GENERAL NOTES (THESE NOTES PERTAIN TO ALL CIVIL DRAWINGS)

1. EXISTING INFORMATION AND CONDITIONS NOT GUARANTEED; VERIFY AND TEST PIT EXISTING UTILITIES: THE CORRECTNESS AND COMPLETENESS OF THE INFORMATION SHOWING EXISTING CONDITIONS IS NOT GUARANTEED. BEFORE BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL PERFORM THE FOLLOWING TASKS:

   (a) NOTIFY MISS UTILITY AT 1-800-257-7777, AND MAKE SURE THEY COMPLETE THE MARKING OF UTILITIES WITHIN THE LIMITS OF CONSTRUCTION AT LEAST 48 HOURS PRIOR TO INSTALLING SEDIMENT CONTROL MEASURES. MAINTAIN ALL MARKINGS THROUGHOUT CONSTRUCTION. THE CONTRACTOR SHALL ALSO INCLUDE IN HIS BID PRICE MARKING OF ON-SITE UTILITIES THAT MIGHT NOT BE MARKED BY MISS UTILITY; THE CONTRACTOR SHALL EITHER MARK THESE ON-SITE UTILITIES HIMSELF OR BY SUBCONTRACTING WITH A PRIVATE ON-SITE UTILITY LOCATION COMPANY.
   (b) VERIFY THE GENERAL ACCURACY OF THE EXISTING CONDITIONS SHOWN ON THE SITE DRAWINGS BY VISUAL INSPECTION OF THE SURFACE OF THE SITE AND ALL EXISTING STRUCTURES, PAVING AND UTILITY APPURTENANCES VISIBLE THEREON;
   (c) WITH REGARD TO THE STRUCTURES & APPURTENANCES OBSERVED AS REQUIRED PER ITEM (B) ABOVE, DETERMINE THE TYPE, SIZE, LOCATION AND ELEVATION OF ALL THOSE EXISTING UTILITIES (INCLUDING BUT NOT LIMITED TO ALL STORM DRAINS, SANITARY LINES, WATER LINES, GAS LINES, STEAM LINES, ELECTRIC LINES, TELEPHONE LINES, AND COMMUNICATION DUCTS, AND ALL MANHOLES, INLETS, CLEAN-OUTS, VALVES, HANDHOLES, ETC. RELATED THERETO) WITHIN THE LIMITS OF CONSTRUCTION IN ORDER TO: (I) AVOID DAMAGING OR DISRUPTING SERVICE, AND (II) TO COORDINATE AND FACILITATE CONSTRUCTION OF PROPOSED UTILITIES AND OTHER IMPROVEMENTS. IN ADDITION TO THE CONTRACTOR'S VISUAL OBSERVATION AND THE UTILITY MARKING (AS REQUIRED ABOVE), THE CONTRACTOR SHALL SCHEDULE AND COMPLETE TEST PITTING OF ALL EXISTING UTILITIES (FOR THE PURPOSES SET FORTH ABOVE) AND SHALL DO SO IN A TIMELY MANNER IN ORDER TO ALLOW TIME FOR ANALYSIS AND REDESIGN BY SITE RESOURCES AND/OR OTHER CONSULTANTS, WITHOUT DELAYING THE PROJECT SCHEDULE.
   (d) IMMEDIATELY REPORT TO SITE RESOURCES, INC. THE RESULTS OF STEPS (A), (B) AND (C) WHICH MIGHT INDICATE ANY DISCREPANCY BETWEEN ACTUAL CONDITIONS AND THOSE SHOWN ON THE PLAN, AND ANY POTENTIAL CONFLICTS BETWEEN PROPOSED IMPROVEMENTS AND EXISTING CONDITION.

   TEST PITTING DEFINED: FOR THE PURPOSES OF THIS CONTRACT, EXCAVATION OF UTILITY TRENCHES DOES NOT CONSTITUTE TEST PITTING. TEST PITTING IS A SEPARATE OPERATION COMPLETED AT LEAST SEVEN DAYS BEFORE UTILITY INSTALLATION IS SCHEDULED TO BEGIN. TEST PITTING MEANS EXCAVATION TO EXPOSE EXISTING UTILITIES IN TWO SITUATIONS: (I) WHERE PROPOSED IMPROVEMENTS CROSS EXISTING UTILITIES (PIPES, LINES, STRUCTURES, APPURTENANCES) AND; (II) WHERE PROPOSED UTILITIES ARE DESIGNED TO CONNECT TO EXISTING UTILITIES. TEST PITTING INCLUDES RECORDING THE TYPE, SIZE, LOCATION AND ELEVATION OF THE EXPOSED UTILITIES, AND FAXING AND MAILING THE RECORD TO SITE RESOURCES, INC. AND THE OWNER. THE RECORD MAY BE A LEGIBLE HAND-WRITTEN FIELD SKETCH.

2. EXISTING AND PROPOSED GAS LINES, ELECTRIC LINES, TELEPHONE LINES, COMMUNICATION LINES AND OTHER UTILITIES: THESE DRAWINGS INCLUDE INFORMATION AND DEPICTIONS OF BALTIMORE GAS & ELECTRIC COMPANY'S (BGE) ELECTRIC AND/OR GAS UTILITIES LOCATED WITHIN THE GENERAL PROJECT AREA. LOCATIONS, DIMENSIONS, DEPTHS, AND OTHER DETAILS OF ANY SUCH UTILITIES MAY NOT BE AS ACTUALLY CONSTRUCTED, AND THE INFORMATION SHALL NOT BE RELIED UPON WITHOUT FIELD VERIFICATION BY TEST PITTING AS DEFINED ABOVE. EXCAVATORS MUST EMPLOY SAFE DIGGING PRACTICES WHEN APPROACHING BGE ELECTRIC AND/OR GAS UTILITIES AND COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS INCLUDING, BUT NOT LIMITED TO, THE LAW GOVERNING NOTIFICATION OF MISS UTILITY. NO REPRESENTATION, GUARANTEES, OR WARRANTIES EXPRESSED OR IMPLIED ARE MADE BY BGE OR SITE RESOURCES, INC. AS TO THE QUALITY, COMPLETENESS, OR ACCURACY OF THE BGE UTILITY INFORMATION, AND IN ACCEPTING THESE DRAWINGS, THE RECIPIENT EXPRESSLY AGREES THAT IT IS NOT RELYING ON THE ACCURACY OF THE SAME.

   EXISTING AND PROPOSED GAS LINES, STEAM LINES, ELECTRIC LINES, TELEPHONE LINES, COMMUNICATION DUCTS AND OTHER SUCH UTILITIES ARE NOT PART OF THE SCOPE OF WORK SHOWN ON THESE SITE PLANS AND SITE RESOURCES, INC. HAS NO RESPONSIBILITY FOR DESIGN, SPECIFICATION OR INSTALLATION OF SAID UTILITIES. TO THE EXTENT THAT SOME OR ALL OF SUCH UTILITIES (WHETHER EXISTING OR PROPOSED) APPEAR ON THE SITE DRAWINGS, IT IS PRESENTED ONLY FOR THE CONVENIENCE OF THE CONTRACTOR AND THE CORRECTNESS AND COMPLETENESS OF THE INFORMATION SHOWING THESE UTILITIES IS NOT GUARANTEED.

3. COORDINATION BETWEEN PROPOSED UTILITIES: THE CONTRACTOR SHALL ADJUST THE LOCATION AND ELEVATION OF PROPOSED GAS LINES, ELECTRIC LINES, TELEPHONE LINES, COMMUNICATION LINES, AND WATER LINES AS NEEDED TO CONSTRUCT THE PROPOSED STORM DRAINS AND SANITARY SEWER WITH MINIMUM CLEARANCES. COORDINATE WITH THE MECHANICAL/ELECTRICAL DRAWINGS AND SPECIFICATIONS AND APPROPRIATE UTILITY COMPANY.

4. RELOCATION OF EXISTING UTILITIES: IN THE EVENT THAT THE LOCATION OR ELEVATION OF EXISTING MINOR UNDERGROUND ELECTRIC LINES AND PHONE LINES CONFLICT WITH PROPOSED STORM DRAINS, SANITARY SEWER LINES OR WATER LINES, THE CONTRACTOR SHALL, WITH THE PERMISSION OF THE OWNER AND WITHOUT AN EXTRA COST TO THE PROJECT, ADJUST THESE LINES TO PERMIT INSTALLATION OF THE NEW UTILITIES. IN THE EVENT THAT ANY OTHER UTILITY IS RELOCATED TO ACCOMMODATE A NEW UTILITY, SAID RELOCATION SHALL BE AN EXTRA COST TO THE PROJECT, SUBJECT TO THE TERMS AND CONDITIONS OF THE CONSTRUCTION CONTRACT.

5. UTILITIES TO REMAIN OPERATIONAL; ADJUSTMENT FOR FINAL GRADE: ALL EXISTING UTILITIES SHALL BE RETAINED UNLESS MARKED OTHERWISE. EXISTING UTILITIES NOT TO BE REMOVED ARE TO REMAIN OPERATIONAL AT ALL TIMES. EXISTING UTILITIES TO BE REPLACED OR RELOCATED SHALL REMAIN IN SERVICE UNTIL REPLACED OR RELOCATED UTILITIES ARE OPERATIONAL. ALL EXISTING UTILITY APPURTENANCES SHALL BE ADJUSTED FOR FINAL GRADE.

6. UTILITY TRENCHING, BACKFILL AND COMPACTION: ALL TRENCHING FOR SANITARY SEWER, STORM DRAINS AND WATER MAINS SHALL BE DONE IN ACCORDANCE WITH THE LATEST BALTIMORE COUNTY STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION AS AMENDED TO DATE.

7. UTILITY CERTIFICATION: THE CONTRACTOR SHALL HAVE A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF MARYLAND CERTIFY, ON A FORM PROVIDED BY THE OWNER, THAT ALL PROPOSED STORM DRAINS, SANITARY SEWERS AND WATER LINES SHOWN HEREON WERE INSTALLED IN ACCORDANCE WITH THESE PLANS AND BALTIMORE COUNTY SPECIFICATIONS. IF SAID CERTIFICATION IS NOT POSSIBLE BECAUSE THE UTILITIES WERE NOT INSTALLED IN ACCORDANCE WITH THESE PLANS AND BALTIMORE COUNTY SPECIFICATIONS, THEN THE OWNER HAS THE OPTION OF WAIVING, IN WRITING, THIS CERTIFICATION, IN WHOLE OR PART. IF THE OWNER DOES NOT ELECT TO WAIVE THE CERTIFICATION, THE CONTRACTOR SHALL ADJUST AND, IF NECESSARY, RECONSTRUCT THE UTILITIES TO BRING THEM IN CONFORMANCE WITH THESE PLANS AND BALTIMORE COUNTY SPECIFICATIONS.

8. UTILITY CAPPING AND PROTECTION: ALL BUILDING CONNECTIONS SHALL BE CAPPED AT UPSTREAM END, 5 FEET FROM PROPOSED BUILDINGS, CAISSONS OR COLUMN FOOTINGS OR AS NOTED, AND SHALL BE PROTECTED BY PROVIDING THREE STAKES (THE HEIGHT BEING A MINIMUM OF 18 INCHES ABOVE PROPOSED GRADE) WITH HIGH VISIBILITY FLAGGING AROUND THE CAPPED END OF THE UTILITY.

9. PROPOSED STORM DRAINS: ALL STORM DRAINS 12 INCHES AND LARGER SHALL BE CORRUGATED HIGH-DENSITY POLYETHYLENE PIPE (HDPE) UNLESS INDICATED OTHERWISE ON THESE CONSTRUCTION DRAWINGS.

10. STANDARD CONSTRUCTION SPECIFICATIONS AND DETAILS: UNLESS OTHERWISE NOTED OR DETAILED ON THE DRAWINGS, ALL CONSTRUCTION SHALL FOLLOW THE LATEST BALTIMORE COUNTY STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION AS AMENDED TO DATE.

11. SEDIMENT CONTROL: THE CONTRACTOR SHALL COORDINATE INSTALLATION OF ALL UTILITIES TO AVOID CONSTRUCTION PROBLEMS/CONFLICTS WITH SEDIMENT AND EROSION CONTROL MEASURES. ANY DISTURBANCE TO SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REPAIRED AT THE END OF EACH WORKING DAY. CONTRACTOR SHALL, WITHOUT EXTRA COST TO THE PROJECT, REPAIR AND MAINTAIN EXISTING SEDIMENT CONTROL DEVICES UNTIL ALL AREAS WITHIN LIMITS OF CONSTRUCTION ARE STABILIZED. WITH THE APPROVAL OF SEDIMENT CONTROL INSPECTOR, ALL SEDIMENT CONTROL DEVICES SHALL BE REMOVED AND AREAS RESTORED AND STABILIZED. ALL SEDIMENT CONTROL MEASURES REFERRED TO ON THESE PLANS SHALL BE IN ACCORDANCE WITH THE PUBLICATION ENTITLED 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

12. DISTURBED AREAS: ALL AREAS DISTURBED BY THE CONTRACTOR DURING OR PRIOR TO CONSTRUCTION, NOT DESIGNATED TO RECEIVE PAVING, MULCH OR SOLID SOD SHALL BE FINE GRADED, SEEDED AND MULCHED IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES AND SPECIFICATIONS SHOWN ON THE SEDIMENT CONTROL DRAWINGS.

13. REPAIR AND REPLACEMENT OF DAMAGE CAUSED BY CONTRACTOR AND SUBCONTRACTORS: IN THE EVENT THAT THE CONTRACTOR OR ANY OF HIS SUBCONTRACTORS DAMAGE ANY EXISTING CURB, GUTTER, PAVING, UTILITIES, SIDEWALKS, TREES, SHRUBS, LAWNS, OR ANY OTHER EXISTING CONDITIONS (NOT INDICATED TO BE DEMOLISHED), OR ANY NEWLY INSTALLED PROPOSED IMPROVEMENT, THE GENERAL CONTRACTOR SHALL REPAIR AND REPLACE SAID DAMAGE TO OWNER'S SATISFACTION, AT GENERAL CONTRACTOR'S SOLE COST AND EXPENSE.

14. BENCHMARKS: SEE EXISTING CONDITIONS AND DEMOLITION PLAN.

15. ELEVATION AND LABELING: ALL SPOT GRADE ELEVATIONS IN ROADWAYS AND PARKING LOTS ARE FOR BOTTOM OF CURB UNLESS OTHERWISE NOTED. ELEVATIONS ON HARD SURFACES (ROADS, WALKS, WALLS, STEPS, MANHOLES, INLETS, ETC.) ARE LABELED TO THE HUNDREDTH OF A FOOT (E.G. 245.45). ELEVATIONS ON PROPOSED LAWN AND PLANTING AREAS ARE LABELED TO THE TENTH OF A FOOT (E.G. 245.5).

16. DIMENSIONS: UNLESS OTHERWISE NOTED ON THE DRAWING, ALL DIMENSIONS SHOWN ON THE SITE DRAWINGS FOLLOW THESE CONVENTIONS:

   (a) DIMENSIONS TO A BUILDING OR RETAINING WALL ARE TO THE FACE OF THE WALL;
   (b) DIMENSIONS TO A CURB ARE TO THE FACE (NOT THE BACK) OF THE CURB;
   (c) DIMENSIONS TO A FENCE ARE TO THE CENTERLINE OF THE FENCE;
   (d) DIMENSIONS FOR SIDEWALKS ABUTTING A CURB ARE FROM THE FACE OF CURB TO THE BACK EDGE OF THE WALK;
   (e) DIMENSIONS FOR OTHER SIDEWALKS OR OPEN PAVING SECTIONS ARE MEASURED TO THE EDGE OF PAVING;
   (f) DIMENSIONS TO A MANHOLE, INLET, CLEANOUT, PIPE BEND, VALVE, FIRE HYDRANT OR OTHER UTILITY APPURTENANCE ARE TO THE CENTER OF THE STRUCTURE;
   (g) DIMENSIONS FOR STEPS ARE TO THE OUTER EDGE OF THE STAIRCASE AND THE NOSE OF THE TOP OR BOTTOM STEP;
   (h) LAYOUT OF SEDIMENT CONTROL MEASURES AND PLANT MATERIAL SHALL BE SCALED.

17. GRADING: IT IS THE INTENT OF THE GRADING DESIGN TO ACHIEVE POSITIVE DRAINAGE AND AESTHETICALLY PLEASING VERTICAL CURVES AND LINES. TRANSITIONS BETWEEN EXISTING AND PROPOSED PAVEMENT SHALL BE SMOOTH AND JOINTS FLUSH. UNLESS OTHERWISE EXPRESSLY NOTED ON THE PLAN (BY ARROW WITH THE PERCENT SLOPE LABELED), ALL PROPOSED BITUMINOUS PAVING SHALL HAVE A SLOPE OF AT LEAST 2 PERCENT AND ALL CONCRETE SHALL HAVE A MINIMUM SLOPE OF 1.5 PERCENT IN THE DIRECTION INDICATED BY PROPOSED CONTOURS. UNPAVED AREAS SHALL HAVE A MINIMUM SLOPE OF 2 PERCENT AND A MAXIMUM SLOPE OF 2:1. FINAL GRADING SHALL ACHIEVE POSITIVE SURFACE DRAINAGE AWAY FROM BUILDINGS AND TOWARD DRAINAGE FACILITIES (SWALES, GUTTERS, INLETS, ETC.).

ROUND TOP AND BOTTOM OF SLOPES.

CORRECT METHOD INCORRECT METHOD

18. COMPACTION: ALL EARTH FILL MATERIAL UNDER SLABS, FOOTINGS AND PAVED AREAS SHALL BE PLACED IN 8" LOOSE LAYERS AND COMPACTED TO 95% OF MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D 698. ALL OTHER FILL SHALL BE COMPACTED TO 90%.

19. HEADINGS: THE HEADINGS CONTAINED IN THESE GENERAL NOTES ARE FOR THE CONVENIENCE OF THE READER ONLY AND SHALL NOT LIMIT THE RESPONSIBILITY OF THE CONTRACTOR. IT SHALL BE DISTINCTLY UNDERSTOOD THAT FAILURE TO MENTION SPECIFICALLY ANY WORK WHICH WOULD NORMALLY BE REQUIRED TO COMPLETE THE PROJECT SHALL NOT RELIEVE THE CONTRACTOR FROM COMPLETING SUCH WORK.

20. ABBREVIATIONS:

PROP	PROPOSED*	DIP	DUCTILE IRON PIPE
EX	EXISTING	PVC	POLYVINYL CHLORIDE PIPE
ASPH	ASPHALT	HDPE	HIGH DENSITY POLYETHYLENE PIPE
CONC	CONCRETE	CMP	CORRUGATED METAL PIPE
M OR MH	MANHOLE	RCCP	REINFORCED CONCRETE PIPE
SD	STORM DRAIN	C&G	CONCRETE CURB & GUTTER
I	INLET	INV	INVERT ELEVATION
SAN	SANITARY SEWER	FDC	FIRE DEPARTMENT CONNECTION
FF	FINISHED FLOOR ELEVATION	FH	FIRE HYDRANT
BF	BASEMENT FLOOR ELEVATION		
TC	TOP OF CURB	BC	BOTTOM OF CURB
TS	TOP OF STEP	BS	BOTTOM OF STEP
TW	TOP OF WALL	BW	BOTTOM OF WALL
PC	POINT OF CURVATURE	PS	PARKING SPACE
PT	POINT OF TANGENCY	HC	HANDICAPPED PARKING SPACE
PI	POINT OF INTERSECTION	TYP	TYPICAL
AGIP	AT-GRADE INLET PROTECTION	CIP	CURB INLET PROTECTION
COIP	COMBINATION INLET PROTECTION	ED	EARTH DIKE
FB	FILTER BAG	IB	INLET BLOCKING
RPS	REMOVABLE PUMPING STATION	SCE	STABILIZED CONSTRUCTION ENTRANCE
SFD	SUPER FENCE DIVERSION	SIP	STANDARD INLET PROTECTION
SP	SUMP PIT	SSF	SUPER SILT FENCE
TS	TEMPORARY SWALE	TSOS	TEMPORARY STONE OUTLET STRUCTURE

*PROPOSED MEANS WORK INCLUDED IN THE BASE CONTRACT UNLESS ACCOMPANIED BY THE PHRASES "N.I.C." OR "BY OTHERS."

21. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES): IT IS THE CONTRACTOR'S RESPONSIBILITY TO IMPLEMENT ALL THE PROVISIONS AND REQUIREMENTS OF THE NPDES NOTICE OF INTENT (NOI) PERMIT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO APPLY SEPARATELY FOR THE NOI ON THE SAME PROJECT. THE NOI HAS BEEN APPLIED FOR BY THE CONSULTANT/DESIGN PROFESSIONAL ON BEHALF OF THE OWNER, BUT THE OWNER WILL BE REQUIRED TO CERTIFY AND MAKE THE PAYMENT FOR THE NOI. MDE WILL THEN REVIEW THE NOI AND ISSUE THE PERMIT AFTER THE PUBLIC NOTICE PERIOD. NO LAND DISTURBANCE IS PERMITTED UNTIL THE NPDES NOI PERMIT HAS BEEN ISSUED.

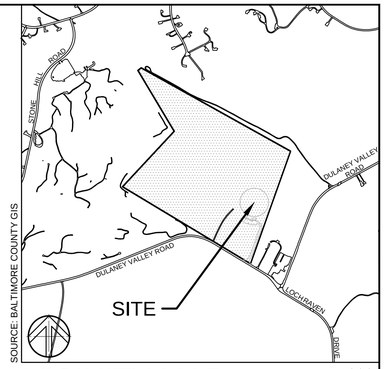
22. ALL SIDEWALKS, PATHS AND OTHER PAVED AREAS SHALL BE FINISH GRADED WITH A MAXIMUM LONGITUDINAL SLOPE OF 5% (1:20) AND A MAXIMUM CROSS SLOPE OF 2% (1:50) UNLESS OTHERWISE NOTED.

23. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL SITE ELEMENTS ARE CONSTRUCTED IN ACCORDANCE WITH THE ADA 2010 STANDARDS FOR ACCESSIBLE DESIGN OR MOST CURRENT.

24. TO THE EXTENT THAT QUANTITIES MAY BE LISTED ON THESE PLANS, THEY ARE FOR PERMITTING PURPOSES ONLY AND NOT FOR BIDDING PURPOSES. CONTRACTOR SHALL FORM HIS OWN CONCLUSIONS ABOUT THE QUANTITIES OF ALL MATERIALS AND OPERATIONS NECESSARY TO COMPLETE THE PROJECT.

