



APPLEBROOK GOLF CLUB

TURF CARE CENTER

VIEW FROM YARD

KSM
architects

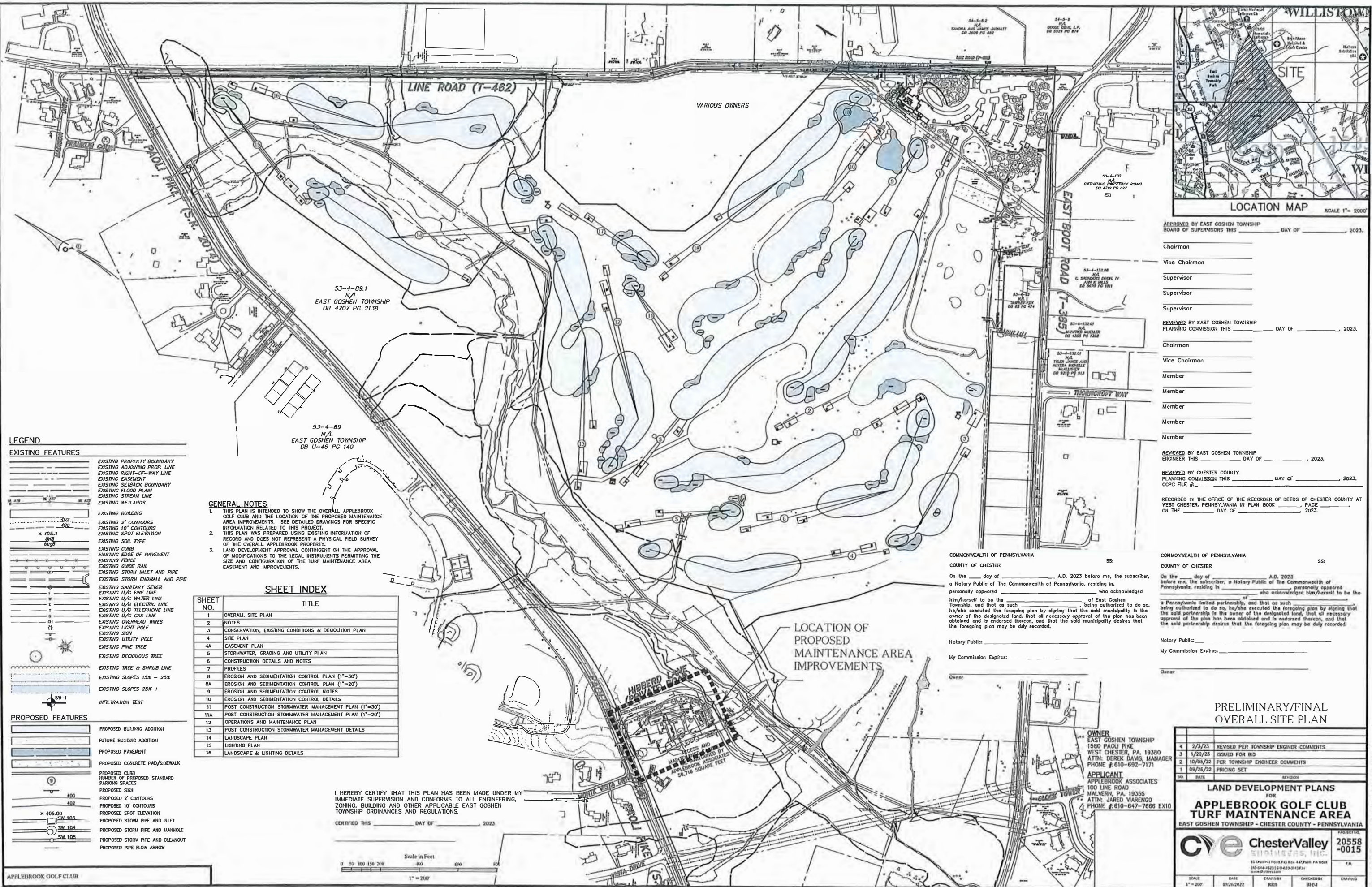


APPLEBROOK GOLF CLUB

TURF CARE CENTER

VIEW FROM PAOLI PIKE

KSM
architects



LEGEND

EXISTING FEATURES

- EXISTING PROPERTY BOUNDARY
- EXISTING ADJOINING PROP. LINE
- EXISTING RIGHT-OF-WAY LINE
- EXISTING EASEMENT
- EXISTING SETBACK BOUNDARY
- EXISTING FLOOD PLAIN
- EXISTING STREAM LINE
- EXISTING WETLANDS
- EXISTING BUILDING
- EXISTING 2' CONTOURS
- EXISTING 10' CONTOURS
- EXISTING SPOT ELEVATION
- EXISTING SOIL TYPE
- EXISTING CURB
- EXISTING EDGE OF PAVEMENT
- EXISTING FENCE
- EXISTING GUE RAIL
- EXISTING STORM INLET AND PIPE
- EXISTING STORM ENDWALL AND PIPE
- EXISTING SANITARY SEWER
- EXISTING U/G FIRE LINE
- EXISTING U/G WATER LINE
- EXISTING U/G ELECTRIC LINE
- EXISTING U/G TELEPHONE LINE
- EXISTING U/G GAS LINE
- EXISTING OVERHEAD WIRES
- EXISTING LIGHT POLE
- EXISTING SIGN
- EXISTING UTILITY POLE
- EXISTING PINE TREE
- EXISTING DECIDUOUS TREE
- EXISTING TREE & SHRUB LINE
- EXISTING SLOPES 15% - 25%
- EXISTING SLOPES 25% +
- INFILTRATION TEST

PROPOSED FEATURES

- PROPOSED BUILDING ADDITION
- FUTURE BUILDING ADDITION
- PROPOSED PAVEMENT
- PROPOSED CONCRETE PAD/SIDEWALK
- PROPOSED CURB
- NUMBER OF PROPOSED STANDARD PARKING SPACES
- PROPOSED SIGN
- PROPOSED 2' CONTOURS
- PROPOSED 10' CONTOURS
- PROPOSED SPOT ELEVATION
- PROPOSED STORM PIPE AND INLET
- PROPOSED STORM PIPE AND MANHOLE
- PROPOSED STORM PIPE AND CLEANOUT
- PROPOSED PIPE FLOW ARROW

GENERAL NOTES

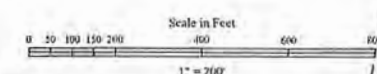
- THIS PLAN IS INTENDED TO SHOW THE OVERALL APPLEBROOK GOLF CLUB AND THE LOCATION OF THE PROPOSED MAINTENANCE AREA IMPROVEMENTS. SEE DETAILED DRAWINGS FOR SPECIFIC INFORMATION RELATED TO THIS PROJECT.
- THIS PLAN WAS PREPARED USING EXISTING INFORMATION OF RECORD AND DOES NOT REPRESENT A PHYSICAL FIELD SURVEY OF THE OVERALL APPLEBROOK PROPERTY.
- LAND DEVELOPMENT APPROVAL CONTINGENT ON THE APPROVAL OF MODIFICATIONS TO THE LEGAL INSTRUMENTS PERMITTING THE SIZE AND CONFIGURATION OF THE TURF MAINTENANCE AREA EASEMENT AND IMPROVEMENTS.

SHEET INDEX

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2	NOTES
3	CONSERVATION, EXISTING CONDITIONS & DEMOLITION PLAN
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5	STORMWATER, GRADING AND UTILITY PLAN
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9	EROSION AND SEDIMENTATION CONTROL NOTES
10	EROSION AND SEDIMENTATION CONTROL DETAILS
11	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN (1"=30')
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13	POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS
14	LANDSCAPE PLAN
15	LIGHTING PLAN
16	LANDSCAPE & LIGHTING DETAILS

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN MADE UNDER MY IMMEDIATE SUPERVISION AND CONFORMS TO ALL ENGINEERING, ZONING, BUILDING AND OTHER APPLICABLE EAST GOSHEN TOWNSHIP ORDINANCES AND REGULATIONS.

CERTIFIED THIS _____ DAY OF _____, 2023.



COMMONWEALTH OF PENNSYLVANIA
COUNTY OF CHESTER

On the _____ day of _____, A.D. 2023 before me, the subscriber, a Notary Public of the Commonwealth of Pennsylvania, residing in _____, personally appeared _____ who acknowledged him/herself to be the _____ of East Goshen Township, and that as such _____ being authorized to do so, he/she executed the foregoing plan by signing that the said municipality is the owner of the designated land, that all necessary approval of the plan has been obtained and is endorsed thereon, and that the said municipality desires that the foregoing plan may be duly recorded.

Notary Public: _____
My Commission Expires: _____

Owner: _____

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF CHESTER

On the _____ day of _____, A.D. 2023 before me, the subscriber, a Notary Public of the Commonwealth of Pennsylvania, residing in _____, personally appeared _____ who acknowledged him/herself to be the _____ of _____, and that as such _____ being authorized to do so, he/she executed the foregoing plan by signing that the said partnership is the owner of the designated land, that all necessary approval of the plan has been obtained and is endorsed thereon, and that the said partnership desires that the foregoing plan may be duly recorded.

Notary Public: _____
My Commission Expires: _____

Owner: _____



APPROVED BY EAST GOSHEN TOWNSHIP BOARD OF SUPERVISORS THIS _____ DAY OF _____, 2023.

Chairman _____
Vice Chairman _____
Supervisor _____
Supervisor _____
Supervisor _____

REVIEWED BY EAST GOSHEN TOWNSHIP PLANNING COMMISSION THIS _____ DAY OF _____, 2023.

Chairman _____
Vice Chairman _____
Member _____
Member _____
Member _____
Member _____

REVIEWED BY EAST GOSHEN TOWNSHIP ENGINEER THIS _____ DAY OF _____, 2023.

REVIEWED BY CHESTER COUNTY PLANNING COMMISSION THIS _____ DAY OF _____, 2023.
CCPC FILE # _____

RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS OF CHESTER COUNTY AT WEST CHESTER, PENNSYLVANIA IN PLAN BOOK _____, PAGE _____, ON THE _____ DAY OF _____, 2023.

PRELIMINARY/FINAL OVERALL SITE PLAN

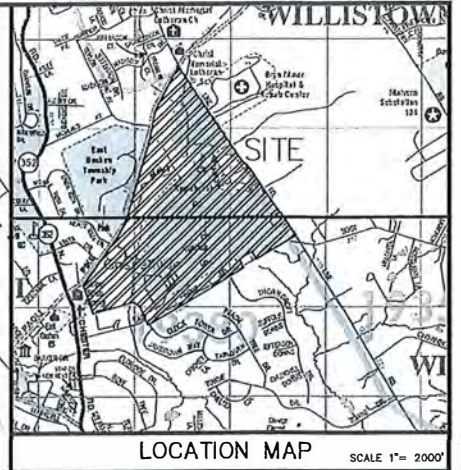
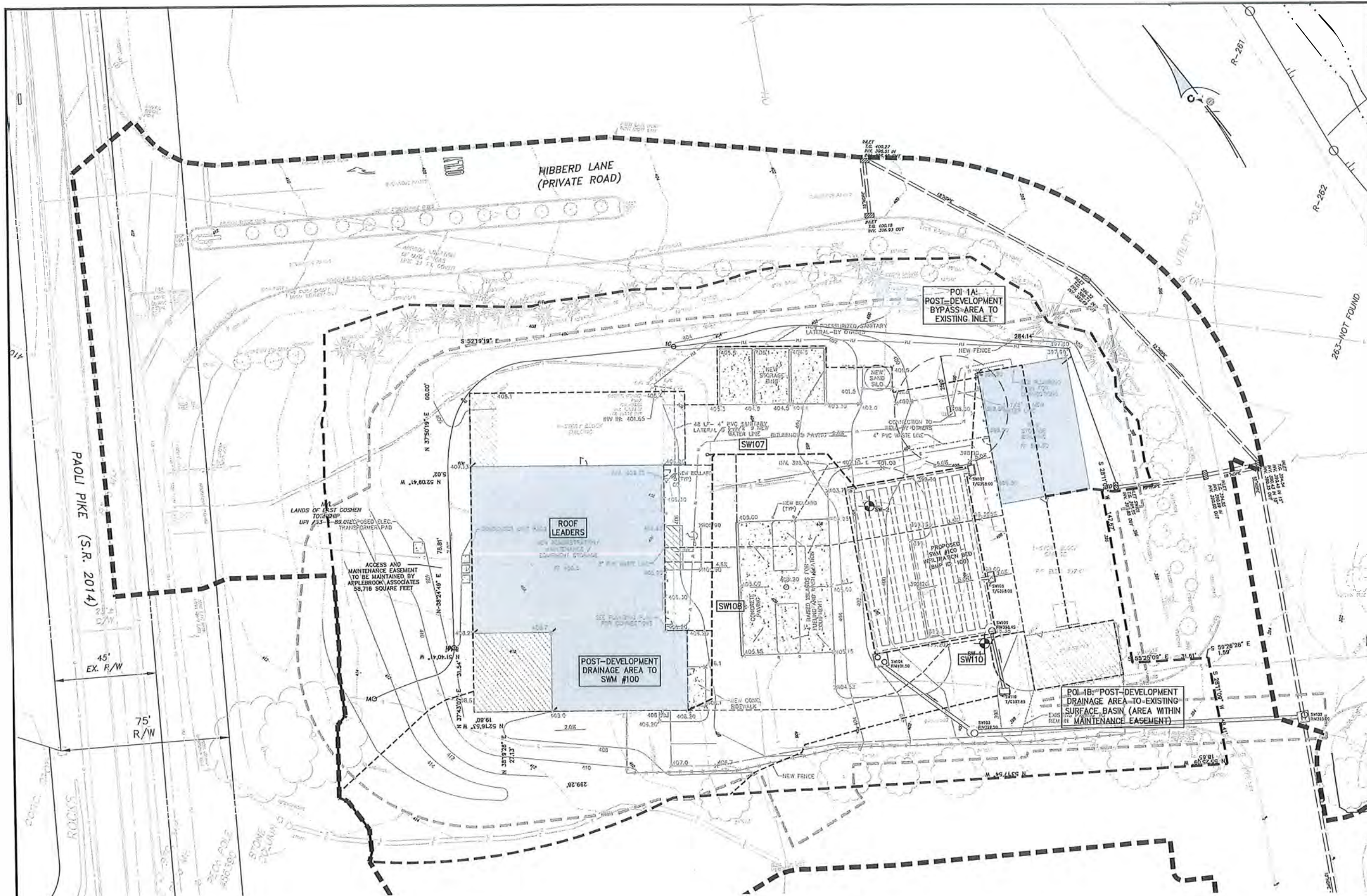
NO.	DATE	REVISION
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3	1/20/23	ISSUED FOR BID
2	10/05/22	PER TOWNSHIP ENGINEER COMMENTS
1	09/26/22	PRICING SET

LAND DEVELOPMENT PLANS FOR APPLEBROOK GOLF CLUB TURF MAINTENANCE AREA
EAST GOSHEN TOWNSHIP - CHESTER COUNTY - PENNSYLVANIA

ChesterValley ENGINEERS, INC.
85 Chestnut Road P.O. Box 447, Park PA 0301
(603) 444-4433 | (603) 439-3143 Fax
www.cv-engineers.com

PROJECT NO. **20558-0015**

SCALE	DATE	DRAWN BY	CHECKED BY	DATE
1" = 200'	07/26/2022	RRB	BHEJ	



LEGEND	
EXISTING FEATURES	
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[Symbol]	PROPOSED PIPE FLOW ARROW
DRAINAGE FEATURES	
[Symbol]	POST-DEVELOPMENT DRAINAGE AREA
[Symbol]	POST-DEVELOPMENT INLET
[Symbol]	DRAINAGE AREA
[Symbol]	POST-DEVELOPMENT T. PATH

POST-DEVELOPMENT DRAINAGE AREA PLAN

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LAND DEVELOPMENT PLANS
FOR
**APPLEBROOK GOLF CLUB
TURF MAINTENANCE AREA**
EAST GOSHEN TOWNSHIP - CHESTER COUNTY - PENNSYLVANIA

**ChesterValley
ENGINEERS, INC.**
83 Chester Road, P.O. Box 487, PA 19381
610-644-4823 | 610-433-5513 FAX
www.chesterengineers.com

20558-0015
F.B.
SCALE: 1" = 20'
DATE: 09/16/2022
DRAWN BY: RMB
CHECKED BY: DMB
DATE: 09/16/2022

DISCLAIMER:
CHESTER VALLEY ENGINEERS, INC. (C.V.E.) ENGINEERS & SURVEYORS, EXPRESSLY DISCLAIMS ITS COMMON LAW COPYRIGHT AND ALL OTHER PROPRIETARY RIGHTS IN THESE PLANS. ALL DRAWINGS, SPECIFICATIONS AND NOTES HEREIN ARE AND SHALL REMAIN THE PROPERTY OF CHESTER VALLEY ENGINEERS, INC. ANY USE OF THESE PLANS FOR ANY PURPOSE, INCLUDING BUT NOT LIMITED TO REUSE, REPRODUCTION, OR MODIFICATION, WITHOUT THE WRITTEN CONSENT OF CHESTER VALLEY ENGINEERS, INC. IS PROHIBITED. ANY SUCH VIOLATION SHALL BE CONSIDERED A VIOLATION OF THE COMMON LAW COPYRIGHT AND ALL OTHER PROPRIETARY RIGHTS OF CHESTER VALLEY ENGINEERS, INC. AND SHALL BE SUBJECT TO THE FULL FORCE AND EFFECT OF ANY APPLICABLE LAWS, INCLUDING BUT NOT LIMITED TO THE PENNSYLVANIA UNIFORM TRADEDRESS ACT (UTDA), 17 PA.S. 3301-3309, AND ANY OTHER LAWS THAT MAY BE APPLICABLE. THE USER OF THESE PLANS SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES AND FOR OBTAINING ALL NECESSARY INSURANCE COVERAGE. THE USER OF THESE PLANS SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INSURANCE COVERAGE. THE USER OF THESE PLANS SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INSURANCE COVERAGE.

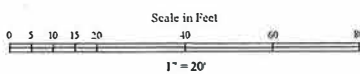
NOTE TO USER OF THESE PLANS:
THESE PLANS WERE PREPARED BY CHESTER VALLEY ENGINEERS, INC. (C.V.E.) ENGINEERS & SURVEYORS, AND ARE THE PROPERTY OF C.V.E. ANY USE OF THESE PLANS FOR ANY PURPOSE, INCLUDING BUT NOT LIMITED TO REUSE, REPRODUCTION, OR MODIFICATION, WITHOUT THE WRITTEN CONSENT OF C.V.E. IS PROHIBITED. ANY SUCH VIOLATION SHALL BE CONSIDERED A VIOLATION OF THE COMMON LAW COPYRIGHT AND ALL OTHER PROPRIETARY RIGHTS OF C.V.E. AND SHALL BE SUBJECT TO THE FULL FORCE AND EFFECT OF ANY APPLICABLE LAWS, INCLUDING BUT NOT LIMITED TO THE PENNSYLVANIA UNIFORM TRADEDRESS ACT (UTDA), 17 PA.S. 3301-3309, AND ANY OTHER LAWS THAT MAY BE APPLICABLE. THE USER OF THESE PLANS SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES AND FOR OBTAINING ALL NECESSARY INSURANCE COVERAGE. THE USER OF THESE PLANS SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INSURANCE COVERAGE. THE USER OF THESE PLANS SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INSURANCE COVERAGE.

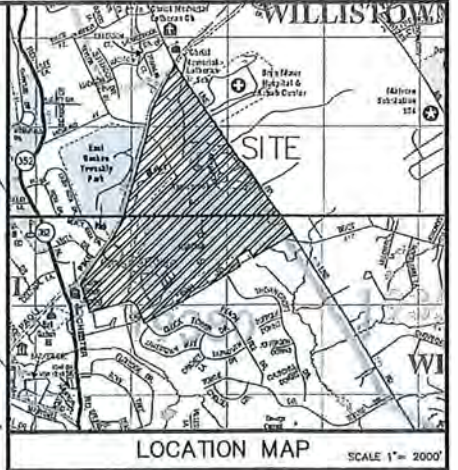
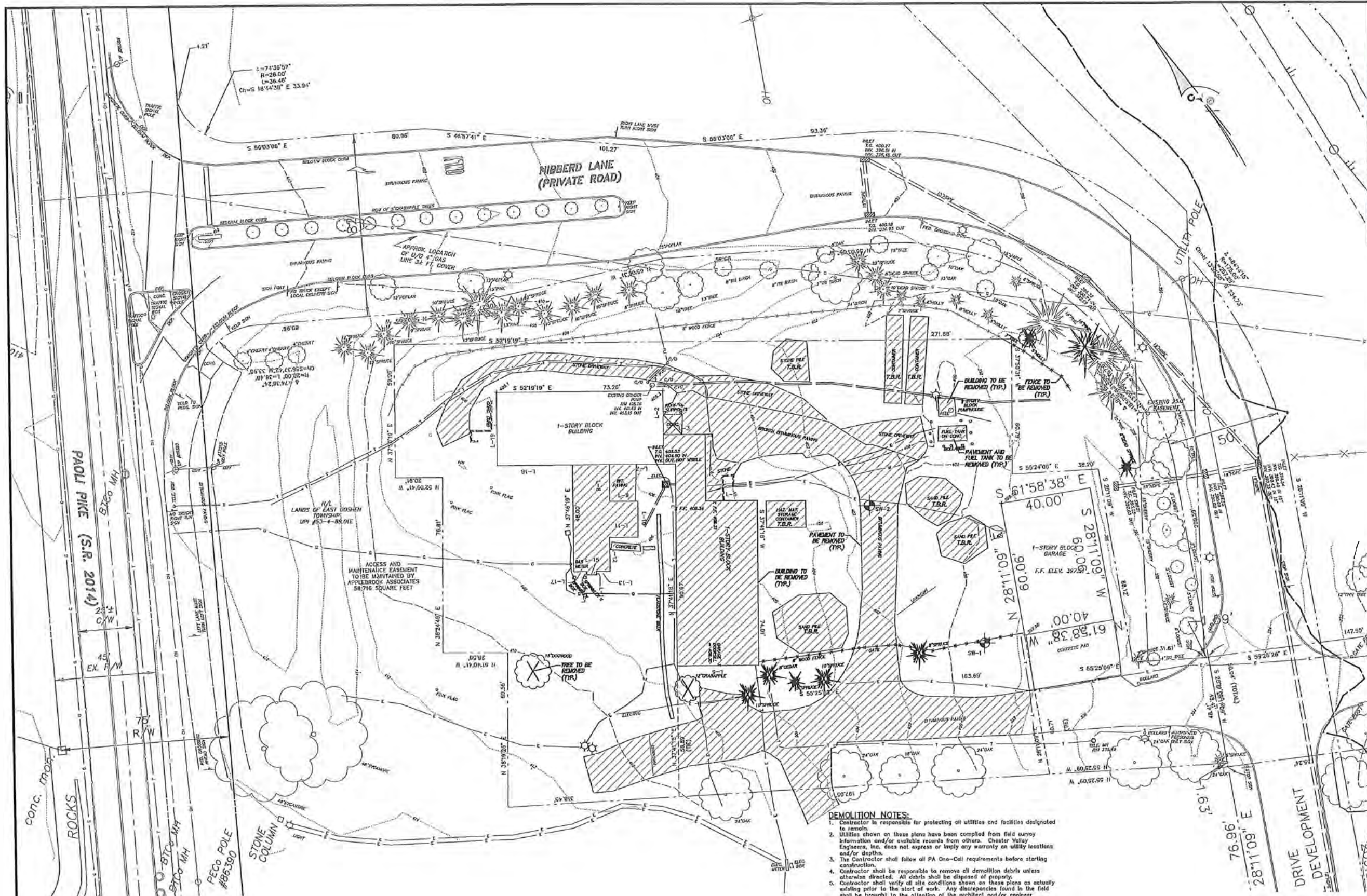
FOR PENNSYLVANIA ACT 187 REQUIREMENTS:
CHESTER VALLEY ENGINEERS, INC. (C.V.E.) ENGINEERS & SURVEYORS, EXPRESSLY DISCLAIMS ITS COMMON LAW COPYRIGHT AND ALL OTHER PROPRIETARY RIGHTS IN THESE PLANS. ANY USE OF THESE PLANS FOR ANY PURPOSE, INCLUDING BUT NOT LIMITED TO REUSE, REPRODUCTION, OR MODIFICATION, WITHOUT THE WRITTEN CONSENT OF C.V.E. IS PROHIBITED. ANY SUCH VIOLATION SHALL BE CONSIDERED A VIOLATION OF THE COMMON LAW COPYRIGHT AND ALL OTHER PROPRIETARY RIGHTS OF C.V.E. AND SHALL BE SUBJECT TO THE FULL FORCE AND EFFECT OF ANY APPLICABLE LAWS, INCLUDING BUT NOT LIMITED TO THE PENNSYLVANIA UNIFORM TRADEDRESS ACT (UTDA), 17 PA.S. 3301-3309, AND ANY OTHER LAWS THAT MAY BE APPLICABLE. THE USER OF THESE PLANS SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES AND FOR OBTAINING ALL NECESSARY INSURANCE COVERAGE. THE USER OF THESE PLANS SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INSURANCE COVERAGE. THE USER OF THESE PLANS SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INSURANCE COVERAGE.

