

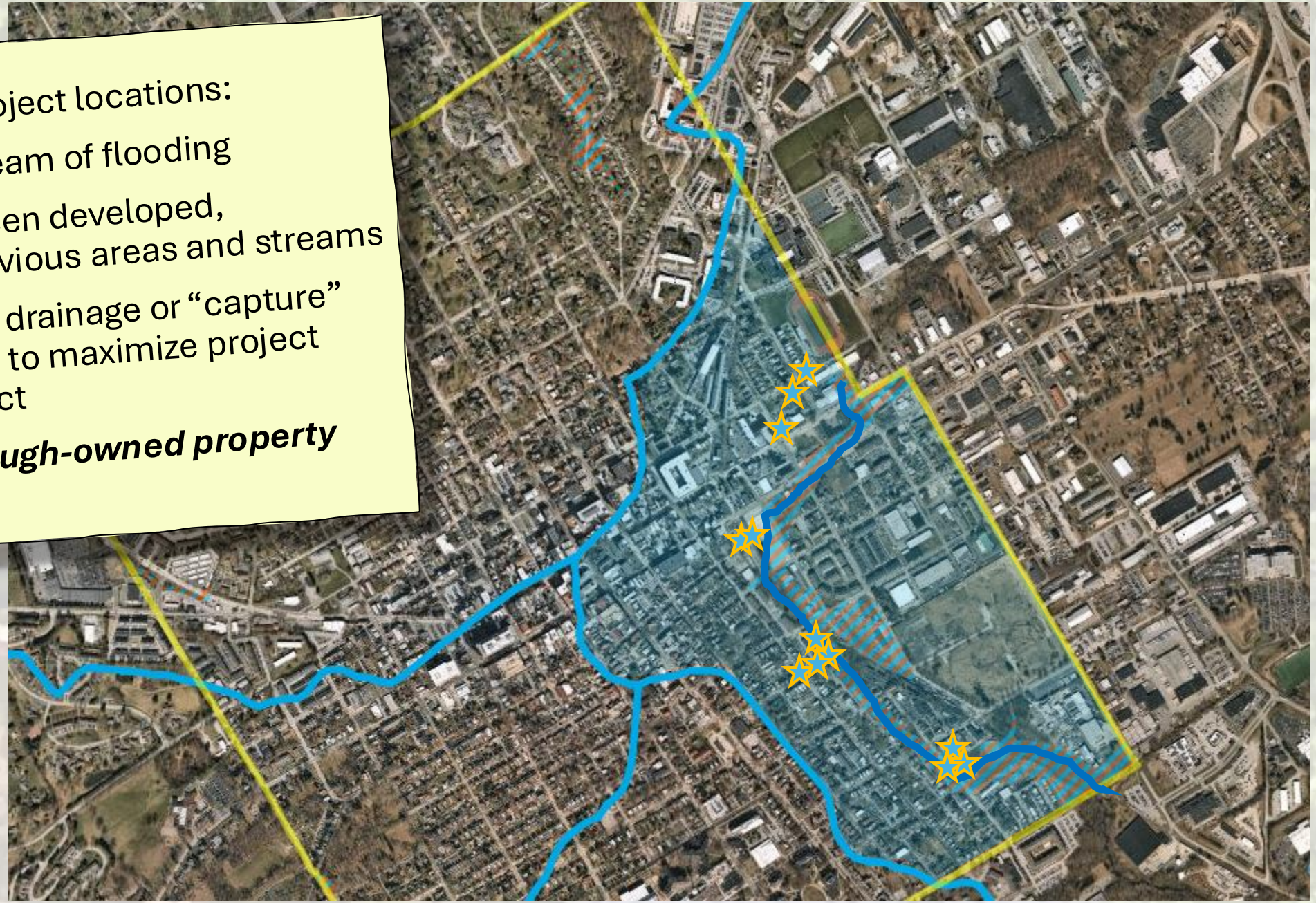
What is a PRP & TMDL?

- DEP-mandated, written, watershed-specific plans outlining proposed, conceptual-level projects to address:
  - Pollution Reduction Plan (PRP) – 10% reduction in sediment
  - Total Maximum Daily Load (TMDL) – 5% reduction in phosphorous
- Reduce pollution and meet goals by actions & infrastructure that improve stormwater quality
- Focused on stormwater quality, but all physical projects have significant flood mitigation aspects
- Tough for Boroughs like West Chester



Good project locations:

- ✓ Upstream of flooding
- ✓ Between developed, impervious areas and streams
- ✓ Large drainage or “capture” areas to maximize project impact
- ✓ ***Borough-owned property***



What is a BMP?