SHEET LIST

SHEET NUMBER	SHEET DESIGNATION	DRAWING TITLE	DRAWING NUMBER
1	C001	COVER SHEET	2025-1632
2	C101	EXISTING CONDITIONS AND DEMOLITION PLAN	2025-1633
3	C111	SITE PLAN I	2025-1634
4	C112	SITE PLAN II	2025-1635
5	C121	SITE GEOMETRY PLAN I	2025-1636
6	C122	SITE GEOMETRY PLAN II	2025-1637
7	C131	UTILITY PLAN I	2025-1638
8	C132	UTILITY PLAN II	2025-1639
9	C140	GRADING CONTEXT PLAN	2025-1640
10	C141	GRADING PLAN I	2025-1641
11	C142	GRADING PLAN II	2025-1642
12	C201	SITE DETAILS I	2025-1643
13	C202	SITE DETAILS II	2025-1644
14	C401	EXISTING EROSION & SEDIMENT CONTROL PLAN	2025-1645
15	C402	EXISTING EROSION & SEDIMENT CONTROL PLAN	2025-1646
16	C411	PROPOSED EROSION & SEDIMENT CONTROL PLAN	2025-1647
17	C412	PROPOSED EROSION & SEDIMENT CONTROL PLAN	2025-1648
18	C421	EROSION & SEDIMENT CONTROL NOTES I	2025-1649
19	C422	EROSION & SEDIMENT CONTROL NOTES II	2025-1650
20	C423	EROSION & SEDIMENT CONTROL DETAILS I	2025-1651
21	C424	EROSION & SEDIMENT CONTROL DETAILS II	2025-1652
22	C425	EROSION & SEDIMENT CONTROL DETAILS III	2025-1653
23	C431	STORM DRAIN PROFILES I	2025-1654
24	C432	STORM DRAIN PROFILES II	2025-1655
25	C500	RESOURCE MAPPING PLAN	2025-1656
26	C501	ESD DRAINAGE AREA MAP	2025-1657
27	C511	STORMWATER MANAGEMENT NOTES & DETAILS I	2025-1658
28	C512	STORMWATER MANAGEMENT NOTES & DETAILS II	2025-1659
29	C513	SWM SOIL BORING LOGS	2025-1660
30	C521	SWM SECTIONS I	2025-1661
31	C522	SWM SECTIONS II	2025-1662
32	C531	SWM PLANTING PLAN, SCHEDULE & DETAILS	2025-1663
33	C541	EXISTING SWM DRAINAGE AREA MAP	2025-1664
34	C542	PROPOSED SWM DRAINAGE AREA MAP	2025-1665
35	L101	FINAL LANDSCAPE PLAN I	2025-1666
36	L102	FINAL LANDSCAPE PLAN II	2025-1667
37	L201	LANDSCAPE NOTES & DETAILS	2025-1668
38	S001	STRUCTURAL GENERAL NOTES	2025-1669
39	S100	PAVILION FOUNDATION PLAN AND DETAILS	2025-1670
40	S101	SHED FOUNDATION PLAN AND DETAILS	2025-1671

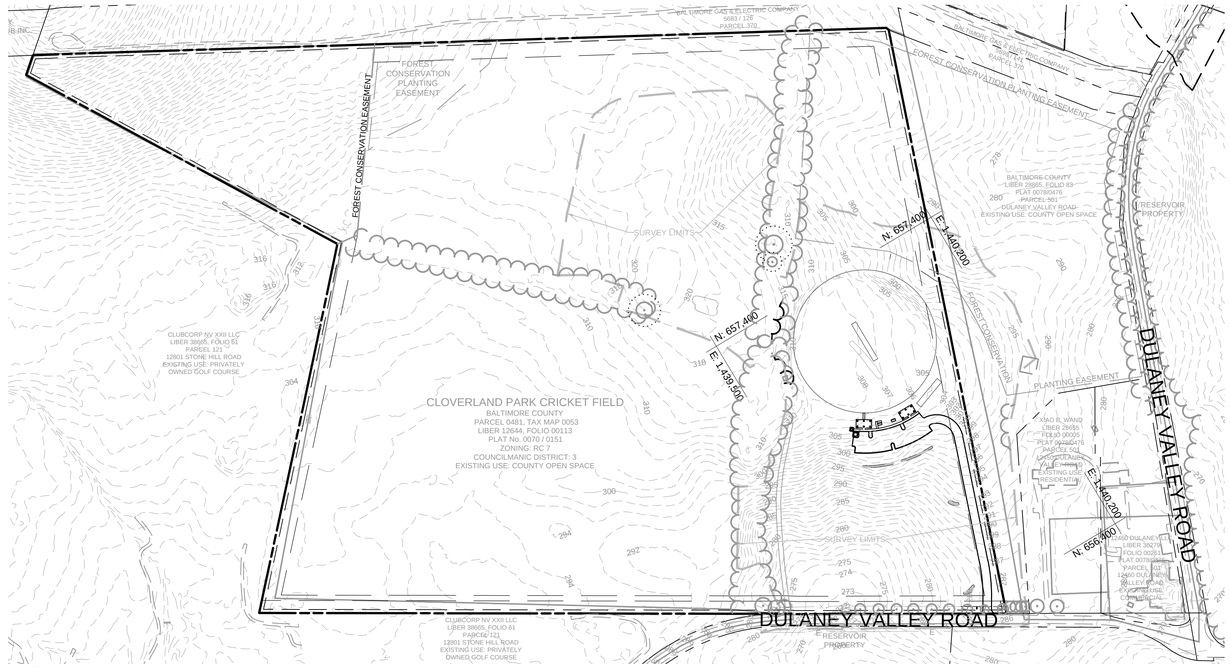


VICINITY MAP 1"=1000'

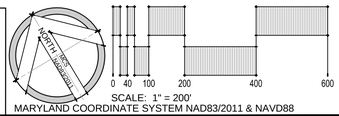
Cloverland Park Cricket Field

Baltimore County

Department of Recreation & Parks



1 SITE CONTEXT PLAN 1" = 200'



OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

SEAL

STATE OF MARYLAND — PETER C. SOPRANO — 42977 — PROFESSIONAL ENGINEER — 03/19/2025

DATE : 03/19/2025

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO. 42977, EXPIRATION DATE 06/07/2025

ENGINEER: PETER C. SOPRANO DGN BY:

AS-BUILT PER RECORD PRINT DWN BY:

BY: CHKD BY:

DATE:

AS-BUILT / REVISION | BY | DATE

CONTRACT COMPLETION BOX

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

P.W.A. NO.	KEY SHEET	POSITION SHT
R.O.W NO.	USE 112 113	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14

DRAWING SCALE — PLAN SCALE: AS SHOWN — PROFILE SCALE:

PROPERTY MANAGEMENT — APPROVED BY: David Carlino PROPERTY MANAGER — DATE: 5/12/25

100% CD SUBMISSION

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT

CLOVERLAND PARK CRICKET FIELD

COVER SHEET

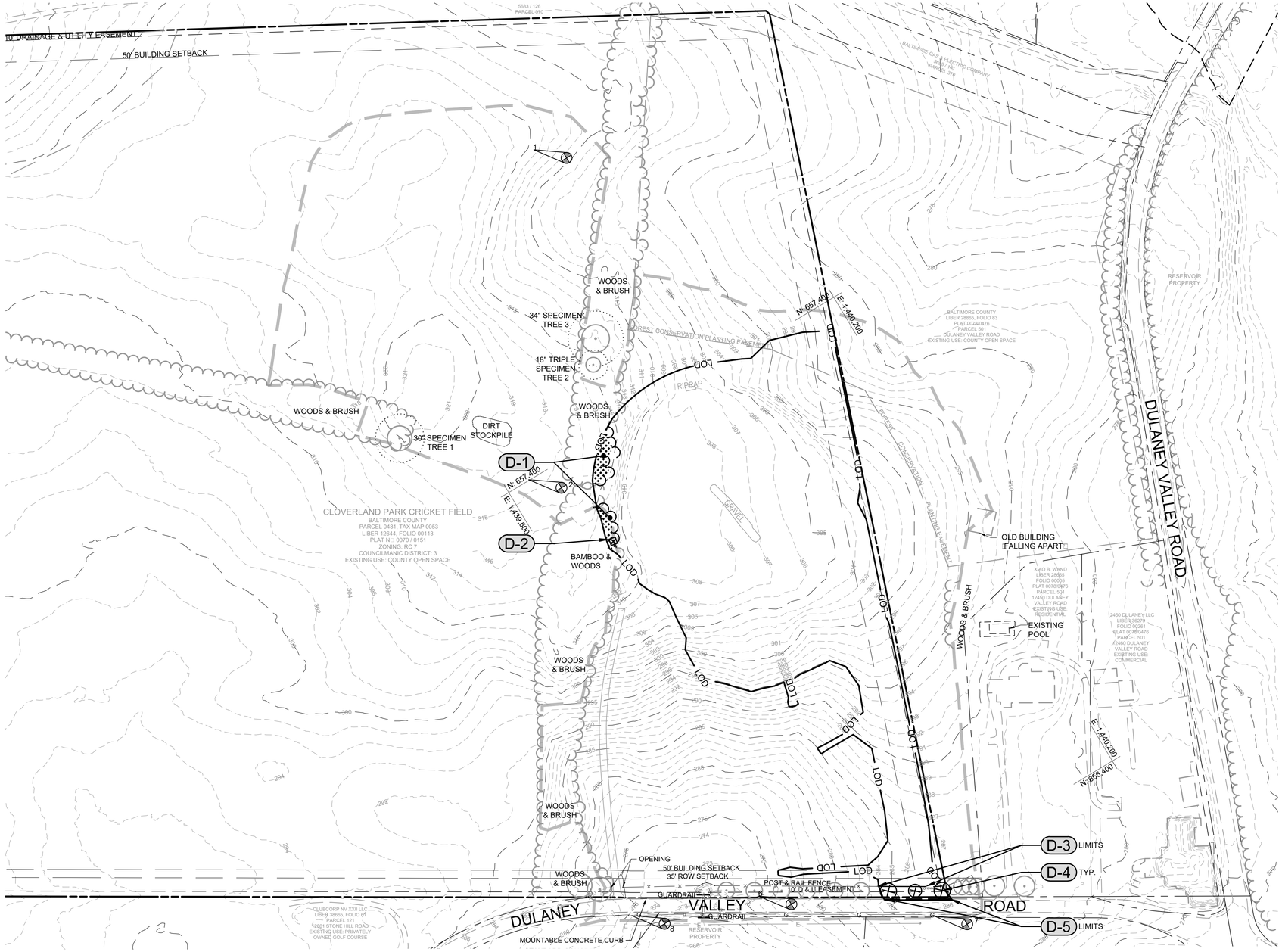
CONSTRUCTION DOCUMENTS

SUBDIVISION: PHOENIX — 12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131 — ELECTION DIST. NO.: 10C3

SHEET DESIGNATION	CONTRACT NUMBER
C001	25067 GXO
JOB ORDER NUMBER	PROJ-10000752
SHEET 1 OF 40	
DRAWING NUMBER	2025-1632
FILE NO.: 9	

BALTIMORE COUNTY MARYLAND

DWG. FILENAME: © SITE RESOURCES, INC. P:\23\23003-BACO CLOVERLAND PARK CRICKET FIELD\04-DWG\C001_COVERSHEET.DWG 3/19/2025 4:14 PM ajm



LEGEND

- PROPERTY LINE
- EXISTING TREELINE TO REMAIN
- EXISTING TREELINE TO BE REMOVED
- EXISTING BUILDING TO REMAIN
- EXISTING BUILDING TO BE REMOVED
- EXISTING CURB TO REMAIN
- EXISTING CURB TO BE REMOVED
- EXISTING ROAD TO REMAIN
- EXISTING ROAD TO BE REMOVED
- EXISTING FENCE TO REMAIN
- EXISTING FENCE TO BE REMOVED
- EXISTING GUARDRAIL TO REMAIN
- EXISTING 100 YR. FLOODPLAIN (100 YR FLOODPLAIN)
- EXISTING TREES TO REMAIN (CRITICAL ROOT ZONE)
- EXISTING TREES TO BE REMOVED
- EXISTING STORM DRAIN (EX. 15" SD D)
- EXISTING GAS (EX. 2" GAS G)
- EXISTING OVERHEAD ELECTRIC (E)
- EXISTING CONTOURS (350, 348)
- SURVEY EXTENTS
- SURVEY BENCHMARKS/ TRAVERSE POINTS (22)
- LOD — LIMIT OF DISTURBANCE

DEMOLITION NOTES:

THESE NOTES PERTAIN TO C101 ONLY.

- D-1 CLEAR AND GRUB EXISTING BAMBOO AND ROOTS FOR FIELD GRADING.
- D-2 REMOVE EXISTING SHED. REMOVE ALL MATERIALS AND FOOTINGS ASSOCIATED WITH EXISTING SHED FOUNDATION.
- D-3 REMOVE EXISTING WOOD FENCE TO POSTS NEAREST TO LIMITS SHOWN.
- D-4 REMOVE EXISTING TREE.
- D-5 REMOVE EXISTING CURB TO LIMITS SHOWN.

GENERAL NOTES:

1. PROTECT ALL EXISTING TREES TO REMAIN DURING CONSTRUCTION.
2. BASE INFORMATION REFLECTED ON THESE PLANS WAS TAKEN FROM THE FOLLOWING SOURCES:
   - A. PLAN ENTITLED "TOPOGRAPHIC SURVEY OF CLOVERLAND PARK", PREPARED BY DIETZ SURVEYING INC. DATED DECEMBER 1, 2023.
   - B. COORDINATES SHOWN ON ARE BASED ON THE MARYLAND COORDINATE SYSTEM, NAD 83-2011, ESTABLISHED BY GPS OBSERVATION.
     ELEVATIONS AND CONTOURS SHOWN ARE BASED ON THE NAVD-88 VERTICAL DATUM.
   - C. BALTIMORE COUNTY GIS INFORMATION.

SURVEY REFERENCE NOTES

ALL HORIZONTAL AND VERTICAL SURVEY DATA CONTAINED HEREIN ARE REFERENCED TO SURVEY CONTROL POINTS

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	657,918.3950	1,439,865.4080	314.61	B+C SET
2	657,401.1230	1,439,543.5180	318.59	B+C SET
6	656,523.1370	1,439,511.3090	274.88	B+C SET
7	656,324.2090	1,439,770.6580	286.00	B+C SET
8	656,612.8250	1,439,292.0240	274.45	B+C SET

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

NORTH (MAGNETIC)

0 20 50 100 200 300
SCALE: 1" = 100'
MARYLAND COORDINATE SYSTEM NAD83/2011 & NAVD88

SEAL — STATE OF MARYLAND — KATHRYN R. HEIL — 42977 — PROFESSIONAL ENGINEER — 03/19/2025
DATE : 03/19/2025

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 42977, EXPIRATION DATE 06/07/2025.
ENGINEER: KATHRYN R. HEIL
AS-BUILT PER RECORD PRINT
BY:
DATE:
DGN BY:
DWN BY:
CHKD BY:

AS-BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT
				USE 112 113	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14
			R.O.W NO.		
CONTRACT COMPLETION BOX					

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

DRAWING SCALE
PLAN SCALE: AS SHOWN
PROFILE SCALE:

PROPERTY MANAGEMENT
APPROVED BY: PROPERTY MANAGER
DATE:

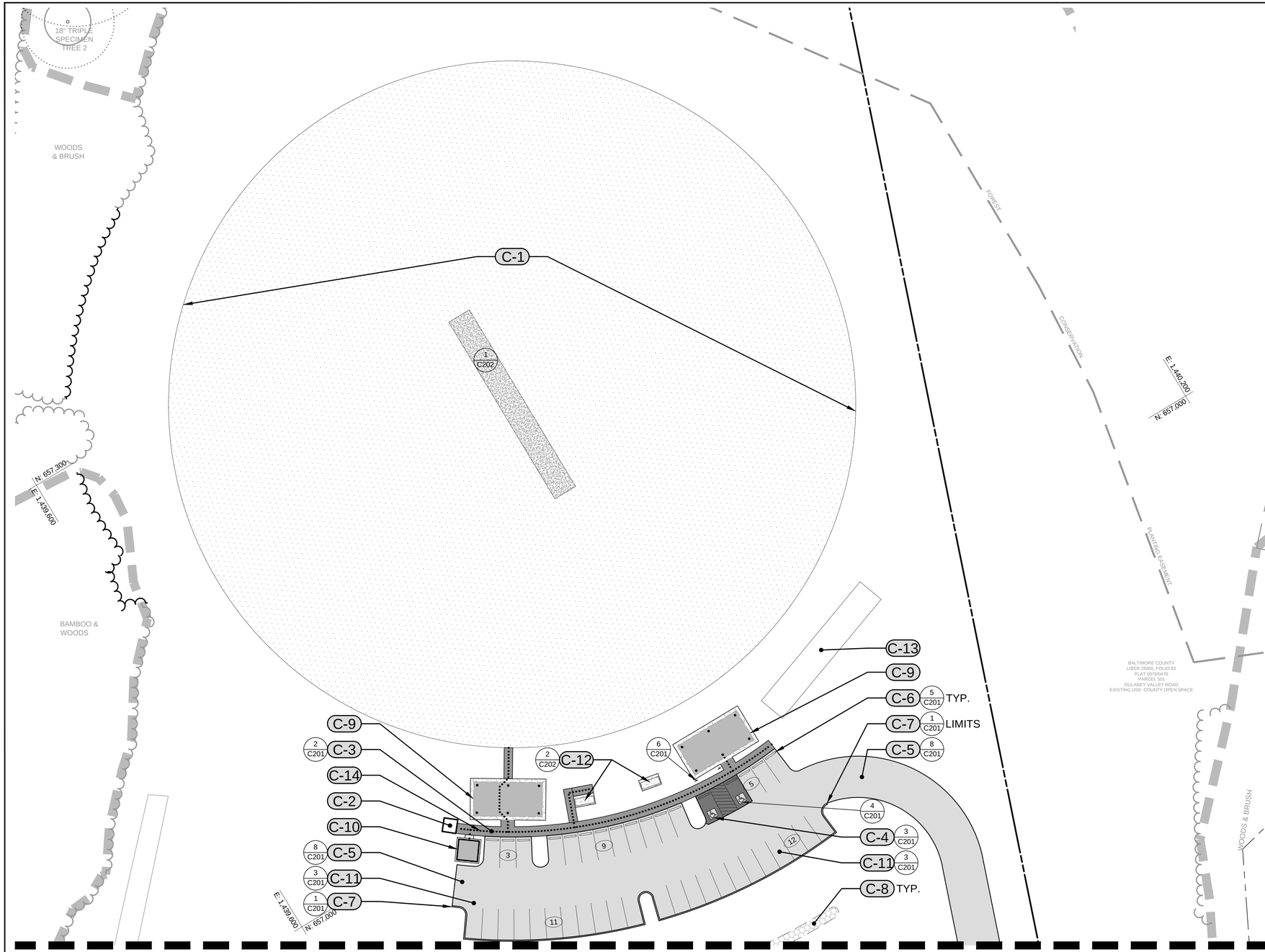
100% CD SUBMISSION

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT
CLOVERLAND PARK CRICKET FIELD
EXISTING CONDITIONS AND DEMOLITION PLAN
CONSTRUCTION DOCUMENTS
SUBDIVISION: PHOENIX — 12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131 — ELECTION DIST. NO.: 10C3

SHEET DESIGNATION	CONTRACT NUMBER
C101	25067 GXO
	JOB ORDER NUMBER
	PROJ-10000752
	SHEET 2 OF 40
	DRAWING NUMBER
	2025-1633
	FILE NO.: 9

BALTIMORE COUNTY MARYLAND

DWG. FILENAME: © SITE RESOURCES, INC. Z:\23\23053 - BACO CLOVERLAND PARK CRICKET FIELD\04 - DWG\C101_EXISTING CONDITIONS AND DEMOLITION PLAN.DWG 3/19/2025 4:15 PM epm



MATCHLINE - SEE SHEET C112

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BUILDING
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING GUARDRAIL
- FOREST CONSERVATION PLANTING EASEMENT
- EXISTING TREES (CRITICAL ROOT ZONE)
- SURVEY EXTENTS
- PROPOSED BUILDING
- PROPOSED PAVILION OVERHANG
- PROPOSED ASPHALT SIDEWALK*
- PROPOSED ASPHALT PAVING*
- PROPOSED 57 STONE AND GEOTEXTILE* PROPOSED ASPHALT PAVING*
- PROPOSED CONCRETE*
- PROPOSED ATHLETIC FIELD AND PITCH AREA
- PROPOSED CURB
- PROPOSED SIGN
- DETAIL REFERENCE (# / SHT)
- PROPOSED WOODSLINE
- PROPOSED SWM
- ADA ACCESSIBLE ROUTE

* NOTE: REFER TO CONSTRUCTION NOTES FOR ITEMS THAT ARE BASE BID VS. ALTERNATES.

CONSTRUCTION NOTES:

THESE NOTES PERTAIN TO C111 ONLY.

- C-1 LIMIT OF TURF ESTABLISHMENT FOR CRICKET FIELD AREA. SEE SPECIFICATIONS.
- C-2 PROPOSED PORTABLE RESTROOM LOCATION (N.I.C.).
- C-3 PROPOSED ASPHALT SIDEWALK. (BASE BID)
- C-4 PROPOSED ACCESSIBLE PARKING ASPHALT PAVING. (BASE BID)
- C-5 PROPOSED #57 STONE AND GEOTEXTILE. (BASE BID)
- C-6 PROPOSED WHEEL STOP. (BASE BID)
- C-7 PROPOSED CONCRETE CURB AND GUTTER. (BASE BID)
- C-8 PROPOSED STORM WATER MANAGEMENT.
- C-9 ADD ALTERNATE 1: PROPOSED 20X40 ICON DUAL SLOPE PAVILION OR APPROVED EQUAL. (SEE STRUCTURAL PLANS FOR SLAB/FOUNDATION INFORMATION)
  STEEL FRAME: BROWN TEXTURE PCT29118
  STEEL ROOF: EVERGREEN
  CONTRACTOR SHALL ACQUIRE ALL REQUIRED PERMITS FOR CONSTRUCTION OF THE PAVILIONS. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS, MATERIAL, AND COLOR SUBMITTALS FOR BALTIMORE COUNTY PROPERTY MANAGEMENT PROJECT MANAGER'S REVIEW PRIOR TO PURCHASE.
- C-10 ADD ALTERNATE 2: PROPOSED 12X12 WOOD SHED WITH ROLL UP DOOR ON 14X14 CONCRETE PAD. (SEE STRUCTURAL PLANS FOR PAD)
  HIGH POINT BUILDINGS OR APPROVED EQUAL.
  STYLE: GABLE
  SIDING: VINYL SIDING
  ROOF: ARCHITECTURAL SHINGLES
  DOORS: 8X6 GARAGE DOOR
  ADDITIONAL OPTIONS: GABLE VENTS
  COLOR: BEIGE
  CONTRACTOR SHALL ACQUIRE ALL REQUIRED PERMITS FOR CONSTRUCTION OF THE SHED. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS, MATERIAL, AND COLOR SUBMITTALS FOR BALTIMORE COUNTY PROPERTY MANAGEMENT PROJECT MANAGER'S REVIEW PRIOR TO PURCHASE.
- C-11 ADD ALTERNATE 3: PROPOSED ASPHALT PAVING.
- C-12 ADD ALTERNATE 4: PROPOSED 5'X12' THREE ROW ALUMINUM BLEACHERS ON 9'X15' CONCRETE PAD.
- C-13 FUTURE NET BATTING CAGE ON CONCRETE SLAB (N.I.C.).
- C-14 ADA ACCESSIBLE ROUTE. MAINTAIN 5' CLEAR SPACE BETWEEN COLUMNS AND SITE FURNISHINGS WITHIN ROUTE.

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
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PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

NORTH (MAGNETIC)

SCALE: 1" = 30'
0 10 20 30 50 100
MARYLAND COORDINATE SYSTEM NAD83/2011 & NAVD88

100% CD SUBMISSION

SEAL
STATE OF MARYLAND — PETER C. SOPRANO — 42977 — PROFESSIONAL ENGINEER
03/19/2025
DATE : 03/19/2025

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 42977, EXPIRATION DATE 06/07/2025.
ENGINEER: PETER C. SOPRANO
AS-BUILT PER RECORD PRINT
BY:
DATE:
DGN BY:
DWN BY:
CHKD BY:

AS-BUILT / REVISION	BY	DATE
CONTRACT COMPLETION BOX		

P.W.A. NO.	KEY SHEET	POSITION SHT
R.O.W NO.	USE 112 113	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

DRAWING SCALE
PLAN SCALE: AS SHOWN
PROFILE SCALE:

PROPERTY MANAGEMENT
APPROVED BY: PROPERTY MANAGER
DATE:

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT
CLOVERLAND PARK CRICKET FIELD
SITE PLAN I
CONSTRUCTION DOCUMENTS
SUBDIVISION: PHOENIX
12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131
ELECTION DIST. NO.: 10C3

SHEET DESIGNATION	CONTRACT NUMBER
C111	25067 GXO
	JOB ORDER NUMBER
	PROJ–10000752
	SHEET 3 OF 40
	DRAWING NUMBER
	2025–1634
	FILE NO.: 9

BALTIMORE COUNTY MARYLAND

DWG. FILENAME: © SITE RESOURCES, INC. Z:\23\23053-BACO CLOVERLAND PARK CRICKET FIELD\04-DWG\C111_SITE PLAN.DWG 3/19/2025 4:15 PM sjrm

MATCHLINE - SEE SHEET C111

8 C201 C-1

N: 656,800
E: 1,439,700

CLOVERLAND PARK CRICKET FIELD
BALTIMORE COUNTY
PARCEL 0481, TAX MAP 0053
LIBER 12644, FOLIO 00113
PLAT No. 0070 / 0151
ZONING: RC 7
COUNCILMANIC DISTRICT: 3
EXISTING USE: COUNTY OPEN SPACE

E: 1,439,900
N: 656,500

BALTIMORE COUNTY
LIBER 28865, FOLIO 83
PLAT 00780476
PARCEL 501
DULANEY VALLEY ROAD
EXISTING USE:
COUNTY OPEN SPACE

3 C201 C-2

E: 1,439,700
N: 656,500

C-3

C-3

/OODS
BRUSH

POST & RAIL FENCE

OPENING

POST & RAIL FENCE

GUARDRAIL

MOUNTABLE CONC. CURB

MOUNTABLE CONC. CURB

DULANEY VALLEY ROAD

C-5

C-4 9 C201

STANDARD CONC. CURB

STANDARD CONC. CURB

GUARDRAIL

RESERVOIR PROPERTY

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BUILDING
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING GUARDRAIL
- FOREST CONSERVATION PLANTING EASEMENT
- EXISTING TREES (CRITICAL ROOT ZONE)
- SURVEY EXTENTS
- PROPOSED 57 STONE AND GEOTEXTILE* PROPOSED ASPHALT PAVING*
- PROPOSED SIGN(FUTURE N.I.C.)
- # SHT — DETAIL REFERENCE
- PROPOSED WOODSLINE
- PROPOSED SWM
- PROPOSED FENCE

* NOTE: REFER TO CONSTRUCTION NOTES FOR ITEMS THAT ARE BASE BID VS. ALTERNATES.

CONSTRUCTION NOTES:

THESE NOTES PERTAIN TO C112 ONLY.

- C-1 PROPOSED 57 STONE AND GEOTEXTILE. (BASE BID)
- C-2 ADD ALTERNATE 3: PROPOSED ASPHALT PAVING.
- C-3 PROPOSED WOOD FENCE TO MATCH EXISTING.
- C-4 DEPRESSED CURB COMMERCIAL ENTRANCE
- C-5 FUTURE MONUMENT SIGN (N.I.C.)