SEE SHEET FOR FACILITY OWNERS DESIGNATED OFFICE ADDRESS AND TELEPHONE NUMBER.

PENNSYLVANIA ONE CALL SYSTEM, INC. CALL 3 WORKING DAYS BEFORE YOU DIG 1-800-242-1776

POCS SERIAL NUMBER: _____





LEGEND	
EXISTING FEATURES	
	EXISTING PROPERTY BOUNDARY
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	EXISTING SLOPES 25% +
DEMOLITION FEATURES	
	TO BE REMOVED
	EXISTING FEATURE TO BE REMOVED
	EXISTING FEATURE TO BE REMOVED
	EXISTING PAVEMENT / CONCRETE / STRUCTURE TO BE REMOVED

DEMOLITION NOTES:

- Contractor is responsible for protecting all utilities and facilities designated to remain.
- Utilities shown on these plans have been compiled from field survey information and/or available records from others. Chester Valley Engineers, Inc. does not express or imply any warranty on utility locations and/or depths.
- The Contractor shall follow all PA One-Call requirements before starting construction.
- Contractor shall be responsible to remove all demolition debris unless otherwise directed. All debris shall be disposed of properly.
- Contractor shall verify all site conditions shown on these plans as actually existing prior to the start of work. Any discrepancies found in the field shall be brought to the attention of the architect and/or engineer immediately.
- Contractor shall remove all paving materials in areas noted for paving removal including base course material.
- Contractor shall remove all building foundations and slabs for building noted to be removed.
- Contractor shall co-ordinate with the appropriate utility provider regarding the removal and/or abandonment of all utility services to be removed. All services shall be removed or stabilized in accordance with the respective utility provider's requirements.
- No demolition may occur until the necessary erosion control measures have been installed. See the Erosion Control Plans in this set.
- This plan has been prepared to indicate major facilities to be removed. Contractor shall become familiar with the proposed improvements in this plan set as well as the architectural plans to determine the full extent of the items to be removed or adjusted.
- All utilities in the area of new building construction shall be removed. All existing underground utilities to remain shall be adjusted to finish grades. See Grading and Utility Plans in this plan set.
- Contractor shall coordinate with the Golf Club to identify and replace existing utility lines to be removed and replaced.

PRELIMINARY/FINAL CONSERVATION, EXISTING CONDITIONS & DEMOLITION PLAN

NO.	DATE	REVISION
4	2/3/23	REVISED PER TOWNSHIP ENGINEER COMMENTS
3	1/20/23	ISSUED FOR BID
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1	09/26/22	PRICING SET

LAND DEVELOPMENT PLANS

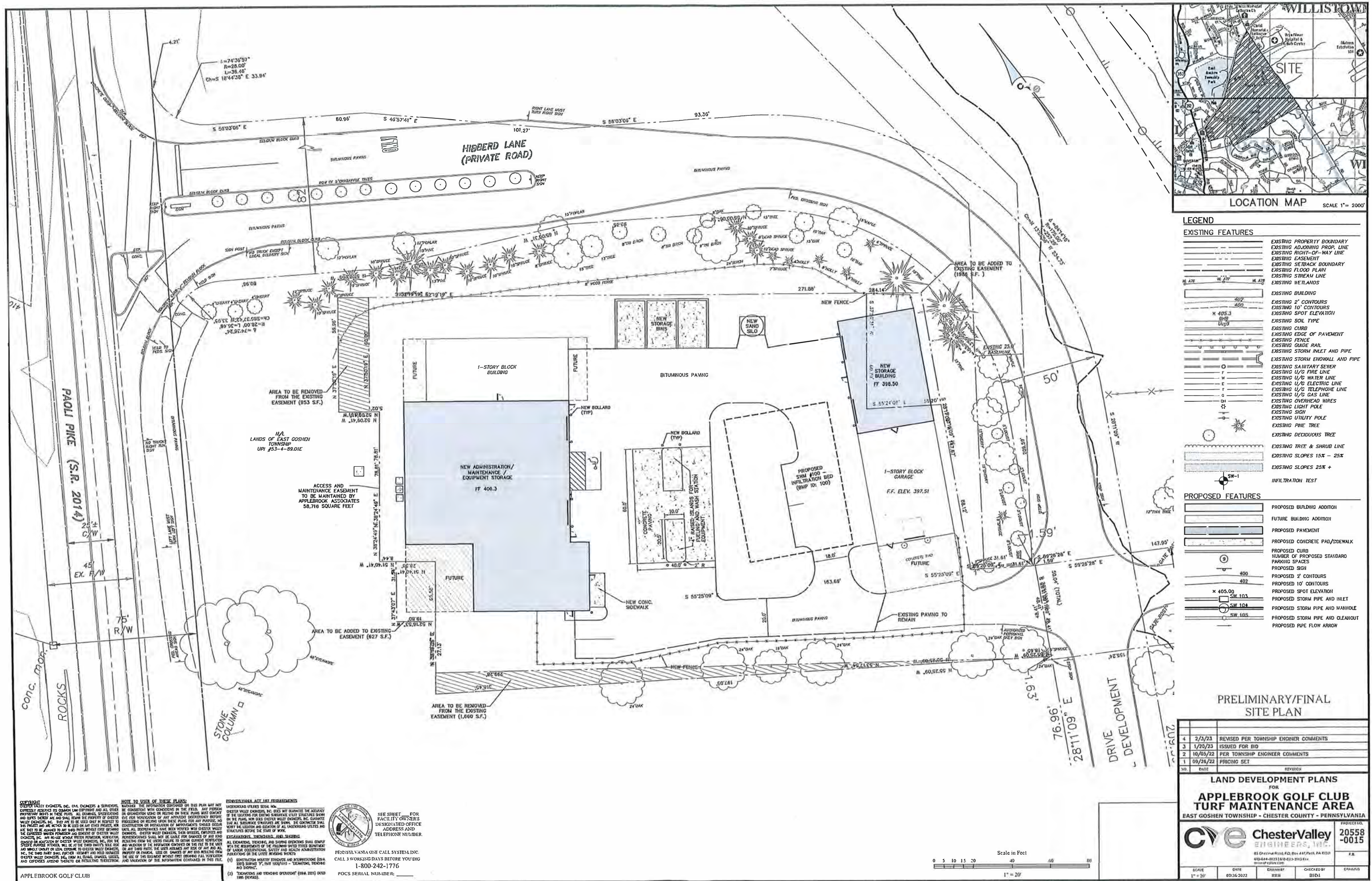
FOR
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TURF MAINTENANCE AREA**
EAST GOSHEN TOWNSHIP - CHESTER COUNTY - PENNSYLVANIA

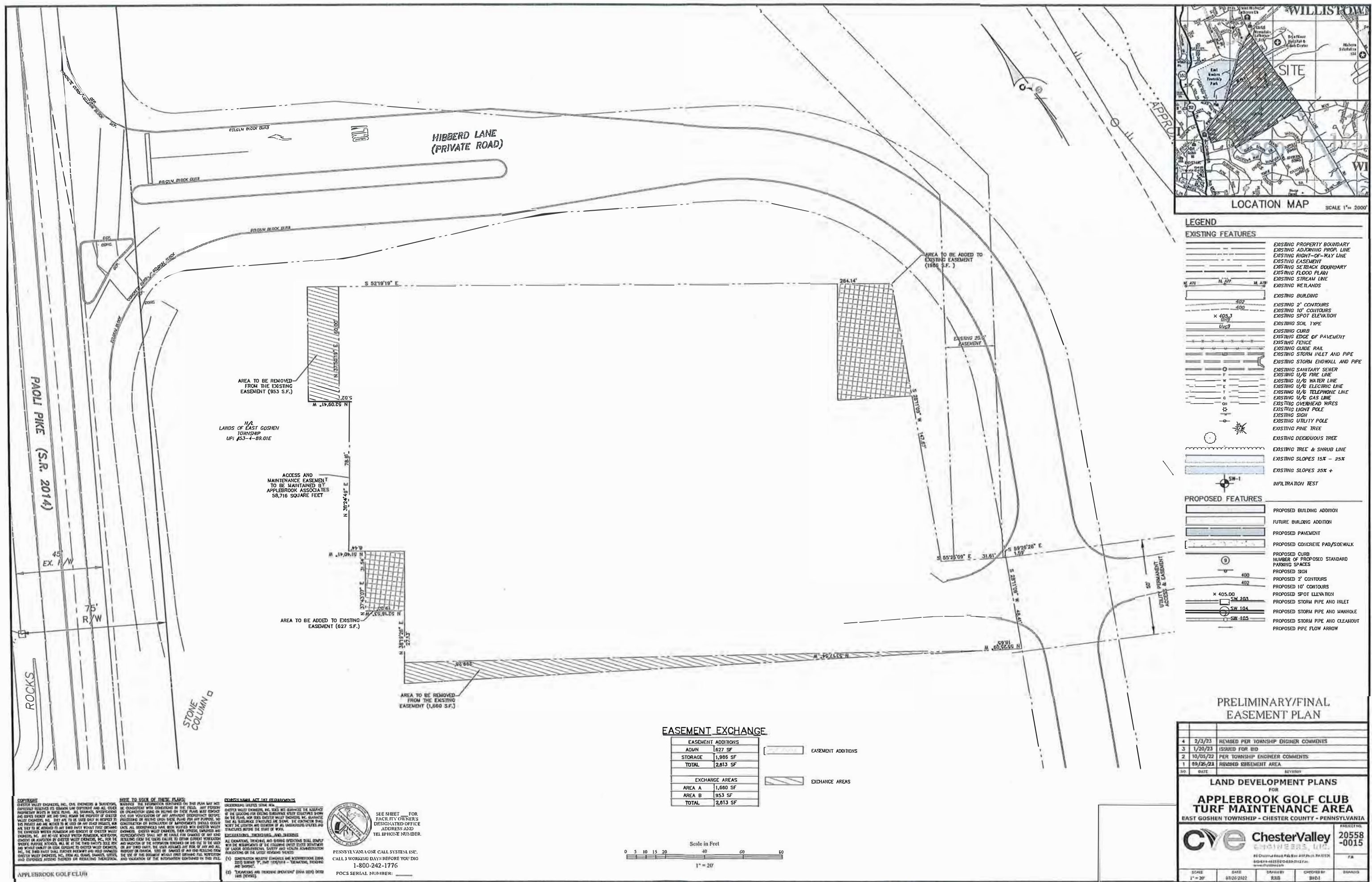
Chester Valley
ENGINEERS, INC.
20558-0015

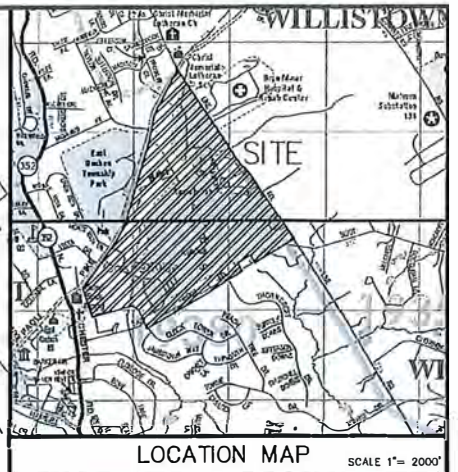
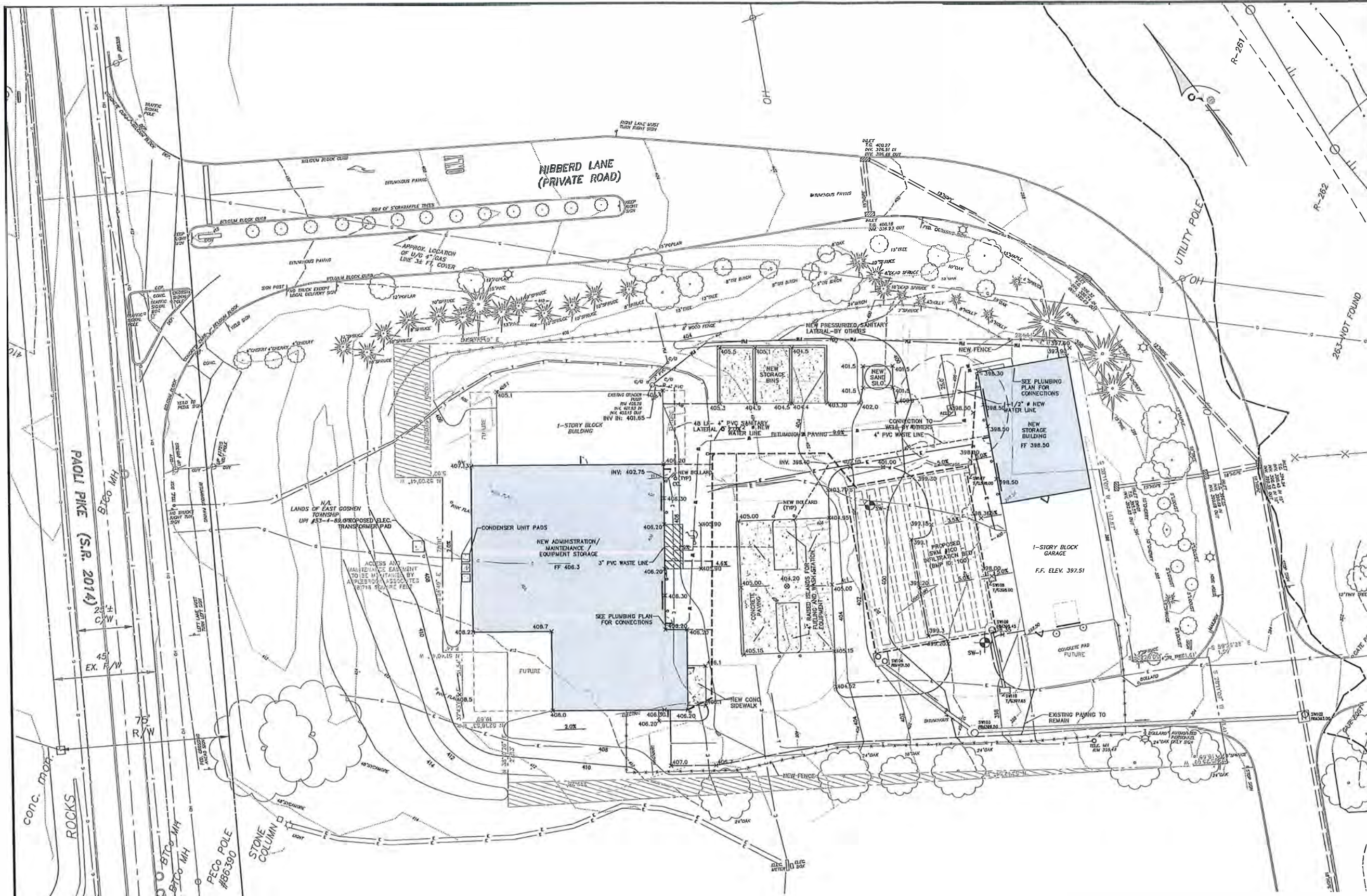
SCALE: 1" = 20'
DATE: 09-20-2022
DRAWN BY: HUB
CHECKED BY: JWB
DATE: 09-20-2022

NOTES TO USER OF THESE PLANS:
CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

DEMOLITION NOTES:
1. CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL UTILITIES AND FACILITIES DESIGNATED TO REMAIN.
2. UTILITIES SHOWN ON THESE PLANS HAVE BEEN COMPILED FROM FIELD SURVEY INFORMATION AND/OR AVAILABLE RECORDS FROM OTHERS. CHESTER VALLEY ENGINEERS, INC. DOES NOT EXPRESS OR IMPLY ANY WARRANTY ON UTILITY LOCATIONS AND/OR DEPTHS.
3. THE CONTRACTOR SHALL FOLLOW ALL PA ONE-CALL REQUIREMENTS BEFORE STARTING CONSTRUCTION.
4. CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE ALL DEMOLITION DEBRIS UNLESS OTHERWISE DIRECTED. ALL DEBRIS SHALL BE DISPOSED OF PROPERLY.
5. CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS SHOWN ON THESE PLANS AS ACTUALLY EXISTING PRIOR TO THE START OF WORK. ANY DISCREPANCIES FOUND IN THE FIELD SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND/OR ENGINEER IMMEDIATELY.
6. CONTRACTOR SHALL REMOVE ALL PAVING MATERIALS IN AREAS NOTED FOR PAVING REMOVAL INCLUDING BASE COURSE MATERIAL.
7. CONTRACTOR SHALL REMOVE ALL BUILDING FOUNDATIONS AND SLABS FOR BUILDING NOTED TO BE REMOVED.
8. CONTRACTOR SHALL CO-ORDINATE WITH THE APPROPRIATE UTILITY PROVIDER REGARDING THE REMOVAL AND/OR ABANDONMENT OF ALL UTILITY SERVICES TO BE REMOVED. ALL SERVICES SHALL BE REMOVED OR STABILIZED IN ACCORDANCE WITH THE RESPECTIVE UTILITY PROVIDER'S REQUIREMENTS.
9. NO DEMOLITION MAY OCCUR UNTIL THE NECESSARY EROSION CONTROL MEASURES HAVE BEEN INSTALLED. SEE THE EROSION CONTROL PLANS IN THIS SET.
10. THIS PLAN HAS BEEN PREPARED TO INDICATE MAJOR FACILITIES TO BE REMOVED. CONTRACTOR SHALL BECOME FAMILIAR WITH THE PROPOSED IMPROVEMENTS IN THIS PLAN SET AS WELL AS THE ARCHITECTURAL PLANS TO DETERMINE THE FULL EXTENT OF THE ITEMS TO BE REMOVED OR ADJUSTED.
11. ALL UTILITIES IN THE AREA OF NEW BUILDING CONSTRUCTION SHALL BE REMOVED. ALL EXISTING UNDERGROUND UTILITIES TO REMAIN SHALL BE ADJUSTED TO FINISH GRADES. SEE GRADING AND UTILITY PLANS IN THIS PLAN SET.
12. CONTRACTOR SHALL COORDINATE WITH THE GOLF CLUB TO IDENTIFY AND REPLACE EXISTING UTILITY LINES TO BE REMOVED AND REPLACED.







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PRELIMINARY/FINAL
STORMWATER, GRADING
AND UTILITY PLAN

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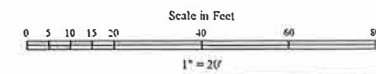
APPLEBROOK GOLF CLUB
TURF MAINTENANCE AREA
EAST GOSHEN TOWNSHIP - CHESTER COUNTY - PENNSYLVANIA

		20558-0015
SCALE	DATE	PROJECT
1" = 20'	07/26/2022	RRB
CHECKED BY	DATE	DATE
BBE	BBE	BBE

FUEL / WASH ISLAND NOTES

- CONCRETE PAVING TO BE HEAVY DUTY CONCRETE PAVING AS DETAILED ON THESE PLANS.
- SEE PLANS BY OTHERS FOR EQUIPMENT PLACEMENT, PENETRATION SIZES AND LOCATIONS ON ISLAND. PROVIDE UTILITY CONNECTIONS AS SHOWN ON PLUMBING AND ELECTRICAL PLANS (BY OTHERS).

SEE SHEET 2 FOR
UTILITY NOTES

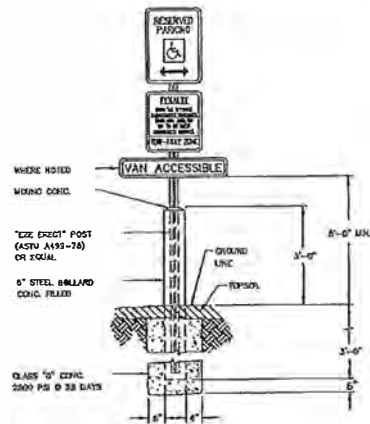


CHESTER VALLEY ENGINEERS, INC. 1000 EXETER RD. SUITE 100
WILKES BARRE, PA 18703
TEL: 717-853-1111 FAX: 717-853-1112
WWW.CHESTERVALLEYENGINEERS.COM

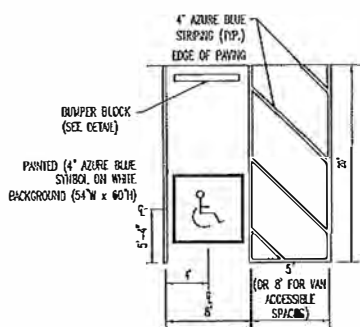
NOTE TO USER OF THESE PLANS:
THESE PLANS WERE PREPARED BY CHESTER VALLEY ENGINEERS, INC. FOR THE USE OF THE CLIENT. THE CLIENT IS RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED TO CHESTER VALLEY ENGINEERS, INC. AND FOR THE RESULTS OF THE DESIGN. THE CLIENT SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR THE PROTECTION OF THE PUBLIC. THE CLIENT SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE PUBLIC. THE CLIENT SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE PUBLIC.

PENNSYLVANIA ACT 167 REQUIREMENTS
THESE PLANS WERE PREPARED BY CHESTER VALLEY ENGINEERS, INC. FOR THE USE OF THE CLIENT. THE CLIENT IS RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED TO CHESTER VALLEY ENGINEERS, INC. AND FOR THE RESULTS OF THE DESIGN. THE CLIENT SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR THE PROTECTION OF THE PUBLIC. THE CLIENT SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE PUBLIC. THE CLIENT SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE PUBLIC.

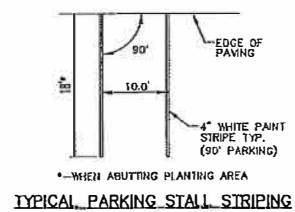
SEE SHEET 2 FOR
FACILITY OWNERS
DESIGNATED OFFICE
ADDRESS AND
TELEPHONE NUMBER
PENN. VMA ONE CALL SYSTEM INC.
CALL 3 WORKING DAYS BEFORE YOU DIG
1-800-242-1776
POCS SERIAL NUMBER: _____



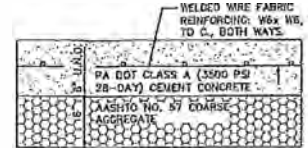
**"RESERVED PARKING" SIGN (R7-8) WITH
"VAN ACCESSIBLE" SIGN (R7-8P)**
N.T.S.



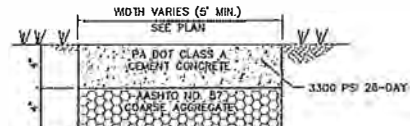
ADA ACCESSIBLE PARKING STRIPING
N.T.S.



TYPICAL PARKING STALL STRIPING
N.T.S.



HEAVY DUTY CONCRETE PAVING DETAIL
N.T.S.

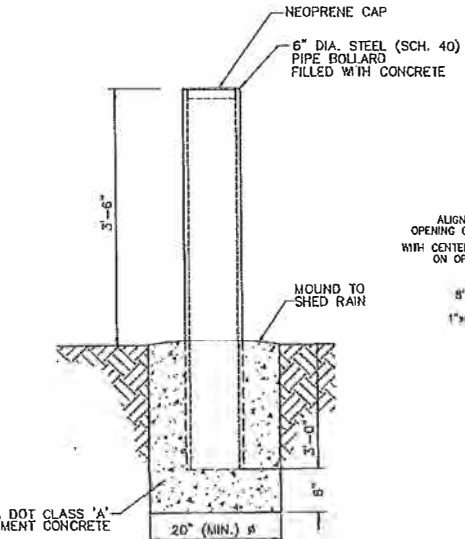


CONCRETE SIDEWALK DETAIL
N.T.S.