Good Projects:

- ✓ Infiltrate stormwater to ground
- ✓ Detains water from streams during heavy precipitation
- ✓ Improves stormwater quality
- ✓ Vegetated, to mimic natural processes that occur absent development
- ✓ Opportunity to add greenery, habitat in developed areas
- ✓ **Mitigate flooding**









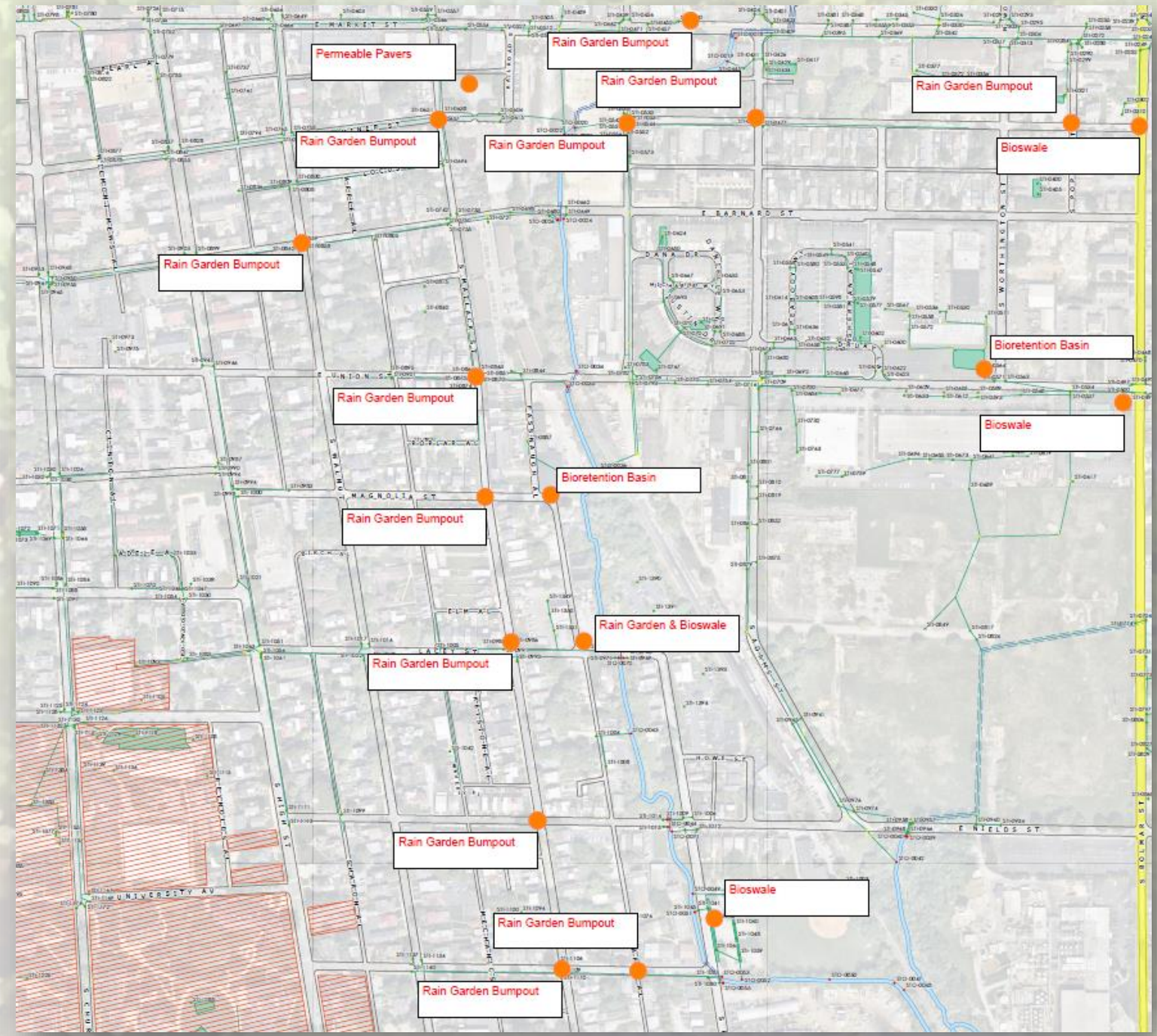






Timeline

- Review Draft - November 2024
- Submit to DEP for comment - December 2024-
- DEP Review - 1Q 2025
- Public Input Process - 3Q-4Q 2025
- Revisions - 4Q 2025
- Final Adoption by Borough Council - 4Q 2025