OWNER/DEVELOPER:
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12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
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DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

NORTH (GRID)

0 10 20 30 50 100
SCALE: 1" = 30'
MARYLAND COORDINATE SYSTEM NAD83/2011 & NAVD88

SEAL

STATE OF MARYLAND — PETER C. SOPRANO — 42977 — PROFESSIONAL ENGINEER
03/19/2025

DATE : 03/19/2025

PROFESSIONAL CERTIFICATION		AS-BUILT / REVISION	BY	DATE
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 42977, EXPIRATION DATE 06/07/2025				
ENGINEER: PETER C. SOPRANO	DGN BY:	CONTRACT COMPLETION BOX		
	DWN BY:			
AS-BUILT PER RECORD PRINT	CHKD BY:			
BY: DATE:				

P.W.A. NO.	KEY SHEET	POSITION SHT
R.O.W NO.	USE 112 113	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

DRAWING SCALE	
PLAN SCALE:	AS SHOWN
PROFILE SCALE:	

PROPERTY MANAGEMENT
APPROVED BY: _____ PROPERTY MANAGER
DATE: _____

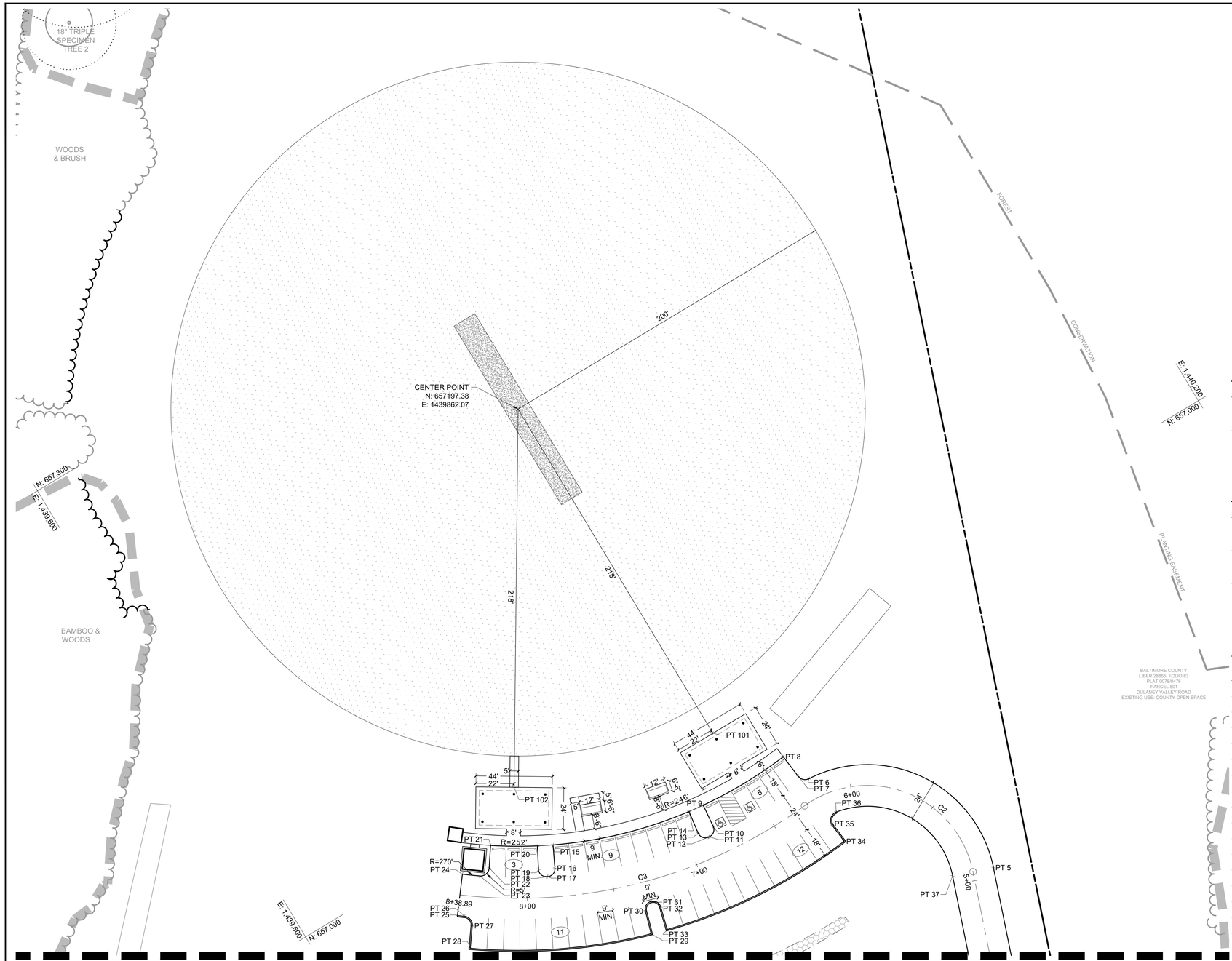
100% CD SUBMISSION

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT
CLOVERLAND PARK CRICKET FIELD
SITE PLAN II
CONSTRUCTION DOCUMENTS
SUBDIVISION: PHOENIX — 12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131 — ELECTION DIST. NO.: 10C3

SHEET DESIGNATION	CONTRACT NUMBER
C112	25067 GXO
	JOB ORDER NUMBER
	PROJ-10000752
	SHEET 4 OF 40
	DRAWING NUMBER
	2025-1635
	FILE NO.: 9

BALTIMORE COUNTY MARYLAND

DWG. FILENAME: © SITE RESOURCES, INC. Z:\23\23053-BACO CLOVERLAND PARK CRICKET FIELD G4-DWG\C111_SITE PLAN.DWG 3/19/2025 4:15 PM sjunn



LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BUILDING
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING GUARDRAIL
- FOREST CONSERVATION PLANTING EASEMENT
- EXISTING TREES (CRITICAL ROOT ZONE)
- SURVEY EXTENTS
- PROPOSED BUILDING
- PROPOSED PAVILION OVERHANG
- PROPOSED ASPHALT SIDEWALK*
- PROPOSED ASPHALT PAVING*
- PROPOSED ATHLETIC FIELD AND PITCH AREA
- PROPOSED CURB
- PROPOSED WOODSLINE
- PROPOSED SWM

LINE DATA

LINE	START POINT	BEARING	DISTANCE	END POINT
L1	STA. 0+00.00 N: 656365.93 E: 1439762.06	N30°48'57"E	51.93'	STA. 0+51.93 N: 656410.53 E: 1439788.67
L2	STA. 1+49.98 N: 656499.11 E: 1439830.34	N19°34'49"E	355.25'	STA. 5+05.23 N: 656833.82 E: 1439949.40

BASELINE CURVE DATA

CURVE	START POINT	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE	END POINT
C1	PC STA 0+51.93 N: 656410.53 E: 1439788.67	500.00'	98.05'	97.89'	N25° 11' 53"E	11°14'08"	PT STA 1+49.98 N: 656499.11 E: 1439830.34
C2	PC STA 5+05.23 N: 656833.82 E: 1439949.40	62.00'	123.79'	104.23'	N37° 37' 13"W	114°24'05"	PT STA 6+29.03 N: 656916.38 E: 1439885.77
C3	PC STA 6+29.03 N: 656916.38 E: 1439885.77	282.00'	209.86'	205.05'	N73° 30' 06"W	42°38'19"	PT STA 8+38.89 N: 656974.61 E: 1439689.16

SITE GEOMETRY POINT TABLE

POINT NAME	STATION	OFFSET	ALIGNMENT
PT 5	5+05.23	RT 12.00'	ROAD
PT 6	6+19.59	RT 12.00'	ROAD
PT 7	6+23.49	RT 16.27'	ROAD
PT 8	6+24.59	RT 30.32'	ROAD
PT 9	6+82.06	RT 30.00'	ROAD
PT 10	6+82.06	RT 16.54'	ROAD
PT 11	6+86.84	RT 12.00'	ROAD
PT 12	6+87.36	RT 12.00'	ROAD
PT 13	6+92.14	RT 16.54'	ROAD
PT 14	6+92.13	RT 30.00'	ROAD
PT 15	7+82.78	RT 30.00'	ROAD
PT 16	7+82.78	RT 16.54'	ROAD
PT 17	7+87.55	RT 12.00'	ROAD
PT 18	7+88.07	RT 12.00'	ROAD
PT 19	7+92.85	RT 16.54'	ROAD
PT 20	7+92.85	RT 30.00'	ROAD
PT 21	8+23.06	RT 30.00'	ROAD
PT 22	8+23.06	RT 17.05'	ROAD

SITE GEOMETRY POINT TABLE

POINT NAME	STATION	OFFSET	ALIGNMENT
PT 23	8+28.38	RT 12.00'	ROAD
PT 24	8+38.89	RT 12.00'	ROAD
PT 25	8+38.89	LT 12.00'	ROAD
PT 26	8+34.97	LT 12.00'	ROAD
PT 27	8+30.26	LT 16.96'	ROAD
PT 28	8+30.26	LT 30.00'	ROAD
PT 29	7+35.30	LT 30.00'	ROAD
PT 30	7+35.30	LT 16.47'	ROAD
PT 31	7+30.98	LT 12.00'	ROAD
PT 32	7+26.66	LT 16.47'	ROAD
PT 33	7+26.66	LT 30.00'	ROAD
PT 34	6+16.46	LT 29.26'	ROAD
PT 35	6+20.03	LT 18.10'	ROAD
PT 36	6+13.22	LT 12.00'	ROAD
PT 37	5+05.23	LT 12.00'	ROAD
PT 101	6+52.76	RT 64.00'	ROAD
PT 102	8+08.29	RT 64.00'	ROAD

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

NORTH (MAGNETIC)

0 10 20 30 50 100
SCALE: 1" = 30'
MARYLAND COORDINATE SYSTEM NAD83/2011 & NAVD88

100% CD SUBMISSION

SEAL — STATE OF MARYLAND — PETER C. SOPRANO — 21677 — PROFESSIONAL ENGINEER — 03/19/2025
DATE : 03/19/2025

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 42977, EXPIRATION DATE 06/07/2025
ENGINEER: PETER C. SOPRANO
AS-BUILT PER RECORD PRINT
BY:
DATE:
DGN BY:
DWN BY:
CHKD BY:

AS-BUILT / REVISION	BY	DATE
CONTRACT COMPLETION BOX		

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

P.W.A. NO.	KEY SHEET	POSITION SHT
R.O.W NO.	USE 112 113	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14

DRAWING SCALE
PLAN SCALE: AS SHOWN
PROFILE SCALE:

PROPERTY MANAGEMENT
APPROVED BY: _____ PROPERTY MANAGER
DATE: _____

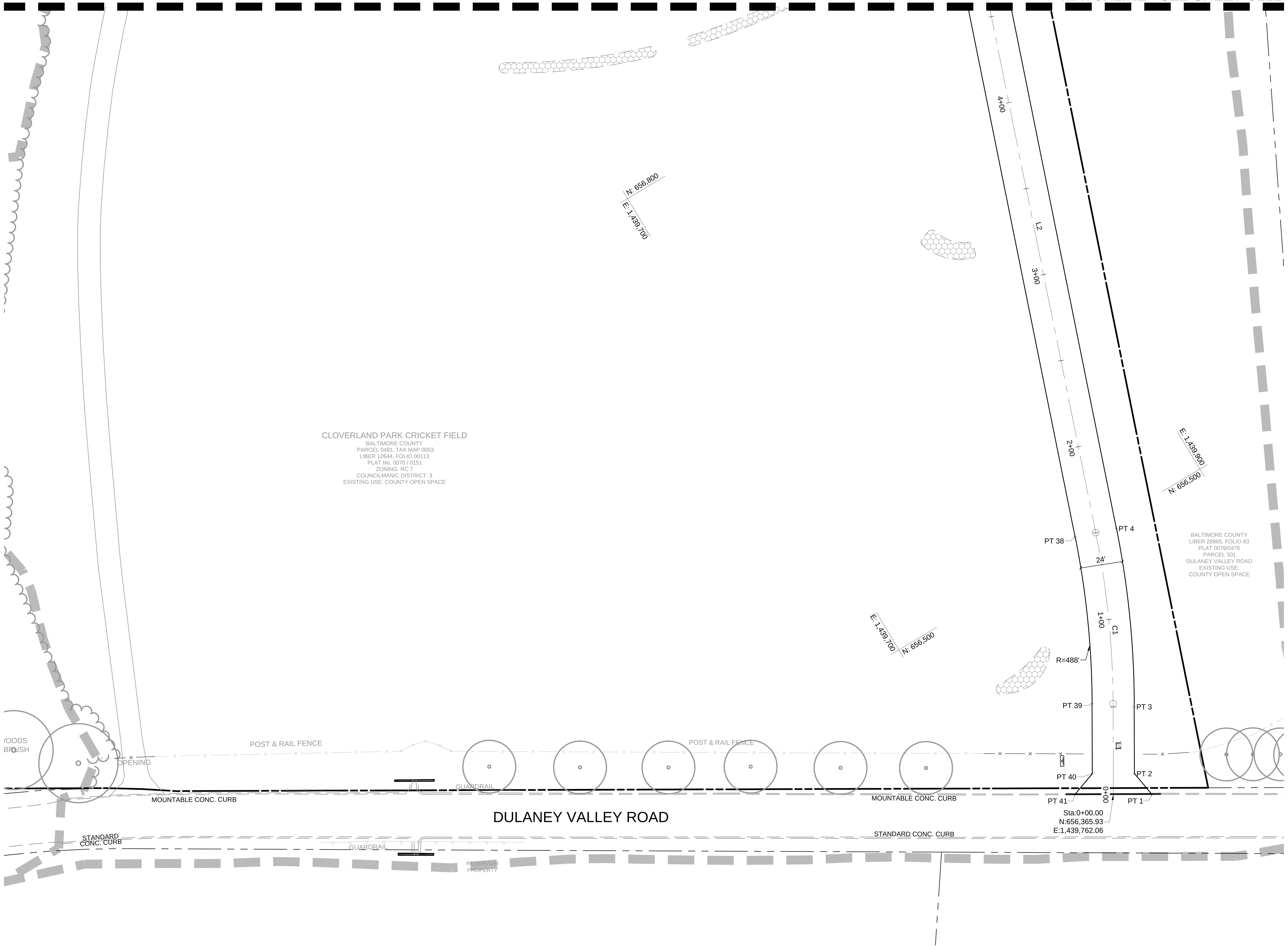
BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT
CLOVERLAND PARK CRICKET FIELD
SITE GEOMETRY PLAN I
CONSTRUCTION DOCUMENTS
SUBDIVISION: PHOENIX — 12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131 — ELECTION DIST. NO.: 10C3

SHEET DESIGNATION	CONTRACT NUMBER
C121	25067 GXO
JOB ORDER NUMBER	PROJ-10000752
SHEET 5 OF 40	DRAWING NUMBER 2025-1636
FILE NO.: 9	

BALTIMORE COUNTY MARYLAND

DWG. FILENAME: © SITE RESOURCES, INC. Z:\25\25053-BACO CLOVERLAND PARK CRICKET FIELD\04-DWG\C121_GEOMETRY PLAN.DWG 3/19/2025 4:21 PM epm

MATCHLINE - SEE SHEET C121



LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BUILDING
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING GUARDRAIL
- FOREST CONSERVATION PLANTING EASEMENT
- CRITICAL ROOT ZONE — EXISTING TREES
- SURVEY EXTENTS
- PROPOSED ASPHALT PAVING*
- PROPOSED WOODSLINE
- PROPOSED SWM

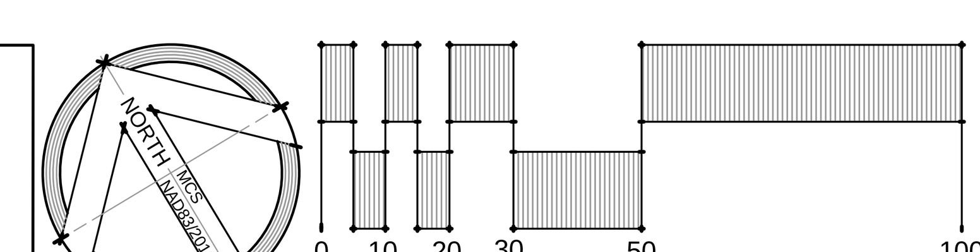
SITE GEOMETRY POINT TABLE

POINT NAME	STATION	OFFSET	ALIGNMENT
PT 1	0+00.09	RT 22.00'	ROAD
PT 2	0+12.02	RT 12.00'	ROAD
PT 3	0+50.10	RT 12.00'	ROAD
PT 4	1+49.98	RT 12.00'	ROAD
PT 38	1+49.98	LT 12.00'	ROAD
PT 39	0+51.93	LT 12.00'	ROAD
PT 40	0+12.03	LT 12.00'	ROAD
PT 41	0+00.08	LT 22.00'	ROAD

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3



SCALE: 1" = 30'
MARYLAND COORDINATE SYSTEM NAD83/2011 & NAVD88

100% CD SUBMISSION

SEAL
STATE OF MARYLAND
PETER C. SOPRANO
PROFESSIONAL ENGINEER
03/19/2025
DATE : 03/19/2025

PROFESSIONAL CERTIFICATION
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LICENSE NO. 42977, EXPIRATION DATE 06/07/2025.
ENGINEER: PETER C. SOPRANO
DGN BY:
DWN BY:
CHKD BY:
AS-BUILT PER RECORD PRINT
BY:
DATE:

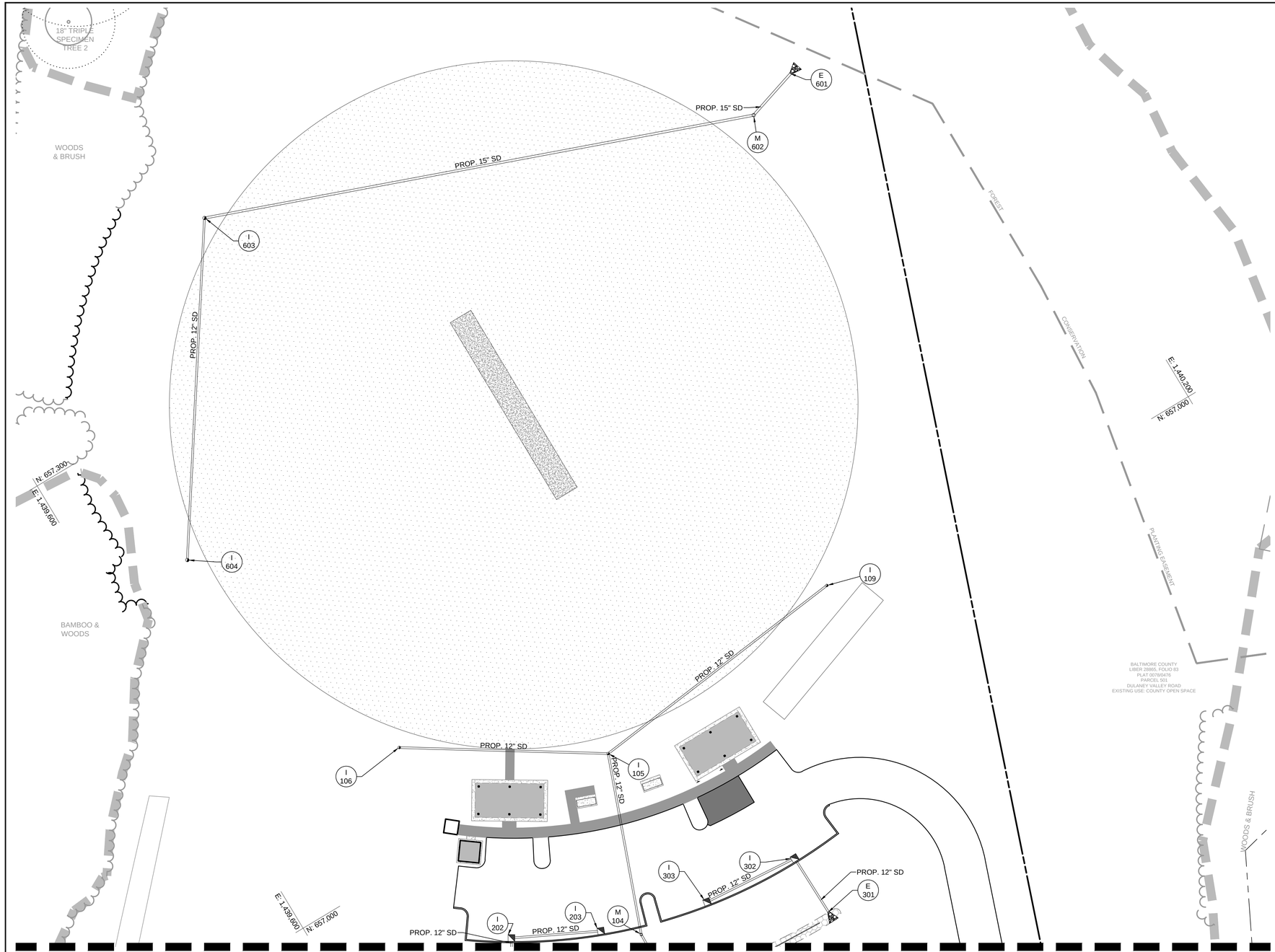
AS-BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWING SCALE		PROPERTY MANAGEMENT
				USE 112 113	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14	PLAN SCALE:	AS SHOWN	APPROVED BY: PROPERTY MANAGER
			R.O.W NO.			PROFILE SCALE:		DATE:
CONTRACT COMPLETION BOX								
BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER	
REVIEWED BY:								
DATE REVIEWED:								

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT
CLOVERLAND PARK CRICKET FIELD
SITE GEOMETRY PLAN II
CONSTRUCTION DOCUMENTS
SUBDIVISION: PHOENIX
12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131
ELECTION DIST. NO.: 10C3

BALTIMORE COUNTY MARYLAND

SHEET DESIGNATION: C122
CONTRACT NUMBER: 25067 GXO
JOB ORDER NUMBER: PROJ-10000752
SHEET 6 OF 40
DRAWING NUMBER: 2025-1637
FILE NO.: 9
REV. 03/23

DWG. FILENAME: © SITE RESOURCES, INC. Z:\23\23053-BACO CLOVERLAND PARK CRICKET FIELD\04-DWG\C121_GEOMETRY PLAN.DWG 3/19/2025 4:16 PM spm



LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BUILDING
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING GUARDRAIL
- FOREST CONSERVATION PLANTING EASEMENT
- EXISTING TREES (CRITICAL ROOT ZONE)
- EXISTING STORM DRAIN (EX. 15" SD)
- EXISTING GAS (EX. 2" GAS)
- EXISTING OVERHEAD ELECTRIC (EX. ELEC)
- SURVEY EXTENTS
- PROPOSED BUILDING
- PROPOSED PAVILION OVERHANG
- PROPOSED ASPHALT SIDEWALK*
- PROPOSED ASPHALT PAVING*
- PROPOSED 57 STONE AND GEOTEXTILE*
- PROPOSED ASPHALT PAVING*
- PROPOSED CONCRETE*
- PROPOSED ATHLETIC FIELD AND PITCH AREA
- PROPOSED WOODSLINE
- PROPOSED SIGN
- PROPOSED SWM
- PROPOSED STORM DRAIN (PROP. 15" SD)

* NOTE: REFER TO C111 FOR CONSTRUCTION NOTES FOR ITEMS THAT ARE BASE BID VS. ALTERNATES.

MATCHLINE - SEE SHEET C132

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

SEAL

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 42977, EXPIRATION DATE 06/07/2025
ENGINEER: PETER C. SOPRANO
AS-BUILT PER RECORD PRINT
BY:
DATE:
DGN BY:
DWN BY:
CHKD BY:

DATE : 03/19/2025

AS-BUILT / REVISION	BY	DATE
CONTRACT COMPLETION BOX		

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

P.W.A. NO.	KEY SHEET	POSITION SHT
R.O.W NO.	USE 112 113	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14

DRAWING SCALE
PLAN SCALE: AS SHOWN
PROFILE SCALE:

PROPERTY MANAGEMENT
APPROVED BY: PROPERTY MANAGER
DATE:

100% CD SUBMISSION

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT
CLOVERLAND PARK CRICKET FIELD
UTILITY PLAN I
CONSTRUCTION DOCUMENTS
SUBDIVISION: PHOENIX
12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131
ELECTION DIST. NO.: 10C3

SHEET DESIGNATION	CONTRACT NUMBER
C131	25067 GXO
	JOB ORDER NUMBER
	PROJ-10000752
	SHEET 7 OF 40
	DRAWING NUMBER
	2025-1638
	FILE NO.: 9

DWG. FILENAME: © SITE RESOURCES, INC. Z:\23\23053-BACO CLOVERLAND PARK CRICKET FIELD\04-DWG\C131_UTILITY PLAN.DWG 3/19/2025 4:17 PM sjpm

MATCHLINE - SEE SHEET C131

PROP. 12" SD
E 201
PROP. 12" SD
I 108
PROP. 12" SD
M 102
PROP. 15" SD
E 101
PROP. 12" SD
M 103
I 107
N: 656,800
E: 1,439,700
PROP. 12" SD
I 402
E 401

CLOVERLAND PARK CRICKET FIELD
BALTIMORE COUNTY
PARCEL 0481, TAX MAP 0053
LIBER 12644, FOLIO 00113
PLAT No. 0070 / 0151
ZONING: RC 7
COUNCILMANIC DISTRICT: 3
EXISTING USE: COUNTY OPEN SPACE

E: 1,439,900
N: 656,500

BALTIMORE COUNTY
LIBER 28865, FOLIO 83
PLAT 0078/0476
PARCEL 501
DULANEY VALLEY ROAD
EXISTING USE:
COUNTY OPEN SPACE

E: 1,439,700
N: 656,500
I 502
E 501
PROP. 12" SD

WOODS
BRUSH
POST & RAIL FENCE
OPENING
POST & RAIL FENCE
MOUNTABLE CONC. CURB
GUARDRAIL
D
30" RCP
CULVERT
MOUNTABLE CONC. CURB
DULANEY VALLEY ROAD
STANDARD
CONC. CURB
GUARDRAIL
STANDARD CONC. CURB
RESERVOIR
PROPERTY
UTILITY POLE
UTILITY POLE

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BUILDING
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING GUARDRAIL
- FOREST CONSERVATION PLANTING EASEMENT
- EXISTING TREES (CRITICAL ROOT ZONE)
- EXISTING STORM DRAIN (EX. 15" SD, D)
- EXISTING GAS (EX. 2" GAS, G)
- EXISTING OVERHEAD ELECTRIC (EX. ELEC, E)
- SURVEY EXTENTS
- PROPOSED CURB/PAVING
- PROPOSED WOODSLINE
- PROPOSED SIGN
- PROPOSED SWM
- PROPOSED STORM DRAIN (PROP. 15" SD, D)

THREADED PVC CAP - ENGRAVE DEPTH OF PIPE INVERT ON CAP. PROVIDE BLACK RUBBERIZED COATING FROM CAP TO 18" BELOW CAP.
6"
FINISHED GRADE
4" PERFORATED PVC UNDERDRAIN WRAPPED IN 1/4" MESH OR SMALLER GALVANIZED HARDWARE CLOTH.