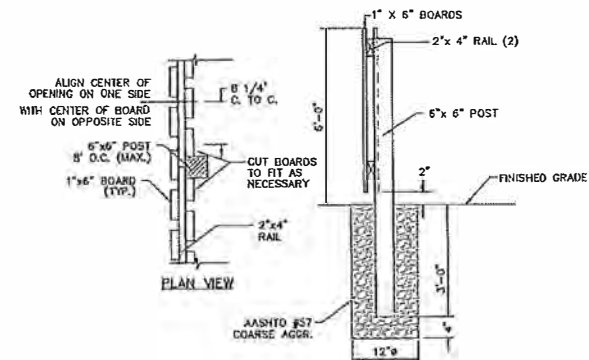


DEPTH	LOCATION	MEDIUM DUTY: ON-SITE PARKING AREAS & DRIVEWAYS
WEARING COURSE: ASPHALT MIXTURE DESIGN, WMA WEARING COURSE, PG 64-22, 40.3 MILLION ESALS, 9.5 MM MIX, SRL-L		1 1/2"
BINDER: SUPERPAVE ASPHALT MIXTURE DESIGN, WMA BINDING COURSE, PG 64-22, 40.3 MILLION ESALS, 9.5 MM MIX, SRL-L		3"
BASE: BITUMINOUS CONCRETE		NONE
SUBBASE: Penn DOT 2A STONE BASE		10"

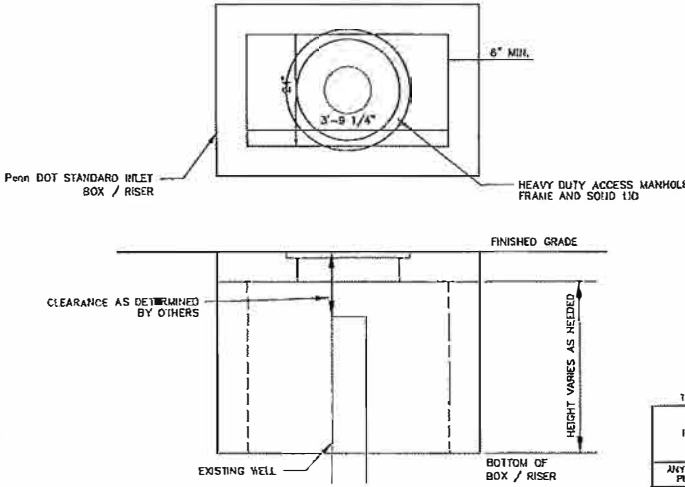
- NOTE:**
- PAVEMENT SHOULD BE INSTALLED LATE IN CONSTRUCTION WHEN MOST HEAVY CONSTRUCTION TRAFFIC WILL NO LONGER COM ON-SITE. PRIOR TO PAVING, THE SITE SHOULD BE PROOFROLLED AGAIN, NEW SOFT AREAS TREATED IN ACCORDANCE WITH SOIL REMEDIATION NOTES ON SHEET 1, THE BASE LEVELED AND THICKENED AS REQUIRED, AND THE SITE PAVED AT THE END OF CONSTRUCTION.
 - FOR PAVEMENT WHERE UNCURBED, EXTEND SUBBASE AND/OR BASE COURSE EIGHT INCHES BEYOND EACH REQUIRED EDGE OF THE BINDER AND SURFACE COURSES.
 - FLEMBLE (AGGREGATE) BASE SHOULD BE COMPACTED TO 100% OF THE MATERIAL'S MAXIMUM DRY DENSITY AS PER MODIFIED PROCTOR (ASTM D-1557).
 - PAVEMENT MUST BE PLACED OVER WELL PREPARED SUBGRADE COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR (ASTM D-698) DENSITY IN THE UPPER 2' BELOW SUBGRADE AND TO AT LEAST 95% OF THE STANDARD PROCTOR (ASTM D-698) MAXIMUM DRY DENSITY ELSEWHERE.
 - SEALING MATERIAL FOR FILLING PAVEMENT JOINTS SHALL MEET THE REQUIREMENTS OF ASTM D3405 OR D1190. ALTERNATIVELY, LOW MODULUS MATERIALS SUCH AS SILICONE, HOT OR COLD-POURED RUBBERIZED ASPHALT OR NITRILE RUBBER MEETING THE MANUFACTURER'S SPECIFICATIONS MAY BE USED.
 - CAR TRAFFIC SHOULD NOT BE ALLOWED ON THE NEW PAVEMENT FOR AT LEAST 3-DAYS; SIMILARLY NO TRUCK TRAFFIC FOR 7-DAYS.
 - WHERE THE EDGE OF THE TRAIL IS ABOVE THE SURROUNDING GRADE, BITUMINOUS PAVEMENT SHALL BE FEATHERED.



BOLLARD DETAIL
N.T.S.

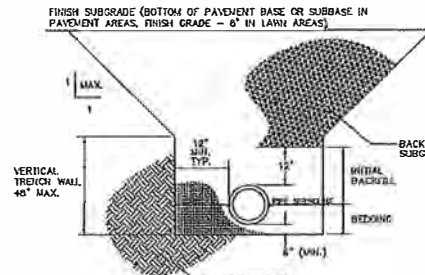


BOARD ON BOARD FENCE DETAIL
N.T.S.



- NOTES:**
- ALL MATERIALS AND PROCEDURES SHALL BE IN CONFORMANCE WITH PennDOT RC STANDARDS (RC-45) AND SPECIFICATIONS (FORM 408) AS LAST REVISED.
 - ALL MATERIAL SHALL BE SUITABLE FOR H25 LOADING.
 - CENTER INLET BOX OVER WELL HEAD. MANHOLE COVER TO ALIGN WITH WELL HEAD.
 - PLUMBING AND ELECTRICAL PENETRATIONS TO BE FIELD LOCATED BY OTHERS.

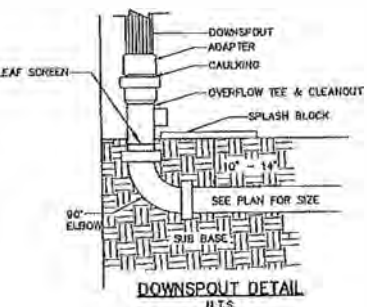
WELL ENCLOSURE
N.T.S.



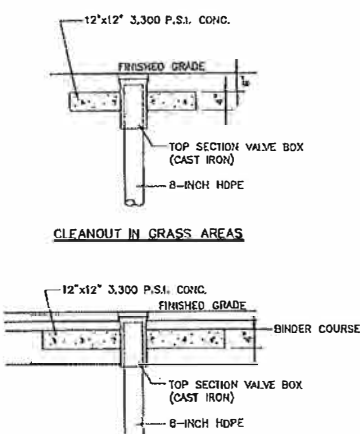
TYPICAL PIPE TRENCH DETAIL
N.T.S.

PIPE TYPE	BEDDING	INITIAL BACKFILL	BACKFILL TO SUBGRADE	BACKFILL TO SUBGRADE (EXCEPT SEE NOTE 3)	BEHIND OTHER AREA
ANY PIPE WITHIN PUBLIC ROW	ASHTO #8 COARSE AGGR.	PA DOT NO. 2A COARSE AGGR.	PA DOT NO. 2A COARSE AGGR.	PA DOT NO. 2A COARSE AGGR.	PA DOT NO. 2A COARSE AGGR.
STORM (METAL)	ASHTO #8 COARSE AGGR.	SUITABLE MATERIAL	SUITABLE MATERIAL	SUITABLE MATERIAL	SUITABLE MATERIAL
STORM (RCP)	ASHTO #8 COARSE AGGR.	PA DOT NO. 2A COARSE AGGR.	SUITABLE MATERIAL	SUITABLE MATERIAL	SUITABLE MATERIAL
STORM (OTHER)	PA DOT NO. 2A COARSE AGGR.	PA DOT NO. 2A COARSE AGGR.	SUITABLE MATERIAL	SUITABLE MATERIAL	SUITABLE MATERIAL
SANITARY	ASHTO #8 COARSE AGGR.	PA DOT NO. 2A COARSE AGGR.	SUITABLE MATERIAL	SUITABLE MATERIAL	SUITABLE MATERIAL
WATER (DP)	NONE REQUIRED	PA DOT NO. 2A COARSE AGGR.	SUITABLE MATERIAL	SUITABLE MATERIAL	SUITABLE MATERIAL
WATER (TUBING)	CEMENT CONCRETE SAND, TYPE A, PA DOT, PUB. 408, § 703.1	CEMENT CONCRETE SAND, TYPE A, PA DOT, PUB. 408, § 703.1	SUITABLE MATERIAL	SUITABLE MATERIAL	SUITABLE MATERIAL
OTHER PIPE, CONDUIT	ASHTO #8 COARSE AGGR.	PA DOT NO. 2A COARSE AGGR.	SUITABLE MATERIAL	SUITABLE MATERIAL	SUITABLE MATERIAL

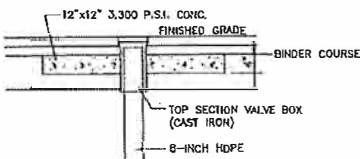
- NOTE:**
- ALTERNATIVELY, SHORE TRENCH WALLS PER USMA OR OTHER APPLICABLE AGENCIES WITH JURISDICTION.
 - SEE PROJECT SPECIFICATIONS FOR REQUIREMENTS FOR "SUITABLE MATERIAL". PA DOT #2 COARSE AGGREGATE MAY BE USED IN LIEU OF "SUITABLE MATERIAL" AT NO ADDITIONAL COST TO OWNER.
 - FOR PIPE TRENCHES WITHIN EX. BITUMINOUS PAVEMENT TO REMAIN, USE PA DOT NO. 2A COARSE AGGREGATE TO BACKFILL TO SUBGRADE.



DOWNSPOUT DETAIL
N.T.S.

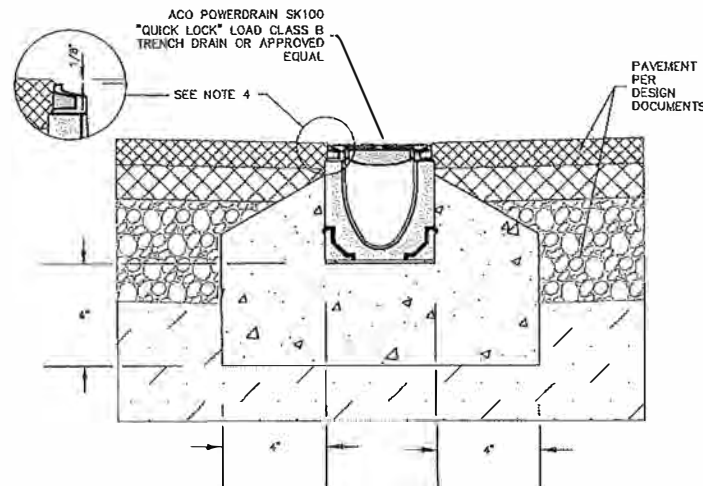


CLEANOUT IN GRASS AREAS



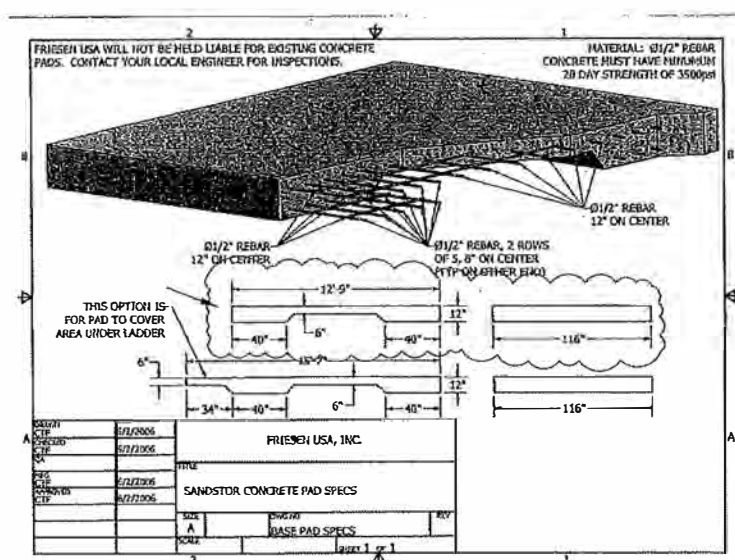
CLEANOUT IN PAVED AREAS

TYPICAL CLEANOUT DETAIL
N.T.S.



- NOTES:**
- EXPANSION AND CONTRACTION CONTROL JOINTS AND REINFORCEMENT ARE RECOMMENDED TO PROTECT CHANNEL AND CONCRETE SURROUND.
 - MINIMUM CONCRETE STRENGTH - 4,000 PSI. CONCRETE SHOULD BE VIBRATED TO ELIMINATE AIR POCKETS.
 - EXPANSION AND CONTRACTION CONTROL JOINTS AND REINFORCEMENT ARE RECOMMENDED TO PROTECT CHANNEL AND CONCRETE SURROUND.
 - THE FINISHED LEVEL OF THE CONCRETE SURROUND MUST BE APPROX. 1/8" [3mm] ABOVE THE TOP OF THE CHANNEL EDGE.
 - CONCRETE BASE THICKNESS SHOULD MATCH SLAB THICKNESS.
 - REFER TO ACO'S LATEST INSTALLATION INSTRUCTIONS FOR FURTHER DETAILS.

TRENCH DRAIN DETAIL
N.T.S.



REVISION	DATE	DESCRIPTION
1	01/12/2006	ISSUED FOR BIDDING
2	02/12/2006	ISSUED FOR BIDDING
3	03/12/2006	ISSUED FOR BIDDING
4	04/12/2006	ISSUED FOR BIDDING

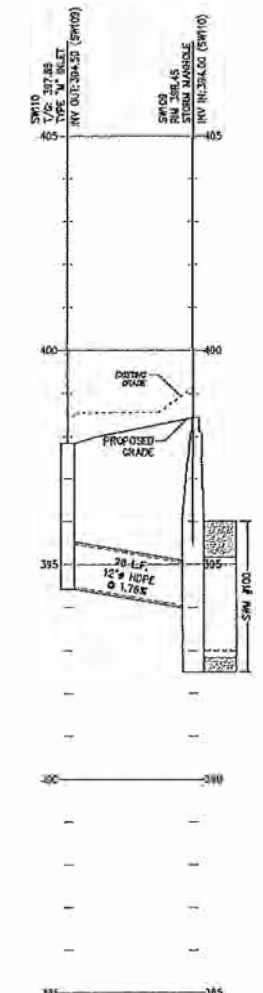
**PRELIMINARY/FINAL
CONSTRUCTION DETAILS
AND NOTES**

4	2/1/23	REVISED PER TOWNSHIP ENGINEER COMMENTS
3	1/20/23	ISSUED FOR BIDDING
2	10/05/22	PER TOWNSHIP P. ENGINEER COMMENTS
1	09/26/22	PRICING SET

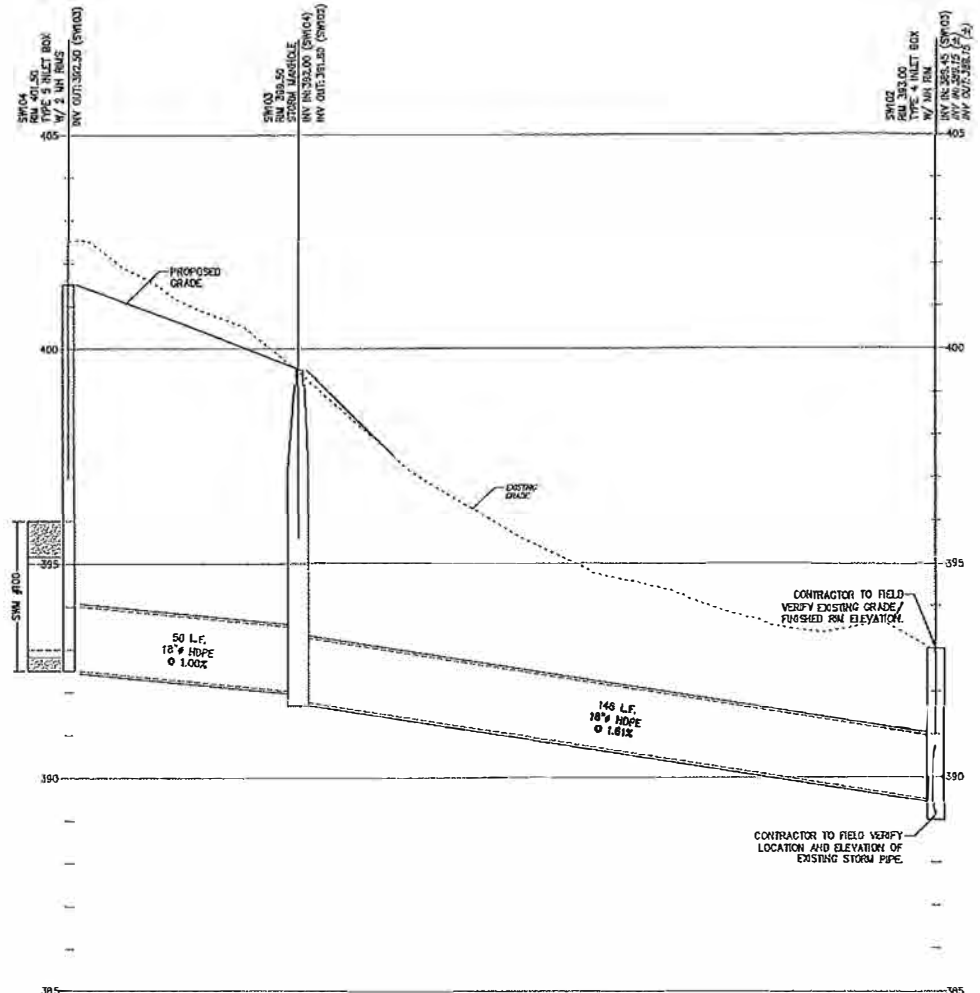
**LAND DEVELOPMENT PLANS
FOR
APPLEBROOK GOLF CLUB
TURF MAINTENANCE AREA**
EAST GOSHEN TOWNSHIP - CHESTER COUNTY - PENNSYLVANIA

CVE ChesterValley
ENGINEERS, INC.
20558-0015
1000 N. 10th St. Suite 200, P.O. Box 447, York, PA 17404
717-766-1621 (t) 717-766-1622 (f) 717-766-1623 (c)
cve@chevalley.com

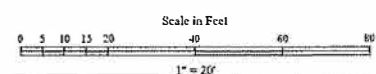
SCALE: AS NOTED DATE: 07/16/2022 DRAWN BY: RRB CHECKED BY: JLB PROJECT NO: 20558-0015 SHEET NO: 6 OF 19



**STORMWATER PROFILE
FROM SW110 TO SW109**
SCALE: 1"=20' HORIZ. 1"=2' VERT.

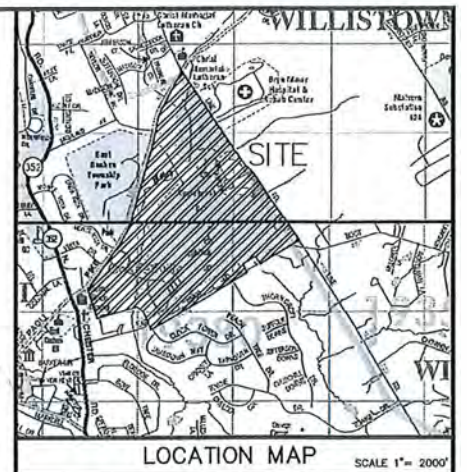
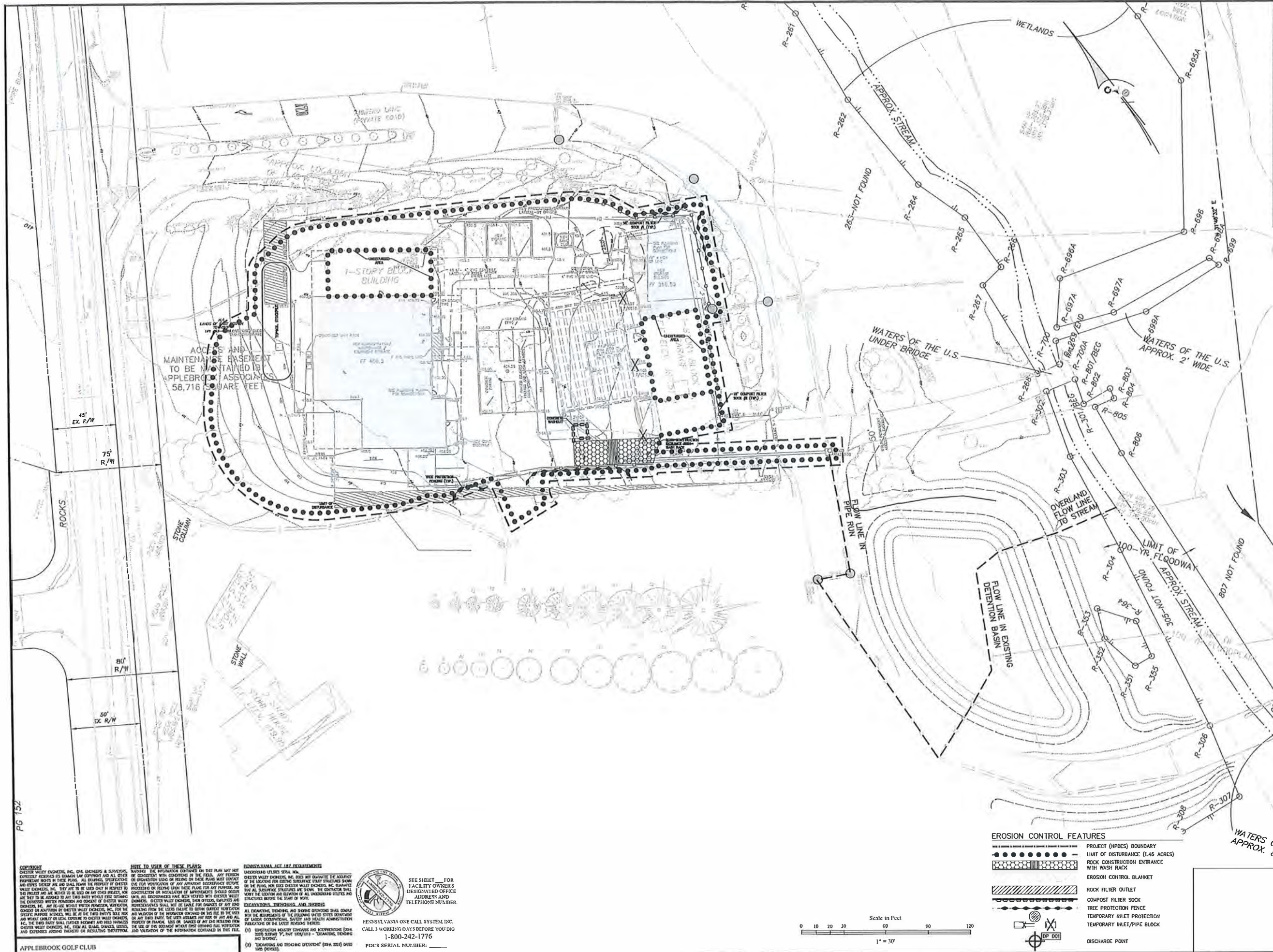


**STORMWATER PROFILE
FROM SW104 TO SW102**
SCALE: 1"=20' HORIZ. 1"=2' VERT.



**PRELIMINARY/FINAL
PROFILES**

NO.	DATE	REVISION
4	2/3/23	REVISED PER TOWNSHIP ENGINEER COMMENTS
3	1/20/23	ISSUED FOR BID
2	10/05/22	PER TOWNSHIP ENGINEER COMMENTS
1	09/28/22	PRICING SET
LAND DEVELOPMENT PLANS FOR APPLEBROOK GOLF CLUB TURF MAINTENANCE AREA EAST GOSHEN TOWNSHIP - CHESTER COUNTY - PENNSYLVANIA		
Chester Valley ENGINEERS, INC. <small>181 CHRYSLER DRIVE, SUITE 200, CHESTER, PA 19381 610-666-4333 610-666-3143 FAX www.chester-valley.com</small>		PROJECT NO. 20558 -0015 F.S.
SCALE AS NOTED	DATE 03/26/2022	DRAWN BY REB CHECKED BY BMD DRAFTER