Permeable Pavers
Rain Garden Bumpout
Rain Garden Bumpout
Rain Garden Bumpout
Rain Garden Bumpout
Rain Garden Bumpout
Bioswale
Rain Garden Bumpout
Bioretention Basin
Rain Garden Bumpout
Bioswale
Bioretention Basin
Rain Garden Bumpout
Rain Garden & Bioswale
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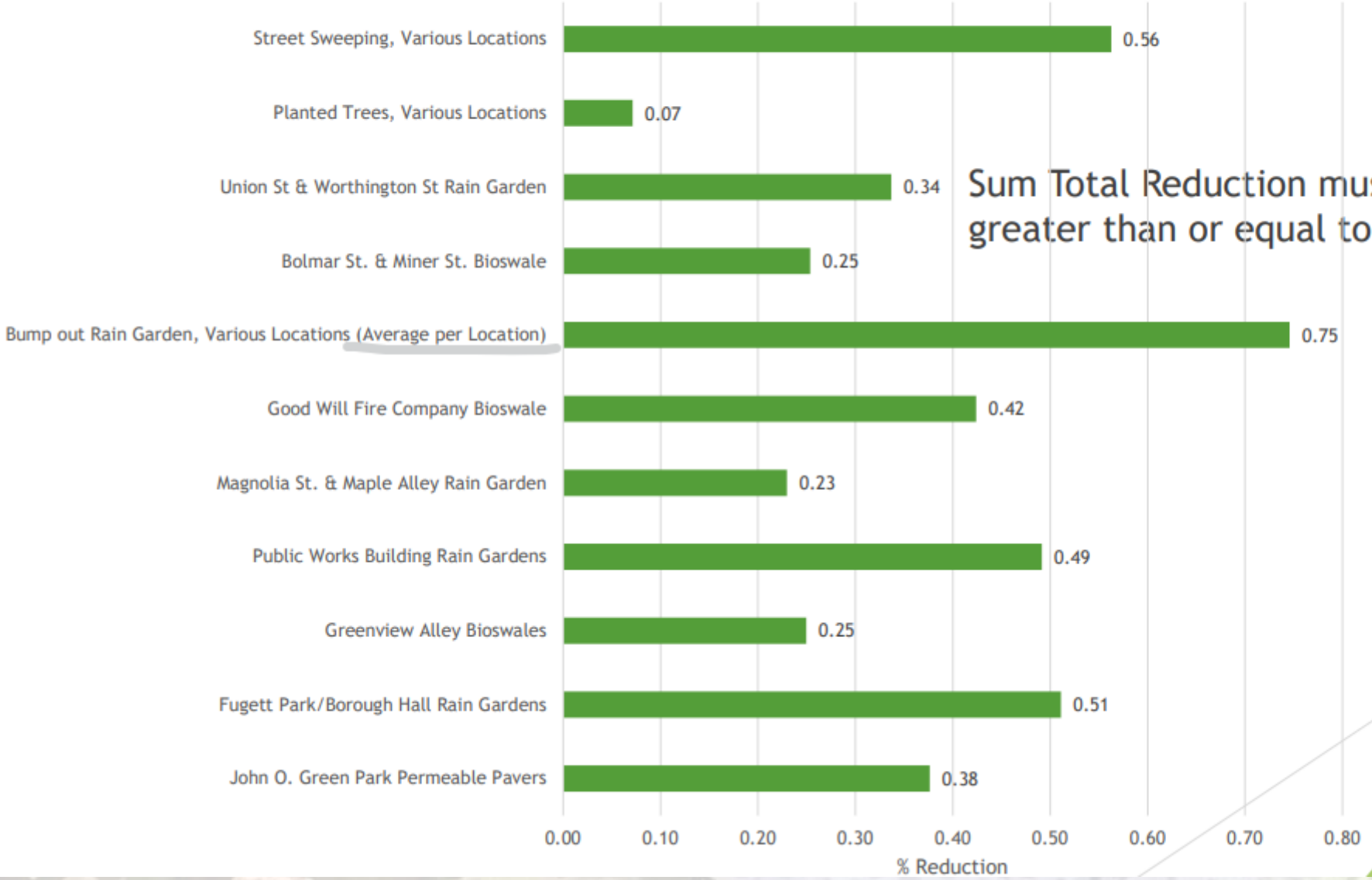
Bioswale
Rain Garden Bumpout
Rain Garden Bumpout

Sediment Reduction by BMP

West Chester Borough PRP/TMDL BMPs



Sum Total Reduction must be greater than or equal to 10%

What PRPs & TMDLs are *not*:

- Representative of all stormwater-related spending
  - Do not address maintenance, expansion, or replacement of existing MS4
- Completely designed projects (or even “preliminary design”)
  - Identify project location, BMP type, approximate drainage area of project to calculate potential impact
- Commitment to completing all projects
  - Plans exceed goals, to allow leeway to pick & choose projects based on future public input, design constraints, future development, funding limitations, regulatory changes, Borough Council decisions, etc.