CLEANOUT TEE

SEE PLAN VIEW FOR LOCATIONS

NOT TO SCALE

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

NORTH (MAGNETIC)
0 10 20 30 50 100
SCALE: 1" = 30'
MARYLAND COORDINATE SYSTEM NAD83/2011 & NAVD88

SEAL
STATE OF MARYLAND — PETER C. SOPRANO — 42977 — PROFESSIONAL ENGINEER
03/19/2025
DATE : 03/19/2025

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 42977, EXPIRATION DATE 06/07/2025
ENGINEER: PETER C. SOPRANO
AS-BUILT PER RECORD PRINT
BY:
DATE:
DGN BY:
DWN BY:
CHKD BY:

AS-BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT
				USE 112 113	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14
			R.O.W NO.		
CONTRACT COMPLETION BOX					

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

DRAWING SCALE
PLAN SCALE: AS SHOWN
PROFILE SCALE:

PROPERTY MANAGEMENT
APPROVED BY: PROPERTY MANAGER
DATE:

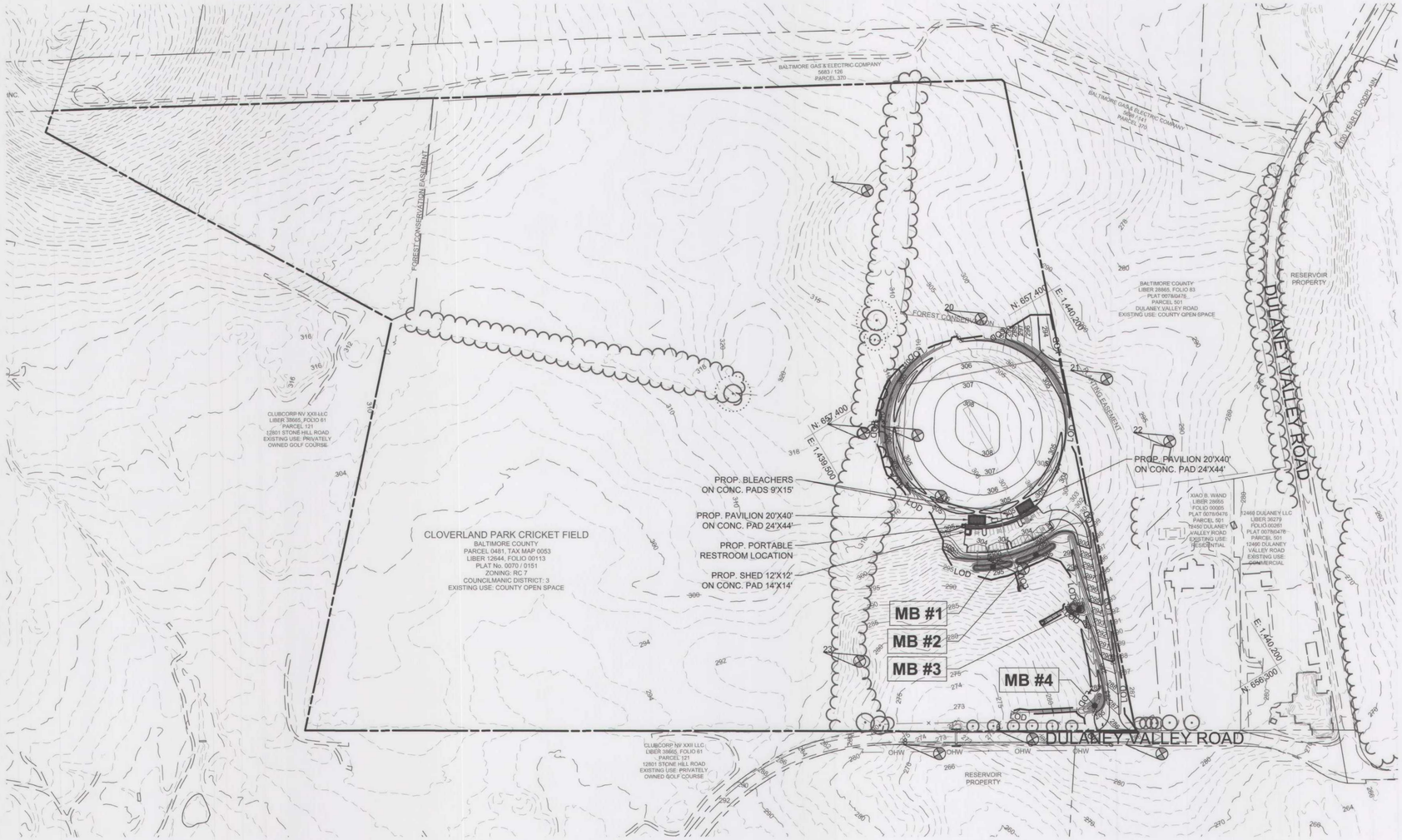
100% CD SUBMISSION

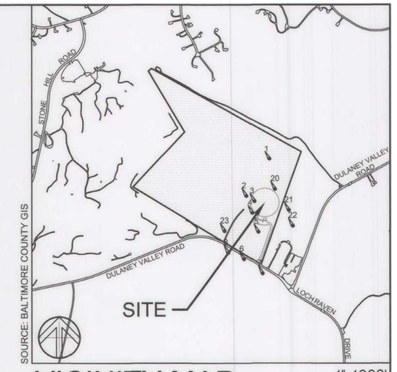
BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT
CLOVERLAND PARK CRICKET FIELD
UTILITY PLAN II
CONSTRUCTION DOCUMENTS
SUBDIVISION: PHOENIX — 12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131 — ELECTION DIST. NO.: 10C3

SHEET DESIGNATION	CONTRACT NUMBER
C132	25067 GXO
JOB ORDER NUMBER	
PROJ-10000752	
SHEET 8 OF 40	
DRAWING NUMBER	
2025-1639	
FILE NO.: 9	

BALTIMORE COUNTY MARYLAND

DWG. FILENAME: © SITE RESOURCES, INC. Z:\23\23053-BACO CLOVERLAND PARK CRICKET FIELD\04-DWG\C131_UTILITY PLAN.DWG 3/19/2025 4:17 PM sjmh





VICINITY MAP

1"=1000'

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BUILDING
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING GUARDRAIL
- FOREST CONSERVATION PLANTING EASEMENT
- EXISTING 100 YR. FLOODPLAIN
- EXISTING TREES
- EXISTING STORM DRAIN
- EXISTING GAS
- EXISTING OVERHEAD ELECTRIC
- EXISTING CONTOURS
- SURVEY BENCHMARKS/ TRAVERSE POINTS
- PROPOSED CURB/PAVING
- PROPOSED WOODSLINE
- PROPOSED SIGN
- PROPOSED SWM
- PROPOSED STORM DRAIN
- PROPOSED CONTOURS
- LIMIT OF DISTURBANCE

OWNER'S/DEVELOPER'S CERTIFICATION-GRADING

I/WE CERTIFY THAT ALL GRADING ON THIS SITE WILL BE DONE IN ACCORDANCE WITH THE CURRENT GRADING REQUIREMENTS AS SET FORTH BY THE BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY AND WITH THE REQUIREMENTS SPECIFIED IN ARTICLE 33, TITLE 5 OF THE BALTIMORE COUNTY CODE.

SIGNATURE OF OWNER/DEVELOPER — DATE: 9/30/2024

GREGORY M. DORAN — PRINT NAME

CHIEF CAPITAL CONSTRUCTION — TITLE

GENERAL GRADING NOTES:

1. THE PROPOSED GRADING SHOWN ON THIS PLAN MEETS THE REQUIREMENTS SET FORTH BY BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY AND COMPLIES WITH ARTICLE 33, TITLE 5 OF THE BALTIMORE COUNTY CODE. HOWEVER, DUE TO BUILDING TYPES AND LAYOUT, SOME FIELD ADJUSTMENTS MAY BE REQUIRED. ALL CHANGES MUST COMPLY WITH THE ABOVE MENTIONED REQUIREMENTS.
2. ALL SWALES HAVE BEEN DESIGNED BY THE ENGINEER TO CONVEY RUNOFF ACCORDING TO BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS DESIGN STANDARDS.
3. THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION OR DISTURBANCE OF VEGETATION IN THE FOREST BUFFER EASEMENT OR OTHER FOREST RETENTION AREAS, EXCEPT AS PERMITTED BY THE BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENT PROTECTION AND SUSTAINABILITY.
4. STORMWATER MANAGEMENT HAS BEEN ADDRESSED BY ENVIRONMENTAL SITE DESIGN AND PAYMENT OF FEE IN LIEU.

SURVEY NOTES:

BASE INFORMATION REFLECTED ON THESE PLANS WAS TAKEN FROM THE FOLLOWING SOURCES:

A. PLAN ENTITLED "TOPOGRAPHIC SURVEY OF CLOVERLAND PARK", PREPARED BY DIETZ SURVEYING INC. DATED DECEMBER 1, 2023.
B. COORDINATES SHOWN ON ARE BASED ON THE MARYLAND COORDINATE SYSTEM, NAD 83-2011, ESTABLISHED BY GPS OBSERVATION.
ELEVATIONS AND CONTOURS SHOWN ARE BASED ON THE NAVD-88 VERTICAL DATUM.
C. BALTIMORE COUNTY GIS INFORMATION.

SURVEY REFERENCE NOTES

ALL HORIZONTAL AND VERTICAL SURVEY DATA CONTAINED HEREIN ARE REFERENCED TO SURVEY CONTROL POINTS

PT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	657,918.4	1,439,865.4	314.61	MAG NAIL SET
2	657,401.1	1,439,543.5	318.59	MAG NAIL SET
3	657,326.2	1,439,656.8	315.18	MAG NAIL SET
4	657,164.5	1,439,628.5	311.03	MAG NAIL SET
5	656,902.1	1,439,712.0	299.67	MAG NAIL SET
6	656,523.1	1,439,511.3	274.88	MAG NAIL SET
7	656,324.2	1,439,770.7	286.00	MAG NAIL SET
8	656,612.8	1,439,292.0	274.45	MAG NAIL SET
20	657,494.6	1,439,944.2	305.35	MAG NAIL SET
21	657,202.0	1,444,137.1	297.09	MAG NAIL SET
22	656,986.4	1,440,192.1	297.00	MAG NAIL SET
23	656,915.6	1,439,239.4	291.25	MAG NAIL SET

LIMIT OF DISTURBANCE:
~~298,380 SF / 6.85 AC~~
297,190 SF / 6.82 AC

STORMWATER MANAGEMENT REQUIRED

BALTIMORE COUNTY
DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY
APPROVED FOR GRADING
Charu Malhotra 02-07-25
Date

SCALE: 1" = 150'
MARYLAND COORDINATE SYSTEM NAD83/2011 & NAVD88

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

SEAL — DATE: 01/15/2025

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 42977, EXPIRATION DATE 06/07/2025.
ENGINEER: PETER C. SOPRANO, SITE RESOURCES, INC.
AS-BUILT PER RECORD PRINT
BY: DATE:

DGN BY: SPM/KRH
DWN BY: SPM/KRH
CHKD BY: KPR/PCS

AS-BUILT / REVISION | BY | DATE | P.W.A. NO. | KEY SHEET | POSITION SHT

CONTRACT COMPLETION BOX | R.O.W NO. | USE 112 113 | 65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

DRAWING SCALE — PLAN SCALE: AS SHOWN; PROFILE SCALE:

PROPERTY MANAGEMENT — APPROVED BY: PROPERTY MANAGER; DATE:

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT

CLOVERLAND PARK CRICKET FIELD

GRADING CONTEXT PLAN

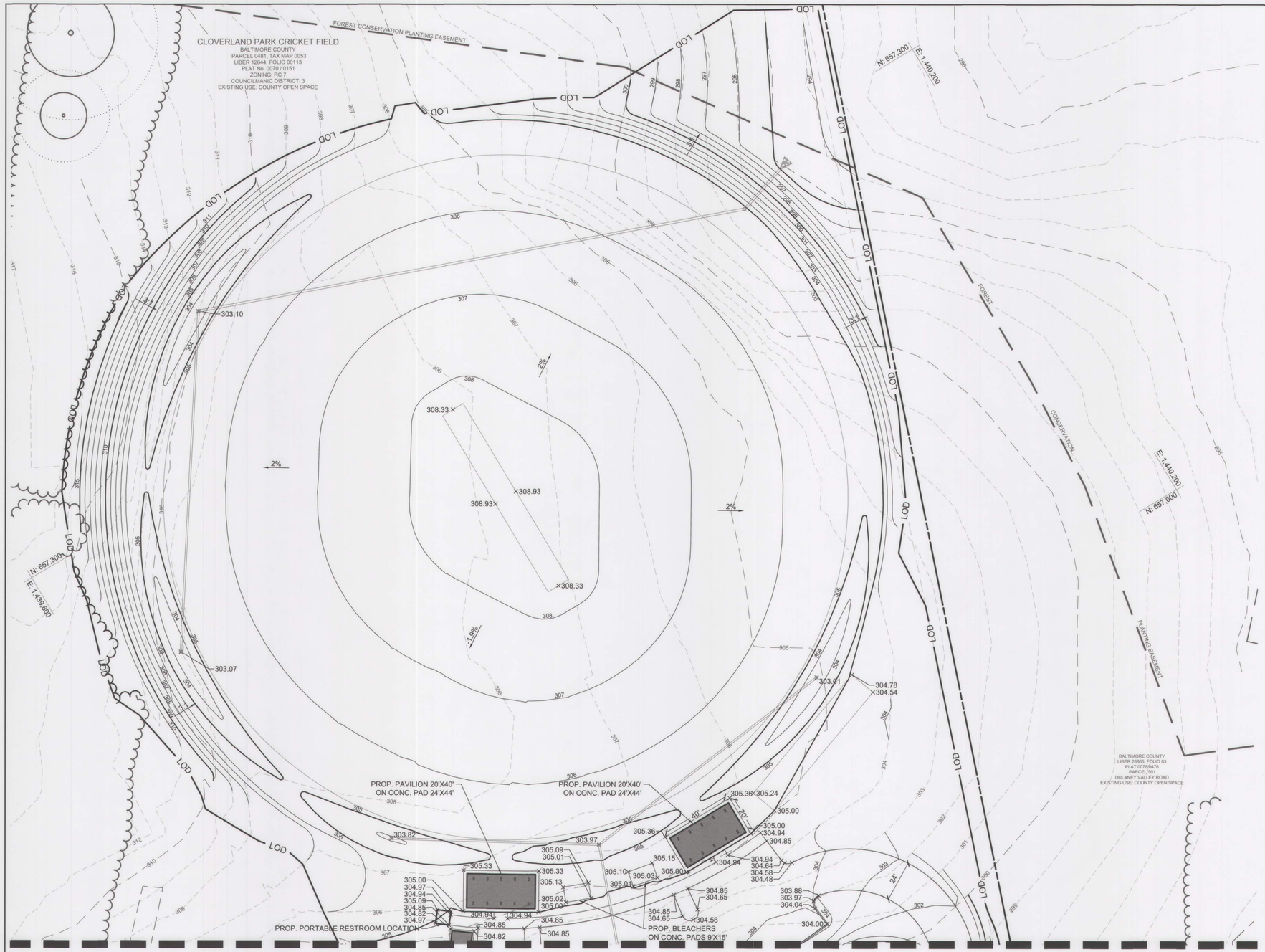
CONSTRUCTION DOCUMENTS

SUBDIVISION: PHOENIX — 12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131 — ELECTION DIST. NO.: 10C3

GRADING SHEET 1 OF 3
09/24/2024

SHEET DESIGNATION	CONTRACT NUMBER
C140	25067 GXO
JOB ORDER NUMBER	PROJ-10000752
SHEET 9 OF 40	
DRAWING NUMBER	2025-1640
FILE NO.: 9	

DWG. FILENAME: © SITE RESOURCES, INC. Z:\CP\25063 BACO CLOVERLAND PARK CRICKET FIELD\C140_GRADING PLAN.DWG 9/23/2024 1:03 PM



LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BUILDING
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING GUARDRAIL
- FOREST CONSERVATION PLANTING EASEMENT
- EXISTING TREES (CRITICAL ROOT ZONE)
- EXISTING STORM DRAIN (EX. 15" SD)
- EXISTING GAS (EX. 2" GAS)
- EXISTING OVERHEAD ELECTRIC (EX. ELEC, OHW)
- EXISTING CONTOURS (350, 348)
- PROPOSED BUILDING
- PROPOSED CURB/PAVING
- PROPOSED WOODSLINE
- PROPOSED SIGN
- PROPOSED SWM
- PROPOSED STORM DRAIN
- PROPOSED CONTOURS (350, 348)
- SPOT ELEVATIONS (EXISTING (220.8), PROPOSED 220.8)
- LOD — LIMIT OF DISTURBANCE

MATCHLINE - SEE SHEET C142

LIMIT OF DISTURBANCE:
~~298,360 SF / 6.85 AC~~
297,150 SF / 6.82 AC

NORTH

0 10 20 30 50 100
SCALE: 1" = 30'
MARYLAND COORDINATE SYSTEM NAD83/2011 & NAVD88

DWG. FILENAME: Z:\20\20003-BACO CLOVERLAND PARK CRICKET FIELD\04-DWG\C142-GRADING PLAN.DWG 9/25/2024 12:50 PM KRH

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

SEAL

DATE : 01/15/2025

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 42977, EXPIRATION DATE 06/07/2025

ENGINEER: PETER C. SOPRANO
SITE RESOURCES, INC.

AS-BUILT PER RECORD PRINT
BY:
DATE:

DGN BY: SPM/KRH
DWN BY: SPM/KRH
CHKD BY: KPR/PCS

AS-BUILT / REVISION | BY | DATE | P.W.A. NO. | KEY SHEET | POSITION SHT

CONTRACT COMPLETION BOX | R.O.W NO. | USE 112 113 | 65NE12 66NE13 64NE12 64NE13 63NE12 63NE13 64NE14

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

DRAWING SCALE
PLAN SCALE: AS SHOWN
PROFILE SCALE:

PROPERTY MANAGEMENT
APPROVED BY: PROPERTY MANAGER
DATE:

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT

CLOVERLAND PARK CRICKET FIELD

GRADING PLAN I

CONSTRUCTION DOCUMENTS

SUBDIVISION: PHOENIX

12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131

ELECTION DIST. NO.: 10C3

GRADING SHEET 2 OF 3
09/24/2024

SHEET DESIGNATION	CONTRACT NUMBER
C141	25067 GXO

JOB ORDER NUMBER
PROJ-10000752

SHEET 10 OF 40

DRAWING NUMBER
2025-1641

FILE NO.: 9

MATCHLINE - SEE SHEET C141

MB #1

MB #2

MB #3

MB #4

N: 656,800
E: 1,439,700

N: 656,500
E: 1,439,900

CLOVERLAND PARK CRICKET FIELD
BALTIMORE COUNTY
PARCEL 0481, TAX MAP 0053
LIBER 12644, FOLIO 00113
PLAT No. 0070 / 0151
ZONING: RC 7
COUNCILMANIC DISTRICT: 3
EXISTING USE: COUNTY OPEN SPACE

BALTIMORE COUNTY
LIBER 28865, FOLIO 83
PLAT 0078/0476
PARCEL 501
DULANEY VALLEY ROAD
EXISTING USE:
COUNTY OPEN SPACE

PROP. SHED 12'X12'
ON CONC. PAD 14'X14'

DULANEY VALLEY ROAD

POST & RAIL FENCE

OPENING

MOUNTABLE CONC. CURB

GUARDRAIL

D
30" RCP
CULVERT

10' D & U EASEMENT

FENCE REMOVED TO NEAREST POST

PLATE R-32

STANDARD CONC. CURB

24'

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BUILDING
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING GUARDRAIL
- FOREST CONSERVATION PLANTING EASEMENT
- CRITICAL ROOT ZONE — EXISTING TREES
- EX. 15" SD — EXISTING STORM DRAIN
- EX. 2" GAS — EXISTING GAS
- EX. ELEC / OHW — EXISTING OVERHEAD ELECTRIC
- EXISTING CONTOURS
- PROPOSED CURB/PAVING
- PROPOSED WOODSLINE
- PROPOSED SIGN
- PROPOSED SWM
- PROPOSED STORM DRAIN
- PROPOSED CONTOURS
- (220.8) EXISTING / 220.8 PROPOSED — SPOT ELEVATIONS
- LOD — LIMIT OF DISTURBANCE

LIMIT OF DISTURBANCE:
~~298,360 SF / 6.85 AC~~
297,150 SF / 6.82 AC

SCALE: 1" = 30'
MARYLAND COORDINATE SYSTEM NAD83/2011 & NAVD88

DWG. FILENAME: © SITE RESOURCES, INC. Z:\257.20050- BACD CLOVERLAND PARK CRICKET FIELD\04 - DWG\C142 - GRADING PLAN.DWG 9/25/2024 12:50 PM KRH

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
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DESIGN PROFESSIONAL:
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CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

SEAL — STATE OF MARYLAND — PETER C. SOPRANO — REGISTERED PROFESSIONAL ENGINEER
DATE: 01/15/2025

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
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ENGINEER: PETER C. SOPRANO
SITE RESOURCES, INC.

AS-BUILT PER RECORD PRINT
BY:
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DGN BY: SPM/KRH
DWN BY: SPM/KRH
CHKD BY: KPR/PCS

AS-BUILT / REVISION	BY	DATE
CONTRACT COMPLETION BOX		

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

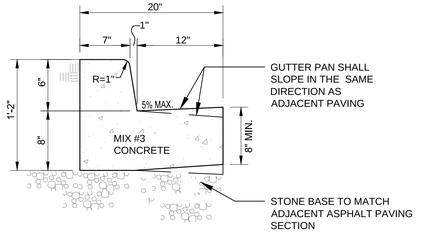
P.W.A. NO.	KEY SHEET	POSITION SHT
R.O.W NO.	USE 112 113	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14

DRAWING SCALE
PLAN SCALE: AS SHOWN
PROFILE SCALE:

PROPERTY MANAGEMENT
APPROVED BY: _____ PROPERTY MANAGER
DATE: _____

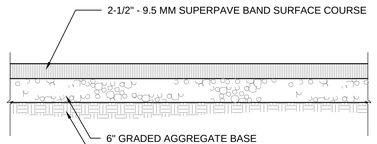
BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT
CLOVERLAND PARK CRICKET FIELD
GRADING PLAN II
CONSTRUCTION DOCUMENTS
SUBDIVISION: PHOENIX
12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131
ELECTION DIST. NO.: 10C3
GRADING SHEET 3 OF 3
09/24/2024

SHEET DESIGNATION	CONTRACT NUMBER
C142	25067 GXO
JOB ORDER NUMBER	
PROJ-10000752	
SHEET 11 OF 40	
DRAWING NUMBER	
2025-1642	
FILE NO.: 9	



1 CONCRETE CURB & GUTTER

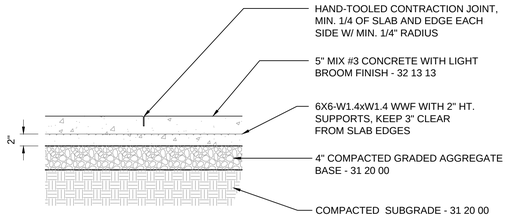
BASE BID — NOT TO SCALE



NOTES:
1. A REPRESENTATIVE FROM THE ON-SITE GEO-TECHNICAL ENGINEER SHALL OBSERVE AND TEST ANY COMPACTED FILL TO BE USED FOR PAVEMENT SUPPORT, AND OBSERVE ANY PROOFROLLING OPERATIONS OF PAVEMENT SUBGRADES.

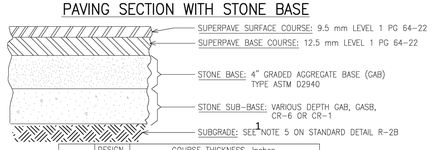
2 PEDESTRIAN ASPHALT WALK

BASE BID — NOT TO SCALE



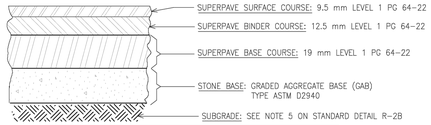
NOTES:
1. PLACE CONTRACTION JOINTS AT INTERVAL MATCHING WIDTH OF SIDEWALK BUT NOT MORE THAN 2X THE SLAB THICKNESS IN FEET.
2. PROVIDE ISOLATION JOINTS WHERE POUR MEETS EXISTING CONCRETE PAVING OR CURB AND ALL PROPOSED VERTICAL CONDITIONS.
3. WHEN CONCRETE PAVING ABUTS BACK OF STREET CURB, WALK SHALL BE 1/4" ABOVE TOP OF CURB.
4. UNLESS OTHERWISE SHOWN ON PLAN, CONTRACTOR TO SUBMIT LAYOUT OF PROPOSED CONTRACTION JOINTS FOR APPROVAL PRIOR TO POURING CONCRETE.