LEGEND	
EXISTING FEATURES	
	EXISTING PROPERTY BOUNDARY
	EXISTING ADJOINING PROP. LINE
	EXISTING RIGHT-OF-WAY LINE
	EXISTING EASEMENT
	EXISTING SETBACK BOUNDARY
	EXISTING FLOOD PLAIN
	EXISTING STREAM LINE
	EXISTING WETLANDS
	EXISTING BUILDING
	EXISTING 2' CONTOURS
	EXISTING 10' CONTOURS
	EXISTING SPOT ELEVATION
	EXISTING SOIL TYPE
	EXISTING CURB
	EXISTING EDGE OF PAVEMENT
	EXISTING FENCE
	EXISTING GUIDE RAIL
	EXISTING STORM INLET AND PIPE
	EXISTING STORM ENDWALL AND PIPE
	EXISTING SANITARY SEWER
	EXISTING U/G FIRE LINE
	EXISTING U/G WATER LINE
	EXISTING U/G ELECTRIC LINE
	EXISTING U/G TELEPHONE LINE
	EXISTING U/G GAS LINE
	EXISTING OVERHEAD WIRES
	EXISTING LIGHT POLE
	EXISTING SIGN
	EXISTING UTILITY POLE
	EXISTING PINE TREE
	EXISTING DECIDUOUS TREE
	EXISTING TREE & SHRUB LINE
	EXISTING SLOPES 15% - 25%
	EXISTING SLOPES 25% +
	INFILTRATION TEST
PROPOSED FEATURES	
	PROPOSED BUILDING ADDITION
	FUTURE BUILDING ADDITION
	PROPOSED PAVEMENT
	PROPOSED CONCRETE PAD/STEWALK
	NUMBER OF PROPOSED STANDARD PARKING SPACES
	PROPOSED SIGN
	PROPOSED 2' CONTOURS
	PROPOSED 10' CONTOURS
	PROPOSED SPOT ELEVATION
	PROPOSED STORM PIPE AND INLET
	PROPOSED STORM PIPE AND MANHOLE
	PROPOSED STORM PIPE AND CLEANOUT
	PROPOSED PIPE FLOW ARROW

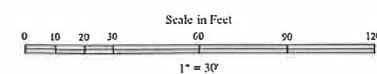
PRELIMINARY/FINAL
EROSION AND SEDIMENTATION
CONTROL PLAN

NO.	DATE	REVISION
4	2/3/23	REVISED PER TOWNSHIP ENGINEER COMMENTS
3	1/20/23	ISSUED FOR BID
2	10/05/22	PER TOWNSHIP ENGINEER COMMENTS
1	09/26/22	PRICING SET

LAND DEVELOPMENT PLANS	
FOR APPLEBROOK GOLF CLUB TURF MAINTENANCE AREA	
EAST GOSHEN TOWNSHIP - CHESTER COUNTY - PENNSYLVANIA	
	ChesterValley ENGINEERS, INC.
812 Chestnut Street, 2nd Floor, Philadelphia, PA 19106 610-444-4122 610-433-3143 Fax www.chestervalley.com	20558-0015
SCALE: 1" = 20'	DATE: 07/26/2022
DRAWN BY: RRB	CHECKED BY: BDL
DATE: 07/26/2022	DATE: 07/26/2022

EROSION CONTROL FEATURES

	PROJECT (NPDES) BOUNDARY
	LIMIT OF DISTURBANCE (1.46 ACRES)
	ROCK CONSTRUCTION ENTRANCE WITH ROCK RACK
	EROSION CONTROL BLANKET
	ROCK FILTER OUTLET
	COMPOST FILTER SOCK
	TREE PROTECTION FENCE
	TEMPORARY INLET PROTECTION
	TEMPORARY INLET/PIPE BLOCK
	DISCHARGE POINT



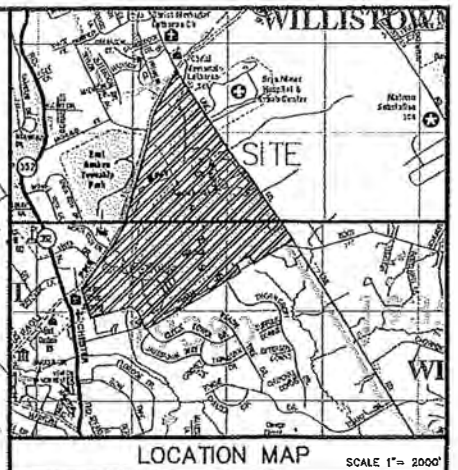
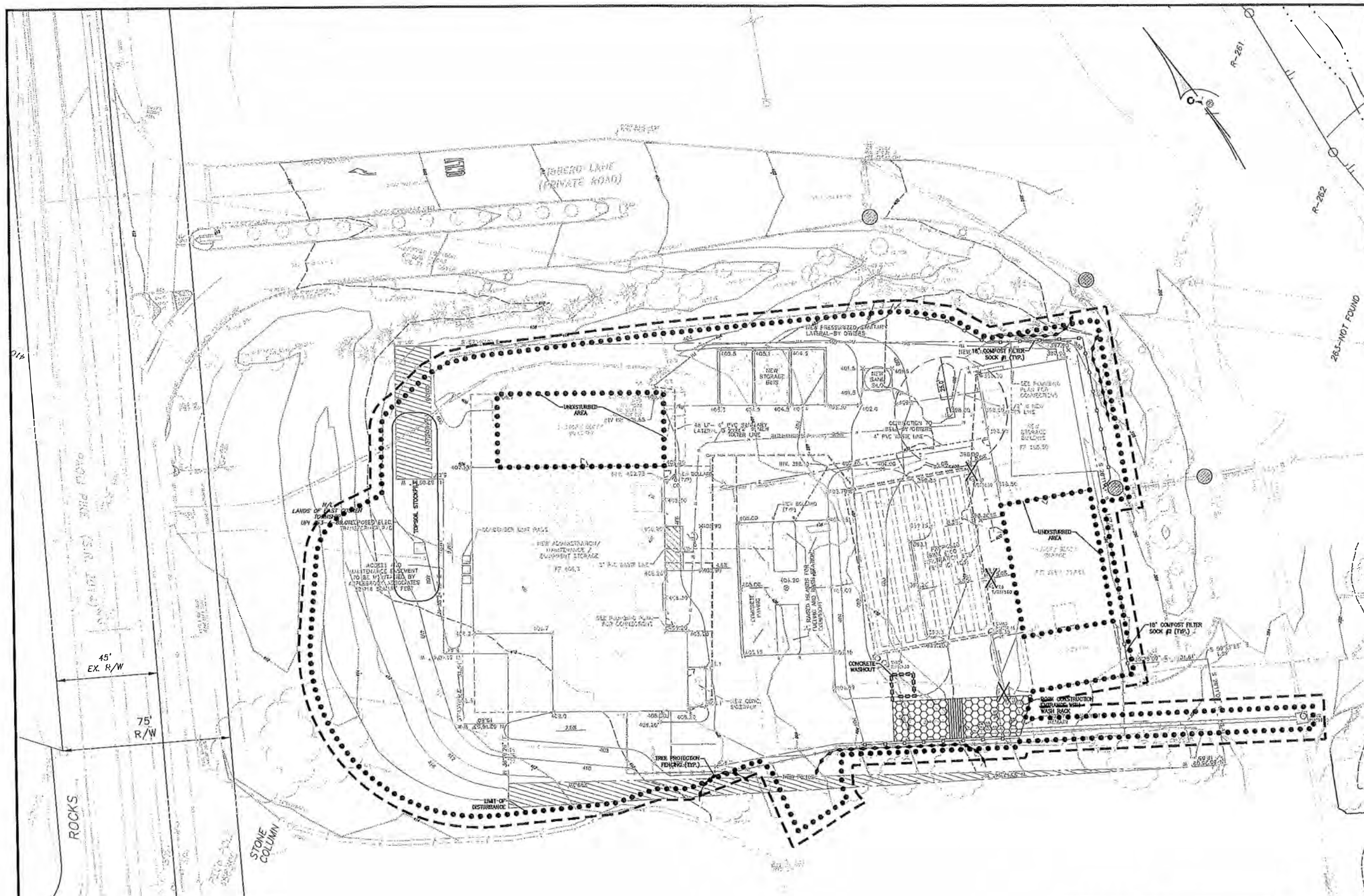
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NOTE TO USER OF THESE PLANS:
THESE PLANS ARE PRELIMINARY AND NOT TO BE USED FOR CONSTRUCTION. ANY CHANGES TO THESE PLANS MUST BE APPROVED BY CHESTER VALLEY ENGINEERS, INC. BEFORE CONSTRUCTION BEGINS. THE USER OF THESE PLANS SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INFORMATION REGARDING THE SITE AND THE PROJECT. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INFORMATION REGARDING THE SITE AND THE PROJECT. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INFORMATION REGARDING THE SITE AND THE PROJECT.

PENNSYLVANIA ACT 187 REQUIREMENTS
UNDERGROUND UTILITIES SHALL BE IDENTIFIED AND MARKED PRIOR TO CONSTRUCTION. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INFORMATION REGARDING THE SITE AND THE PROJECT. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INFORMATION REGARDING THE SITE AND THE PROJECT. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INFORMATION REGARDING THE SITE AND THE PROJECT.

SEE SHEET FOR FACILITY OWNERS DESIGNATED OFFICE ADDRESS AND TELEPHONE NUMBER.

PENNSYLVANIA ONE CALL SYSTEM, INC.
CALL 1-800-242-1776
1-800-242-1776
POCS SERIAL NUMBER: _____



LEGEND

EXISTING FEATURES

-
- EXISTING PROPERTY BOUNDARY
 EXISTING ADJOINING PROP.
 EXISTING RIGHT-OF-WAY LINE
 EXISTING EASEMENT
 EXISTING SETBACK BOUNDARY
 EXISTING FLOOD PLAIN
 EXISTING STREAM LINE
 EXISTING WETLANDS
 EXISTING BUILDING
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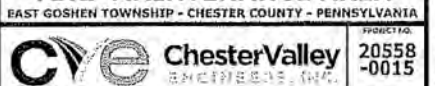
PROPOSED FEATURES

-
- PROPOSED BUILDING ADDITION
- FUTURE BUILDING ADDITION
- PROPOSED PAVEMENT
- PROPOSED CONCRETE PAD/SIDEWALK
- PROPOSED CURB
- NUMBER OF PROPOSED STANDARD PARKING SPACES
- PROPOSED SIGN
- PROPOSED 2' CONTOURS
- PROPOSED 10' CONTOURS
- PROPOSED SPOT ELEVATION
- PROPOSED STORM PIPE AND INLET
- PROPOSED STORM PIPE AND MANHOLE
- PROPOSED STORM PIPE AND CLEANOUT

PRELIMINARY/FINAL EROSION AND SEDIMENTATION CONTROL PLAN



4	2/3/23	REVISED PER TOWNSHIP ENGINEER COMMENTS
3	1/30/23	ISSUED FOR BID
2	10/05/22	PER TOWNSHIP ENGINEER COMMENTS
1	09/26/22	PRICING SET
NO	DATE	REVISION

**LAND DEVELOPMENT PLANS
FOR
APPLEBROOK GOLF CLUB
TURF MAINTENANCE AREA**



82 CRASHES/ROBBERIES, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000, 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1008, 1009, 1010, 1011, 1012, 1013, 1014, 1015, 1016, 1017, 1018, 1019, 1020, 1021, 1022, 1023, 1024, 1025, 1026, 1027, 1028, 1029, 1030, 1031, 1032, 1033, 1034, 1035, 1036, 1037, 1038, 1039, 1040, 1041, 1042, 1043, 1044, 1045, 1046, 1047, 1048, 1049, 1050, 1051, 1052, 1053, 1054, 1055, 1056, 1057, 1058, 1059, 1060, 1061, 1062, 1063, 1064, 1065, 1066, 1067, 1068, 1069, 1070, 1071, 1072, 1073, 1074, 1075, 1076, 1077, 1078, 1079, 1080, 1081, 1082, 1083, 1084, 1085, 1086, 1087, 1088, 1089, 1090, 1091, 1092, 1093, 1094, 1095, 1096, 1097, 1098, 1099, 1100, 1101, 1102, 1103, 1104, 1105, 1106, 1107, 1108, 1109, 1110, 1111, 1112, 1113, 1114, 1115, 1116, 1117, 1118, 1119, 1120, 1121, 1122, 1123, 1124, 1125, 1126, 1127, 1128, 1129, 1130, 1131, 1132, 1133, 1134, 1135, 1136, 1137, 1138, 1139, 1140, 1141, 1142, 1143, 1144, 1145, 1146, 1147, 1148, 1149, 1150, 1151, 1152, 1153, 1154, 1155, 1156, 1157, 1158, 1159, 1160, 1161, 1162, 1163, 1164, 1165, 1166, 1167, 1168, 1169, 1170, 1171, 1172, 1173, 1174, 1175, 1176, 1177, 1178, 1179, 1180, 1181, 1182, 1183, 1184, 1185, 1186, 1187, 1188, 1189, 1190, 1191, 1192, 1193, 1194, 1195, 1196, 1197, 1198, 1199, 1200, 1201, 1202, 1203, 1204, 1205, 1206, 1207, 1208, 1209, 1210, 1211, 1212, 1213			
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EROSION CONTROL FEATURES

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 | PRODUCT (PIPED) BOUNDARY
UNIT OF DISTURBANCE (1.6 ACRES)
ROCK CONSTRUCTION ENTRANCE
WITH WASH ROCK
EROSION CONTR. BLANKET
ROCK FILTER OUTLET
COMPOST FILTER SOCK
TREE PROTECTION FENCE
TEMPORARY INLET PROTECTION
TEMPORARY INLET/PIPE BLOCK
DISCHARGE POINT |
|--|--|

CHSTER WALKER CHEMISTS, INC. DIV. DOMESTIC & SURVIVORS
EXPRESSLY RESERVES ITS COMMON LAW DEFENDANT AND ALL OTHER
INDEFINITE RIGHTS IN THEIR PENCIL, ALL DRAWINGS, SPECIFICATIONS
AND COPIES HEREIN AND SHALL MAINTAIN THE PRESENT OR FUTURE
WALKER PENCIL DESIGN AS A TRADE SECRET AND SHALL BE RESPONSIBLE
TO PROTECT AND DEFEND THE SAME. THE DESIGN SHALL BE KEPT IN
CONFIDENTIALITY AND NOT BE USED OR NOT BE USED WITHOUT THE
WRITTEN PERMISSION OF CHSTER WALKER CHEMISTS, INC. ANY
VIOLATION OF THIS AGREEMENT SHALL BE CONSIDERED A BREACH OF
CONFIDENTIALITY AND SHALL BE SUBJECT TO THE FOLLOWING:
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WRITTEN PERMISSION OF CHSTER WALKER CHEMISTS, INC. ANY
VIOLATION OF THIS AGREEMENT SHALL BE CONSIDERED A BREACH OF
CONFIDENTIALITY AND SHALL BE SUBJECT TO THE FOLLOWING:

HAVE A USER OF THESE PLANS:
 1. PROVIDE THE INFORMATION OBTAINED ON THE
 2. BE CONSISTENT WITH CONCEPTS IN THE
 3. OR DOWNGRADE USING OR RELYING ON THE
 4. FOR THE INVESTIGATION OF ANY APPROPRIATE
 5. PROCEEDING OR RELYING WITH OTHER PLANS
 6. CONSTRUCTION OR MODIFICATION OF APPROPRIATE
 7. SAFETY AND CONSEQUENCES HAVE BEEN EVALUATED
 8. OTHERWISE. OTHERS MUST CONSIDER THEIR
 9. REPRESENTATIONS MUST BE IN LINE FOR
 10. RESULTING FROM THE DESIGN FAILURE, TO DESIGN
 11. AND VALIDATION OF THE INFORMATION OBTAINED ON
 12. OR ANY OTHER PARTS, THE USER ASSUMES THE
 13. PROPERTY OF THE USER, OR DAMAGES OF THE
 14. THE USE OF THIS DOCUMENT WITHOUT FIRST OBTAINING
 15. AND VALIDATION OF THE SUPPLEMENTARY DOCUMENT.

UNDERGROUND UTILITIES SHALL BE:
CHRYSLER VALLEY COOPERATIVE, INC. DOES NOT OWN OR
BE LOCATED FOR THE PROJECT. THE PROJECT WILL BE
LOCATED IN THE CHRYSLER VALLEY COOPERATIVE, INC.
AND ALL SUBURBAN STRUCTURES ARE SMALL. THE
WORTH THE LOCATION AND ELEVATION OF ALL UNDER-
GROUND STRUCTURES BEFORE THE START OF WORK.
EXCAVATIONS, TRENCHING, AND SHIELDING
ALL EXISTING TRENCHES AND SHIELDING STRUCTURES
NEAR THE ADJACENT OF THE FOLLOWING LIST:
OF UNDER-GROUND UTILITIES, SHALL BE HEAVY
PULVERIZED IN THE UNDER-GROUND UTILITIES.

(1) CONSTRUCTION MATERIALS SHALL BE AND BE
TRENCHES SHALL BE TRENCHES - TO

PRICE THE ASSURANCE
 POLICY IS GUARANTEED
 BY THE INSURANCE
 COMPANY. THE POLICY
 IS GUARANTEED BY THE
 INSURANCE COMPANY. THE
 POLICY IS GUARANTEED BY
 THE INSURANCE COMPANY.

SEE SHEET FOR
 FACILITY OWNER'S
 DESIGNATED OFFICE
 ADDRESS AND
 TELEPHONE NUMBER

PERSONAL VANDANA ONE CALL SYSTEM INC.
 24 HOURS A DAY, 7 DAYS A WEEK
 1-800-242-1776

PENNSYLVANIA ONE CALL SYSTEM INC.
CALL 3 WEEKS IN ADVANCE BEFORE YOU DIG
1-800-242-1776

APPLEBROOK COLLEGE

SHEET 8A OF 10

GENERAL EROSION AND SEDIMENTATION CONTROL NOTES

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

ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS, SHALL BE DONE IN ACCORDANCE WITH APPROVED EAS PLANS. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN (STAMPED, SIGNED, AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO THE IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.

THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE COUNTY CONSERVATION DISTRICT, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATIONS.

1. THE CHESTER COUNTY CONSERVATION DISTRICT (CCCD) 808 UNIVERSITY ROAD, SUITE #200 KENNETT SQUARE, PA 19346 PHONE: (610) 455-1360 FAX: (610) 455-1361
2. THE RECEIVING WATER FOR THIS PROJECT IS THE RIDLEY CREEK. THE CHAPTER 93 CLASSIFICATION FOR THE RIDLEY CREEK IS HIGH QUALITY TROUT STOCKING FISHES, MIGRATORY FISHES (H2-TSF).
3. NOTIFY THE COUNTY CONSERVATION DISTRICT AND ARRANGE A PRE-CONSTRUCTION MEETING FOR ALL INVOLVED PARTIES (INCLUDING CDD, APPLICANT, ENGINEER, AND TOWNSHIP OFFICIALS).
4. NOTIFY THE TOWNSHIP ENGINEER AT LEAST 48 HOURS PRIOR TO ANY EARTH DISTURBANCE ACTIVITIES.
5. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN A MANNER SUCH THAT ALL EROSION AND AIR/WATER POLLUTION IS MINIMIZED. STATE AND LOCAL LAWS CONCERNING ABATEMENT SHALL BE FOLLOWED.
6. AREAS TO BE FILLED ARE TO BE GRUBBED, GROUND, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL.
7. 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 SHALL BE CONDUCTED WITHIN THESE LIMITS. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN PLANS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
8. STOCKPILE AREAS SHALL BE SEDED 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. SEDIMENT BARRIER SHALL BE INSTALLED ON THE LOW SIDE OF THE PILE. THERE SHALL BE NO EARTH DISTURBANCE WITHIN THE STOCKPILE AREA.
9. SHOULD UNFENCED EROSION DEVELOP DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ACTION TO REMEDY SUCH CONDITIONS AND TO PREVENT DAMAGE TO ADJACENT PROPERTIES AND STREAMS IN ACCORDANCE WITH PAIDOT 408, SECTION 84.5. STOCKPILES OF CRUSHED STONE AND MULCHES MUST BE MAINTAINED AT THE SITE IN READINESS TO DEAL IMMEDIATELY WITH EMERGENCY PROBLEMS OF EROSION.
10. THE OPERATOR SHALL REMOVE ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE REQUIREMENTS OF THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 2601 ET SEQ., 2711 ET SEQ., AND 2871 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE. CONSTRUCTION WASTES MUST BE RECYCLED TO THE EXTENT PRACTICABLE, AND DISPOSAL METHODS MUST COMPLY WITH FEDERAL, STATE AND LOCAL REQUIREMENTS.
11. ALL ON-SITE WASTE SHALL BE REMOVED FROM THE PROJECT SITE AND DISPOSED OF AT AN EAS PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON THE SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE CONTRACTOR FOR ALL FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.
13. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION BMPs MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION BMPs AND REPORTING TO THE TOWNSHIP ENGINEER ON A DAILY BASIS.
14. THE SITE INSPECTIONS WILL BE DOCUMENTED IN AN INSPECTION LOG KEPT FOR THIS PURPOSE. THE COMPLIANCE ACTIONS AND THE DATE, TIME AND NAME OF THE PERSON CONDUCTING THE INSPECTION. THE INSPECTION LOG WILL BE KEPT ON SITE AT ALL TIMES AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST.
15. ALL PREVENTIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RESETTING, MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENTATION BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs OR MODIFICATIONS OF THOSE INSTALLED WILL BE NEEDED.
16. SEDIMENT TRAPPED ONTO A PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY OR AS NEEDED THROUGHOUT THE WORKDAY, OR AS DIRECTED BY THE CONSERVATION DISTRICT OR MUNICIPALITY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELLED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
17. ALL SEDIMENT REMOVED FROM THE PROJECT SITE SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
18. AREAS WHICH ARE TO BE TOP-SOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES (6 TO 12 INCHES ON COMPACTED SOILS) PRIOR TO THE PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING, I.E. TARS.
19. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES, CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
20. ALL EARTH FILL SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 8 INCHES IN THICKNESS.
21. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOIL, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
22. FROZEN MATERIALS OF SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
23. FILLS SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
24. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATIONS FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
25. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDING AREAS WITHIN 60 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THE PLAN.
26. ANY DISTURBED AREAS WHICH ARE NOT TO BE SEEDING OR MULCHING FOR ANY AMOUNT OF TIME, MUST BE SEEDING AND MULCHED IMMEDIATELY. DURING NON-GERMINATING PERIODS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. DISTURBED AREAS WHICH ARE NOT AT FINISH GRADE AND WHICH WILL BE RE-DISTURBED WITHIN ONE YEAR MAY BE SEEDING 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 SEEDING WITH A PERMANENT SEED MIXTURE AND MULCH.
27. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED PERMANENT STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERMANENT VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER SUFFICIENT TO RESIST REGENERATED SURFACE EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
28. EAS BMPs SHALL REMAIN FUNCTIONAL AS MUCH UNTIL ALL AREAS THERETO TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE TOWNSHIP ENGINEER.
29. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE EAS BMPs.
30. AFTER FINAL STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPs MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION BMPs. REMOVAL OF BMPs MUST BE COMPLETED DURING THE REMOVAL OR CONVERSION OF THE BMPs SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID VEGETATION OF DISTURBED AREAS, SOIL REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
31. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION.
32. FAILURE TO CORRECTLY INSTALL EAS BMPs, FAILURE TO PREVENT SEDIMENT LOADED RUNOFF FROM LEAVING THE SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO REDUCE FAILURE OF EAS BMPs MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING IMPOSED BY THE DEPARTMENT AS SET FORTH IN SECTION 84.5 OF THE PENNSYLVANIA CLEAN STREAM LAW. IN THE CLEAN STREAM LAW PROVIDES FOR UP TO \$10,000 PER DAY CIVIL PENALTIES, UP TO \$100,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR OR CRIMINAL PENALTIES FOR EACH VIOLATION.
33. THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF THE APPENDIX 64, EROSION CONTROL RULES AND REGULATIONS, TITLE 25, PART I, DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUBPART C, PROTECTION OF NATURAL RESOURCES, ARTICLE II, WATER RESOURCES, CHAPTER 100, EROSION CONTROL.
34. THE PERMITTEE SHALL NOTIFY THE COUNTY CONSERVATION DISTRICT IMMEDIATELY PRIOR TO ANY CESSATION IN EARTHMOVING ACTIVITIES.
35. EROSION AND SEDIMENTATION CONTROLS MUST BE MAINTAINED THROUGHOUT THE ENTIRE CONSTRUCTION PERIOD. SITE DISTURBANCE WITHIN THE TRIBUTARY AREAS OF THOSE CONTROLS BEGINS. RUNOFF FROM DISTURBED AREAS MUST PASS THROUGH A SEDIMENT REMOVAL OR RETENTION FACILITY BEFORE LEAVING THE SITE.
36. ONLY LIMITED UP-SLOPE DISTURBANCE WILL BE PERMITTED TO PROVIDE ACCESS TO SEDIMENT TRAPS AND CHANNELS OF CONVEYANCE FOR GRADING AND ACQUIRING BORROW TO CONSTRUCT THOSE CONTROLS.
37. WHERE BMPs 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 BMPs FAILURE AND ANY POLLUTION EVENTS.
 - B. ALL STEPS TAKEN TO REDUCE, ELIMINATE AND PREVENT THE REOCCURRENCE OF THE NON-COMPLIANCE.
 - C. THE TIME FRAME TO CORRECT THE NON-COMPLIANCE, INCLUDING THE EXACT DATES WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE.
38. ACCUMULATED SEDIMENT SHALL BE REMOVED FROM OR COMPOST FILTERS, REGRADING, AND STABILIZED ELSEWHERE ON THE SITE. SILT SHALL ALSO BE REMOVED FROM THE SEDIMENT TRAPS AT THE CLEANOUT ELEVATIONS. THE SILT SHALL BE SPREAD ELSEWHERE ON THE SITE AND SEDED, OR SHOULD ANY MEASURES CONTAINED WITHIN THIS PLAN PROVE TO BE INCAPABLE OF ADEQUATELY REMOVING SEDIMENT FROM ON-SITE FLOWS PRIOR TO THE DISCHARGE OF, OR STABILIZATION OF SURFACES INVOLVED, ADDITIONAL MEASUREMENT MUST BE IMPLEMENTED IMMEDIATELY BY THE OWNER/ DEVELOPER TO ELIMINATE SUCH PROBLEMS.
39. CHANNELS, SEDIMENTATION BASINS, SEDIMENTATION TRAPS AND STOCKPILES MUST BE SEEDING AND MULCHED IMMEDIATELY.
40. GRADED AREAS ARE TO BE TEMPORARILY SEEDING 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.
41. LIME SHALL BE APPLIED TO ALL TEMPORARILY SEEDING AREAS AT A MINIMUM RATE AS SPECIFIED.
42. ALL TEMPORARILY SEEDING AREAS SHALL HAVE 5-8 FEET OF FERTILIZER APPLIED AT THE MINIMUM RATES SPECIFIED.
43. ESTABLISH PERMANENT SEEDING AS SOON AS POSSIBLE AFTER FINAL GRADING IS COMPLETED. PERMANENT SEEDING SHALL BE AT THE RATES SPECIFIED. FERTILIZER AND LIME SHALL BE APPLIED AT THE POSSIBLE AFTER FINAL GRADING IS COMPLETED. PERMANENT SEEDING SHALL BE AT THE RATES SPECIFIED.
44. PERMANENTLY SEEDING AREAS SHALL HAVE HAY OR STRAW APPLIED AT THE RATE OF AT LEAST 3 TONS PER ACRE.
45. ANY AREAS WHERE HYDROSEEDING IS USED, MULCH IS NEEDED.
46. SILT FENCING AND 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.
47. DUST CONTROL SHALL BE PROVIDED BY THE CONTRACTOR AT ALL TIMES DURING CONSTRUCTION.
48. 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.
49. IF ANY SIGNIFICANT CHANGES TO THE EROSION AND SEDIMENTATION CONTROL PLAN, THE BUILDER OR LANDOWNER WILL CONTACT THE CHESTER COUNTY CONSERVATION DISTRICT AT (610) 892-9484 FOR THE ADEQUACY OF THESE CHANGES.
50. SEDIMENT MUST BE REMOVED FROM STORMWATER INLETS NOT DRAINING TO A SEDIMENT TRAP WITH INLET PROTECTION AFTER EACH RUNOFF EVENT.
51. EACH SEDIMENT TRAP/BASIN MUST BE STABILIZED AND FUNCTIONING PRIOR TO ANY EARTH DISTURBANCE ACTIVITY. FURTHER, THE COUNTY CONSERVATION DISTRICT SHALL BE NOTIFIED OF ANY CHANGES TO THE TEMPORARY TRAP/BASIN DESIGN. AN IMMEDIATE INSPECTION BY THE DISTRICT(S) SHALL BE CONDUCTED BY A QUALIFIED SITE REPRESENTATIVE AND THE CHESTER COUNTY CONSERVATION DISTRICT SHALL BE NOTIFIED IN WRITING THAT THE PROPER RISER IS INSTALLED AND SEALED, PER PLAN. SEDIMENT TRAP/BASINS MUST BE PROTECTED FROM UNAUTHORIZED ACTS OF THIRD PARTIES.
52. UPON REQUEST, THE PERMIT HOLDER AND/OR HIS CONTRACTOR SHALL PROVIDE AN AS-BUILT FOR ANY SEDIMENT BASIN OR TRAP TO THE MUNICIPAL INSPECTOR, LOCAL CONSERVATION DISTRICT, OR CDD.
53. BEFORE INITIATING ANY REVISION TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED EAS & S CONTROL, THE OPERATOR MUST RECEIVE THE APPROVAL OF THE REVISIONS FROM THE 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.
54. ALL CONCRETE TRUCKS SHALL UTILIZE THE CONCRETE WASHOUT AREA PRIOR TO LEAVING THE SITE.
55. UTILITY LINE TRENCH EXCAVATION NOTES:
 - A. 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.
 - B. WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PUMP CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS.
 - C. ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
 - D. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUS INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.
 - E. 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.
 - F. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND IMMEDIATELY STABILIZED.