Public Input

- Requirement: advertise the availability of the draft plans

- Our process:
  - Advertised the availability of the draft plans
  - Posted on website, social media
  - Public “open house” educational meeting
  - Newspaper article
  - Website “news flash”
  - Interactive electronic survey
  - Invited comments via e-mail
  - 60+ day public comment period

Public Input Synopsis

- Partner with downstream municipalities for more impactful projects
  - Possible, but accrues no flood mitigation benefit to investment
- Montgomery Avenue
  - Not in our municipality, nor has their been interest in collaborating with us
- Turning radius for ROW projects
  - Turning radius analysis completed using WCFD's largest truck
- Trash in existing rain gardens
  - That's the point! Trash removal is an operational task to fine-tune
- Appearance of newly built GSI
  - "green infrastructure" takes time to establish.
- Parking concerns
  - No net impact to parking. Our Matlack street project actually resulted in additional parking spaces

Additional Considerations

- Implementation of this plans means:
  - Stormwater runoff from up to 39 acres of developed area within the watershed will be handled with Green Stormwater Infrastructure
    - This will reduce the number and severity of flooding events, in the most cost-effective way possible
  - We can commence project planning and grant applications for our next 2-3 projects
  - Get started on implementation

- Approval of this plan DOES NOT mean:
  - All projects will be eventually completed
  - All projects in plan are greenlighted
    - There will be multiple opportunities for Council members to reject individual projects (grant resolutions, budget, bids, etc.)

From: Don Anderson
To: Kathy Brooks
Subject: Fwd: Horgan Tree Experts Contract
Date: Wednesday, December 3, 2025 5:15:03 PM
Attachments: Outlook-ppt2c3fg.png

FYI,

Don Anderson, Public Works Asst. Dir.
Borough of West Chester
Danderson@west-chester.com
610-696-5282 Office
484-459-6193 Cell

Begin forwarded message:

From: Horgan Tree Experts <horgantree@gmail.com>
Date: December 3, 2025 at 4:46:28 PM EST
To: Don Anderson <DAnderson@west-chester.com>
Subject: Re: Horgan Tree Experts Contract

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Dear Don,

Horgan Tree Experts is in agreeance to extend the existing contract 60 days or until new bid is awarded (whichever comes first) at the current labor and equipment rates.

Thank You,
Travis Shaw
Horgan Tree Experts
741 Contention Lane
Berwyn, PA 19312
610.644.1663

On Wed, Dec 3, 2025 at 15:48 Don Anderson <DAnderson@west-chester.com> wrote:

> Don,
>
> We are in agreeance to extend the existing contract 60 days or until new bid is

awarded (whichever comes first) at the current labor and equipment rates.

Thank You,

Don Anderson, Interim Director
of Public Works
West Chester Borough
DAnderson@west-chester.com
484-459-6193 Cell
610-696-5282 Office

From: Don Anderson
To: Kathy Brooks
Subject: Fw: Extension
Date: Thursday, December 4, 2025 8:38:58 AM
Attachments: image001.png
Outlook-v10enwtn.png

FYI,

Don Anderson, Interim Director
of Public Works
West Chester Borough
DAnderson@west-chester.com
484-459-6193 Cell
610-696-5282 Office



From: Alan Chachapoya <alan_c@dscsolutionsfm.com>
Sent: Thursday, December 4, 2025 8:35 AM
To: Donald Edwards <DEdwards@west-chester.com>
Cc: Don Anderson <DAnderson@west-chester.com>
Subject: Extension

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.
Hi Don,

Per our conversation we are okay extending the contract for 60 days until the new procurement process is completed. We will hold the same price.

Kindest Regards,

Alan Chachapoya | Managing Director



3 Kennedy St | Lancaster, PA 17603
Toll Free: 877.765.8065

Office: 717.800.1240 | Cell : 717.940.8187

From: Don Anderson
To: Kathy Brooks
Subject: Fw: Contract
Date: Wednesday, December 3, 2025 3:03:39 PM
Attachments: Outlook-lkyb1zlx
Outlook-l2rg3egd.png

Fyi,

Don Anderson, Interim Director
of Public Works
West Chester Borough
DAnderson@west-chester.com
484-459-6193 Cell
610-696-5282 Office

From: Bill Dunn <bdunn@signalservice.com>
Sent: Wednesday, December 3, 2025 3:02 PM
To: Don Anderson <DAnderson@west-chester.com>
Subject: Contract

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.
Don,

We are in agreeance to extend the existing contract 60 days or until new bid is awarded (whichever comes first) at the current labor and equipment rates.

Thank You,

Bill Dunn
Director of Field Services
Signal Service Inc.
O: 610-429-8073
C: 484-752-8022
F: 610-429-8076

www.signalservice.com