PAVING SECTION WITH STONE BASE



SECTION	DESIGN CBR VALUE	COURSE THICKNESS, Inches: Surface Course	Base Course	Stone Base & Sub-Base
A	5	1.5"	3.0"	12.0"
B	6	1.5"	3.0"	10.0"
C	7	1.5"	2.5"	9.0"
D	8	1.5"	2.5"	8.0"
E	≥9	1.5"	2.5"	7.0"

PAVING SECTION WITH 4" STONE BASE



SECTION	DESIGN CBR VALUE	COURSE THICKNESS, Inches: Surface Course	Binder Course	Base Course	Stone Base
A	5	1.5"	2.5"	4"*	4"
B	6	1.5"	2"	4"*	4"
C	7	1.5"	2"	3"	4"
D	8	1.5"	2"	2.5"	4"
E	≥9	1.5"	2"	2"	4"

* 2 – 2" Lifts of 19 mm Superpave

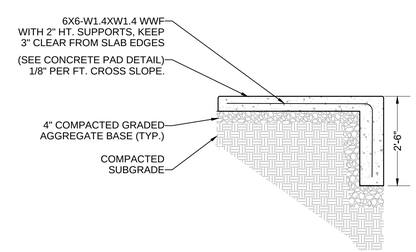
[1]NOTE 5 (STANDARD DETAIL R-28):

SUBGRADES MUST BE STABLE AND APPROVED WITH PROOF ROLL BY BALTIMORE COUNTY INSPECTOR PRIOR TO PLACEMENT OF STONE BASE AND CURB & GUTTER POUR.

DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
ROADS AND STREET DETAILS
TYPICAL SUBDIVISION PAVEMENT SECTION WIDTH ≤ 30'
CBR ≥ 5
ISSUED: SEPTEMBER 2023
PLATE R–2A

3 ASPHALT PAVING

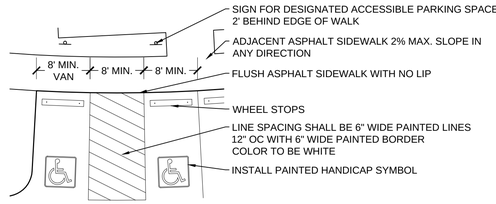
BASE BID - ACCESSIBLE PARKING SPACES
ADD ALTERNATE 3* — NOT TO SCALE

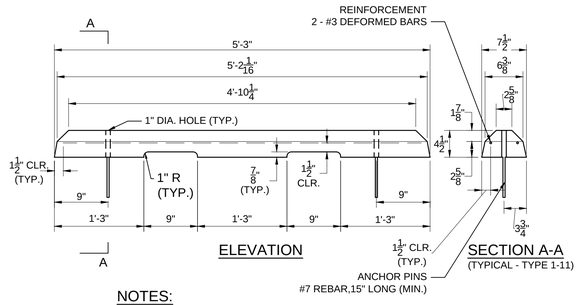


NOTES:
1. ALL CONCRETE TO BE MDSHA MIX NO. 3.
2. ALL EXPOSED CONCRETE EDGE RADII SHALL BE 1/2".
3. WALKING SURFACE TO RECEIVE LIGHT BRUSHED NON-SLIP FINISH THAT IS PERPENDICULAR TO THE DIRECTION OF PEDESTRIAN TRAVEL. (SEE SPECS)
4. UNLESS OTHERWISE SHOWN ON PLAN, ALL REBAR AND/OR MESH SHALL HAVE A MINIMUM CLEARANCE OF 3" FROM SURFACE.
5. EXPANSION AND CONTRACTION JOINTS SHALL BE SPACED IN ACCORDANCE WITH CONCRETE PAD DETAIL.
6. TURN DOWN ALL EDGES TO 30" DEPTH.

4 ACCESSIBLE PARKING SPACES

BASE BID — NOT TO SCALE

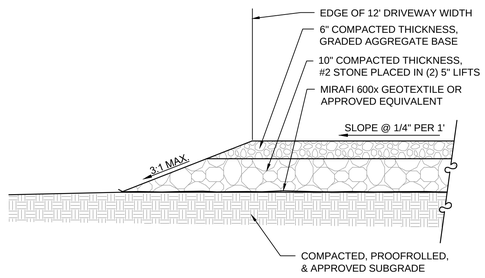




NOTES:
1. 4500 PSI CONCRETE
2. ANCHOR PINS SHALL NOT PROTRUDE ABOVE TOP OF WHEELSTOP
3. INSTALL WHEELSTOPS 24" FROM EDGE OF PAVING.

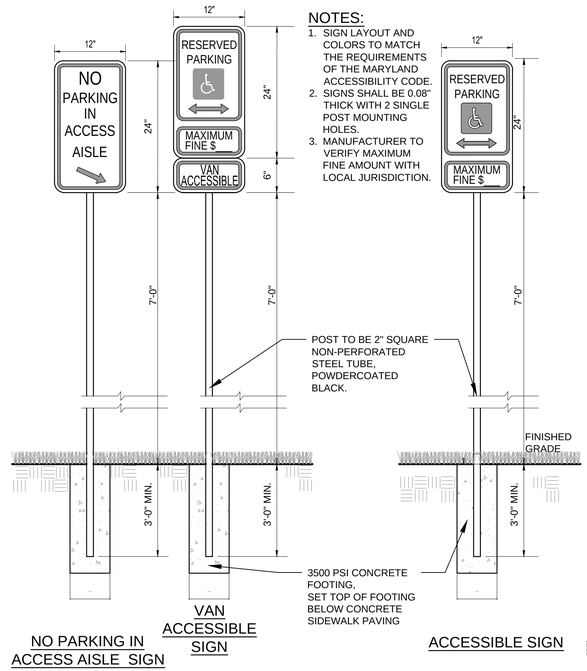
5 PRECAST CONCRETE WHEEL STOP

BASE BID — NOT TO SCALE



6 VAN ACCESSIBLE PARKING SIGNS

BASE BID — NOT TO SCALE



NOTES:
1. SIGN LAYOUT AND COLORS TO MATCH THE REQUIREMENTS OF THE MARYLAND ACCESSIBILITY CODE.
2. SIGNS SHALL BE 0.08" THICK WITH 2 SINGLE POST MOUNTING HOLES.
3. MANUFACTURER TO VERIFY MAXIMUM FINE AMOUNT WITH LOCAL JURISDICTION.

NO PARKING IN ACCESS AISLE SIGN — VAN ACCESSIBLE SIGN — ACCESSIBLE SIGN

7 CONCRETE PAD AND TURNDOWN EDGE

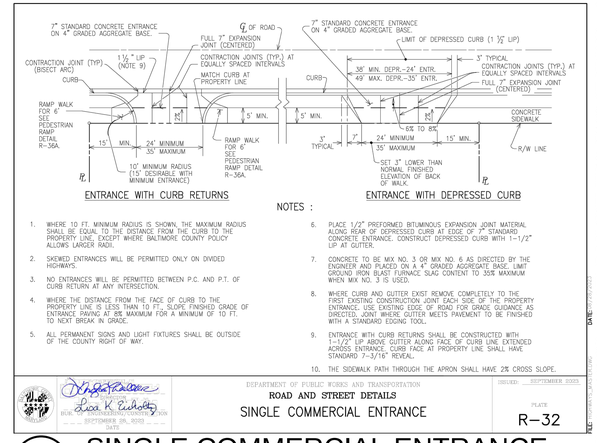
ADD ALTERNATE 4* — NOT TO SCALE

8 STONE DRIVEWAY/PARKING

BASE BID* — NOT TO SCALE

9 SINGLE COMMERCIAL ENTRANCE

BASE BID — NOT TO SCALE



NOTES :
1. WHERE 10 FT. MINIMUM RADIUS IS SHOWN, THE MAXIMUM RADIUS SHALL BE EQUAL TO THE DISTANCE FROM THE CURB TO THE PROPERTY LINE, EXCEPT WHERE BALTIMORE COUNTY POLICY ALLOWS LARGER RADII.
2. SKEWED ENTRANCES WILL BE PERMITTED ONLY ON DIVIDED HIGHWAYS.
3. NO ENTRANCES WILL BE PERMITTED BETWEEN P.C. AND P.T. OF CURB RETURN AT ANY INTERSECTION.
4. WHERE THE DISTANCE FROM THE FACE OF CURB TO THE PROPERTY LINE IS LESS THAN 10 FT., SLOPE FINISHED GRADE OF ENTRANCE PAVING AT 8% MAXIMUM FOR A MINIMUM OF 10 FT. TO NEXT BREAK IN GRADE.
5. ALL PERMANENT SIGNS AND LIGHT FIXTURES SHALL BE OUTSIDE OF THE COUNTY RIGHT OF WAY.
6. PLACE 1/2" PREFORMED BITUMINOUS EXPANSION JOINT MATERIAL ALONG REAR OF DEPRESSED CURB AT EDGE OF 7" STANDARD CONCRETE ENTRANCE. CONSTRUCT DEPRESSED CURB WITH 1–1/2" LIP AT GUTTER.
7. CONCRETE TO BE MIX NO. 3 OR MIX NO. 6 AS DIRECTED BY THE ENGINEER AND PLACED ON A 4" GRADED AGGREGATE BASE. LIMIT GROUND IRON BLAST FURNACE SLAG CONTENT TO 30% MAXIMUM WHEN MIX NO. 3 IS USED.
8. WHERE CURB AND GUTTER EXIST REMOVE COMPLETELY TO THE FIRST EXISTING CONSTRUCTION JOINT EACH SIDE OF THE PROPERTY ENTRANCE. USE EXISTING EDGE OF ROAD FOR GRADE GUIDANCE AS DIRECTED. JOINT WHERE GUTTER MEETS PAVEMENT TO BE FINISHED WITH A STANDARD EDGING TOOL.
9. ENTRANCE WITH CURB RETURNS SHALL BE CONSTRUCTED WITH 1–1/2" LIP ABOVE GUTTER ALONG FACE OF CURB LINE EXTENDED ACROSS ENTRANCE. CURB FACE AT PROPERTY LINE SHALL HAVE STANDARD 7–3/16" REVEAL.
10. THE SIDEWALK PATH THROUGH THE APRON SHALL HAVE 2% CROSS SLOPE.

DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
ROAD AND STREET DETAILS
SINGLE COMMERCIAL ENTRANCE
ISSUED: SEPTEMBER 2023
PLATE R–32

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

SEAL — STATE OF MARYLAND — PETER C. SOPRANO — 42977 — PROFESSIONAL ENGINEER — 03/19/2025

DATE : 03/19/2025

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 42977, EXPIRATION DATE 06/07/2025
ENGINEER: PETER C. SOPRANO
AS–BUILT PER RECORD PRINT
BY:
DATE:

DGN BY:
DWN BY:
CHKD BY:

AS–BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT
				USE 112 113	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14
CONTRACT COMPLETION BOX			R.O.W NO.		

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

DRAWING SCALE	
PLAN SCALE:	AS SHOWN
PROFILE SCALE:	

PROPERTY MANAGEMENT
APPROVED BY: PROPERTY MANAGER
DATE:

*NOTE:
SEE SHEET C111. REFER TO CONSTRUCTION NOTES FOR ITEMS THAT ARE BASE BID VS. ALTERNATES.

100% CD SUBMISSION

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT
CLOVERLAND PARK CRICKET FIELD
SITE DETAILS I
CONSTRUCTION DOCUMENTS
SUBDIVISION: PHOENIX — 12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131 — ELECTION DIST. NO.: 10C3

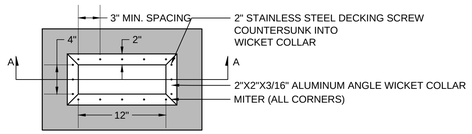
SHEET DESIGNATION	CONTRACT NUMBER
C201	25067 GXO
JOB ORDER NUMBER	
PROJ–10000752	
SHEET 12 OF 40	
DRAWING NUMBER	
2025–1643	
FILE NO.: 9	REV. 40/A

BALTIMORE COUNTY MARYLAND

HOCKEY GOLD
ARTIFICIAL TURF
(OR APPROVED EQUAL)

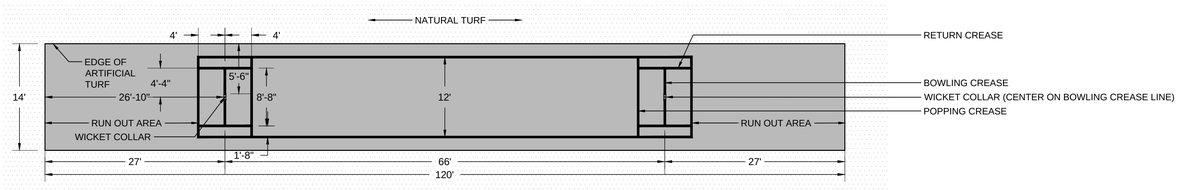
FIELD TURF
(800) 724.2969
contact@fieldturf.com
www.fieldturf.com

NOTES:
1. PLACE EXPANSION JOINTS NOT MORE THAN 20'-25' APART AND AT THE END OF EACH CONTIGUOUS POUR.
2. PLACE CONTRACTION JOINTS NO MORE THAN 6' APART.
3. PITCH MARKINGS TO BE TUFTED OR INLAID INTO ARTIFICIAL TURF, COLOR: WHITE 4" IN WIDTH.
4. REFER TO MANUFACTURER SPECIFICATIONS REGARDING INSTALLATION PROCEDURES.
5. ALL METAL EDGES SHALL BE SMOOTH AND FREE OF BURRS.

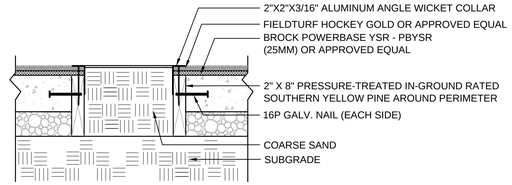


WICKET COLLAR (PLAN)

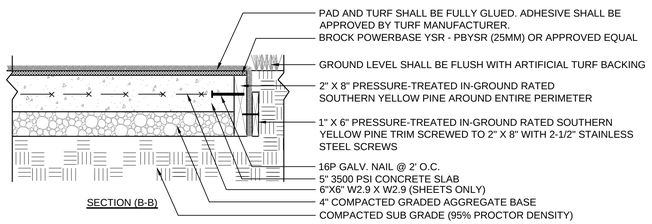
NOTE: MARKINGS SHALL COMPLY WITH THE INTERNATIONAL CRICKET COUNCIL RULES AND REGULATIONS.



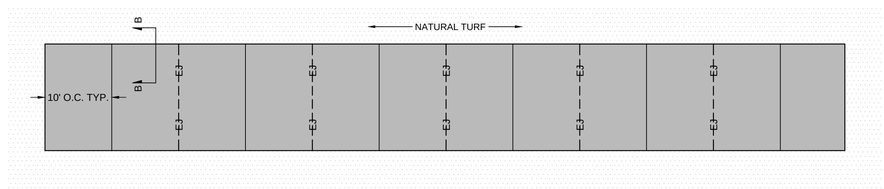
LAYOUT



SECTION (A-A)



SECTION (B-B)



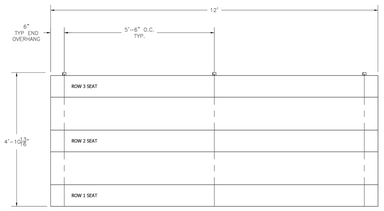
CONCRETE SCORING AND EXPANSION JOINTS

1 ARTIFICIAL TURF CRICKET PITCH AREA

BASE BID

NOT TO SCALE

BLEACHER TOP VIEW

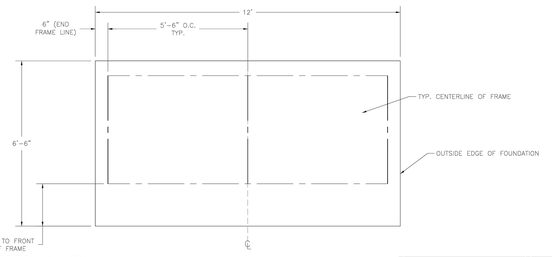


SECTION LENGTH	GROSS SEATS	ACTUAL SEATS	NO. OF ROWS	NET SEATS
12'	8.00	8.00	3	24
NET SEATS				24
WHEELCHAIR SPACES				0
TOTAL NET SEATING CAPACITY (BASED ON 18" PER SEAT)				24

BELSON OUTDOORS — 627 Annandale Drive, Naperville, IL 60565, Phone: (630) 357-6565, Fax: (630) 357-6573, sales@belson.com

MODEL: BS-0312
DESCRIPTION: NON-ELEV. 3 ROW x 12' SEATING PLAN
DRAWN BY: HIT | DATE: 7/12/22 | REVISION: 0 | SCALE: N.T.S. | SHEET NUMBER: TD.1

LOCATE FRAMES ON FOUNDATION



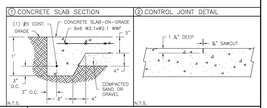
CONCRETE FOUNDATION SPECIFICATIONS

NOTE:
Foundation construction is not part of BELSON OUTDOORS' scope of work unless noted otherwise in the contract documents. The OWNER shall review the foundation design with local code authorities and coordinate with BELSON OUTDOORS.

FOUNDATION DESIGN & ANCHORS:
1) The foundation designs are based on the following:
a) Minimum pressured soil bearing of 2000 psf.
b) Bleacher frame dead and live load of 700 lbs. ft.
c) Bleacher frame wind uplift of 250 lbs. ft.
2) Unless otherwise specified on the drawings the bleacher frames shall be attached to concrete with a ½" dia. x 5½" wedge type expansion anchor. The anchors shall be embedded a minimum of 3" into the concrete.

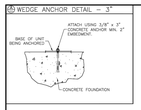
CONCRETE SPECIFICATIONS:
1) All concrete construction shall be in accordance with *ACI 318.05*.
2) All concrete shall be air-entrained using an air entraining admixturing meeting *ASTM C620*. Total air content: 5%-7% per *ASTM C173*.
3) All concrete shall have a minimum 28-day strength of f'c=3000psi. Concrete shall have air-entrainment
4) A ½" bituminous expansion joint material shall be placed between strip and slab foundations where adjacent to each other.
5) Slab depressions in the top of the foundations between high spots shall not exceed ¼" below 10-foot long straightedge. The 10-foot straightedge method used to measure foundation features shall be in accordance with *ACI 302.1R-04 "Guide for Concrete Floor and Slab Construction"*.

CONCRETE SLAB RECOMMENDED SPECIFICATIONS:
1) Concrete slab shall have a minimum thickness of 6" (some areas may require 8") and placed on 4" of compacted gravel or compacted soil base.
2) BELSON OUTDOORS recommends that the concrete slab be reinforced with 6x6-W2.1xW2.1 welded wire fabric at mid-height of the slab. If the slab is not reinforced with welded wire fabric, steel fiber substitution requires OWNER approval and his understanding of potential crack formation issues.
3) Contractor may substitute blended fiber reinforcing, provided the blend consists of multifilament polypropylene fibers and steel fibers. The fibers shall be added to the concrete mix at the manufacturer's recommended rate, or at a different recommendation in order to achieve equivalent, applied at a dosage rate of 5lb/CY unless specified otherwise by a different recommendation in order to achieve equivalent.
4) Crack control joints shall be sawed cuts shall to form approximate square patterns. The maximum spacing for control joints shall not exceed 15'-0", UNLESS INDICATED OTHERWISE. The bleacher frames shall not be set on control joints. The designer shall contact BELSON OUTDOORS to coordinate joint spacing requirements with the specific bleacher design.
5) The slab shall be finished with a broom finish. The direction of the broom finish shall be perpendicular to the long axis of the slab perpendicular to the seats (front to rear) shall not exceed 3" and parallel to the seats (end to end) shall not exceed 6".

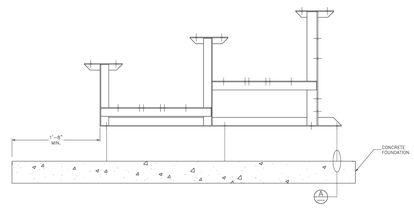


MODEL: BS-0312
DESCRIPTION: NON-ELEV. 3 ROW x 12' FOUNDATION PLAN
DRAWN BY: HIT | DATE: 7/12/22 | REVISION: 0 | SCALE: N.T.S. | SHEET NUMBER: FP.1

WEDGE ANCHOR DETAIL – 3"



(OPTIONAL) ANCHOR BLEACHER TO CONCRETE FOUNDATION *



* CONCRETE WEDGE ANCHORS NOT INCLUDED WITH ALL UNITS. IF USING OTHER ANCHORING SYSTEM, SKIP THIS STEP AND REFER TO INSTRUCTIONS SPECIFIC TO THE ANCHORING SYSTEM PURCHASED FOR YOUR UNIT. SEE PRINT FP.1 (INCLUDED IN THIS PACKET) FOR GENERAL CONCRETE FOUNDATION SPECIFICATIONS.

BELSON OUTDOORS — 627 Annandale Drive, Naperville, IL 60565, Phone: (630) 357-6565, Fax: (630) 357-6573, sales@belson.com

MODEL: BS-0312
DESCRIPTION: NON-ELEV. 3 ROW BLEACHER ANCHORING PLAN
DRAWN BY: HIT | DATE: 7/12/22 | REVISION: 0 | SCALE: N.T.S. | SHEET NUMBER: AP.1

2 BENCH INSTALLATION (OR APPROVED EQUAL)

ADD ALTERNATE 4*

NOT TO SCALE

*NOTE:

SEE SHEET C111. REFER TO CONSTRUCTION NOTES FOR ITEMS THAT ARE BASE BID VS. ALTERNATES.

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER C. SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

SEAL

STATE OF MARYLAND — PETER CHRISTOPHER SOPRANO — 42977 — REGISTERED PROFESSIONAL ENGINEER — 03/19/2025

DATE : 03/19/2025

PROFESSIONAL CERTIFICATION		AS-BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWING SCALE	PROPERTY MANAGEMENT
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.						USE 112 113	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14	PLAN SCALE: AS SHOWN	APPROVED BY: PROPERTY MANAGER
LICENSE NO. 42977, EXPIRATION DATE 06/07/2025		CONTRACT COMPLETION BOX			R.O.W NO.			PROFILE SCALE:	DATE:
ENGINEER: PETER C. SOPRANO	DGN BY:	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
AS-BUILT PER RECORD PRINT	DWN BY:	REVIEWED BY:							
BY: DATE:	CHKD BY:	DATE REVIEWED:							

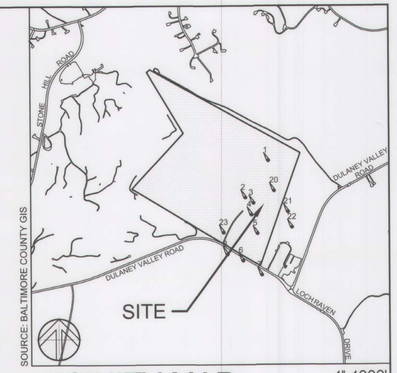
100% CD SUBMISSION

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT
CLOVERLAND PARK CRICKET FIELD
SITE DETAILS II
CONSTRUCTION DOCUMENTS
SUBDIVISION: PHOENIX — 12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131 — ELECTION DIST. NO.: 10C3

SHEET DESIGNATION	CONTRACT NUMBER
C202	25067 GXO
JOB ORDER NUMBER	PROJ-10000752
SHEET 13 OF 40	
DRAWING NUMBER	2025-1644
FILE NO.: 9	REV. 40/A

BALTIMORE COUNTY MARYLAND

DWG. FILENAME: © SITE RESOURCES, INC. Z:\23-23053-BACO CLOVERLAND PARK CRICKET FIELD\04-DWG\C20I_SITE DETAILS.DWG 3/19/2025 4:19 PM stutts



VICINITY MAP 1"=1000'

SURVEY NOTES:

1. PROTECT ALL EXISTING TREES TO REMAIN DURING CONSTRUCTION.
2. BASE INFORMATION REFLECTED ON THESE PLANS WAS TAKEN FROM THE FOLLOWING SOURCES:
   - A. PLAN ENTITLED "TOPOGRAPHIC SURVEY OF CLOVERLAND PARK", PREPARED BY DIETZ SURVEYING INC. DATED DECEMBER 1, 2023.
   - B. COORDINATES SHOWN ON ARE BASED ON THE MARYLAND COORDINATE SYSTEM, NAD 83-2011, ESTABLISHED BY GPS OBSERVATION. ELEVATIONS AND CONTOURS SHOWN ARE BASED ON THE NAVD-88 VERTICAL DATUM.
   - C. BALTIMORE COUNTY GIS INFORMATION.