SPECIAL GEOLOGIC AND SOIL CONDITIONS

NO SPECIAL GEOLOGIC OR GEOLOGICAL ISSUES ARE KNOWN.

CONSTRUCTION SEQUENCE

AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES (INCLUDING CLEARING AND GRUBBING), THE OWNER AND/OR OPERATOR SHALL NOTIFY ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, TOWNSHIP ENGINEER/INSPECTOR, AND LICENSED PROFESSIONAL ENGINEER OR DESIGNER TO AN ON-SITE PRE-CONSTRUCTION MEETING.

UPON INSTALLATION OR STABILIZATION OF ALL PERIMETER SEDIMENT CONTROL BMPs AND AT LEAST 3 DAYS PRIOR TO PROCEEDING WITH THE BULK EARTH DISTURBANCE ACTIVITIES, THE PERMITTEE OR CO-PERMITTEE SHALL PROVIDE NOTIFICATION TO THE TOWNSHIP.

AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED BY THE TOWNSHIP PRIOR TO IMPLEMENTATION. EACH STEP OF THE SEQUENCE SHALL BE COMPLETED BEFORE PROCEEDING TO THE NEXT STEP, EXCEPT WHERE NOTED.

PRIOR TO EARTH DISTURBANCE ACTIVITY DESCRIBED IN ANY STEP OF THE CONSTRUCTION SEQUENCE, CLEAR AND GRUB AND STRIP TOPSOIL. STOCKPILE TOPSOIL IN THE DESIGNATED LOCATIONS.

UPON COMPLETION OR TEMPORARY CESSATION OF EARTH DISTURBANCE ACTIVITY, OR ANY STAGE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED WITH THE APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION.

EARTH DISTURBANCE ACTIVITIES WILL BE PERFORMED IN THE FOLLOWING SEQUENCE:

1. FIELD DELINEATE LIMITS OF DISTURBANCE WITH ORANGE CONSTRUCTION FENCING PRIOR TO EARTH MOVING ACTIVITIES.
 2. INSTALL TREE PROTECTION FENCING AND COMPOST FILTER SOCKS ON DOWNSLOPE SIDE OF DISTURBED AREA. NOTIFY THE TOWNSHIP ENGINEER FOLLOWING THE INSTALLATION OF PROTECTIVE MEASURES AND PRIOR TO EARTH DISTURBANCE. NO EARTH DISTURBANCE MAY COMMENCE UNTIL THE EAS MEASURES HAVE BEEN INSPECTED BY THE TOWNSHIP ENGINEER.
 3. INSTALL THE ROCK CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT AREA AS DEPicted ON THE EROSION & SEDIMENTATION CONTROL PLAN.
 4. WHEN EAS MEASURES HAVE BEEN INSPECTED BY THE TOWNSHIP ENGINEER, PERFORM DEMOLITION ACTIVITIES, AS INDICATED BY THE PLANS. ALL MATERIAL GENERATED BY DEMOLITION ACTIVITIES SHALL BE DISPOSED OF BY THE CONTRACTOR USING APPROPRIATE METHODS.
 5. CLEAR AND GRUB AREA OF CONSTRUCTION. STRIP TOPSOIL AND STOCKPILE IN LOCATION SHOWN ON EROSION & SEDIMENTATION CONTROL PLAN. TEMPORARILY STABILIZE TOPSOIL STOCKPILE.
 6. PERFORM ROUGH GRADING.
 7. INSTALL UNDERGROUND INFILTRATION BED AND DISTRIBUTION PIPE, PEICE AREA OF UNDERGROUND BED WITH PROTECTION FENCING UPON COMPLETION OF INSTALLATION.
- CRITICAL STAGE OF CONSTRUCTION: CONTACT ENGINEER PRIOR TO EXCAVATION AND FINAL GRADING OF UNDERGROUND STORMWATER BED. CONTACT ENGINEER PRIOR TO PLACEMENT OF GEOTECHNICAL BARS.**
8. INSTALL STORM INLETS AND STORM PIPING SHOWN ON THESE PLANS. TEMPORARILY SEAL INLETS AS NOTED. CONTRACTOR SHOULD ENSURE THAT NO SEDIMENT OR SEDIMENT LADEN RUNOFF IS ALLOWED TO ENTER THE INFILTRATION BED DURING SITE CONSTRUCTION. ONLY AFTER THE TRIBUTARY DRAINAGE AREA TO THE INFILTRATION BED IS FULLY STABILIZED (I.E. 70% STABILIZATION), CAN RUNOFF BE INTRODUCED TO THIS FACILITY. IF SEDIMENT ENTERS THE STORM WITHIN THIS FACILITY, THE STORM SHALL BE REMOVED AND REPLACED.
 9. PROCEED WITH BUILDING CONSTRUCTION.
 10. INSTALL REQUIRED UNDERGROUND UTILITIES.
 11. INSTALL REMAINING STORM STRUCTURES, ROOF DRAINS AND ASSOCIATED PIPES.
 12. WHEN UTILITY INSTALLATION HAS BEEN COMPLETED, BEGIN CONSTRUCTION OF DRIVEWAY AND PARKING AREAS, GRADE AND STABILIZE WITH SILT BASE AS CONSTRUCTION ALLOWS.
 13. COMPLETE BUILDING CONSTRUCTION. INSTALL BINDER COURSE ON ALL DRIVEWAY AND PARKING AREAS.
 14. INSTALL WEARING COARSE AND PAVEMENT STRIPS AS INDICATED ON THE PLANS AND DETAILS.
 15. COLLECT ALL SILT AND SEDIMENT DEPOSITS IN EROSION CONTROL DEVICES AND PLACE ON SITE IN NON-ERODIBLE AREAS. PERMANENTLY STABILIZE ALL DISTURBED AREAS. TEMPORARY EROSION CONTROLS MAY NOT BE REMOVED UNTIL STABILIZATION IS ATTAINED (70% UNIFORM COVERAGE OF A PERMANENT VEGETATIVE SPECIES).
 16. UPON STABILIZATION OF ALL DISTURBED AREAS, REMOVE SEALS FROM STORM INLETS. REMOVE REMAINING SEDIMENT BARRIERS AND CONTROLS. IMMEDIATELY STABILIZE AREAS DISTURBED BY REMOVAL PROCESS IN ACCORDANCE WITH PERMANENT SEED AND MULCH SPECIFICATIONS.
 17. SUBMIT A NOTICE OF TERMINATION TO THE COUNTY CONSERVATION DISTRICT ONCE ALL TEMPORARY E&S BMPs HAVE BEEN REMOVED AND THE ENTIRE PROJECT SITE IS PERMANENTLY STABILIZED.

OPERATION AND MAINTENANCE PROCEDURE

TEMPORARY EROSION AND SEDIMENT CONTROL BMPs

1. THE PERMITTEE SHALL BE RESPONSIBLE FOR THE PROPER CONSTRUCTION, STABILIZATION AND MAINTENANCE OF ALL EROSION AND SEDIMENTATION CONTROL MEASURES. INSPECTION/MAINTENANCE OF THESE MEASURES SHALL BE CONDUCTED ON A WEEKLY BASIS AND AFTER EVERY MEASURABLE RAINFALL. A WRITTEN REPORT DOCUMENTING THE INSPECTION AND APPLICABLE REPAIRS SHALL BE KEPT ON SITE AND AVAILABLE FOR INSPECTION UPON REQUEST.
2. THE OPERATION AND MAINTENANCE REQUIREMENTS FOR THE TEMPORARY E&S BMPs FOR THIS PROJECT INCLUDE THE FOLLOWING:
 - A. COMPOST FILTER SOCK SHALL BE INSPECTED/MAINTAINED TO ENSURE THAT THE WOODEN STAKES AND FABRIC CONFORM TO THE STANDARD DETAIL. FABRIC WHICH IS TORN, DISTENDED/DEFORMED OR OTHERWISE COMPROMISED SHALL BE REPLACED. ALL MATERIAL DEPOSITED BEHIND THE COMPOST FILTER SOCK SHALL BE DISTRIBUTED ON SITE AND IMMEDIATELY STABILIZED USING SEED AND MULCH.
 - B. STABILIZED CONSTRUCTION ENTRANCE (SCE) - THE SCE SHALL BE INSPECTED/MAINTAINED TO ENSURE THAT THE STRUCTURE CONFORMS TO THE STANDARD DETAIL. ROCK SHOULD BE MAINTAINED AT FULL DEPTH AND MAY REQUIRE REPLACEMENT AND/OR REDISTRIBUTION. MATERIAL DEPOSITED ON THE SCE SHALL BE DISTRIBUTED ON SITE AND IMMEDIATELY STABILIZED USING SEED AND MULCH.
 - C. ROCK FILTER OUTLET - IF INSTALLED, OUTLET SHALL BE INSPECTED/MAINTAINED TO ENSURE THAT MATERIAL IS NOT DISPLACED OR DAMAGED.

MINIMUM OF EARTH MOVING ACTIVITIES

1. THE OVERALL SCHEDULE OF THE PROJECT IS THAT CONSTRUCTION WILL START APPROXIMATELY DURING EARLY SPRING, 2023. THE CONTRACTOR MAY SELECT HIS SCHEDULE FOR THE SPECIFIC PORTIONS OF THE PROJECT, UNLESS OTHERWISE SPECIFIED.
2. SPECIFIED EROSION CONTROL MEASURES AND FACILITIES INCLUDING BUT NOT LIMITED TO CONSTRUCTION ENTRANCES MUST BE INSTALLED AND BE OPERATIONAL PRIOR TO ANY EARTH MOVING ACTIVITIES WITHIN THE UPSLOPE DRAINAGE AREAS.
3. FOR PIPELINE CONSTRUCTION WITHIN DRIVEWAYS AND PAVED AREAS, THE FOLLOWING STAGES ARE TO BE IMPLEMENTED SEQUENTIALLY AS WORK PROCEEDS:
 - A. INSTALL INLET PROTECTION AND OTHER MEASURES AS SHOWN ON THE PLANS. THESE MEASURES SHALL BE INSTALLED AT LEAST 500 FEET AHEAD OF PIPE INSTALLATION.
 - B. EXCAVATE TRENCHES AND DISCHARGE MATERIAL DIRECTLY INTO TRUCKS. CLEAN UP SPILLAGE WITH EACH TRUCKLOAD.
 - C. INSTALL PIPELINE AND BACKFILL. EROSION CONTROL FACILITIES MAY BE REMOVED WHEN TEMPORARY OR PERMANENT REPAVING IS INSTALLED AND THE AREA HAS BEEN CLEANED OF ALL DEBRIS.
 - D. PLACE TEMPORARY PAVING OR GRAVEL SURFACE OVER TRENCH AT THE END OF EACH WORK DAY.

EROSION CONTROL MAINTENANCE PROGRAM TEMPORARY

UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION BMPs MUST BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION BMPs ON A DAILY BASIS AND AFTER EACH RUNOFF EVENT. ALL SITE INSPECTIONS SHALL BE DOCUMENTED IN AN INSPECTION LOG KEPT FOR THIS PURPOSE. THE COMPLIANCE ACTIONS AND THE DATE, TIME AND NAME OF THE PERSON CONDUCTING THE INSPECTION SHALL BE NOTED. THE INSPECTION LOG SHALL BE KEPT ON SITE AT ALL TIMES, AND MADE AVAILABLE TO THE TOWNSHIP UPON REQUEST.

ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEANOUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RESETTING MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENTATION BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT, REPAIRS OR MODIFICATIONS OF THOSE INSTALLED WILL BE NEEDED.

WHERE BMPs ARE FOUND TO FAIL TO ALLEVIATE EROSION AND SEDIMENTATION POLLUTION, THE CONTRACTOR SHALL INCLUDE THE FOLLOWING INFORMATION:

- A) THE LOCATION AND SEVERITY OF THE BMPs FAILURE AND ANY POLLUTION EVENTS.
- B) ALL STEPS TAKEN TO REDUCE, ELIMINATE AND PREVENT THE REOCCURRENCE OF THE NON-COMPLIANCE.
- C) THE TIME FRAME TO CORRECT THE NON-COMPLIANCE, INCLUDING THE EXACT DATES WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE.

VEGETATIVE STABILIZATION NOTES

1. AS DISTURBED AREAS WITHIN A PROJECT APPROACH FINAL GRADE, PREPARATIONS SHOULD BE MADE FOR SEEDING AND MULCHING TO BEGIN (I.E. ANTICIPATE THE COMPLETION DATE AND SCHEDULE THE SEEDER). IN NO CASE SHOULD AN AREA EXCEEDING 15,000 SQUARE FEET, WHICH IS TO BE STABILIZED BY VEGETATION, REACH FINAL GRADE WITHOUT BEING SEEDING AND MULCHED. WAITING UNTIL FINISH GRADING IS COMPLETED BEFORE SEEDING AND MULCHING IS NOT ACCEPTABLE. THIS REQUIREMENT SHOULD BE CLEARLY STATED IN THE SEEDING AND MULCHING SPECIFICATIONS CONTAINED ON THE PLAN DRAWINGS.
2. BEFORE THE SEEDING BEGINS, TOPSOIL SHOULD BE APPLIED AND ANY REQUIRED SOIL AMENDMENTS WORKED INTO THE SOIL TO A DEPTH OF 4 TO 6 INCHES. IF COMPOST IS TO BE ADDED TO THE TOPSOIL, IT SHOULD BE WORKED INTO THE SOIL WITH THE OTHER SOIL AMENDMENTS UNLESS IT IS BEING APPLIED AS AN EROSION CONTROL BMP.
3. UPON COMPLETION OR TEMPORARY CESSATION OF THE EARTH DISTURBANCE ACTIVITY IN A SPECIAL PROTECTION WATERSHED, THAT PORTION OF THE PROJECT SITE TRIBUTARY TO THE SPECIAL PROTECTION WATERSHED MUST BE IMMEDIATELY STABILIZED. IN ALL OTHER WATERSHEDS, CESSATION OF ACTIVITY FOR AT LEAST 4 DAYS REQUIRES TEMPORARY STABILIZATION.
4. SURFACE ROUGHENING SHOULD BE APPLIED TO SLOPES 3H:1V OR STEEPER UNLESS A STABLE ROCK FACE IS PROVIDED OR IT CAN BE SHOWN THAT THERE IS NOT A POTENTIAL FOR SEDIMENT POLLUTION TO SURFACE WATERS. FOR ROUGHENED SURFACES WITHIN 50 FEET OF A SURFACE WATER, AND WHERE BLANKETING OF SEEDING AREAS IS PROPOSED AS THE MEANS TO ACHIEVING PERMANENT STABILIZATION, SPRAY ON TYPE BLANKETS ARE RECOMMENDED.
5. FILL SLOPES SHOULD BE SEEDING AND MULCHED AT REGULAR VERTICAL INCREMENTS - 15 TO 25 FEET MAXIMUM - AS THE FILL IS BEING CONSTRUCTED. THIS WILL ALLOW THE BOTTOM OF THE FILL TO PROCEED TOWARD STABILIZATION WHILE WORK CONTINUES ON THE UPPER PORTION, MAKING FINAL STABILIZATION EASIER TO ACHIEVE AND PROVIDING SOME VEGETATIVE BUFFERING AT THE BOTTOM OF THE SLOPE.
6. WHEREVER SEED AND MULCH IS APPLIED BY HYDROSEEDING METHODS, THE SEED AND MULCH SHOULD BE APPLIED IN SEPARATE APPLICATIONS WITH THE SEED BEING APPLIED FIRST AND THE MULCH SPRAYED ON TOP OF SEED. THIS IS TO ENSURE THAT THE SEED MAKES CONTACT WITH THE UNDERLYING SOIL. SOIL PREPARATION SHOULD BE COMPLETED PRIOR TO ADDING SEED TO THE HYDROSEEDING EQUIPMENT. RUNNING SEED THROUGH THE PUMPING SYSTEM CAN RESULT IN EXCESSIVE ABRASION OF THE SEED AND REDUCE THE PERCENTAGE OF PURE LIVE SEED IN THE APPLICATION. THEREFORE ALL SITE PREPARATION SHOULD BE COMPLETED PRIOR TO THE ARRIVAL OF THE HYDROSEEDER.
7. IN CRITICAL AREAS (E.G. ADJACENT TO OR WITHIN 50 FEET OF STREAMS, PONDS, OR WETLANDS) A PROTECTIVE BLANKET SHOULD BE PROVIDED FOR ALL SEEDING AREAS. CONSIDERATION SHOULD BE GIVEN TO USE OF MULCH WITH NETTING OR PROTECTIVE BLANKETS FOR ALL SEEDING AREAS ON SLOPES 3H:1V OR STEEPER.
8. VEHICULAR TRAFFIC SHOULD BE RESTRICTED FROM AREAS TO BE SEEDING TO PREVENT SOIL COMPACTION.
9. AS SOON AS SLOPES, CHANNELS, DITCHES AND OTHER AREAS DISTURBED DURING CONSTRUCTION, REACH FINAL GRADE, STABILIZE IMMEDIATELY, IN ACCORDANCE WITH SEEDING, MULCHING AND STABILIZATION SPECIFICATIONS.
10. NO MORE THAN 15,000 SQUARE FEET OF DISTURBED AREA REACH FINAL GRADE BEFORE INITIATING SEEDING AND MULCHING OPERATIONS.
11. CESSATION OF ACTIVITY FOR 4 DAYS OR LONGER REQUIRES TEMPORARY STABILIZATION.

SOIL TYPE USE LIMITATIONS AND RESOLUTIONS

1. SOIL TYPES POORLY SUITED AS SOURCES OF TOPSOIL, RESISTIVE OR PLACE CONDITIONS ON PLANNING VEGETATIVE STABILIZATION, ADDIC, LOW FERTILITY, EXCESSIVE DRYNESS AND EXCESSIVE WETNESS LIMIT PLANT GROWTH.

RESOLUTIONS: IDENTIFYING AND RESOLVING CHARACTERISTICS, THAT RENDER THE SOIL TYPES POORLY SUITED AS TOPSOIL.
2. ACIDIC SOIL TYPES EXHIBITING PH REACTION VALUES LOWER THAN ABOUT 5.5. LIMIT VEGETATIVE STABILIZATION. SOIL TESTS MIGHT BE NECESSARY TO DETERMINE SITE SPECIFIC PH REACTION.

RESOLUTIONS: APPLYING LIME CONSISTENT WITH RATES DETERMINED BY SOIL TESTING; SELECTING VEGETATIVE SPECIES TOLERANT TO ACIDIC SOIL CONDITIONS AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.
3. LOW FERTILITY SOIL TYPES LACKING IN SUFFICIENT AMOUNTS OF ESSENTIAL PLANT NUTRIENTS SUCH AS: NITROGEN, PHOSPHORUS, POTASSIUM, SULFUR, MAGNESIUM, CALCIUM, IRON, MANGANESE, BORON, CHLORINE, ZINC, COPPER AND MOLYBDENUM. LIMIT VEGETATION STABILIZATION. SOIL TESTS MIGHT BE NECESSARY TO DETERMINE SITE SPECIFIC SOIL FERTILITY.

RESOLUTIONS: INCORPORATING SOIL NUTRIENTS CONSISTENT WITH RATES DETERMINED BY SOIL TESTING; SELECTING VEGETATIVE SPECIES TOLERANT TO LOW FERTILITY SOIL CONDITIONS, AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.
4. ERODIBLE SOIL TYPES EXHIBITING K VALUES GREATER THAN 0.36 OR PLASTICITY INDEX VALUES LOWER THAN 10. LIMIT VEGETATIVE STABILIZATION OF CHANNELS.

RESOLUTIONS: PROVIDING TEMPORARY CHANNEL LINING, PROVIDING PERMANENT CHANNEL LINING, DECREASING CHANNEL GRADE, INCREASING CHANNEL WIDTH, SELECTING VEGETATIVE WITH GREATER REPAIRABLE. SELECTING PERMANENT CHANNEL LINING, AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLES 6 AND 7 OF THE EROSION AND SEDIMENT POLLUTION CONTROL MANUAL PUBLISHED BY PAEP.
5. WET SOIL TYPES HAVE EXCESSIVE ROOT ZONE AND SOIL MOISTURES. SOME SOIL SURVEYS INDICATE WETNESS, HIGH WATER TABLE AND FLOODING. THIS INDICATOR IS AFFECTED BY SOIL DISTURBANCE.

RESOLUTIONS: SELECTING VEGETATIVE SPECIES TOLERANT TO WET CONDITIONS, TUNING VEGETATIVE AREAS, AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.
6. SOIL TYPES THAT EXHIBIT INSTABILITY IN POID EMBANKMENTS OR SUSCEPTIBILITY TO PIPING AND SEEDING POSE LIMITATIONS ON PLANNING EMBANKMENTS OF SEDIMENT BASINS, SEDIMENT TRAPS, STORMWATER RETENTION BASINS AND STORMWATER DETENTION BASINS.

RESOLUTIONS: IMPROVING OTHER SOIL FOR EMBANKMENTS OF THOSE FACILITIES, LOCATING THOSE FACILITIES ON OTHER SOIL TYPES, LIMITING EMBANKMENT SLOPE STEEPNESS AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS.
7. SOILS THAT ARE DIFFICULT TO COMPACT, UNSUITABLE FOR WHITE GRADING, OR SUSCEPTIBLE TO FROST ACTION POSE LIMITATIONS ON PLANNING EMBANKMENTS OF SEDIMENT BASINS, SEDIMENT TRAPS, STORM WATER RETENTION BASINS AND STORMWATER DETENTION BASINS.

RESOLUTIONS: IMPROVING OTHER SOIL FOR EMBANKMENTS OF THOSE FACILITIES, LOCATING THOSE FACILITIES ON OTHER SOIL TYPES, NOT CONSTRUCTING EMBANKMENTS DURING PERIODS PRONE TO FROST AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS.

DISPOSAL AND RECYCLING

CONTRACTOR IS RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL DEMOLISHED OR UNUSED CONSTRUCTION MATERIALS. CARGAGE SHALL BE COLLECTED ON-SITE UNTIL RETRIEVED BY AN APPROVED DISPOSAL OR RECYCLING COMPANY. CONTRACTOR SHALL NOT INCINERATE EXCESS MATERIALS.

- LIKELY WASTE TO BE GENERATED AT THIS SITE:
- UNUSED CONCRETE TO BE PLACED IN CONCRETE WASHOUT AREAS.
 - EXCESS SILT SOIL AND FENCING MATERIALS.
 - GENERAL RUBBISH AND DEBRIS

THERMAL IMPACTS

THE RUNOFF FROM THE PROJECT AREA THAT OUTLETS TO SURFACE WATERS OR EXISTING STORM SEWER FLOWS THROUGH COMPOST FILTER SOCKS.

INTERCEPTING THE RUNOFF WITH THE ON-SITE TEMPORARY BMP'S WILL TEMPORARILY STORE THE SEDIMENT LADEN WATER BEHIND THE PROPOSED EAS MEASURES AND SLOWLY ALLOW CLEAN WATER TO FILTER THROUGH (I.E. REDUCING FLOW RATE AND VELOCITY). THE NATURAL COOLING EFFECTS OF FILTERING SEDIMENT LADEN WATER WILL HELP TO DISSIPATE THE HEAT ENERGY ABSORBED BY THE STORMWATER.

EROSION AND SEDIMENT CONTROL PLAN OBJECTIVES

1. FIT THE LAND-DISTURBING ACTIVITY TO THE TERRAIN THROUGH MATCHING PROPOSED GRADES AS CLOSE TO EXISTING AS POSSIBLE.
2. MINIMIZE BARE SOIL EXPOSURE AND THE EXTENT AND DURATION OF EARTH DISTURBANCE THROUGH THE USE OF TEMPORARY STABILIZATION TECHNIQUES AND A DETAILED CONSTRUCTION SEQUENCE.
3. RETAIN EXISTING VEGETATION WHENEVER FEASIBLE AND APPROPRIATE BY MAXIMIZING PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION.
4. MINIMIZE SOIL COMPACTION BY DELINEATING LIMITS OF DISTURBANCE IN ONLY THOSE AREAS NECESSARY FOR CONSTRUCTION.
5. STABILIZE DISTURBED AREAS IMMEDIATELY AFTER GRADING WITH TEMPORARY SEEDING AND MULCHING.
6. DIRECT RUNOFF AWAY FROM BARE SOIL AREAS.
7. MINIMIZE LENGTH AND STEEPNESS OF SLOPES BY IMPLEMENTING THE APPROPRIATE TEMPORARY E&S BMP.
8. UTILIZE OTHER MEASURES OR CONTROLS THAT PREVENT OR MINIMIZE GENERATION OF INCREASED STORMWATER RUNOFF.
9. PREPARE DRAINAGE WAYS AND OUTLETS TO HANDLE INCREASED RUNOFF AND CONCENTRATION FLOWS.
10. REDUCE SEDIMENTATION BY APPLYING EROSION CONTROL AND WATER QUALITY PRACTICES ON-SITE.
11. AVOID, MINIMIZE OR MITIGATE THERMAL IMPACTS.

SEEDING AND MULCHING SPECIFICATIONS

TEMPORARY

SEEDING SHALL BE ANNUAL RYE GRASS APPLIED AT 48 LBS. PER ACRE. LIMEING TO BE APPLIED AT 1 TON/ACRE. 10-10-10 FERTILIZER TO BE APPLIED AT 500 LBS./ACRE. HAY OR STRAW MULCH TO BE APPLIED AT 3 TONS/ACRE.

PERMANENT

LIMEING TO BE APPLIED AT 8 TON/ACRE. 10-10-20 FERTILIZER TO BE APPLIED AT 1000 LBS./ACRE. HAY OR STRAW MULCH TO BE APPLIED AT 3 TONS/ACRE.

CONTRACTOR SHALL VERIFY PERMANENT SEEDING CRITERIA WITH OWNER PRIOR TO APPLICATION.

NON-STEEP AREAS < 3:1, HIGHLY MAINTAINED AND MOVED. USE ONLY TOP SOIL, SLOPES AREAS. SEEDING SHALL BE 60% KENTUCKY BLUEGRASS, 30% RED FESCUE, AND 20% PERENNIAL RYE GRASS. AT A RATE OF 21 LBS. PER 1000 SQUARE YARDS.

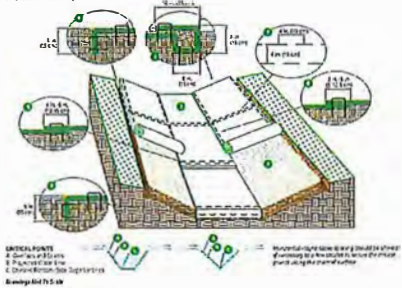
SLOPES STEEPER THAN 3:1, NO-MOW AREAS. THERE ARE NO AREAS OF NO-MOW STEEP SLOPE ON THIS PROJECT.

GENERAL

1. THE NON-GERMINATING PERIODS ARE BETWEEN JUNE 15 THRU AUGUST 15, AND SEPTEMBER 30 THRU APRIL 15. AREAS DISTURBED DURING THESE PERIODS MUST BE LIMEED, FERTILIZED, SEEDING AND MULCHED WITHIN TWENTY (20) DAYS OF THE ENDING OF THOSE PERIODS.
2. ALL SEED MIXTURES SHALL HAVE A MINIMUM LIVE SEED AND GERMINATION PERCENTAGE OF 85% TO 95%.
3. TOPSOIL TAKEN FROM CONSTRUCTION AREAS SHALL BE SEEDING WITH VEGETATIVE COVER AND STOCKPILED FOR RE-USE IN FINISH GRADING. THERE IS TO BE NO EARTH DISTURBANCE OR VEGETATIVE CLEARING IN AREAS OF STOCKPILED (OR REMOVED) WETLANDS. EARTH DISTURBANCE WITHIN THESE AREAS WITHOUT THE REQUIRED PERMITS WILL RESULT IN POTENTIAL VIOLATION OF COMMONWEALTH AND FEDERAL WATERSHED REGULATIONS.
4. ANY DISTURBED AREA ON WHICH ACTIVITY HAS CEASED AND WHICH WILL REMAIN EXPOSED MUST BE SEEDING AND MULCHED IMMEDIATELY. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN ONE (1) YEAR MAY BE SEEDING AND MULCHED WITH A QUICK GROWING, TEMPORARY SEEDING MIXTURE AND MULCH. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE RE-DISTURBED WITHIN ONE (1) YEAR MUST BE SEED

Channel Installation

The Channel Installation details are provided for the purpose of illustrating the various methods of installation. The details are not intended to be a substitute for the professional judgment of the engineer or designer. The details are subject to change without notice.



- CHANNEL INSTALLATION STEPS**
1. Excavate the area to be installed. The channel should be installed in a trench that is at least 6 inches deep. The trench should be wide enough to allow for the channel to be installed without any obstruction.
 2. Place the channel in the trench. The channel should be placed in the trench so that it is centered and the ends are flush with the trench walls.
 3. Backfill the trench. The trench should be backfilled with a material that is at least 6 inches thick. The backfill should be compacted in layers.
 4. Install the inlet grate. The inlet grate should be installed in the trench so that it is centered and the ends are flush with the trench walls.
 5. Install the expansion restraint. The expansion restraint should be installed in the trench so that it is centered and the ends are flush with the trench walls.

NOTES:

1. The channel should be installed in a trench that is at least 6 inches deep.
2. The channel should be placed in the trench so that it is centered and the ends are flush with the trench walls.
3. The trench should be backfilled with a material that is at least 6 inches thick.
4. The backfill should be compacted in layers.
5. The inlet grate should be installed in the trench so that it is centered and the ends are flush with the trench walls.
6. The expansion restraint should be installed in the trench so that it is centered and the ends are flush with the trench walls.

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

INSTALLATION DETAIL N.T.S.

WATERPROOF SEAL EXTERIOR GRADE CAULK OR APPROVED EQUAL

2"x2" or 2"x4" GRATE

1/2" W/AVE GRADE PLYWOOD

INSTALLATION DETAIL N.T.S.

INLET TEMPORARY SEAL DETAIL N.T.S.

WELL VEGETATED GRASSY AREA

EXISTING ROADWAY

PROFILE

PLAN VIEW

ELEVATION VIEW

PUMPED WATER FILTER BAG DETAIL N.T.S.

NOTES:

1. LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL WITH 100% STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDE WIDTH STRENGTH	ASTM D-4854	60 LB/IN
GRAB TENSILE	ASTM D-4852	200 LB
PUNCTURE	ASTM D-4853	1101 LB
MAXIMUM BURST	ASTM D-3780	350 PSI
UV RESISTANCE	ASTM D-4355	70%
LOS % RETAINED	ASTM D-4751	80 SEIVE

2. A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME A FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRIPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.

3. BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILL TO PROVIDE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5% FOR SLOPES EXCEEDING 5% CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-VOLATILE MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STRENGTH.

4. NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BEHIND BAGS LOCATED IN NO OR LOW VEGETATION, WITHIN 50 FEET OF ANY RECEIVING DRAINAGE WATER OR WHERE GRASSY AREAS ARE NOT AVAILABLE.

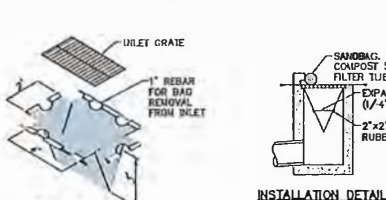
5. THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

6. THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP WORKER SHALL BE AVAILABLE TO MONITOR THE PUMPING RATE.

7. FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

ROCK CONSTRUCTION ENTRANCE DETAIL N.T.S.

APPLEBROOK GOLF CLUB



INSTALLATION DETAIL N.T.S.

ISOMETRIC VIEW

ELEVATION VIEW

PLAN VIEW

EXTEND BERM OVER CURB IF RUNOFF IS BYPASSING INLET ON LATERAL SIDE

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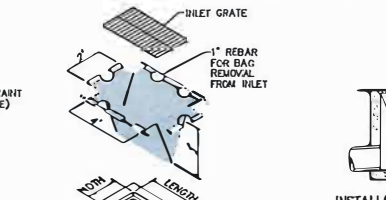
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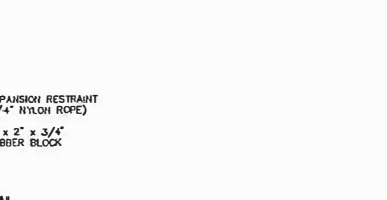
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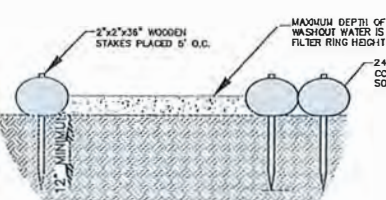
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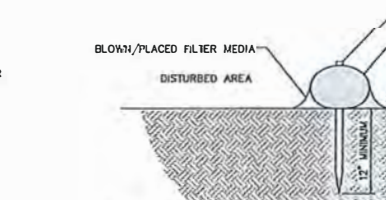
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GENERAL NOTES:

- STORMWATER MANAGEMENT DESIGN:
REFER TO THE "POST-CONSTRUCTION STORMWATER MANAGEMENT REPORT", PREPARED BY CHESTER VALLEY ENGINEERS.
- MAINTENANCE NOTES:
 - THE BMPs LISTED BELOW WILL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER
 - INFILTRATION BED
 - WATER QUALITY FILTER(S)
 - STORM SEWER AND ASSOCIATED STRUCTURES
- DESIGN CONSIDERATIONS:
SUBSURFACE BED DESIGNED TO STORE AND MITIGATE POST-DEVELOPMENT RUNOFF TO RATES LESS THAN THOSE REQUIRED BY TOWNSHIP CODE. SUBSURFACE BED DESIGNED TO MITIGATE THE POST-DEVELOPMENT VOLUME INCREASE DUE TO DEVELOPMENT. WATER QUALITY FILTERS DESIGNED TO FILTER ALL SURFACE RUNOFF.
- THE POST CONSTRUCTION STORMWATER MANAGEMENT PLAN HAS BEEN DESIGNED TO MEET THE FOLLOWING GOALS AND GUIDELINES:
 - PRESERVE THE INTEGRITY OF STREAM CHANNELS AND MAINTAIN AND PROTECT THE PHYSICAL, BIOLOGICAL AND CHEMICAL QUALITIES OF RECEIVING STREAMS.
 - PREVENT AN INCREASE IN THE RATE OF STORMWATER RUNOFF.
 - MINIMIZE ANY INCREASE IN STORMWATER RUNOFF VOLUME.
 - MINIMIZE IMPERVIOUS AREAS.
 - MAXIMIZE THE PROTECTION OF EXISTING DRAINAGE FEATURES AND EXISTING VEGETATION.
 - MINIMIZE LAND CLEARING AND GRADING.
 - MINIMIZE SOIL COMPACTION.
 - UTILIZE OTHER STRUCTURAL OR NONSTRUCTURAL BMPs THAT PREVENT OR MINIMIZE CHANGES IN STORMWATER RUNOFF.
- THE RECEIVING WATER FOR THIS PROJECT IS RIDLEY CREEK. THE CHAPTER 93 CLASSIFICATION FOR THIS WATERSHED IS HIGH QUALITY-TROUT STOCKING FISHES (HQ-TSF).
- THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 2601 ET SEQ., 271.1 ET SEQ., AND 282.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY DUMP, DUMP OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE. CONSTRUCTION WASTES MUST BE RECYCLED TO THE EXTENT PRACTICABLE, AND DISPOSAL METHODS MUST COMPLY WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS.
- THE PERMITTEE SHALL PROVIDE ENGINEERING CONSTRUCTION OVERSIGHT FOR THE PROPOSED STORMWATER BMPs. A LICENSED PROFESSIONAL ENGINEER KNOWLEDGEABLE IN THE DESIGN AND CONSTRUCTION OF STORMWATER BMPs, PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.
- AS-BUILT PLANS OF THE STORMWATER BMPs SHALL BE PROVIDED WITHIN SIX MONTHS FOLLOWING THE COMPLETION OF EACH PHASE. THE AS-BUILT PLANS SHALL BE SIGNED AND SEALED BY A PA REGISTERED PROFESSIONAL ENGINEER.
- A NOTICE OF TERMINATION (NOT) WILL BE REQUIRED TO BE SUBMITTED FOLLOWING APPROVAL OF THE FINAL AS-BUILT PLANS. PRIOR TO ACCEPTING THE NOT, THE DEPARTMENT AND/OR CONSERVATION DISTRICT STAFF WILL PERFORM A FINAL INSPECTION TO ENSURE SITE STABILIZATION AND VERIFY ADEQUATE INSTALLATION AND FUNCTION OF STORMWATER BMPs.
- PCSM REPORTING AND RECORDKEEPING: THE PCSM PLAN, INSPECTION REPORTS AND MONITORING RECORDS SHALL BE AVAILABLE FOR REVIEW AND INSPECTION BY THE DEPARTMENT OR THE CONSERVATION DISTRICT.
- FINAL CERTIFICATION: THE PERMITTEE SHALL INCLUDE WITH THE NOTICE OF TERMINATION "RECORD DRAWINGS" WITH A FINAL CERTIFICATION STATEMENT FROM A LICENSED PROFESSIONAL, WHICH READS AS FOLLOWS:

"I (NAME) DO HEREBY CERTIFY PURSUANT TO THE PENALTIES OF 18 P.A.C.S.A. § 4904 TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THAT THE ACCOMPANYING RECORD DRAWINGS ACCURATELY REFLECT THE AS-BUILT CONDITIONS, ARE TRUE AND CORRECT, AND ARE IN CONFORMANCE WITH CHAPTER 102 OF THE RULES AND REGULATIONS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THAT THE PROJECT SITE WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PCSM PLAN, ALL APPROVED PLAN CHANGES AND ACCEPTED CONSTRUCTION PRACTICES."

(1) THE PERMITTEE SHALL RETAIN A COPY OF THE RECORD DRAWINGS AS A PART OF THE APPROVED PCSM PLAN.

(2) THE PERMITTEE SHALL PROVIDE A COPY OF THE RECORD DRAWINGS AS A PART OF THE APPROVED PCSM PLAN TO THE PERSON IDENTIFIED IN THIS SECTION AS BEING RESPONSIBLE FOR THE LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMPs.
- UPON PERMANENT STABILIZATION OF THE EARTH DISTURBANCE ACTIVITY UNDER § 102.22(A)(2) (RELATING TO PERMANENT STABILIZATION), AND INSTALLATION OF BMPs IN ACCORDANCE WITH AN APPROVED PLAN PREPARED AND IMPLEMENTED IN ACCORDANCE WITH §§ 102.4 AND 102.8 (RELATING TO EROSION AND SEDIMENT CONTROL REQUIREMENTS), AND PCSM REQUIREMENTS), THE PERMITTEE OR CO-PERMITTEE SHALL SUBMIT A NOTICE OF TERMINATION TO THE DEPARTMENT OR CONSERVATION DISTRICT.

THE NOTICE OF TERMINATION MUST INCLUDE:

- THE FACILITY NAME, ADDRESS AND LOCATION.
- THE OPERATOR NAME AND ADDRESS.
- THE PERMIT NUMBER.
- THE REASON FOR PERMIT TERMINATION.
- IDENTIFICATION OF THE PERSONS WHO HAVE AGREED TO AND WILL BE RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMPs IN ACCORDANCE WITH §102.8(h) AND PROOF OF COMPLIANCE WITH § 102.8(h)(2).

PRIOR TO ACCEPTING THE NOT, THE DEPARTMENT AND/OR CONSERVATION DISTRICT STAFF WILL PERFORM A FINAL INSPECTION AND APPROVE OR DENY THE NOTICE OF TERMINATION.

GENERAL CONSERVATION NOTES AND SPECIFICATIONS

INTENT OF CONSERVATION PROGRAM: THE INTENT OF THIS PROGRAM IS TO PREVENT ACCELERATED EROSION OF THE EXPOSED SITE SOILS DURING THE CONSTRUCTION AND PERMANENT LIFE PERIODS OF THE DEVELOPMENT. THE PROGRAM REQUIRES RETENTION OF ALL SEDIMENTS ON THE CONSTRUCTION SITE TO MINIMIZE THE IMPACT OF DEVELOPMENT ON EXISTING STREAMS AND ADJACENT PROPERTY OWNERS. THESE OBJECTIVES WILL BE ACHIEVED BY MINIMIZING THE EXPOSURE TIME OF POTENTIALLY ERODIBLE SOILS TO RUNOFF AND INSTALLATION OF THE TEMPORARY CONSTRUCTION. THE INTENT OF THIS PROGRAM SHOULD BE UNDERSTOOD AND IMPLEMENTED THROUGHOUT THE ENTIRE DEVELOPMENT. THE VARIOUS CONSTRUCTION TRADES SHOULD BE APPRAISED OF THIS PROGRAM AND DIRECTED TO PREVENT UNDUO DISTURBANCE OF PREPARED AND PROTECTED SURFACES.

SURFACE STABILIZATION CRITERIA: ALL DISTURBED SOIL SURFACES, INCLUDING SOIL STOCKPILES, ARE SUBJECT TO EROSION AND SHALL BE STABILIZED EITHER TEMPORARILY OR PERMANENTLY. IMMEDIATELY DURING NON-GERMINATION PERIODS, MULCH MUST BE APPLIED AT THE RECOMMENDED RATES. CRUSHED STONE OR PAVEMENT SUBGRADES IS CONSIDERED ADEQUATE PROTECTION. ALL DISTURBED ZONES AND VEGETATED REGIONS SHALL BE STABILIZED, PREFERABLY WITH A PERMANENT TREATMENT.

CRITICAL VEGETATION AREAS (CVA)

CRITICAL VEGETATION AREAS ARE TO BE GRADED, HYDROSEEDED, AND MULCHED WITHIN 10 DAYS OF THE BEGINNING OF EXCAVATION. IN GENERAL, CRITICAL VEGETATION AREAS ARE DEFINED AS CUT SLOPES STEEPER THAN 3:1, ALL FILL SLOPES STEEPER THAN 4:1 AND IN ALL DRAINAGE SWALES.

DISPOSAL AND RECYCLING

CONTRACTOR IS RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL DEMOLISHED OR UNUSED CONSTRUCTION MATERIALS. GARBAGE SHALL BE COLLECTED ON-SITE UNTIL RETRIEVED BY AN APPROVED DISPOSAL OR RECYCLING COMPANY. CONTRACTOR SHALL NOT INMEDIATE EXCESS MATERIALS.

- LIKELY WASTE TO BE GENERATED AT THIS SITE:
- UNUSED CONCRETE TO BE PLACED IN CONCRETE WASHOUT AREAS;
 - EXCESS SILT SOCK AND FENCING MATERIALS;
 - GENERAL RUBBISH AND DEBRIS

THERMAL IMPACT

STORMWATER RUNOFF FROM THE DRIVEWAY AND PARKING AREAS ORIGIN TO A SUBSURFACE INFILTRATION BED AND UNDERGROUND STORM DRAIN PIPES. THEREFORE, THE INITIAL RUNOFF THAT IS MOST LIKELY TO WARMER IS SENT UNDERGROUND AND NOT DISCHARGED TO THE WATERCOURSE. FURTHER, THE REDUCTION OF IMPERVIOUS SURFACES LESSENS THE POTENTIAL OF THERMAL IMPACTS. WATER HAS TIME TO COOL PRIOR TO LEAVING THE SITE AND DRAINING TO THE WATER COURSE.

SPECIAL GEOLOGIC AND SOIL CONDITIONS

NO SPECIAL SOIL OR GEOLOGICAL ISSUES ARE KNOWN.