SURVEY REFERENCE NOTES

ALL HORIZONTAL AND VERTICAL SURVEY DATA CONTAINED HEREIN ARE REFERENCED TO SURVEY CONTROL POINTS

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	657,918.3950	1,439,865.4080	314.61	MAG NAIL SET
2	657,401.1230	1,439,543.5180	318.59	MAG NAIL SET
3	657,326.2267	1,439,656.7716	315.18	MAG NAIL SET
4	657,164.4511	1,439,628.4549	311.03	MAG NAIL SET
5	656,902.1350	1,439,711.9560	299.67	MAG NAIL SET
6	656,523.1370	1,439,511.3090	274.88	MAG NAIL SET
7	656,324.2090	1,439,770.6580	286.00	MAG NAIL SET
8	656,612.8250	1,439,292.0240	274.45	MAG NAIL SET
20	657,494.6240	1,439,944.2260	305.35	MAG NAIL SET
21	657,202.0090	1,444,137.1450	297.09	MAG NAIL SET
22	656,986.3720	1,440,192.0550	297.00	MAG NAIL SET
23	656,915.6490	1,439,239.4410	291.25	MAG NAIL SET

SOILS INFORMATION

MAP UNIT SYMBOL	MAP UNIT NAME	HSG	K_f
BcA	BALTIMORE GRAVELLY LOAM, 0-3% SLOPES	B	0.20
BcB	BALTIMORE GRAVELLY LOAM, 3-8% SLOPES	B	0.20
BcC	BALTIMORE GRAVELLY LOAM, 8-15 SLOPES	B	0.20
WhB	WILTSHIRE SILT LOAM, 3-8% SLOPES	C	0.37

SEDIMENT TRAP #1

TRAP TYPE	ST-II
DRAINAGE AREA	
EXISTING	3.56 Acres ±
INTERIM	2.93 Acres ±
PROPOSED	2.93 Acres ±
STORAGE REQUIRED	
TOTAL	12,816 Ft³±
WET	6,408 Ft³±
DRY	6,408 Ft³±
STORAGE PROVIDED	
TOTAL	13,557 Ft³±
WET	6,533 Ft³±
DRY	7,024 Ft³±
BOTTOM DIMENSIONS	73' x 79'
SIDE SLOPES	2:1
WEIR LENGTH	16 Ft
BOTTOM ELEVATION	292.00
WEIR CREST ELEVATIONS	295.25
CLEANOUT ELEVATION	292.75
EMBANKMENT ELEV.	296.25
WET STORAGE ELEV.	293.75
EXISTING GROUND	
ELEV. AT OUTLET	293.65
STORAGE ZONES	
WET STORAGE	292.00 - 293.75
DRY STORAGE	293.75 - 295.25

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BUILDING
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING GUARDRAIL
- FOREST CONSERVATION PLANTING EASEMENT
- EXISTING TREES
- EX. 15" SD (D) — EXISTING STORM DRAIN
- (G) — EXISTING GAS
- (E) — EXISTING OVERHEAD ELECTRIC
- 350 / 348 — EXISTING CONTOURS
- UtD / GnG — EXISTING SOIL GROUP DELINEATION
- LOD — LIMIT OF DISTURBANCE
- SFD — SUPER FENCE DIVERSION
- SSF — SUPER SILT FENCE
- TREE PROTECTION FENCE
- SCE — STABILIZED CONSTRUCTION ENTRANCE
- MB — MOUNTABLE BERM
- BB — BAFFLE BOARD
- SAME DAY STABILIZATION
- SOIL STABILIZATION MATTING
- SIP-B STANDARD B — INLET PROTECTION
- WR — WASH RACK
- SFCD — SILT FENCE CHECK DAM
- GP — GABION INFLOW PROTECTION
- RPS — REMOVABLE PUMPING STATION
- ROP I / ROP III — ROCK OUTLET PROTECTION

STAGE - STORAGE TABLE

ELEVATION [ft.]	AREA [ft²]	AREA [acre]	CHANGE IN ELEVATION [ft]	AVERAGE AREA [acre]	INCREMENTAL VOLUME [acre·ft]	CUMULATIVE VOLUME [acre·ft]	CUMULATIVE VOLUME [ft³]
292.00	3,206.00	0.07				0.0000	0.00
293.00	3,764.00	0.09	1.00	0.08	0.08	0.08	3,485.00
294.00	4,365.00	0.10	1.00	0.09	0.09	0.17	7,549.50
295.00	4,991.00	0.11	1.00	0.11	0.11	0.28	12,227.50
296.00	5,644.00	0.13	1.00	0.12	0.12	0.40	17,545.00

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL 12-23-24 (Date)
DISTRICT OFFICIAL — Plan No. 181-20B7-24
Technical Review for the District by: Sara C. Dulina
This plan approval will expire three (3) years from the approval date.

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

SCALE: 1" = 30'
MARYLAND COORDINATE SYSTEM NAD83/2011 & NAVD88

SEAL. STATE OF MARYLAND — KATHRYN R. HEIL — 52868 — PROFESSIONAL ENGINEER — 12/19/2024
DATE: 12/19/2024

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 52868 EXPIRATION DATE 05/31/2025
ENGINEER: KATHRYN R. HEIL
AS-BUILT PER RECORD PRINT
BY:
DATE:

DGN BY: ____ DWN BY: ____ CHKD BY: ____

AS-BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT
				USE 112 113	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14
			R.O.W NO.		
CONTRACT COMPLETION BOX					

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

DRAWING SCALE: PLAN SCALE: AS SHOWN; PROFILE SCALE: ____

PROPERTY MANAGEMENT: APPROVED BY: ____ PROPERTY MANAGER; DATE: ____

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT

CLOVERLAND PARK CRICKET FIELD

EXISTING EROSION & SEDIMENT CONTROL PLAN

CONSTRUCTION DOCUMENTS

SUBDIVISION: PHOENIX — 12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131 — ELECTION DIST. NO.: 10C3

ESC SHEET 1 OF 9

SHEET DESIGNATION	CONTRACT NUMBER
C401	25067 GXO
JOB ORDER NUMBER	PROJ-10000752
SHEET 14 OF 40	
DRAWING NUMBER	2025-1645
FILE NO.: 9	

BALTIMORE COUNTY MARYLAND

DWG. FILENAME: © SITE RESOURCES, INC. Z:\C3\25063-BACO CLOVERLAND PARK CRICKET FIELD\04-ENG\C401_EXISTING_ESC.DWG 12/19/2024 5:07 PM KEIL

MATCHLINE - SEE SHEET C401

CLOVERLAND PARK CRICKET FIELD
BALTIMORE COUNTY
PARCEL 0481, TAX MAP 0053
LIBER 12644, FOLIO 00113
PLAT No. 0070 / 0151
ZONING: RC 7
COUNCILMANIC DISTRICT: 3
EXISTING USE: COUNTY OPEN SPACE

BALTIMORE COUNTY
LIBER 28865, FOLIO 83
PLAT 0078/0476
PARCEL 501
DULANEY VALLEY ROAD
EXISTING USE:
COUNTY OPEN SPACE

DULANEY VALLEY ROAD

D
30" RCP
CULVERT

N: 656,800
E: 1,439,700

N: 656,500
E: 1,439,600

N: 656,500
E: 1,439,700

EXISTING FENCE TO BE REMOVED TO NEAREST FENCE POST

EXISTING FENCE TO BE REMOVED TO NEAREST FENCE POST

SOURCE: BALTIMORE COUNTY GIS

SITE

DULANEY VALLEY ROAD

STONE HILL ROAD

LOCH RAVEN DRIVE

VICINITY MAP

1"=1000'

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BUILDING
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING GUARDRAIL
- FOREST CONSERVATION PLANTING EASEMENT
- EXISTING TREES
- EXISTING STORM DRAIN (EX. 15" SD; D)
- EXISTING GAS (G)
- EXISTING OVERHEAD ELECTRIC (E)
- EXISTING CONTOURS (350, 348)
- EXISTING SOIL GROUP DELINEATION (UtD / GnG)
- LOD — LIMIT OF DISTURBANCE
- SFD — SUPER FENCE DIVERSION
- SSF — SUPER SILT FENCE
- TREE PROTECTION FENCE
- SCE — STABILIZED CONSTRUCTION ENTRANCE
- MB — MOUNTABLE BERM
- BB — BAFFLE BOARD
- SAME DAY STABILIZATION
- SOIL STABILIZATION MATTING
- SIP-B 22 — STANDARD B — INLET PROTECTION
- WR — WASH RACK
- SFCD — SILT FENCE CHECK DAM
- GP — GABION INFLOW PROTECTION
- RPS — REMOVABLE PUMPING STATION
- ROP I / ROP III — ROCK OUTLET PROTECTION

SCALE: 1" = 30'
MARYLAND COORDINATE SYSTEM NAD83/2011 & NAVD88

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
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DESIGN PROFESSIONAL:
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4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

STABILIZED CONSTRUCTION ENTRANCE NOTE

PRIOR TO DRIVING ON ANY ADJACENT AND PUBLIC ROADS, ALL EQUIPMENT AND VEHICLES MUST BE THOROUGHLY CLEANED OR WASHED TO REMOVE SEDIMENT AND DEBRIS. ALL SEDIMENT SPILLED, DROPPED OR TRACKED ONTO THE ROAD MUST BE REMOVED IMMEDIATELY BY VACUUMING, SCRAPING OR SWEEPING. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE THAT DRAINS TO AN APPROVED SEDIMENT CONTROL DEVICE.

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL
Jeffrey P. West 12-23-24
Date

SEAL: STATE OF MARYLAND — KATHRYN R. HEIL — 52868 — PROFESSIONAL ENGINEER
DATE : 12/19/2024

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 52868, EXPIRATION DATE 05/31/2025.
ENGINEER: KATHRYN R. HEIL
AS-BUILT PER RECORD PRINT
BY:
DATE:
DGN BY:
DWN BY:
CHKD BY:

AS-BUILT / REVISION

BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT
			USE 112 113	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14
		R.O.W NO.		

CONTRACT COMPLETION BOX

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

DRAWING SCALE — PLAN SCALE: AS SHOWN. PROFILE SCALE:

PROPERTY MANAGEMENT — APPROVED BY: PROPERTY MANAGER DATE:

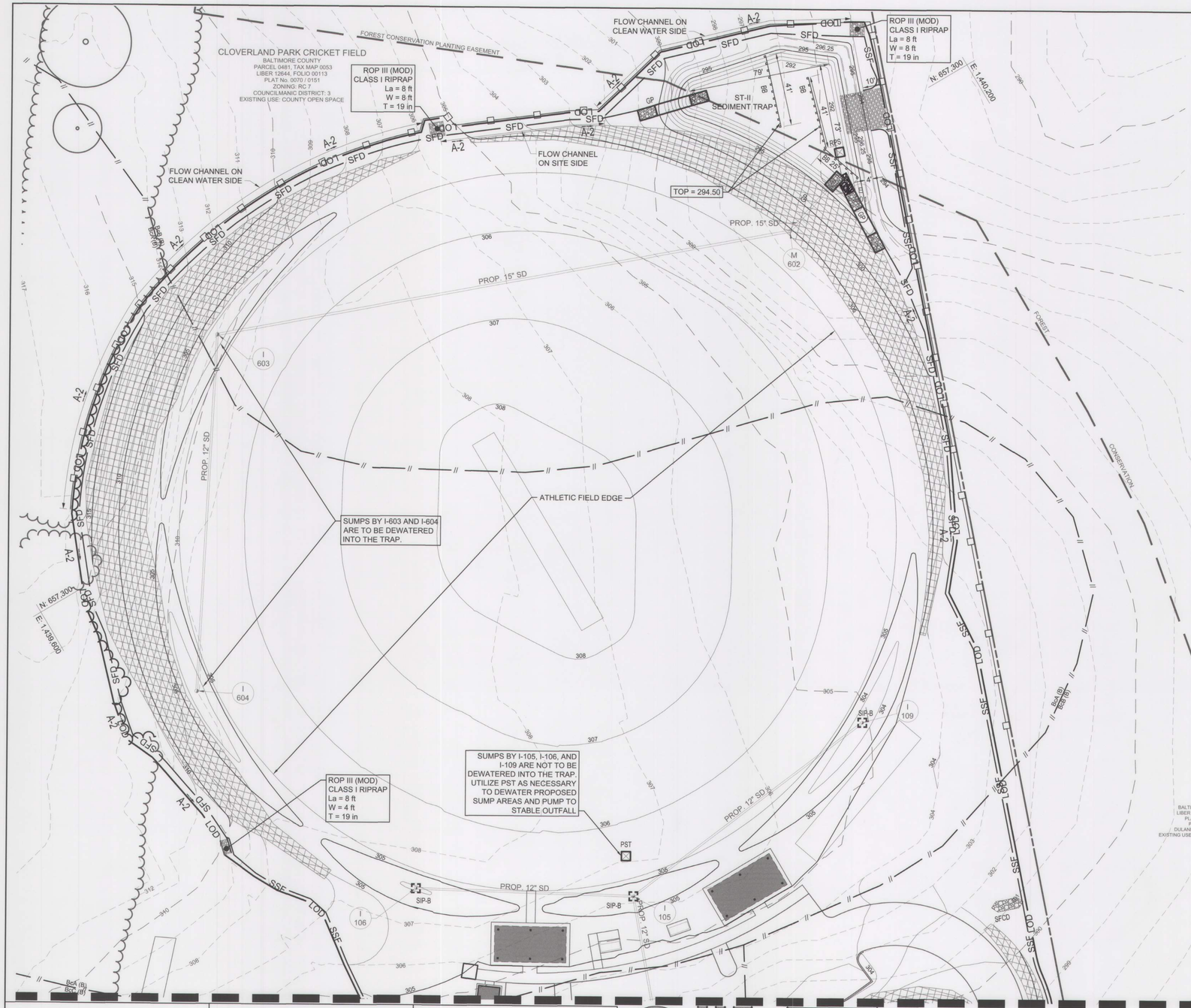
BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT
CLOVERLAND PARK CRICKET FIELD
EXISTING EROSION & SEDIMENT CONTROL PLAN
CONSTRUCTION DOCUMENTS
SUBDIVISION: PHOENIX — 12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131 — ELECTION DIST. NO.: 10C3

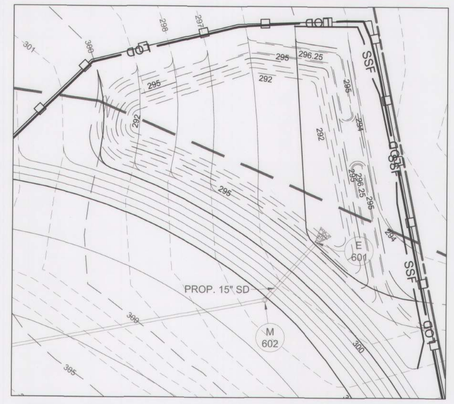
ESC SHEET 2 OF 9

SHEET DESIGNATION	CONTRACT NUMBER
C402	25067 GXO
	JOB ORDER NUMBER
	PROJ-10000752
	SHEET 15 OF 40
	DRAWING NUMBER
	2025-1646
	FILE NO.: 9

BALTIMORE COUNTY MARYLAND

DWG. FILENAME: Z:\2024\2024003-BACO_CLOVERLAND_PARK_CRICKET_FIELD\04-DWG\C401_EXISTING_ESC.DWG 12/19/2024 5:07 PM KRH





1 FINAL CONDITIONS INSET

SCALE: 1" = 30'

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BUILDING
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING GUARDRAIL
- FOREST CONSERVATION PLANTING EASEMENT
- EXISTING STORM DRAIN
- EXISTING GAS
- EXISTING OVERHEAD ELECTRIC
- EXISTING CONTOURS
- EXISTING SOIL GROUP DELINEATION
- PROPOSED BUILDING
- PROPOSED PAVILION OVERHANG
- PROPOSED ASPALT SIDEWALK
- PROPOSED ATHLETIC FIELD AND PITCH AREA
- PROPOSED CURB/PAVING
- PROPOSED WOODSLINE
- PROPOSED SIGN
- PROPOSED SWM
- PROPOSED STORM DRAIN
- PROPOSED CONTOURS
- LIMIT OF DISTURBANCE
- SUPER FENCE DIVERSION
- SUPER SILT FENCE
- TREE PROTECTION FENCE
- STABILIZED CONSTRUCTION ENTRANCE
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- SOIL STABILIZATION MATTING
- INLET PROTECTION
- WASH RACK
- SILT FENCE CHECK DAM
- GABION INFLOW PROTECTION
- REMOVABLE PUMPING STATION
- ROCK OUTLET PROTECTION

TRAP / BASIN FLOW DIVERSION NOTE

TO PREVENT SLOPE EROSION, WITHIN SEDIMENT TRAPPING DEVICES, ADEQUATELY SIZED AND STABILIZED FLOW DIVERSION MEASURES (I.E. EARTH DIKE, TEMPORARY SWALE, PERIMETER DIKE / SWALE, SUPER FENCE DIVERSION, ETC) SHALL BE INSTALLED AT THE UPSLOPE EXTENT OF TRAP, AND BASIN STORAGE AREAS TO DIVERT ALL FLOWS TO APPROPRIATE INFLOW PROTECTION DEVICES. THESE MEASURES WILL BE LOCATED BY THE CONTRACTOR AND THEREFORE NOT SHOWN ON THE PLAN VIEW.

MAINTENANCE NOTE

CONTRACTOR SHALL INSPECT AND MAINTAIN ALL SEDIMENT CONTROL MEASURES AND DEVICES AFTER EVERY STORM EVENT. MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO THE REMOVAL OF ALL ACCUMULATED SEDIMENT. GEOTEXTILE FABRIC SHALL BE REPLACED AS NEEDED TO ENSURE PROPER FUNCTION.

INLET PROTECTION NOTE

THE CONTRACTOR IS REQUIRED TO INSTALL INLET PROTECTION ON ALL STORM DRAIN INLETS WITH THE EXCEPTION OF THE FOLLOWING:

*1. ANY INLET OUTFALLING DIRECTLY INTO A SEDIMENT TRAPPING DEVICE.
2. INLETS ON PRIVATE OR PUBLIC PAVED ROADWAYS OPEN TO THE PUBLIC.

ALL INLET PROTECTION WILL BE INSTALLED AS DIRECTED BY THE INSPECTOR IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, PAGE E.23 (OR AS MAY BE AMMENDED). THE REMOVAL OF ANY INLET PROTECTION DEVICES WILL REQUIRE APPROVAL FROM THE INSPECTOR.

*STORM DRAINS TO BE FLUSHED PRIOR TO TRAPPING DEVICE REMOVAL.

UTILITY NOTE

1. CONTRACTOR SHOULD OPEN ONLY THAT SECTION OF TRENCH THAT CAN BE BACKFILLED AND STABILIZED EACH DAY. IF TRENCH MUST REMAIN OPEN LONGER THAN ONE DAY, SILT FENCE SHALL BE PLACED BELOW (DOWNSLOPE) OF THE TRENCH.
2. PLACE ALL EXCAVATED MATERIAL ON UPHILL SIDE OF TRENCH.
3. ANY SEDIMENT CONTROLS DISTURBED BY UTILITY CONSTRUCTION ARE TO BE REPAIRED IMMEDIATELY.

DAILY STABILIZATION NOTE

CONTRACTOR SHALL ONLY DISTURB THAT AREA WHICH CAN BE COMPLETED AND STABILIZED BY THE END OF EACH WORKING DAY. STABILIZATION SHALL BE AS FOLLOWS:

1. FOR AREAS TO BE PAVED, THE APPLICATION OF STONE BASE.
2. FOR AREAS TO BE VEGETATIVELY STABILIZED:
   a. PERMANENT SEED AND SOIL STABILIZATION MATTING OR SOD FOR ALL STEEP SLOPES, CHANNELS OR SWALES.
   b. PERMANENT SEED AND MULCH FOR ALL OTHER AREAS.

ANY AREAS WHICH CAN NOT BE STABILIZED BY THE END OF EACH WORKING DAY MUST HAVE SILT FENCE INSTALLED ON THE DOWNSIDE SLOPE.

LIMIT OF DISTURBANCE: 298,778 SF / 6.86 AC

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL
Jeffrey P. Wast 12-23-24
Date

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

SEAL — STATE OF MARYLAND — KATHRYN R. HEIL — 52868 — PROFESSIONAL ENGINEER
DATE : 12/19/2024

PROFESSIONAL CERTIFICATION		AS-BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.						USE 112 113	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14
LICENSE NO. 52868, EXPIRATION DATE 05/31/2025		CONTRACT COMPLETION BOX			R.O.W NO.		
ENGINEER: KATHRYN R. HEIL	DGN BY:	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER
AS-BUILT PER RECORD PRINT	DWN BY:	REVIEWED BY:					
BY:	CHKD BY:	DATE REVIEWED:					
DATE:							

DRAWING SCALE		PROPERTY MANAGEMENT
PLAN SCALE:	AS SHOWN	APPROVED BY: PROPERTY MANAGER
PROFILE SCALE:		DATE:
WATER	FIELD ENGINEER	

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT

CLOVERLAND PARK CRICKET FIELD

PROPOSED EROSION & SEDIMENT CONTROL PLAN

CONSTRUCTION DOCUMENTS

SUBDIVISION: PHOENIX — 12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131 — ELECTION DIST. NO.: 10C3

ESC SHEET 3 OF 9

SHEET DESIGNATION	CONTRACT NUMBER
C411	25067 GXO
JOB ORDER NUMBER	PROJ-10000752
SHEET 16 OF 40	
DRAWING NUMBER	2025-1647
FILE NO.: 9	

BALTIMORE COUNTY MARYLAND

DWG. FILENAME: © SITE RESOURCES, INC. Z:\2023\23053-BACO CLOVERLAND PARK CRICKET FIELD\04 DWG\C411 PROPOSED ESC.DWG 12/19/2024 5:07 PM KRH

MATCHLINE - SEE SHEET C411

PROVIDE TEMPORARY CURB CUT AND GABION INFLOW PROTECTION AS NECESSARY TO ELIMINATE EROSION ALONG SLOPE PRIOR TO INLETS I-202, I-203, I-302, & I-303 BEING FUNCTIONAL

NOTE: WORK IN THESE AREAS SHALL BE DONE PER THE DAILY STABILIZATION AND UTILITY NOTES ON THIS SHEET.

PROP. PAVED ROAD

CLOVERLAND PARK CRICKET FIELD
BALTIMORE COUNTY
PARCEL 0481, TAX MAP 0053
LIBER 12644, FOLIO 00113
PLAT No. 0070 / 0151
ZONING: RC 7
COUNCILMANIC DISTRICT: 3
EXISTING USE: COUNTY OPEN SPACE

BALTIMORE COUNTY
LIBER 28865, FOLIO 83
PLAT 0078/0476
PARCEL 501
DULANEY VALLEY ROAD
EXISTING USE:
COUNTY OPEN SPACE

10' D & U EASEMENT

DULANEY VALLEY ROAD

D 30" RCP CULVERT

N: 666,800
E: 1,439,700

E: 1,439,900
N: 666,500

E: 1,439,700
N: 656,500

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BUILDING
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING GUARDRAIL
- FOREST CONSERVATION PLANTING EASEMENT
- EXISTING TREES
- EX. 15" SD — EXISTING STORM DRAIN
- G — EXISTING GAS
- E — EXISTING OVERHEAD ELECTRIC
- 350 / 348 — EXISTING CONTOURS
- UtD / GnG — EXISTING SOIL GROUP DELINEATION
- PROPOSED BUILDING
- PROPOSED PAVILION OVERHANG
- PROPOSED ASPALT SIDEWALK
- PROPOSED ATHLETIC FIELD AND PITCH AREA
- PROPOSED CURB/PAVING
- PROPOSED WOODSLINE
- PROPOSED SIGN
- PROPOSED SWM
- PROP. 15" SD — PROPOSED STORM DRAIN
- 350 / 348 — PROPOSED CONTOURS
- LOD — LIMIT OF DISTURBANCE
- SFD — SUPER FENCE DIVERSION
- SSF — SUPER SILT FENCE
- TREE PROTECTION FENCE
- SCE — STABILIZED CONSTRUCTION ENTRANCE
- MB — MOUNTABLE BERM
- BB — BAFFLE BOARD
- SAME DAY STABILIZATION
- SOIL STABILIZATION MATTING
- SIP-B / 22 STANDARD B — INLET PROTECTION
- WR — WASH RACK
- SFCD — SILT FENCE CHECK DAM
- GP — GABION INFLOW PROTECTION
- RPS — REMOVABLE PUMPING STATION
- ROP I ROP III — ROCK OUTLET PROTECTION

MAINTENANCE NOTE

CONTRACTOR SHALL INSPECT AND MAINTAIN ALL SEDIMENT CONTROL MEASURES AND DEVICES AFTER EVERY STORM EVENT. MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO THE REMOVAL OF ALL ACCUMULATED SEDIMENT. GEOTEXTILE FABRIC SHALL BE REPLACED AS NEEDED TO ENSURE PROPER FUNCTION.

INLET PROTECTION NOTE

THE CONTRACTOR IS REQUIRED TO INSTALL INLET PROTECTION ON ALL STORM DRAIN INLETS WITH THE EXCEPTION OF THE FOLLOWING:

*1. ANY INLET OUTFALLING DIRECTLY INTO A SEDIMENT TRAPPING DEVICE.
2. INLETS ON PRIVATE OR PUBLIC PAVED ROADWAYS OPEN TO THE PUBLIC.

ALL INLET PROTECTION WILL BE INSTALLED AS DIRECTED BY THE INSPECTOR IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, PAGE E.23 (OR AS MAY BE AMMENDED). THE REMOVAL OF ANY INLET PROTECTION DEVICES WILL REQUIRE APPROVAL FROM THE INSPECTOR.

*STORM DRAINS TO BE FLUSHED PRIOR TO TRAPPING DEVICE REMOVAL.

UTILITY NOTE

1. CONTRACTOR SHOULD OPEN ONLY THAT SECTION OF TRENCH THAT CAN BE BACKFILLED AND STABILIZED EACH DAY. IF TRENCH MUST REMAIN OPEN LONGER THAN ONE DAY, SILT FENCE SHALL BE PLACED BELOW (DOWNSLOPE) OF THE TRENCH.
2. PLACE ALL EXCAVATED MATERIAL ON UPHILL SIDE OF TRENCH.
3. ANY SEDIMENT CONTROLS DISTURBED BY UTILITY CONSTRUCTION ARE TO BE REPAIRED IMMEDIATELY.

DAILY STABILIZATION NOTE

CONTRACTOR SHALL ONLY DISTURB THAT AREA WHICH CAN BE COMPLETED AND STABILIZED BY THE END OF EACH WORKING DAY. STABILIZATION SHALL BE AS FOLLOWS:

1. FOR AREAS TO BE PAVED, THE APPLICATION OF STONE BASE.
2. FOR AREAS TO BE VEGETATIVELY STABILIZED:
   a. PERMANENT SEED AND SOIL STABILIZATION MATTING OR SOD FOR ALL STEEP SLOPES, CHANNELS OR SWALES.
   b. PERMANENT SEED AND MULCH FOR ALL OTHER AREAS.

ANY AREAS WHICH CAN NOT BE STABILIZED BY THE END OF EACH WORKING DAY MUST HAVE SILT FENCE INSTALLED ON THE DOWNSIDE SLOPE.

LIMIT OF DISTURBANCE:
298,778 SF / 6.86 AC

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL
Jeffrey P. West 12-23-24
Date

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

NORTH (MAGNETIC)
0 10 20 30 50 100
SCALE: 1" = 30'
MARYLAND COORDINATE SYSTEM NAD83/2011 & NAVD88

SEAL — STATE OF MARYLAND — KATHRYN R. HEIL — 52868 — PROFESSIONAL ENGINEER
DATE : 12/19/2024

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 52868 EXPIRATION DATE 05/31/2025
ENGINEER: KATHRYN R. HEIL
AS-BUILT PER RECORD PRINT
BY:
DATE:
DGN BY:
DWN BY:
CHKD BY:

AS-BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT
				USE 112 113	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14
			R.O.W NO.		
CONTRACT COMPLETION BOX					

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

DRAWING SCALE — PLAN SCALE: AS SHOWN — PROFILE SCALE:

PROPERTY MANAGEMENT
APPROVED BY: PROPERTY MANAGER
DATE:

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT
CLOVERLAND PARK CRICKET FIELD
PROPOSED EROSION & SEDIMENT CONTROL PLAN
CONSTRUCTION DOCUMENTS
SUBDIVISION: PHOENIX — 12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131 — ELECTION DIST. NO.: 10C3
ESC SHEET 4 OF 9

SHEET DESIGNATION	CONTRACT NUMBER
C412	25067 GXO
	JOB ORDER NUMBER
	PROJ-10000752
	SHEET 17 OF 40
	DRAWING NUMBER
	2025-1648
	FILE NO.: 9

BALTIMORE COUNTY MARYLAND

Z:\GIS\25053-BACO CLOVERLAND PARK CRICKET FIELD\04-DWG\C411_PROPOSED ESC.DWG 12/19/2024 5:08 PM KBH
DWG. FILENAME: © SITE RESOURCES, INC.

B-4 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

DEFINITION
USING VEGETATION AS COVER TO PROTECT EXPOSED SOIL FROM EROSION.

PURPOSE
TO PROMOTE THE ESTABLISHMENT OF VEGETATION ON EXPOSED SOIL.

CONDITIONS WHERE PRACTICE APPLIES
ON ALL DISTURBED AREAS NOT STABILIZED BY OTHER METHODS. THIS SPECIFICATION IS DIVIDED INTO SECTIONS ON INCREMENTAL STABILIZATION; SOIL PREPARATION, SOIL AMENDMENTS AND TOPSOILING; SEEDING AND MULCHING; TEMPORARY STABILIZATION; AND PERMANENT STABILIZATION.

EFFECTS ON WATER QUALITY AND QUANTITY
STABILIZATION PRACTICES ARE USED TO PROMOTE THE ESTABLISHMENT OF VEGETATION ON EXPOSED SOIL. WHEN SOIL IS STABILIZED WITH VEGETATION, THE SOIL IS LESS LIKELY TO ERODE AND MORE LIKELY TO ALLOW INFILTRATION OF RAINFALL, THEREBY REDUCING SEDIMENT LOADS AND RUNOFF TO DOWNSTREAM AREAS.

PLANTING VEGETATION IN DISTURBED AREAS WILL HAVE AN EFFECT ON THE WATER BUDGET, ESPECIALLY ON VOLUMES AND RATES OF RUNOFF, INFILTRATION, EVAPORATION, TRANSPIRATION, PERCOLATION, AND GROUNDWATER RECHARGE. OVER TIME, VEGETATION WILL INCREASE ORGANIC MATTER CONTENT AND IMPROVE THE WATER HOLDING CAPACITY OF THE SOIL AND SUBSEQUENT PLANT GROWTH.

VEGETATION WILL HELP REDUCE THE MOVEMENT OF SEDIMENT, NUTRIENTS, AND OTHER CHEMICALS CARRIED BY RUNOFF TO RECEIVING WATERS. PLANTS WILL ALSO HELP PROTECT GROUNDWATER SUPPLIES BY ASSIMILATING THOSE SUBSTANCES PRESENT WITHIN THE ROOT ZONE.

SEDIMENT CONTROL PRACTICES MUST REMAIN IN PLACE DURING GRADING, SEEDBED PREPARATION, SEEDING, MULCHING, AND VEGETATIVE ESTABLISHMENT.

ADEQUATE VEGETATIVE ESTABLISHMENT
INSPECT SEEDED AREAS FOR VEGETATIVE ESTABLISHMENT AND MAKE NECESSARY REPAIRS, REPLACEMENTS, AND RESEEDINGS WITHIN THE PLANTING SEASON.

1. ADEQUATE VEGETATIVE STABILIZATION REQUIRES 95 PERCENT GROUNDCOVER.
2. IF AN AREA HAS LESS THAN 40 PERCENT GROUNDCOVER, RESTABILIZE FOLLOWING THE ORIGINAL RECOMMENDATIONS FOR LIME, FERTILIZER, SEEDBED PREPARATION, AND SEEDING.
3. IF AN AREA HAS BETWEEN 40 AND 94 PERCENT GROUNDCOVER, OVER-SEED AND FERTILIZE USING HALF OF THE RATES ORIGINALLY SPECIFIED.
4. MAINTENANCE FERTILIZER RATES FOR PERMANENT SEEDING ARE SHOWN IN TABLE B.6.

B-4-4 STANDARDS AND SPECIFICATIONS FOR TEMPORARY STABILIZATION

DEFINITION
TO STABILIZE DISTURBED SOILS WITH VEGETATION FOR UP TO 6 MONTHS.

PURPOSE
TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURBED SOILS.

CONDITIONS WHERE PRACTICE APPLIES
EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR A PERIOD OF 6 MONTHS OR LESS. FOR LONGER DURATION OF TIME, PERMANENT STABILIZATION PRACTICES ARE REQUIRED.

CRITERIA
1. SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B.1 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3), AND ENTER THEM IN THE TEMPORARY SEEDING SUMMARY BELOW ALONG WITH APPLICATION RATES, SEEDING DATES AND SEEDING DEPTHS. IF THIS SUMMARY IS NOT PUT ON THE PLAN AND COMPLETED, THEN TABLE B.1 PLUS FERTILIZER AND LIME RATES MUST BE PUT ON THE PLAN.
2. FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING.
3. WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING SEASON, APPLY SEED AND MULCH OR STRAW MULCH ALONE AS PRESCRIBED IN SECTION B-4-3.A.1.B AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

TEMPORARY SEEDING SUMMARY

HARDINESS ZONE 7B					
SPECIES	APPLICATION RATE (LBS./AC.)	SEEDING DATES	SEEDING DEPTH	FERTILIZER RATE (10-20-20)	LIME RATE
ANNUAL RYEGRASS	40 LBS./AC.	2/15 - 4/30 8/15 - 11/30	½"	436 LB./AC. (10 LB./1000 S.F.)	2 TONS/AC. (90 LB./1000 S.F.)
FOXTAIL MILLET	30 LBS./AC.	5/1 - 8/14	½"		

B-4-1 STANDARDS AND SPECIFICATIONS FOR INCREMENTAL STABILIZATION

DEFINITION
ESTABLISHMENT OF VEGETATIVE COVER ON CUT AND FILL SLOPES.

PURPOSE
TO PROVIDE TIMELY VEGETATIVE COVER ON CUT AND FILL SLOPES AS WORK PROGRESSES.

CONDITIONS WHERE PRACTICE APPLIES
ANY CUT OR FILL SLOPE GREATER THAN 15 FEET IN HEIGHT. THIS PRACTICE ALSO APPLIES TO STOCKPILES.

CRITERIA
A. INCREMENTAL STABILIZATION - CUT SLOPES
1. EXCAVATE AND STABILIZE CUT SLOPES IN INCREMENTS NOT TO EXCEED 15 FEET IN HEIGHT. PREPARE SEEDBED AND APPLY SEED AND MULCH ON ALL CUT SLOPES AS THE WORK PROGRESSES.
2. CONSTRUCTION SEQUENCE EXAMPLE (REFER TO FIGURE
a. CONSTRUCT AND STABILIZE ALL TEMPORARY SWALES OR DIKES THAT WILL BE USED TO CONVEY RUNOFF AROUND THE EXCAVATION.
b. PERFORM PHASE 1 EXCAVATION, PREPARE SEEDBED, AND STABILIZE.
c. PERFORM PHASE 2 EXCAVATION, PREPARE SEEDBED, AND STABILIZE. OVERSEED PHASE 1 AREAS AS NECESSARY.
d. PERFORM FINAL PHASE EXCAVATION, PREPARE SEEDBED, AND STABILIZE. OVERSEED PREVIOUSLY SEEDED AREAS AS NECESSARY.

NOTE: ONCE EXCAVATION HAS BEGUN, THE OPERATION SHOULD BE CONTINUOUS FROM GRUBBING THROUGH THE COMPLETION OF GRADING AND PLACEMENT OF TOPSOIL (IF REQUIRED) AND PERMANENT SEED AND MULCH. ANY INTERRUPTIONS IN THE OPERATION OR COMPLETING THE OPERATION OUT OF THE SEEDING SEASON WILL NECESSITATE THE APPLICATION OF TEMPORARY STABILIZATION.

B. INCREMENTAL STABILIZATION - FILL SLOPES
1. CONSTRUCT AND STABILIZE FILL SLOPES IN INCREMENTS NOT TO EXCEED 15 FEET IN HEIGHT. PREPARE SEEDBED AND APPLY SEED AND MULCH ON ALL SLOPES AS THE WORK PROGRESSES.
2. STABILIZE SLOPES IMMEDIATELY WHEN THE VERTICAL HEIGHT OF A LIFT REACHES 15 FEET, OR WHEN THE GRADING OPERATION CEASES AS PRESCRIBED ON THE PLANS.
3. AT THE END OF EACH DAY, INSTALL TEMPORARY WATER CONVEYANCE PRACTICE(S), AS NECESSARY, TO INTERCEPT SURFACE RUNOFF AND CONVEY IT DOWN THE SLOPE IN A NON-EROSIVE MANNER.
4. CONSTRUCTION SEQUENCE EXAMPLE (REFER TO FIGURE B.2):
a. CONSTRUCT AND STABILIZE ALL TEMPORARY SWALES OR DIKES THAT WILL BE USED TO DIVERT RUNOFF AROUND THE FILL. CONSTRUCT SILT FENCE ON LOW SIDE OF FILL UNLESS OTHER METHODS SHOWN ON THE PLANS ADDRESS THIS AREA.
b. AT THE END OF EACH DAY, INSTALL TEMPORARY WATER CONVEYANCE PRACTICE(S), AS NECESSARY, TO INTERCEPT SURFACE RUNOFF AND CONVEY IT DOWN THE SLOPE IN A NON-EROSIVE MANNER.
c. PLACE PHASE 1 FILL, PREPARE SEEDBED, AND STABILIZE.
d. PLACE PHASE 2 FILL, PREPARE SEEDBED, AND STABILIZE.
e. PLACE FINAL PHASE FILL, PREPARE SEEDBED, AND STABILIZE. OVERSEED PREVIOUSLY SEEDED AREAS AS NECESSARY.

NOTE: ONCE THE PLACEMENT OF FILL HAS BEGUN, THE OPERATION SHOULD BE CONTINUOUS FROM GRUBBING THROUGH THE COMPLETION OF GRADING AND PLACEMENT OF TOPSOIL (IF REQUIRED) AND PERMANENT SEED AND MULCH. ANY INTERRUPTIONS IN THE OPERATION OR COMPLETING THE OPERATION OUT OF THE SEEDING SEASON WILL NECESSITATE THE APPLICATION OF TEMPORARY STABILIZATION.

B-4-2 STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING AND SOIL AMENDMENTS

DEFINITION
THE PROCESS OF PREPARING THE SOILS TO SUSTAIN ADEQUATE VEGETATIVE STABILIZATION.

PURPOSE
TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH.

CONDITIONS WHERE PRACTICE APPLIES
WHERE VEGETATIVE STABILIZATION IS TO BE ESTABLISHED.

CRITERIA
A. SOIL PREPARATION
1. TEMPORARY STABILIZATION
a. SEEDBED PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT, SUCH AS DISC HARROWS OR CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. AFTER THE SOIL IS LOOSENED, IT MUST NOT BE ROLLED OR DRAGGED SMOOTH BUT LEFT IN THE ROUGHENED CONDITION. SLOPES 3:1 OR FLATTER ARE TO BE TRACKED WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE.
b. APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS.
c. INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
2. PERMANENT STABILIZATION
a. A SOIL TEST IS REQUIRED FOR ANY EARTH DISTURBANCE OF 5 ACRES OR MORE. THE MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE:
i. SOIL PH BETWEEN 6.0 AND 7.0.
ii. SOLUBLE SALTS LESS THAN 500 PARTS PER MILLION (PPM).
iii. SOIL CONTAINS LESS THAN 40 PERCENT CLAY BUT ENOUGH FINE GRAINED MATERIAL (GREATER THAN 30 PERCENT SILT PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF

B-4-2 STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING AND SOIL AMENDMENTS

MOISTURE. AN EXCEPTION: IF LOVEGRASS WILL BE PLANTED, THEN A SANDY SOIL (LESS THAN 30 PERCENT SILT PLUS CLAY) WOULD BE ACCEPTABLE.
iv. SOIL CONTAINS 1.5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT.
v. SOIL CONTAINS SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION.
b. APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE SOILS DO NOT MEET THE ABOVE CONDITIONS.
c. GRADED AREAS MUST BE MAINTAINED IN A TRUE AND EVEN GRADE AS SPECIFIED ON THE APPROVED PLAN, THEN SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES.
d. APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY THE RESULTS OF A SOIL TEST.
e. MIX SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. RAKE LAWN AREAS TO SMOOTH THE SURFACE, REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. LOOSEN SURFACE SOIL BY DRAGGING WITH A HEAVY CHAIN OR OTHER EQUIPMENT TO ROUGHEN THE SURFACE WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDBED PREPARATION. TRACK SLOPES 3:1 OR FLATTER WITH TRACKED EQUIPMENT LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRIABLE. SEEDBED LOOSENING MAY BE UNNECESSARY ON NEWLY DISTURBED AREAS.

B. TOPSOILING
1. TOPSOIL IS PLACED OVER PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION. THE PURPOSE IS TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.
2. TOPSOIL SALVAGED FROM AN EXISTING SITE MAY BE USED PROVIDED IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-NRCS.
3. TOPSOILING IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:
a. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.
b. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS.
c. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.
d. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.
4. AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN.
5. TOPSOIL SPECIFICATIONS: SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING CRITERIA:
a. TOPSOIL MUST BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, OR LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. TOPSOIL MUST NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND MUST CONTAIN LESS THAN 5 PERCENT BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1½ INCHES IN DIAMETER.
b. TOPSOIL MUST BE FREE OF NOXIOUS PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACK GRASS, JOHNSON GRASS, NUT SEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
c. TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL.
6. TOPSOIL APPLICATION
a. EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED WHEN APPLYING TOPSOIL.
b. UNIFORMLY DISTRIBUTE TOPSOIL IN A 5 TO 8 INCH LAYER AND LIGHTLY COMPACT TO A MINIMUM THICKNESS OF 4 INCHES. SPREADING IS TO BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS MUST BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
c. TOPSOIL MUST NOT BE PLACED IF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.

C. SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS)
1. SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OF 5 ACRES OR MORE. SOIL ANALYSIS MAY BE PERFORMED BY A RECOGNIZED PRIVATE OR COMMERCIAL LABORATORY. SOIL SAMPLES TAKEN FOR ENGINEERING PURPOSES MAY ALSO BE USED FOR CHEMICAL ANALYSES.
2. FERTILIZERS MUST BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION BY APPROPRIATE EQUIPMENT. MANURE MAY BE SUBSTITUTED FOR FERTILIZER WITH PRIOR APPROVAL FROM THE APPROPRIATE APPROVAL AUTHORITY. FERTILIZERS MUST ALL BE DELIVERED TO THE SITE FULLY LABELED ACCORDING TO THE APPLICABLE LAWS AND MUST BEAR THE NAME, TRADE NAME OR TRADEMARK AND WARRANTY OF THE PRODUCER.
3. LIME MATERIALS MUST BE GROUND LIMESTONE (HYDRATED OR BURNT LIME MAY BE SUBSTITUTED EXCEPT WHEN HYDROSEEDING) WHICH CONTAINS AT LEAST 50 PERCENT TOTAL OXIDES (CALCIUM OXIDE PLUS MAGNESIUM OXIDE). LIMESTONE MUST BE GROUND TO SUCH FINENESS THAT AT LEAST 50 PERCENT WILL PASS THROUGH A #100 MESH SIEVE AND 98 TO 100 PERCENT WILL PASS THROUGH A #20 MESH SIEVE.
4. LIME AND FERTILIZER ARE TO BE EVENLY DISTRIBUTED AND INCORPORATED INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
5. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, SPREAD GROUND LIMESTONE AT THE RATE OF 4 TO 8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL.

B-4-3 STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING

DEFINITION
THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER.

PURPOSE
TO PROTECT DISTURBED SOILS FROM EROSION DURING AND AT THE END OF CONSTRUCTION.

CONDITIONS WHERE PRACTICE APPLIES
TO THE SURFACE OF ALL PERIMETER CONTROLS, SLOPES, AND ANY DISTURBED AREA NOT UNDER ACTIVE GRADING.

CRITERIA
A. SEEDING
1. SPECIFICATIONS
a. ALL SEED MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE SEED LAW. ALL SEED MUST BE SUBJECT TO RE-TESTING BY A RECOGNIZED SEED LABORATORY. ALL SEED USED MUST HAVE BEEN TESTED WITHIN THE 6 MONTHS IMMEDIATELY PRECEDING THE DATE OF SOWING SUCH MATERIAL ON ANY PROJECT. REFER TO TABLE B.4 REGARDING THE QUALITY OF SEED. SEED TAGS MUST BE AVAILABLE UPON REQUEST TO THE INSPECTOR TO VERIFY TYPE OF SEED AND SEEDING RATE.
b. MULCH ALONE MAY BE APPLIED BETWEEN THE FALL AND SPRING SEEDING DATES ONLY IF THE GROUND IS FROZEN. THE APPROPRIATE SEEDING MIXTURE MUST BE APPLIED WHEN THE GROUND THAWS.
c. INOCULANTS: THE INOCULANT FOR TREATING LEGUME SEED IN THE SEED MIXTURES MUST BE A PURE CULTURE OF NITROGEN FIXING BACTERIA PREPARED SPECIFICALLY FOR THE SPECIES. INOCULANTS MUST NOT BE USED LATER THAN THE DATE INDICATED ON THE CONTAINER. ADD FRESH INOCULANTS AS DIRECTED ON THE PACKAGE. USE FOUR TIMES THE RECOMMENDED RATE WHEN HYDROSEEDING. NOTE: IT IS VERY IMPORTANT TO KEEP INOCULANT AS COOL AS POSSIBLE UNTIL USED. TEMPERATURES ABOVE 75 TO 80 DEGREES FAHRENHEIT CAN WEAKEN BACTERIA AND MAKE THE INOCULANT LESS EFFECTIVE.
d. SOD OR SEED MUST NOT BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS.
2. APPLICATION
a. DRY SEEDING: THIS INCLUDES USE OF CONVENTIONAL DROP OR BROADCAST SPREADERS.
i. INCORPORATE SEED INTO THE SUBSOIL AT THE RATES PRESCRIBED ON TEMPORARY SEEDING TABLE B.1, PERMANENT SEEDING TABLE B.3, OR SITE-SPECIFIC SEEDING SUMMARIES.
ii. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION. ROLL THE SEEDED AREA WITH A WEIGHTED ROLLER TO PROVIDE GOOD SEED TO SOIL CONTACT.
b. DRILL OR CULTIPACKER SEEDING: MECHANIZED SEEDERS THAT APPLY AND COVER SEED WITH SOIL.
i. CULTIPACKING SEEDERS ARE REQUIRED TO BURY THE SEED IN SUCH A FASHION AS TO PROVIDE AT LEAST 1/4 INCH OF SOIL COVERING. SEEDBED MUST BE FIRM AFTER PLANTING.
ii. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION.
c. HYDROSEEDING: APPLY SEED UNIFORMLY WITH HYDROSEEDER (SLURRY INCLUDES SEED AND FERTILIZER).
i. IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE APPLICATION RATES SHOULD NOT EXCEED THE FOLLOWING: NITROGEN, 100 POUNDS PER ACRE TOTAL OF SOLUBLE NITROGEN; P_2O_5 (PHOSPHOROUS), 200 POUNDS PER ACRE; K_2O (POTASSIUM), 200 POUNDS PER ACRE.
ii. LIME: USE ONLY GROUND AGRICULTURAL LIMESTONE (UP TO 3 TONS PER ACRE MAY BE APPLIED BY HYDROSEEDING). NORMALLY, NOT MORE THAN 2 TONS ARE APPLIED BY HYDROSEEDING AT ANY ONE TIME. DO NOT USE BURNT OR HYDRATED LIME WHEN HYDROSEEDING.
iii. MIX SEED AND FERTILIZER ON SITE AND SEED IMMEDIATELY AND WITHOUT INTERRUPTION.
iv. WHEN HYDROSEEDING DO NOT INCORPORATE SEED INTO THE SOIL.

B. MULCHING
1. MULCH MATERIALS (IN ORDER OF PREFERENCE)
a. STRAW CONSISTING OF THOROUGHLY THRESHED WHEAT, RYE, OAT, OR BARLEY AND REASONABLY BRIGHT IN COLOR. STRAW IS TO BE FREE OF NOXIOUS WEED SEEDS AS SPECIFIED IN THE MARYLAND SEED LAW AND NOT MUSTY, MOLDY, CAKED, DECAYED, OR EXCESSIVELY DUSTY. NOTE: USE ONLY STERILE STRAW MULCH IN AREAS WHERE ONE SPECIES OF GRASS IS DESIRED.
b. WOOD CELLULOSE FIBER MULCH (WCFM) CONSISTING OF SPECIALLY PREPARED WOOD CELLULOSE PROCESSED INTO A UNIFORM FIBROUS PHYSICAL STATE.
i. WCFM IS TO BE DYED GREEN OR CONTAIN A GREEN DYE IN THE PACKAGE THAT WILL PROVIDE AN APPROPRIATE COLOR TO FACILITATE VISUAL INSPECTION OF THE UNIFORMLY SPREAD SLURRY.
ii. WCFM, INCLUDING DYE, MUST CONTAIN NO GERMINATION OR GROWTH INHIBITING FACTORS.
iii. WCFM MATERIALS ARE TO BE MANUFACTURED AND PROCESSED IN SUCH A MANNER THAT THE WOOD CELLULOSE FIBER MULCH WILL REMAIN IN UNIFORM SUSPENSION IN WATER UNDER AGITATION AND WILL BLEND WITH SEED, FERTILIZER AND OTHER ADDITIVES TO FORM A HOMOGENEOUS SLURRY. THE MULCH MATERIAL MUST FORM A BLOTTER-LIKE GROUND COVER, ON APPLICATION, HAVING MOISTURE ABSORPTION AND PERCOLATION PROPERTIES AND MUST COVER AND HOLD GRASS SEED IN CONTACT WITH THE SOIL WITHOUT INHIBITING THE GROWTH OF THE GRASS SEEDLINGS.
iv. WCFM MATERIAL MUST NOT CONTAIN ELEMENTS OR COMPOUNDS AT CONCENTRATION LEVELS THAT WILL BE PHYTO-TOXIC.
v. WCFM MUST CONFORM TO THE FOLLOWING PHYSICAL REQUIREMENTS: FIBER LENGTH OF APPROXIMATELY 10 MILLIMETERS, DIAMETER APPROXIMATELY 1 MILLIMETER, PH RANGE OF 4.0 TO 8.5, ASH CONTENT OF 1.6 PERCENT MAXIMUM AND WATER HOLDING CAPACITY OF 90 PERCENT MINIMUM.

2. APPLICATION
a. APPLY MULCH TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING.
b. WHEN STRAW MULCH IS USED, SPREAD IT OVER ALL SEEDED AREAS AT THE RATE OF 2 TONS PER ACRE TO A UNIFORM LOOSE DEPTH OF 1 TO 2 INCHES. APPLY MULCH TO ACHIEVE A UNIFORM DISTRIBUTION AND DEPTH SO THAT THE SOIL SURFACE IS NOT EXPOSED. WHEN USING A MULCH ANCHORING TOOL, INCREASE THE APPLICATION RATE TO 2.5 TONS PER ACRE.
c. WOOD CELLULOSE FIBER USED AS MULCH MUST BE APPLIED AT A NET DRY WEIGHT OF 1500 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER TO ATTAIN A MIXTURE WITH A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.
3. ANCHORING
a. PERFORM MULCH ANCHORING IMMEDIATELY FOLLOWING APPLICATION OF MULCH TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS (LISTED BY PREFERENCE), DEPENDING UPON THE SIZE OF THE AREA AND EROSION HAZARD:
i. A MULCH ANCHORING TOOL IS A TRACTOR DRAWN IMPLEMENT DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE A MINIMUM OF 2 INCHES. THIS PRACTICE IS MOST EFFECTIVE ON LARGE AREAS, BUT IS LIMITED TO FLATTER SLOPES WHERE EQUIPMENT CAN OPERATE SAFELY. IF USED ON SLOPING LAND, THIS PRACTICE SHOULD FOLLOW THE CONTOUR.
ii. WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER AT A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.
iii. SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRO-TACK), DCA-70, PETROSET, TERRA TAX II, TERRA TACK AR OR OTHER APPROVED EQUAL MAY BE USED. FOLLOW APPLICATION RATES AS SPECIFIED BY THE MANUFACTURER. APPLICATION OF LIQUID BINDERS NEEDS TO BE HEAVIER AT THE EDGES WHERE WIND CATCHES MULCH, SUCH AS IN VALLEYS AND ON CRESTS OF BANKS. USE OF ASPHALT BINDERS IS STRICTLY PROHIBITED.
iv. LIGHTWEIGHT PLASTIC NETTING MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER RECOMMENDATIONS. NETTING IS USUALLY AVAILABLE IN ROLLS 4 TO 15 FEET WIDE AND 300 TO 3,000 FEET LONG.