POST CONSTRUCTION STORMWATER MANAGEMENT (PCSM) LONG-TERM OPERATIONS AND MAINTENANCE REQUIREMENTS

- UNTIL THE PERMITTEE OR CO-PERMITTEE HAS RECEIVED WRITTEN APPROVAL OF A NOTICE OF TERMINATION, THE PERMITTEE OR CO-PERMITTEE WILL REMAIN RESPONSIBLE FOR COMPLIANCE WITH THE PERMIT TERMS AND CONDITIONS INCLUDING LONG-TERM OPERATION AND MAINTENANCE OF ALL PCSM BMPs ON THE PROJECT SITE AND IS RESPONSIBLE FOR VIOLATIONS OCCURRING ON THE PROJECT SITE.
- THE PERMITTEE OR CO-PERMITTEE SHALL BE RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF PCSM BMPs UNLESS A DIFFERENT PERSON IS IDENTIFIED IN THE NOTICE OF TERMINATION AND HAS AGREED TO LONG-TERM OPERATION AND MAINTENANCE OF PCSM BMPs.
- FOR ANY PROPERTY CONTAINING A PCSM BMP, THE PERMITTEE OR CO-PERMITTEE SHALL RECORD AN INSTRUMENT WITH THE RECORDER OF DEEDS WHICH WILL ASSURE DISCLOSURE OF THE PCSM BMP AND THE RELATED OBLIGATIONS IN THE ORDINARY COURSE OF A TITLE SEARCH OF THE SUBJECT PROPERTY. THE RECORDED INSTRUMENT MUST IDENTIFY THE PCSM BMP, PROVIDE FOR NECESSARY ACCESS RELATED TO LONG-TERM OPERATION AND MAINTENANCE FOR PCSM BMPs AND PROVIDE NOTICE THAT THE RESPONSIBILITY FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMP IS A COVENANT THAT RUNS WITH THE LAND THAT IS BINDING UPON AND ENFORCEABLE BY THE SUBSEQUENT GRANTEE, AND PROVIDE PROOF OF FILING WITH THE NOTICE OF TERMINATION UNDER § 102.7(h)(5) (RELATING TO PERMIT TERMINATION).
- THE PERSON RESPONSIBLE FOR PERFORMING LONG-TERM OPERATION AND MAINTENANCE MAY ENTER INTO AN AGREEMENT WITH ANOTHER PERSON INCLUDING A CONSERVATION DISTRICT, NONPROFIT ORGANIZATION, MUNICIPALITY, AUTHORITY, PRIVATE CORPORATION OR OTHER PERSON TO TRANSFER THE RESPONSIBILITY FOR PCSM BMPs OR TO PERFORM LONG-TERM OPERATION AND MAINTENANCE AND PROVIDE NOTICE THEREOF TO THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.
- A PERMITTEE OR CO-PERMITTEE THAT FAILS TO TRANSFER LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMP OR OTHERWISE FAILS TO COMPLY WITH THIS REQUIREMENT SHALL REMAIN CIVILLY AND SEVERALLY RESPONSIBLE WITH THE LANDOWNER FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMPs LOCATED ON THE PROPERTY.
- IN THE EVENT THAT THE BMP IS NOT FUNCTIONING PROPERLY, THE PERSON RESPONSIBLE FOR PERFORMING LONG-TERM OPERATION AND MAINTENANCE SHALL BE REQUIRED TO REPAIR OR REPLACE THE BMP TO ENSURE FUNCTION AND OPERATION.
- THE PERMITTEE SHALL BE REQUIRED TO SUBMIT A WRITTEN REPORT DOCUMENTING EACH INSPECTION AND ALL BMP REPAIR AND MAINTENANCE ACTIVITIES TO THE TOWNSHIP, CONSERVATION DISTRICT, AND THE DEPARTMENT UPON REQUEST.

BMP FAILURE NOTES (PER PROTOCOL 2 OF THE BMC MANUAL)

- THE TERM "FAILURE" FOR THE PROPOSED SUBSURFACE BED SHALL BE DEFINED AS:
- THE LOSS OF FUNCTIONALITY OF THE PROPOSED OUTLET STRUCTURE OR DISCHARGE PIPE
 - THE LOSS OF STRUCTURAL INTEGRITY OF THE STONE AND PIPES
 - THE ACCUMULATION OF SEDIMENT, TRASH OR DEBRIS IN PERIMETER DRAINAGE STRUCTURES.
 - STANDING WATER IS OBSERVED IN THE BASIN AFTER 72 HOURS
- THE PERMITTEE SHALL MAKE THE NECESSARY REPAIRS TO THE OUTLET STRUCTURE, DISCHARGE PIPING, STONE, AND PERFORATED PIPE AS NEEDED. IF STANDING WATER IS OBSERVED AFTER 72 HOURS, CONSULT ENGINEER FOR REMEDIATION OF THE UNDERGROUND BED.

- THE TERM "FAILURE" FOR THE PROPOSED WATER QUALITY INLETS (FILTER INSERTS) SHALL BE DEFINED AS:
- DISCOVER EVIDENCE OF DAMAGED FILTER MEDIA
 - DISCOVER EVIDENCE OF THE FILTER MEDIA'S INABILITY TO SUPPORT ACCUMULATED SEDIMENT OR DEBRIS.

THE PERMITTEE SHALL REPAIR BMP FAILURE BY REPLACING THE FILTER MEDIA IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.

POST CONSTRUCTION STORMWATER MANAGEMENT REPORTING AND RECORD KEEPING

A WRITTEN REPORT DOCUMENTING EACH INSPECTION AND ALL BMP REPAIR AND MAINTENANCE ACTIVITIES MUST BE PROVIDED AS PART OF THE LONG-TERM OPERATION AND MAINTENANCE PROGRAM.

THE POST CONSTRUCTION STORMWATER MANAGEMENT PLAN, INSPECTION REPORTS, AND MONITORING RECORDS SHALL BE AVAILABLE FOR REVIEW AND INSPECTION BY THE DEPARTMENT OR THE CONSERVATION DISTRICT.

WATER QUALITY INLETS (FILTER INSERTS)

IT SHALL BE THE SOLE RESPONSIBILITY OF THE PROPERTY OWNER TO MAINTAIN ALL WATER QUALITY INLETS ON SITE.

INSPECTION REQUIREMENTS

- WATER QUALITY INLET INSERTS SHOULD BE INSPECTED THREE TIMES PER YEAR.

- DURING THE THREE ROUTINE INSPECTIONS, THE FILTER MEDIA SHALL BE CLEANED.
- ONE REGULAR CHANGE AND DISPOSAL OF THE FILTER MEDIA SHALL OCCUR DURING THE CALENDAR YEAR AS WELL.

BMP FAILURE

- BMP FAILURE IS DEFINED AS DISCOVERING EVIDENCE OF TORN FILTER FABRIC OR FILTER MEDIA INABILITY TO SUPPORT ACCUMULATED SEDIMENT OR DEBRIS.
- REPAIR BMP FAILURE BY REPLACING THE FILTER MEDIA IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.

GENERAL MAINTENANCE NOTES

- WATER QUALITY INLET INSERTS SHALL BE CHECKED TO ENSURE THEY ARE SECURELY FASTENED DURING EACH INSPECTION.
- RECOMMENDED MAINTENANCE IS PERFORMED INCLUDING REMOVAL AND DISPOSAL OF THE FILTER MEDIA OR EXCESS MATERIAL BY PERSONNEL.

DISPOSAL

- DISPOSAL OF REMOVED MATERIAL WILL DEPEND ON THE NATURE OF THE DRAINAGE AREA AND THE INTENT AND FUNCTION OF THE WATER QUALITY INLET.
- MATERIAL REMOVED FROM WATER QUALITY INSERTS THAT SERVE "HOT SPOTS" SUCH AS FUELING STATIONS THAT RECEIVE A LARGE AMOUNT OF DEBRIS SHOULD BE HANDLING ACCORDING TO DEP REGULATIONS FOR THAT TYPE OF SOLID WASTE, SUCH AS A LANDFILL THAT IS APPROVED BY DEP TO ACCEPT SOLID WASTE. WATER QUALITY INSERTS THAT PRIMARILY CATCH SEDIMENT AND DETRITUS FROM AREAS SUCH AS LAWNS MAY REUSE THE WASTE ON SITE.

CONSTRUCTION SEQUENCE

- REMOVE THE GRATE OF THE INSTALLED INLET AND SET IT TO THE SIDE.
- REMOVE DEBRIS AND LITTER FROM THE INLET.
- CLEAN OFF THE GRATE BEARING LEDGE.
- LOWER THE FILTER ASSEMBLY INTO THE INLET UNTIL THE ASSEMBLY'S SUPPORT FLANGES REST ON THE GRATE BEARING LEDGE.
- INSURE THAT THE FOUR FILTER MEDIUM CARTRIDGES ARE ATTACHED TO THE O-RINGS IN THE BOTTOM CORNERS OF THE FILTER ASSEMBLY.
- REPLACE THE INLET GRATE.

CRITICAL STAGE OF CONSTRUCTION: CONTACT ENGINEER TO VERIFY INSTALLATION OF WATER QUALITY INSERTS.

SUBSURFACE INFILTRATION BED (SWM #100)

IT SHALL BE THE SOLE RESPONSIBILITY OF THE PROPERTY OWNER TO MAINTAIN THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM(S).

SPECIFICATIONS

- AGGREGATE: AGGREGATE FOR BEDS SHALL BE 3/8" INCH TO 3/4" INCH UNIFORMLY GRADED COARSE AGGREGATE, AASHTO NUMBER 57 PER TABLE 4, AASHTO SPECIFICATIONS, PART 1, 13TH ED., 1998 (P. 47).
- NON-WOVEN GEOTEXTILE: SHALL CONSIST OF NEEDLED NON-WOVEN POLYPROPYLENE FIBERS AND MEET THE FOLLOWING PROPERTIES:
 - GRAB TENSILE STRENGTH (ASTM-D4632): 120 LB
 - MULLER BURST STRENGTH (ASTM-D3785): 225 PSI
 - FLOW RATE (ASTM-D4491): 95 GPM/FT²
 - UV RESISTANCE AFTER 500 HOURS (ASTM-D4355X): 70%
 - HEAT-SET OR HEAT-CALCULATED FABRICS ARE NOT PERMITTED.ACCEPTABLE TYPES INCLUDE NUBAF 1400, ANCOOL 4542, AND GEOTEX 451.
- STORAGE PIPE: SHALL BE CONTINUOUSLY PERFORATED, SMOOTH INTERIOR, HIGH-DENSITY POLYETHYLENE (HDPE) PIPE SHALL MEET AASHTO M252, TYPE S OR AASHTO M294, TYPE S.

INSPECTION REQUIREMENTS

- ALL STORMWATER MANAGEMENT SYSTEMS SHALL BE INSPECTED ANNUALLY, OR AFTER EACH RAINFALL EVENT IN EXCESS OF TWO (2) INCHES (MAJOR STORM EVENT), FOR TRASH AND DEBRIS; ANY DISCOVERED TRASH OR DEBRIS SHALL BE REMOVED IMMEDIATELY.

GENERAL MAINTENANCE NOTES

- ACCESS FOR VIEWING OR VACUUMING IS PROVIDED THROUGH OBSERVATION PORTS AND STORM MANHOLES.
- REMOVE SEDIMENT/TRASH/DEBRIS FROM PERIMETER DRAINAGE STRUCTURES AND OUTLET STRUCTURE.
- THE OVERLYING VEGETATION OF SUBSURFACE INFILTRATION FEATURES SHOULD BE MAINTAINED IN GOOD CONDITION, AND ANY BARE SPOTS REVEGETATED AS SOON AS POSSIBLE.
- VEHICULAR ACCESS ON SUBSURFACE INFILTRATION AREAS SHOULD BE PROHIBITED IN UNPAVED AREAS, AND CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY JACKERS. IF CONTINUAL ACCESS IS NEEDED, USE OF PERMEABLE, TURF REINFORCEMENT SHOULD BE CONSIDERED.
- CONTACT QUALIFIED ENGINEER IMMEDIATELY AFTER DISCOVERY OF SINKHOLE OCCURRENCE, SINKHOLE SHOULD BE PROMPTLY AND PROPERLY REPAIRED.

CONSTRUCTION SEQUENCE

- INSTALL AND MAINTAIN ADEQUATE EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.
- INSTALL CONSTRUCTION FENCING AROUND PERIMETER OF INFILTRATION AREA TO PREVENT CONSTRUCTION TRAFFIC FROM COMPACTING EXISTING SUBSURFACE AREAS.
- INSTALL UPSTREAM AND DOWNSTREAM CONTROL STRUCTURES, CLEANOUTS, STORAGE PIPE, AND ALL OTHER NECESSARY STORMWATER STRUCTURES.
- AT THE TIME OF CONSTRUCTION, CONTACT ENGINEER PRIOR TO PLACEMENT OF GEOTEXTILE, GEOTEXTILE, STORAGE PIPES, AND BED AGGREGATE SHOULD BE PLACED IMMEDIATELY AFTER APPROVAL OF SUB GRADE PREPARATION AND INSTALLATION OF STRUCTURES. GEOTEXTILE SHOULD BE PLACED IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDATIONS.
- CLEAN-WASHED, UNIFORMLY GRADED AGGREGATE SHOULD BE PLACED IN THE BED IN MAXIMUM 6-INCH LIFTS. EACH LAYER SHOULD BE LIGHTLY COMPACTED, WITH CONSTRUCTION EQUIPMENT KEPT OFF THE BED BOTTOM.
- APPROVED SOIL MEDIA OR PAVEMENT BASE COURSES SHOULD BE PLACED OVER DETENTION BED IN MAXIMUM 6-INCH LIFTS. SEED AND STABILIZE AREA IF APPLICABLE.
- DO NOT REMOVE INLET PROTECTION OR OTHER EROSION AND SEDIMENT CONTROL MEASURES UNTIL SITE IS FULLY STABILIZED.

STORM SEWER

INSPECTION REQUIREMENTS:

- ALL STORM COLLECTION STRUCTURES SHALL BE INSPECTED ANNUALLY, OR AFTER EACH RAINFALL EVENT IN EXCESS OF TWO (2) INCHES (MAJOR STORM EVENT), FOR TRASH, DEBRIS OR EVIDENCE OF PIPE LEAKAGE OR SAGGING; REMOVE TRASH OR DEBRIS IMMEDIATELY; IMMEDIATELY REPAIR OR REPLACE LEAKING/SAGGING DRAINAGE FEATURES.

GENERAL MAINTENANCE NOTES:


- ACCESS CAN BE GAINED TO EACH COLLECTION STRUCTURE THROUGH THE REMOVABLE INLET GRATE, OR MANHOLE LID, STEEL OR OTHER APPROVED STOPS HAVE BEEN INSTALLED ON THE INSIDE OF EACH STRUCTURE OVER FOUR FEET DEEP FOR ANY NECESSARY ENTRY. GRATES AND LIDS SHALL BE REPLACED SECURELY IMMEDIATELY AFTER MAINTENANCE.
 - CONTACT DESIGN ENGINEER IMMEDIATELY AFTER DISCOVERY OF SINKHOLE OCCURRENCE, SINKHOLE SHOULD BE PROMPTLY AND PROPERLY REPAIRED.
 - IF SEDIMENT/TRASH/DEBRIS IS FOUND IN THE CONVEYANCE SYSTEM, THE SYSTEM SHALL BE LETTED AND VACUUMED TO REMOVE ALL SEDIMENT/TRASH/DEBRIS AND DISPOSED OF APPROPRIATELY.
- REFER TO WATER QUALITY INLET MAINTENANCE GUIDELINES FOR ADDITIONAL DETAIL IN CLEANING OF THOSE STRUCTURES WITH WATER QUALITY APPARATUS INSTALLED.

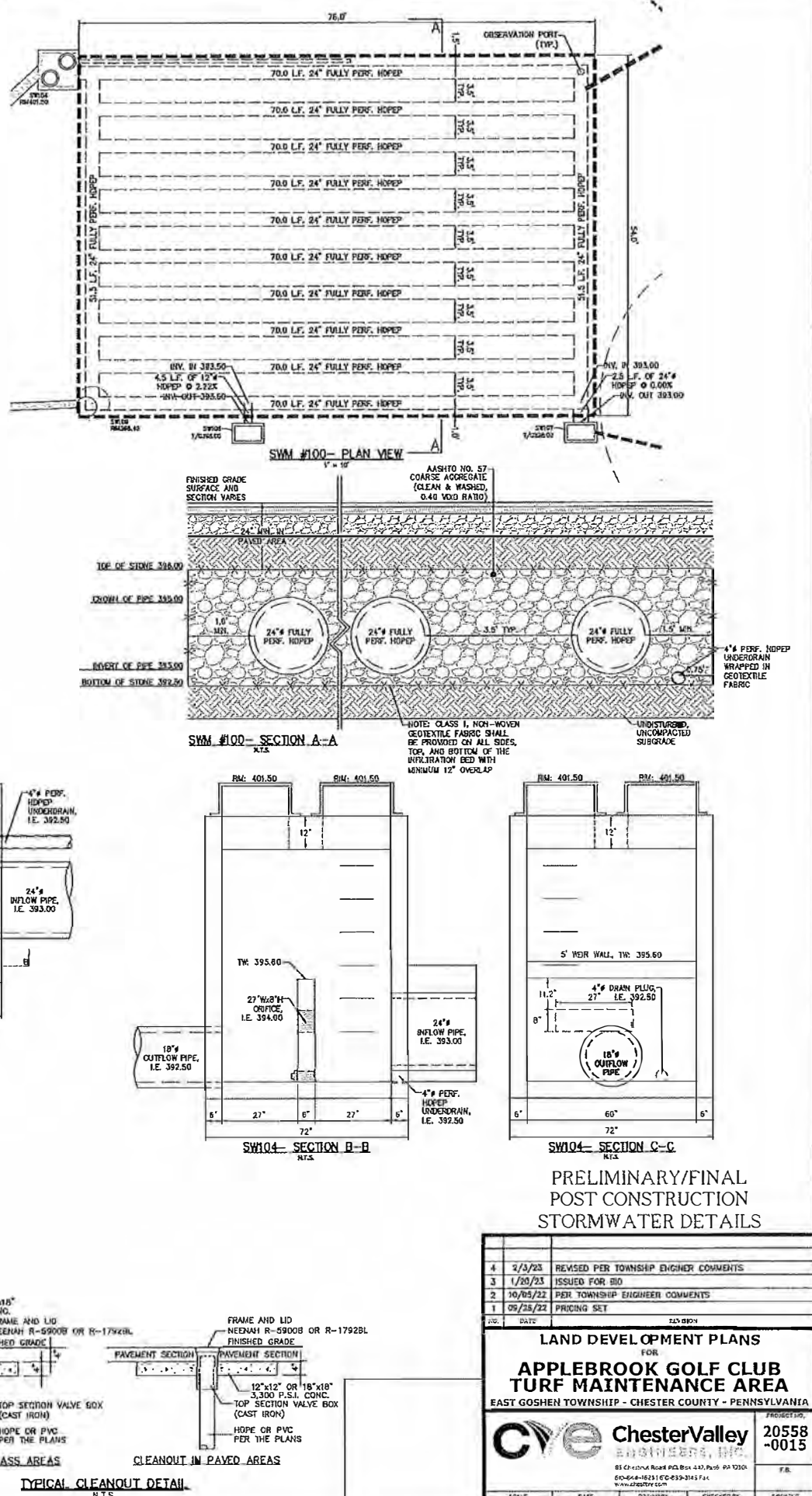
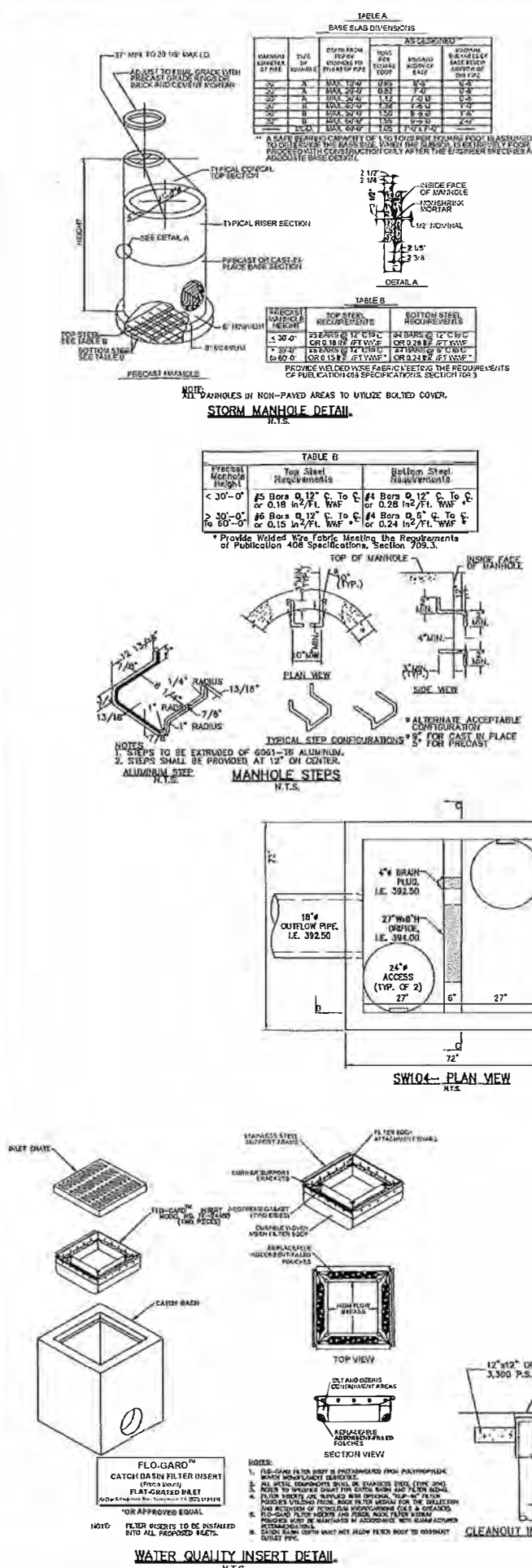
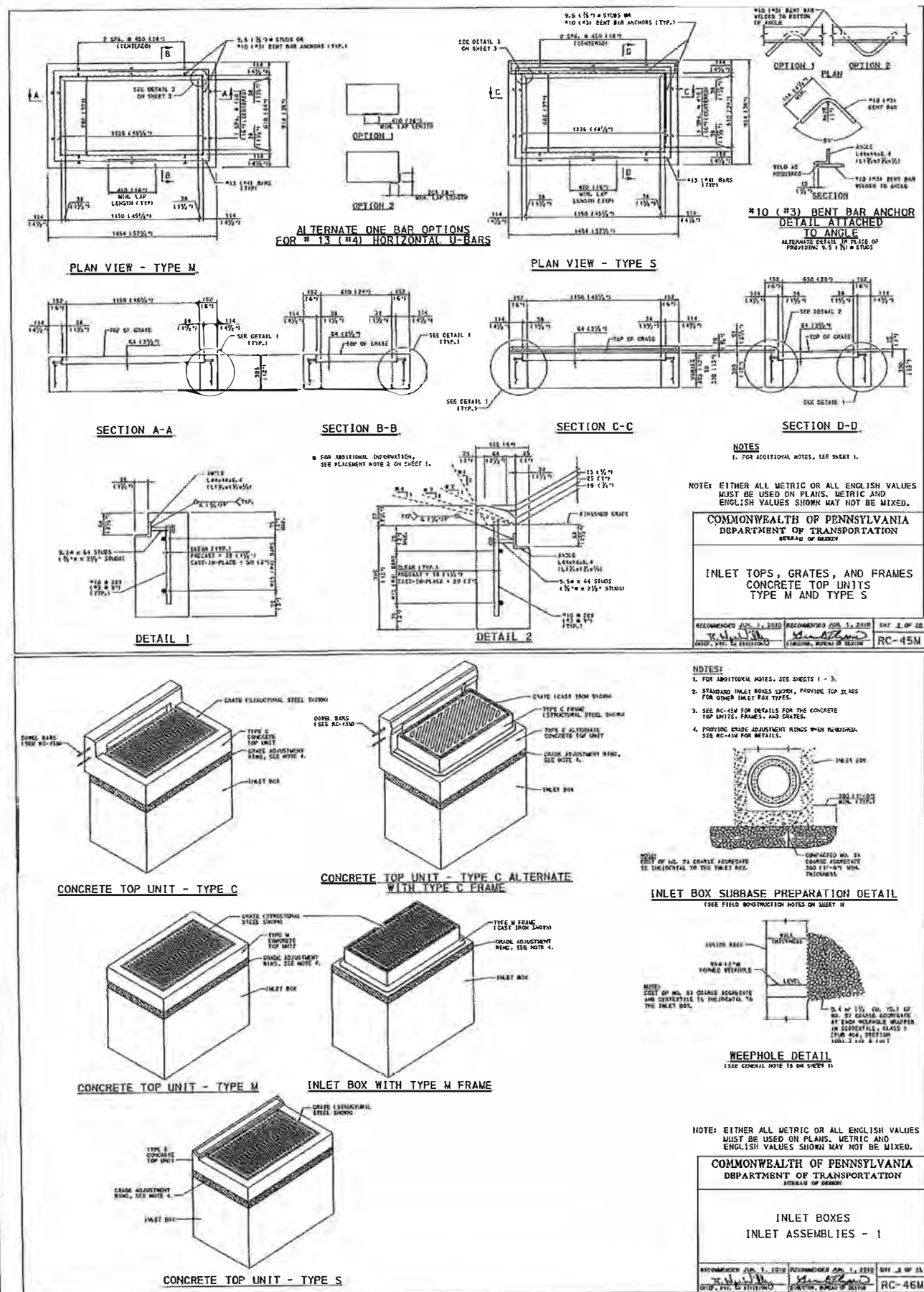
CRITICAL STAGES OF CONSTRUCTION

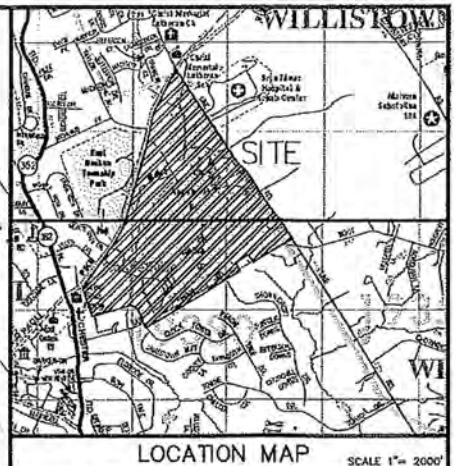
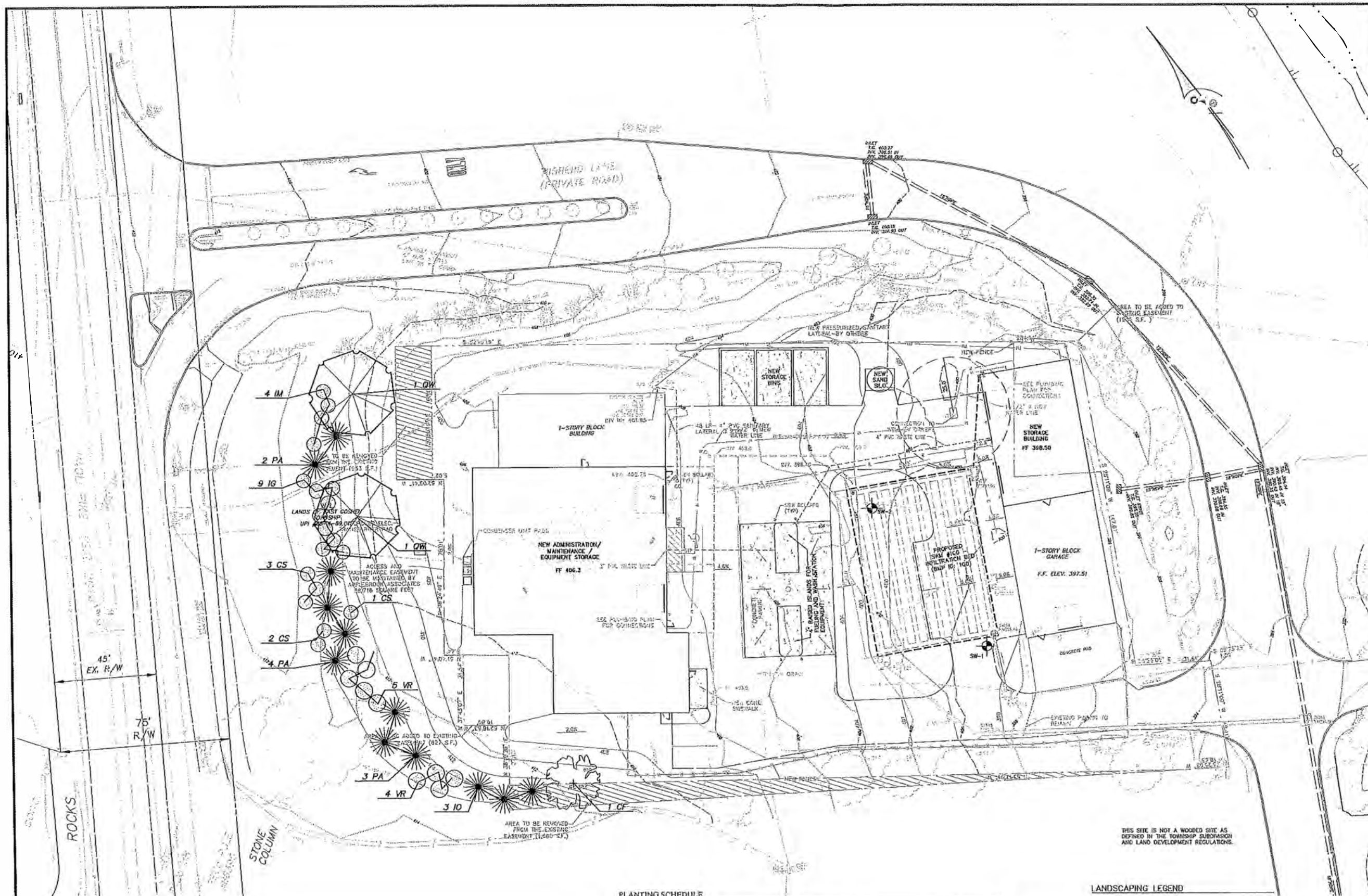
A LICENSED ENGINEER OR HIS DESIGNEE SHALL BE PRESENT TO OBSERVE AND VERIFY INSTALLATION AND CONSTRUCTION OF THE PCSM PLAN AT THE FOLLOWING CRITICAL STAGES:

- EXCAVATION AND FINAL GRADING OF SWM #100.
- PLACEMENT OF GEOTEXTILE FABRIC, STONE AND DISTRIBUTION PIPE INSIDE SWM #100.
- INSTALLATION OF WATER QUALITY INLET FILTERS.
- FOLLOWING CONSTRUCTION, ENGINEER TO VERIFY THAT ALL PCSM BMPs ARE INSTALLED, FUNCTIONING, AND HAVE NOT BEEN IMPACTED BY CONSTRUCTION ACTIVITIES.

PRELIMINARY/FINAL OPERATIONS AND MAINTENANCE PLAN

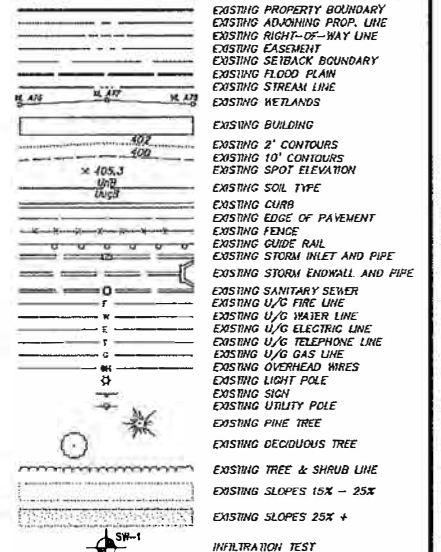
4. 2/3/23		REVISED PER TOWNSHIP ENGINEER COMMENTS
3. 1/20/23		ISSUED FOR BID
2. 10/05/22		PER TOWNSHIP ENGINEER COMMENTS
1. 09/26/22		PRICING SET
NO	DATE	REVISION
LAND DEVELOPMENT PLANS FOR APPLEBROOK GOLF CLUB TURF MAINTENANCE AREA EAST GOSHEN TOWNSHIP • CHESTER COUNTY • PENNSYLVANIA		
		PROJECT NO. 20558-0015
85 CHESTER VALLEY RD. SUITE 400, PA 19381 610-664-0853 • 610-664-0833 FAX www.chestervalley.com		DATE
SCALE AS NOTED	DATE 07/26/2022	DESIGNED BY RJD
		CHECKED BY UTD1
		DRAWING



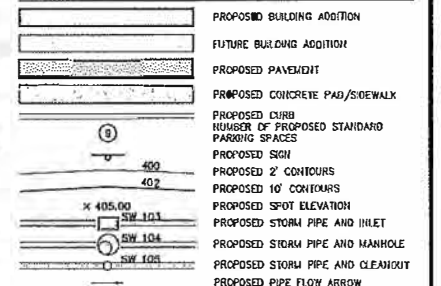


LEGEND

EXISTING FEATURES



PROPOSED FEATURES

PRELIMINARY/FINAL
LANDSCAPE PLAN

4	2/3/23	REVISED PER TOWNSHIP ENGINEER COMMENTS
3	1/20/23	ISSUED FOR BID
2	10/05/22	PER TOWNSHIP ENGINEER COMMENTS
1	09/26/22	PRICING SET
SNO.	DATE	REVISION

LAND DEVELOPMENT PLANS

FOR
**APPLEBROOK GOLF CLUB
TURF MAINTENANCE AREA**

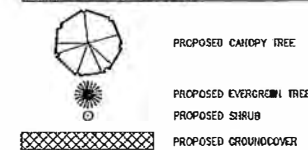


85 Chippewa Road P.O. Box 447, Potosi, PA 17081 610-514-6615 610-239-3143 Fax <i>www.thecityofpotosi.com</i>				18
SCALE 1" = 20'	DATE 07/26/2019	DRAWN BY RJB	CHECKED BY BJS	ERASING

PLANTING SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	QUANT	SIZE	ROOT	NOTES
CANOPY TREES						
QV	<i>Quercus phellos</i>	Willow Oak	2	25' - 3' Cal.	B & B	
FLOWERING TREES						
CF	<i>Cornus florida</i>	Flowering Dogwood	1	8'	B & B	
EVERGREEN TREES						
PA	<i>Platanus</i>	Hanway Spruce	8	8'	B & B	
IO	<i>Ilex opaca</i>	American Holly	3	8'	B & B	
SHRUBS						
CS	<i>Cornus sibirica</i>	Red Twig Dogwood	8	36"	Can	
IG	<i>Ilex glabra</i> Shamrock	Shamrock Holly	9	36"	Can	
IM	<i>Ilex max.</i> Blue Prince/Princess	Blue Prince / Princess Holly	4	36"	Can	
VR	<i>Viburnum rhytidophyllum</i>	Lespedeza Viburnum	8	36"	Can	

LANDSCAPING LEGEND



Scale in Feet

0 40 60 80

1" = 20'

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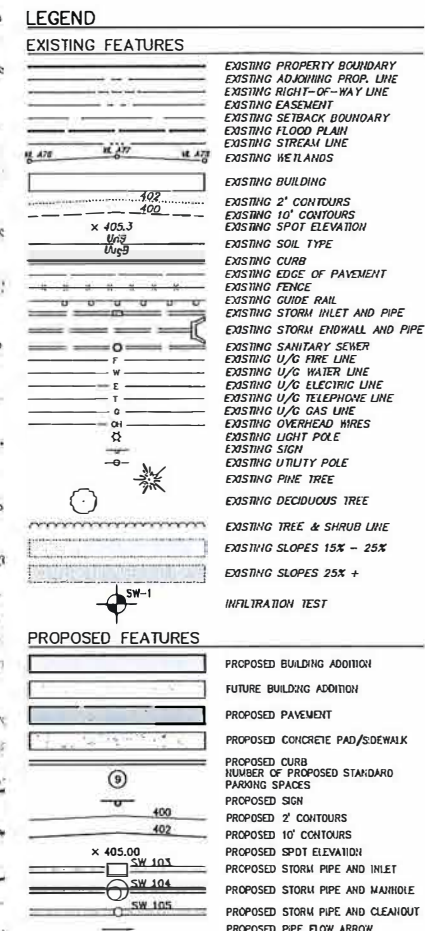
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SEE SHEET FOR
FACILITY OWNERS
DESIGNATED OFFICE
ADDRESS AND
TELEPHONE NUMBER.

ONE CALL SYSTEM, INC.
DAYS BEFORE YOU DIG
1-242-1776
NUMBER: _____

APPLEBROOK GOLF CLUB	(S) EXAMINING AND RECORDING STANDARD (PCA 277) 10/20 1985 (REVISED)	POC'S SERIAL NUMBER: _____	1" = 20'	SCALE 1" = 20'	DATE 07/26/2022	DRAWN BY RJB	CHECKED BY BHS	EXAMINING
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SHEET 14 OF 19



4	2/3/23	REVISED PER TOWNSHIP ENGINEER COMMENTS
3	1/20/23	ISSUED FOR BID
2	10/05/22	PER TOWNSHIP ENGINEER COMMENTS
1	09/26/22	PRICING SET

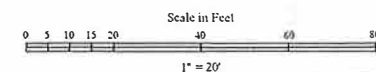
SHEET 15 OF 16

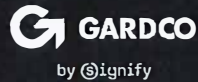
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**SEE SHEET _____ FOR
FACILITY OWNERS
DESIGNATED OFFICE
ADDRESS AND
TELEPHONE NUMBER**

**PENNSYLVANIA ONE CALL SYSTEM, INC.
CALL 3 WORKING DAYS BEFORE YOU DIG
1-800-242-1776
POCS SERIAL NUMBER: _____**

SEE SHEET 16 FOR LIGHTING NOTES
AND DETAILS.





Site & Area

EcoForm



The Gardco EcoForm Gen-2 luminaire features narrow spectrum amber LEDs combined with special shielding, making it a wildlife friendly lighting solution. EcoForm features an innovative retrofit arm kit, simplifying site conversions to LED by eliminating the need to drill additional holes in most existing poles. Integral control systems available for further energy savings.

Ordering guide

example: ECF-S-64L-ECO-AM-G2-AR-S-120-FWQ-MGR

Part	Number of Units	Site Config	LED Driver / Dimmer	Mounting	Finish	Notes
ECF-S			AM-G2			
ECF-S	32L 32 LEDs (2 mpa) 64L 64 LEDs (1 mpa)	400 600 400mA 600mA	AM-G2 Direct Amber, 3000K, 5000lm spectrum LED Conversion 2	AR Arm Mount (standard)	Type 2 Type 3 Type 4 Type 5 Type 6	120 120V 208 208V 240 240V 277 277V 347 347V 480 480V 120-277V (50/60Hz) 317-480V (50/60Hz)
Options						
001	0-10V External dimming (for sensor or external)	0487** Ecogrow with 0-10V dimmer	PCB** Photocell	0487** Ecogrow with 0-10V dimmer	0487** Ecogrow with 0-10V dimmer	0487** Ecogrow with 0-10V dimmer
002	Field Adjustable Timing Selector	0487** Ecogrow with 0-10V dimmer	0487** Ecogrow with 0-10V dimmer	0487** Ecogrow with 0-10V dimmer	0487** Ecogrow with 0-10V dimmer	0487** Ecogrow with 0-10V dimmer
003	Bi-level functionality	0487** Ecogrow with 0-10V dimmer	0487** Ecogrow with 0-10V dimmer	0487** Ecogrow with 0-10V dimmer	0487** Ecogrow with 0-10V dimmer	0487** Ecogrow with 0-10V dimmer
Optional Accessories						
004	Safety 30% Dimming, 7 hours	0487** Ecogrow with 0-10V dimmer	0487** Ecogrow with 0-10V dimmer	0487** Ecogrow with 0-10V dimmer	0487** Ecogrow with 0-10V dimmer	0487** Ecogrow with 0-10V dimmer
005	Medium 30% Dimming, 7 hours	0487** Ecogrow with 0-10V dimmer	0487** Ecogrow with 0-10V dimmer	0487** Ecogrow with 0-10V dimmer	0487** Ecogrow with 0-10V dimmer	0487** Ecogrow with 0-10V dimmer
006	Strong 30% Dimming, 7 hours	0487** Ecogrow with 0-10V dimmer	0487** Ecogrow with 0-10V dimmer	0487** Ecogrow with 0-10V dimmer	0487** Ecogrow with 0-10V dimmer	0487** Ecogrow with 0-10V dimmer
007	Medium 30% Dimming, 7 hours	0487** Ecogrow with 0-10V dimmer	0487** Ecogrow with 0-10V dimmer	0487** Ecogrow with 0-10V dimmer	0487** Ecogrow with 0-10V dimmer	0487** Ecogrow with 0-10V dimmer

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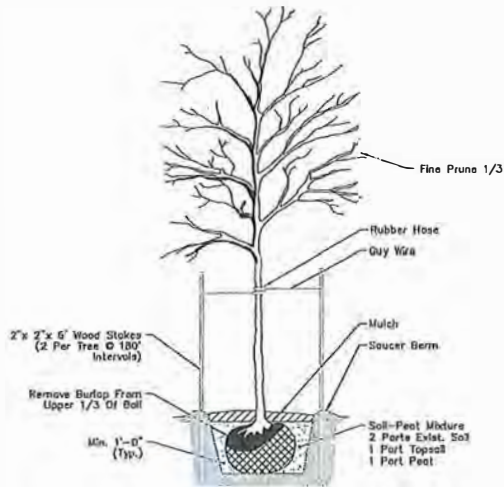
ECF-S EcoForm, F&D 06/21 page 1 of 8

AREA LIGHTING CONTROLS

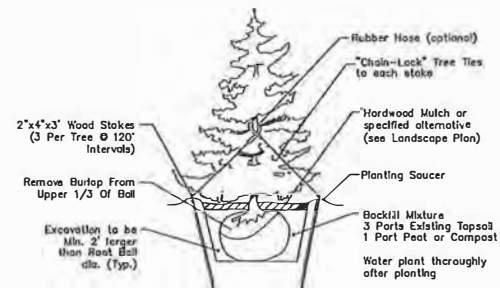
1. AREA LIGHTING FIXTURES TO BE CONTROLLED BY ELECTRONIC TIMERS.
2. HOURS OF OPERATION: SUNDOWN UNTIL DAWN. LIGHTS TO BE DIMMED TO 25% AT 9:00 PM FOR SECURITY PURPOSES.

PLANTING NOTES

1. This Landscape Plan is intended to be used for landscaping purposes only.
2. Landscape contractor shall inspect the site and become familiar with the planting area prior to the installation of any plant material.
3. Plant material quantities listed for the convenience of the Contractor. Actual numbers of symbols shall take precedence over quantities listed in cases of conflict.
4. The Landscape Contractor is responsible for supplying all materials, supplies, equipment and labor required to install the landscaping shown on these plans.
5. All plant material subject to approval by the Owner or Owners representative prior to installation. Plant material shall be nursery grown locally, freshly dug, shall be free of disease and pests, and shall be full and well shaped. Any material found to be unacceptable shall be replaced with acceptable material at no cost to the owner.
6. The Contractor shall advise the Landscape Architect and/or Owner in writing of any proposed substitutions for the plant material specified and these substitutions shall be subject to the approval by the Landscape Architect and/or Owner prior to installation.
7. Plant material and installation shall be in accordance with the American Standard for Nursery Stock of the American Association of Nurserymen (as last revised) and with the general planting specifications of the municipality.
8. All plant material shall be of the minimum size noted on the plans. Plant material shall be measured in accordance with the American Standard for Nursery Stock as last revised.
9. All areas to be landscaped, especially next to building areas, shall be excavated of all building material, debris and poor soils to a minimum depth of 12"-18" and backfilled with a good, medium textured planting soil. All lawn areas shall have a minimum of 4"-6" of topsoil spread prior to seeding or sodding as may be specified. Areas adjacent to curbs and walks shall be crowned a minimum of 4" higher than the top of curb or walk to allow for settling, however finished grade immediately adjacent to the curb or walk shall be sufficiently depressed to allow for the surface of any mulching or sod to be even with the top of curb or walk.
10. All borders between lawn areas and planting beds shall not have edging unless otherwise noted on the plans.
11. Compacted existing soils shall be remediated with soil additives or soil replacement prior to planting.
12. See Tree Planting Details for tree planting, staking and guying directions. See Shrub Planting Details for shrub planting directions. Tree shall be staked immediately after planting.
13. Remove all twine and wire from tree and shrub root balls. Remove all non-rot burlap and twine from all plant material prior to planting. Untie all twine and/or burlap from the trunk of the plant material and drop down the root ball or remove from plant. Remove all plant containers prior to planting.
14. Prune all plant material after planting in accordance with the American Association of Nurserymen standards. Fine prune all plants to shape, but do not disfigure plant material. Prune all dead branches from plant material.
15. Umb deciduous, high canopy (shade) trees to 6' above grade.
16. All plantings shall be installed in the locations shown on the Landscape Plans. Minor adjustments for field conditions may be required. Significant adjustments needs to be approved by the Owner prior to planting.
17. Canopy trees to be placed a minimum of 30' from paved areas and walkways unless otherwise directed.
18. Contractor shall final grade all planting areas and berms as necessary prior to the installation of the plant material unless final grading is to be performed by others. Regardless, planting areas shall be fine raked smooth and even after the installation of the plant material and prior to mulching. No plant material shall be installed and no raking shall occur if the soils are saturated or muddy.
19. Trees and shrubs to be planted slightly higher (2" max.) than the grade that the plants were grown at the nursery (roughly the top of the root ball). Contractor is responsible for plant installation to the proper height.
20. Trees and shrubs shall not be planted over any underground utility, nor within any underground utility easement (minimum of 10' from the center of the pipe). Contractor shall verify location of all underground utilities prior to starting work.
21. Trees planted in lawn areas to be mulched with a ring a minimum of 2' wide with a minimum of 3" of mulch unless otherwise noted or required for tree protection. Shrub beds to be mulched to a minimum depth of 3".
22. Shrub groupings shown on the Landscape plans shall be planted as a single bed.
23. Mulch to be shredded hardwood bark. Prior to installation of the mulch, spread a pre-emergent herbicide.
24. Plant material shall be installed the same day as it is delivered to the site to the extent practical. Any plant material that is not planted the same day it arrives shall be protected from drying out by the Contractor until it can be planted.
25. Contractor shall thoroughly water all material planted at the end of each day.
26. Contractor shall apply anti-desiccant to plant material for late summer and fall plantings.
27. Upon completion of planting and mulching and at the end of each day, Contractor shall remove all extraneous material and debris, broom sweep and wash the area clean.
28. Contractor shall guarantee all plant material for a period of 2 years from the date of acceptance by the Owner. All plant material that does not survive the guarantee period shall be replaced by the Contractor. Dead plants shall be replaced no later than the next planting season.
29. Contractor shall notify the Owner upon the completion of the guarantee period and schedule a final inspection of the plant material and lawn areas. At or before the final inspection, Contractor shall remove any remaining tree stakes and prune the plant material as needed unless otherwise directed by the Owner.
30. All areas disturbed by construction activities that are not shown to be planting beds on the Landscape Plans, shall be seeded as lawn areas per the seeding specifications on these plans.
31. Contractor shall provide all topsoil, fertilizers and other additives as required unless otherwise directed by the Owner. All materials used shall be as specified or better.
32. Contractor shall be responsible for the maintenance of the plant material until such time as the project is accepted by the Owner. Maintenance shall include, but is not limited to, watering, fertilizing, pruning, mowing and weeding.
33. Contractor shall provide the Owner with written instructions regarding the care of the plant material and any special circumstances.



TYPICAL DECIDUOUS TREE PLANTING
N.T.S.



TYPICAL EVERGREEN TREE PLANTING
N.T.S.



TYPICAL SHRUB PLANTING
N.T.S.

PRELIMINARY/FINAL LANDSCAPE & LIGHTING DETAILS

4	2/3/23	REVISED PER TOWNSHIP ENGINEER COMMENTS
3	1/20/23	ISSUED FOR BID
2	10/05/22	PER TOWNSHIP ENGINEER COMMENTS
1	03/26/22	PRICING SET

LAND DEVELOPMENT PLANS FOR APPLEBROOK GOLF CLUB TURF MAINTENANCE AREA				
EAST GOSHEN TOWNSHIP - CHESTER COUNTY - PENNSYLVANIA				
	PROJECT NO. 20558-0015			
83 Chestnut Road, P.O. Box 447, P.O. PA 19381 610-444-8231 • 610-444-1100 www.chester-valley.com				
SCALE AS NOTED	DATE 07/26/2022	DRAWN BY RBB	CHECKED BY BDE1	DRAWN BY