CONSULTANT'S CERTIFICATION:

I CERTIFY THAT THIS PLAN OF EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT AND THE CURRENT STATE OF MARYLAND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. I HAVE REVIEWED THIS EROSION AND SEDIMENT CONTROL PLAN WITH THE OWNER/DEVELOPER.

Kathryn R Heil — Signature 12/20/2024 — Date

KATHRYN HEIL — Print Name 52868 — MD License Number

OWNER'S/DEVELOPER'S CERTIFICATION:

I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THIS CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I/WE ALSO CERTIFY THAT THE SITE WILL BE INSPECTED AT THE END OF EACH WORKING DAY, AND THAT ANY NEEDED MAINTENANCE WILL BE COMPLETED SO AS TO INSURE THAT ALL SEDIMENT CONTROL PRACTICES ARE LEFT IN OPERATIONAL CONDITION. I/WE AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT BOARD OF SUPERVISORS OR THEIR AUTHORIZED AGENTS.

Signature of Owner/Developer 9/30/2024 — Date

GREGORY DORAN — Print Name CHIEF CAPITAL CONSTRUCTION — Title

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL
Jeffrey P. West 12-23-24 — Date

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

SEAL: STATE OF MARYLAND — KATHRYN R. HEIL — 52868 — PROFESSIONAL ENGINEER — 12/19/2024
DATE : 12/19/2024

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 52868, EXPIRATION DATE 05/31/2025.
ENGINEER: KATHRYN R. HEIL
DGN BY:
DWN BY:
CHKD BY:
AS-BUILT PER RECORD PRINT
BY:
DATE:

AS-BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWING SCALE		PROPERTY MANAGEMENT
				USE 112 113	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14	PLAN SCALE:	AS SHOWN	APPROVED BY: PROPERTY MANAGER
			R.O.W NO.			PROFILE SCALE:		DATE:
CONTRACT COMPLETION BOX								
BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER	
REVIEWED BY:								
DATE REVIEWED:								

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT
CLOVERLAND PARK CRICKET FIELD
ESC SHEET 5 OF 9
EROSION & SEDIMENT CONTROL NOTES I
CONSTRUCTION DOCUMENTS
SUBDIVISION: PHOENIX
12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131
ELECTION DIST. NO.: 10C3

SHEET DESIGNATION: C421
CONTRACT NUMBER: 25067 GXO
JOB ORDER NUMBER: PROJ–10000752
SHEET 18 OF 40
DRAWING NUMBER: 2025-1649
FILE NO.: 9 REV. 03/23

DWG. FILENAME: © SITE RESOURCES, INC. Z:\23\23053–BACO CLOVERLAND PARK CRICKET FIELD\04–DWG\C421_ESC NOTES.DWG 12/19/2024 5:17 PM KRH

B-4-5 STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

DEFINITION
TO STABILIZE DISTURBED SOILS WITH PERMANENT VEGETATION.

PURPOSE
TO USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER ON DISTURBED SOILS.

CONDITIONS WHERE PRACTICE APPLIES
EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR 6 MONTHS OR MORE.

CRITERIA

A. SEED MIXTURES
1. GENERAL USE
   a. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED IN TABLE B.3 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3) AND BASED ON THE SITE CONDITION OR PURPOSE FOUND ON TABLE B.2. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.
   b. ADDITIONAL PLANTING SPECIFICATIONS FOR EXCEPTIONAL SITES SUCH AS SHORELINES, STREAM BANKS, OR DUNES OR FOR SPECIAL PURPOSES SUCH AS WILDLIFE OR AESTHETIC TREATMENT MAY BE FOUND IN USDA-NRCS TECHNICAL FIELD OFFICE GUIDE, SECTION 342 - CRITICAL AREA PLANTING.
   c. FOR SITES HAVING DISTURBED AREA OVER 5 ACRES, USE AND SHOW THE RATES RECOMMENDED BY THE SOIL TESTING AGENCY.
   d. FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREA FORM FERTILIZER (46-0-0) AT 3 ½ POUNDS PER 1000 SQUARE FEET (150 POUNDS PER ACRE) AT THE TIME OF SEEDING IN ADDITION TO THE SOIL AMENDMENTS SHOWN IN THE PERMANENT SEEDING SUMMARY.
2. TURFGRASS MIXTURES
   a. AREAS WHERE TURFGRASS MAY BE DESIRED INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE.
   b. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED BELOW BASED ON THE SITE CONDITIONS OR PURPOSE. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.
      i. KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN AREAS THAT RECEIVE INTENSIVE MANAGEMENT. IRRIGATION REQUIRED IN THE AREAS OF CENTRAL MARYLAND AND EASTERN SHORE. RECOMMENDED CERTIFIED KENTUCKY BLUEGRASS CULTIVARS SEEDING RATE: 1.5 TO 2.0 POUNDS PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.
      ii. KENTUCKY BLUEGRASS/PERENNIAL RYE: FULL SUN MIXTURE: FOR USE IN FULL SUN AREAS WHERE RAPID ESTABLISHMENT IS NECESSARY AND WHEN TURF WILL RECEIVE MEDIUM TO INTENSIVE MANAGEMENT. CERTIFIED PERENNIAL RYEGRASS CULTIVARS/CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE: 2 POUNDS MIXTURE PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.
      iii. TALL FESCUE/KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN DROUGHT-PRONE AREAS AND/OR FOR AREAS RECEIVING LOW TO MEDIUM MANAGEMENT IN FULL SUN TO MEDIUM SHADE. RECOMMENDED MIXTURE INCLUDES; CERTIFIED TALL FESCUE CULTIVARS 95 TO 100 PERCENT, CERTIFIED KENTUCKY BLUGRASS CULTIVARS 0 TO 5 PERCENT. SEEDING RATE: 5 TO 8 POUNDS PER 1000 SQUARE FEET. ONE OR MORE CULTIVARS MAY BE BLENDED.
      iv. KENTUCKY BLUEGRASS/FINE FESCUE: SHADE MIXTURE: FOR USE IN AREAS WITH SHADE IN BLUEGRASS LAWNS. FOR ESTABLISHMENT IN HIGH QUALITY, INTENSIVELY MANAGED TURF AREA. MIXTURE INCLUDES; CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 30 TO 40 PERCENT AND CERTIFIED FINE FESCUE AND 60 TO 70 PERCENT. SEEDING RATE: 1½ TO 3 POUNDS PER 1000 SQUARE FEET.

   NOTES:
   SELECT TURFGRASS VARIETIES FROM THOSE LISTED IN THE MOST CURRENT UNIVERSITY OF MARYLAND PUBLICATION, AGRONOMY MEMO #77, TURFGRASS CULTIVAR RECOMMENDATIONS FOR MARYLAND.*

   CHOOSE CERTIFIED MATERIAL. CERTIFIED MATERIAL IS THE BEST GUARANTEE OF CULTIVAR PURITY. THE CERTIFICATION PROGRAM OF THE MARYLAND DEPARTMENT OF AGRICULTURE, TURF AND SEED SECTION, PROVIDES A RELIABLE MEANS OF CONSUMER PROTECTION AND ASSURES A PURE GENETIC LINE.

   c. IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURES WESTERN MD: MARCH 15 TO JUNE 1, AUGUST 1 TO OCTOBER 1 (HARDINESS ZONES: 5B, 6A) CENTRAL MD: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONE: 6B) SOUTHERN MD, EASTERN SHORE: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONES: 7A, 7B)
   d. TILL AREAS TO RECEIVE SEED BY DISKING OR OTHER APPROVED METHODS TO A DEPTH OF 2 TO 4 INCHES, LEVEL AND RAKE THE AREAS TO PREPARE A PROPER SEEDBED. REMOVE STONES AND DEBRIS OVER 1 1/2 INCHES IN DIAMETER. THE RESULTING SEEDBED MUST BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASSES WILL POSE NO DIFFICULTY.
   e. IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER FOR PLANT GROWTH (1/2 TO 1 INCH EVERY 3 TO 4 DAYS DEPENDING ON SOIL TEXTURE) UNTIL THEY ARE FIRMLY ESTABLISHED. THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE LATE IN THE PLANTING SEASON, IN ABNORMALLY DRY OR HOT SEASONS, OR ON ADVERSE SITES.

PERMANENT SEEDING SUMMARY

HARDINESS ZONE 7B					FERTILIZER RATE (10-20-20)			LIME RATE
NO.	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	*** SEEDING DEPTHS	N	P_2O_5	K_2O	
ii	TALL FESCUE*	285 LB/AC**	2/15 - 4/30 8/15 - 10/31	1/4" - 1/2"	45 LB/AC (1.0 LB/ 1000SF)	90 LB/AC (2 LB/ 1000 SF)	90 LB/AC (2 LB/ 1000 SF)	2 TONS/AC (90LB/ 1000 SF)
	KENTUCKY BLUEGRASS*	15 LB/AC	2/15 - 4/30 8/15 - 10/31	1/4" - 1/2"				

* SELECT TURFGRASS VARIETIES FROM THOSE LISTED AS ELIGIBLE "RECOMMENDED VARIETIES" CONTAINED IN THE CURRENT "MARYLAND TURFGRASS VARIETY LIST" PUBLISHED BY THE STATE OF MARYLAND, DEPARTMENT OF AGRICULTURE (MDA). TURF & SEED ADMINISTRATION.
** FOR TALL FESCUE CHOOSE 3 PROVEN CULTIVARS TO BE USED IN EQUAL PROPORTIONS IN THE SEED MIX.
*** FOR DATES 5/1 - 8/14 ADD 15 LBS./AC. OF FOXTAIL OR PEARL MILLET TO PERMANENT MIX ii ABOVE.

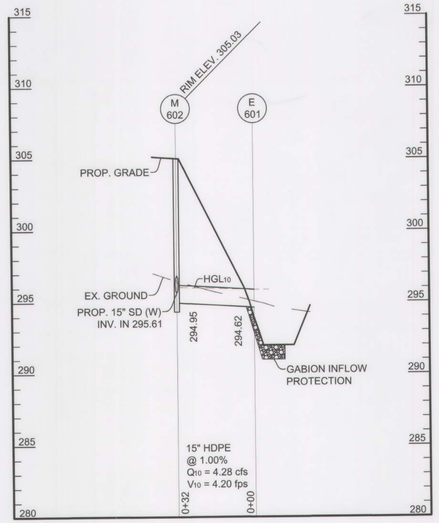
B. SOD: TO PROVIDE QUICK COVER ON DISTURBED AREAS (2:1 GRADE OR FLATTER).
1. GENERAL SPECIFICATIONS
   a. CLASS OF TURFGRASS SOD MUST BE MARYLAND STATE CERTIFIED. SOD LABELS MUST BE MADE AVAILABLE TO THE JOB FOREMAN AND INSPECTOR.
   b. SOD MUST BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF ¾ INCH, PLUS OR MINUS ¼ INCH, AT THE TIME OF CUTTING. MEASUREMENT FOR THICKNESS MUST EXCLUDE TOP GROWTH AND THATCH. BROKEN PADS AND TORN OR UNEVEN ENDS WILL NOT BE ACCEPTABLE.
   c. STANDARD SIZE SECTIONS OF SOD MUST BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON THE UPPER 10 PERCENT OF THE SECTION.
   d. SOD MUST NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL.
   e. SOD MUST BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPLANTED WITHIN THIS PERIOD MUST BE APPROVED BY AN AGRONOMIST OR SOIL SCIENTIST PRIOR TO ITS INSTALLATION.
2. SOD INSTALLATION
   a. DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, LIGHTLY IRRIGATE THE SUBSOIL IMMEDIATELY PRIOR TO LAYING THE SOD.
   b. LAY THE FIRST ROW OF SOD IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO IT AND TIGHTLY WEDGED AGAINST EACH OTHER. STAGGER LATERAL JOINTS TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. ENSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE AIR DRYING OF THE ROOTS.
   c. WHEREVER POSSIBLE, LAY SOD WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERING JOINTS. ROLL AND TAMP, PEG OR OTHERWISE SECURE THE SOD TO PREVENT SLIPPAGE ON SLOPES. ENSURE SOLID CONTACT EXISTS BETWEEN SOD ROOTS AND THE UNDERLYING SOIL SURFACE.
   d. WATER THE SOD IMMEDIATELY FOLLOWING ROLLING AND TAMPING UNTIL THE UNDERSIDE OF THE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD ARE THOROUGHLY WET. COMPLETE THE OPERATIONS OF LAYING, TAMPING AND IRRIGATING FOR ANY PIECE OF SOD WITHIN EIGHT HOURS.
3. SOD MAINTENANCE
   a. IN THE ABSENCE OF ADEQUATE RAINFALL, WATER DAILY DURING THE FIRST WEEK OR AS OFTEN AND SUFFICIENTLY AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF 4 INCHES. WATER SOD DURING THE HEAT OF THE DAY TO PREVENT WILTING.
   b. AFTER THE FIRST WEEK, SOD WATERING IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT.
   c. DO NOT MOW UNTIL THE SOD IS FIRMLY ROOTED. NO MORE THAN 1/3 OF THE GRASS LEAF MUST BE REMOVED BY THE INITIAL CUTTING OR SUBSEQUENT CUTTINGS. MAINTAIN A GRASS HEIGHT OF AT LEAST 3 INCHES UNLESS OTHERWISE SPECIFIED.

GENERAL NOTES

(FOR EROSION AND SEDIMENT CONTROL PLANS ONLY)
1. REFER TO "*2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL*" FOR STANDARD DETAILS AND DETAILED SPECIFICATIONS OF EACH PRACTICE SPECIFIED HEREIN.
2. WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, MINOR FIELD ADJUSTMENTS CAN AND WILL BE MADE TO INSURE THE CONTROL OF ANY SEDIMENT. CHANGES IN SEDIMENT CONTROL PRACTICES REQUIRE PRIOR APPROVAL OF THE SEDIMENT CONTROL INSPECTOR AND THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT.
3. AT THE END OF EACH WORKING DAY, ALL SEDIMENT CONTROL PRACTICES WILL BE INSPECTED AND LEFT IN OPERATIONAL CONDITION.
4. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A.) THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN THREE HORIZONTAL TO ONE VERTICAL (3:1), AND B.) SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.
5. ANY CHANGE TO THE GRADING PROPOSED ON THIS PLAN REQUIRES RE-SUBMISSION TO THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT FOR APPROVAL.
6. DUST CONTROL WILL BE PROVIDED FOR ALL DISTURBED AREAS. REFER TO "*2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL*", PG. H.22, FOR ACCEPTABLE METHODS AND SPECIFICATIONS FOR DUST CONTROL.
7. ANY VARIATION FROM THE SEQUENCE OF OPERATIONS STATED ON THIS PLAN REQUIRES THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR AND THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT PRIOR TO THE INITIATION OF THE CHANGE.
8. EXCESS CUT OR BORROW MATERIAL SHALL GO TO, OR COME FROM, RESPECTIVELY, A SITE WITH AN OPEN GRADING PERMIT AND APPROVED SEDIMENT CONTROL PLAN.
9. THE FOLLOWING ITEM MAY BE USED AS APPLICABLE: REFER TO "*MARYLAND'S GUIDELINES TO WATERWAY CONSTRUCTION*" BY THE WATER MANAGEMENT ADMINISTRATION OF THE MARYLAND DEPARTMENT OF THE ENVIRONMENT, REVISED NOVEMBER, 2000, FOR STANDARD DETAILS AND DETAILED SPECIFICATIONS OF EACH PRACTICE SPECIFIED HEREIN FOR WATERWAY CONSTRUCTION.
10. PUMPING SEDIMENT LADEN WATER INTO THE WATERS OF THE STATE IS STRICTLY PROHIBITED. ANY PORTABLE DEWATERING DEVICE MUST BE LOCATED WITHIN THE LIMIT OF DISTURBANCE.
11. UPON INSTALLATION OF THE BASE PAVEMENT AND AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR, RELOCATE THE STABILIZED CONSTRUCTION ENTRANCE(S) AND INSTALL ADDITIONAL CONTROL MEASURES (STABILIZED CONSTRUCTION ENTRANCES, SILT FENCES, SUPER SILT FENCES) AS NEEDED TO CONTROL SEDIMENT RUNOFF FROM DISTURBED AREAS. THE ADDITIONAL CONTROLS MUST NOT ALTER DRAINAGE PATTERNS.
12. THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION, OR DISTURBANCE OF VEGETATION IN THE FOREST BUFFER EASEMENT OR FOREST BUFFER & FOREST CONSERVATION EASEMENT EXCEPT AS PERMITTED BY THE BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY.
13. ANY FOREST BUFFER EASEMENT OR FOREST BUFFER & FOREST CONSERVATION EASEMENT SHOWN HEREON IS SUBJECT TO PROTECTIVE COVENANTS WHICH MAY BE FOUND IN THE LAND RECORDS OF BALTIMORE COUNTY AND WHICH RESTRICT DISTURBANCE AND USE OF THESE AREAS.

MAINTENANCE NOTE

CONTRACTOR SHALL INSPECT AND MAINTAIN ALL SEDIMENT CONTROL MEASURES AND DEVICES AFTER EVERY STORM EVENT. MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO THE REMOVAL OF ALL ACCUMULATED SEDIMENT. GEOTEXTILE FABRIC SHALL BE REPLACED AS NEEDED TO ENSURE PROPER FUNCTION.



1 M-602 TO E-601
(INTERIM CONDITION)
SCALES: HORIZ. 1" = 30'
VERT. 1" = 5'

UTILITY NOTE:

1. CONTRACTOR SHOULD OPEN ONLY THAT SECTION OF TRENCH THAT CAN BE BACKFILLED AND STABILIZED EACH DAY. IF TRENCH MUST REMAIN OPEN LONGER THAN ONE DAY, SILT FENCE SHALL BE PLACED BELOW (DOWNSLOPE) OF THE TRENCH.
2. PLACE ALL EXCAVATED MATERIAL ON UPHILL SIDE OF TRENCH.
3. ANY SEDIMENT CONTROLS DISTURBED BY UTILITY CONSTRUCTION ARE TO BE REPAIRED IMMEDIATELY.

TEMPORARY STOCKPILE NOTE

TEMPORARY STOCKPILES SHALL BE:
1. LOCATED WITHIN THE LIMIT OF DISTURBANCE (LOD).
2. DRAIN TO A FUNCTIONING SEDIMENT CONTROL DEVICE.
3. POSITIONED TO NOT IMPEDE UPON, OR IMPAIR THE FUNCTION OF SAID DEVICES.
4. POSITIONED TO NOT ALTER DRAINAGE DIVIDES.

DAILY STABILIZATION NOTE

CONTRACTOR SHALL ONLY DISTURB THAT AREA WHICH CAN BE COMPLETED AND STABILIZED BY THE END OF EACH WORKING DAY.
STABILIZATION SHALL BE AS FOLLOWS:
1. FOR AREAS TO BE PAVED, THE APPLICATION OF STONE BASE.
2. FOR AREAS TO BE VEGETATIVELY STABILIZED:
   a. PERMANENT SEED AND SOIL STABILIZATION MATTING OR SOD FOR ALL STEEP SLOPES, CHANNELS OR SWALES.
   b. PERMANENT SEED AND MULCH FOR ALL OTHER AREAS.

ANY AREAS WHICH CAN NOT BE STABILIZED BY THE END OF EACH WORKING DAY MUST HAVE SILT FENCE INSTALLED ON THE DOWNSLOPE SIDE.

INLET PROTECTION NOTE

THE CONTRACTOR IS REQUIRED TO INSTALL INLET PROTECTION ON ALL STORM DRAIN INLETS WITH THE EXCEPTION OF THE FOLLOWING:

*1. ANY INLET OUTFALLING DIRECTLY INTO A SEDIMENT TRAPPING DEVICE.

2. INLETS ON PRIVATE OR PUBLIC PAVED ROADWAYS OPEN TO THE PUBLIC.

ALL INLET PROTECTION WILL BE INSTALLED AS DIRECTED BY THE INSPECTOR IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, PAGE E.23 (OR AS MAY BE AMMENDED). THE REMOVAL OF ANY INLET PROTECTION DEVICES WILL REQUIRE APPROVAL FROM THE INSPECTOR.

*STORM DRAINS TO BE FLUSHED PRIOR TO TRAPPING DEVICE REMOVAL.

H-1 STANDARDS AND SPECIFICATIONS

FOR

MATERIALS

Table H.1: Geotextile Fabrics

		WOVEN SLIT FILM GEOTEXTILE		WOVEN MONOFILAMENT GEOTEXTILE		NONWOVEN GEOTEXTILE	
		MINIMUM AVERAGE ROLL VALUE[1]					
PROPERTY	TEST METHOD	MD	CD	MD	CD	MD	CD
Grab Tensile Strength	ASTM D-4632	200 lb	200 lb	370 lb	250 lb	200 lb	200 lb
Grab Tensile Elongation	ASTM D-4632	15%	10%	15%	15%	50%	50%
Trapezoidal Tear Strength	ASTM D-4533	75 lb	75 lb	100 lb	60 lb	80 lb	80 lb
Puncture Strength	ASTM D-6241	450 lb		900 lb		450 lb	
Apparent Opening Size[2]	ASTM D-4751	U.S. Sieve 30 (0.59 mm)		U.S. Sieve 70 (0.21 mm)		U.S. Sieve 70 (0.21 mm)	
Permittivity	ASTM D-4491	0.05 sec^{-1}		0.28 sec^{-1}		1.1 sec^{-1}	
Ultraviolet Resistance Retained at 500 hours	ASTM D-4355	70% strength		70% strength		70% strength	

[1] All numeric values except apparent opening size (AOS) represent minimum average roll values (MARV). MARV is calculated as the typical minus two standard deviations. MD is machine direction; CD is cross direction.

[2] Values for AOS represent the average maximum opening.

Geotextiles must be evaluated by the National Transportation Product Evaluation Program (NTPEP) and conform to the values in Table H.1.

The geotextile must be inert to commonly encountered chemicals and hydrocarbons and must be rot and mildew resistant. The geotextile must be manufactured from fibers consisting of long chain synthetic polymers and composed of a minimum of 95 percent by weight of polyolefins or polyesters, and formed into a stable network so the filaments or yarns retain their dimensional stability relative to each other, including selvages.

When more than one section of geotextile is necessary, overlap the sections by at least one foot. The geotextile must be pulled taut over the applied surface. Equipment must not run over exposed fabric. When placing riprap on geotextile, do not exceed a one foot drop height.

SEQUENCE OF OPERATIONS

NOTE: ALL REQUIRED STATE, FEDERAL AND LOCAL PERMITS MUST BE OBTAINED PRIOR TO THE PRECONSTRUCTION MEETING.

1. NOTIFY BALTIMORE COUNTY DEPARTMENT OF PERMITS APPROVALS & INSPECTIONS SEDIMENT CONTROL (PAI-SC), 410-887-3226 AT LEAST 48 HOURS PRIOR TO BEGINNING WORK.
2. IF APPLICABLE, ORANGE HIGH VISIBILITY FENCE (HVF) SHALL BE MANUALLY INSTALLED ALONG THE LIMIT OF DISTURBANCE (LOD), WHERE THE LOD IS WITHIN 50 FEET OF THE FOREST BUFFER / CONSERVATION EASEMENT. THIS SHALL BE COMPLETED BY AND INSPECTED AT THE PRE-CONSTRUCTION MEETING.
3. CONTACT MISS UTILITY AT 1-800-257-7777 AT LEAST THREE DAYS IN ADVANCE OF STARTING WORK SHOWN ON PLANS.
4. CLEAR AND GRUB FOR SEDIMENT & EROSION CONTROL MEASURES OR DEVICES ONLY.
5. INSTALL STABILIZED CONSTRUCTION ENTRANCE, SUPER SILT FENCE (SSF), SILT FENCE CHECK DAMS, AND CLEAN WATER SUPER FENCE DIVERSIONS WITH ASSOCIATED ROCK OUTLET PROTECTION AS SHOWN ON SHEETS C401 AND C402. CONSTRUCTION TRAFFIC SHOULD ENTER/EXIT ONLY VIA STABILIZED CONSTRUCTION ENTRANCE.
6. NOTIFY AND WITH APPROVAL OF THE SEDIMENT CONTROL INSPECTOR INSTALL ST-II TRAP INCLUDING BUT NOT LIMITED TO BAFFLE BOARDS (BB), REMOVABLE PUMPING STATION (RPS), AND GABION INFLOW PROTECTION (GP). RPS TO BE USED TO DEWATER THE TRAP FOR MAINTENANCE PURPOSES, SUCH AS FOR CLEANOUT AND AT TIME OF TRAPPING DEVICE REMOVAL. ONCE TRAP IS INSTALLED AND FUNCTIONAL INSTALL SUPER FENCE DIVERSIONS WHICH DIRECT FLOW INTO TRAP.
7. NOTIFY BALTIMORE COUNTY DEPARTMENT OF PERMITS, APPROVALS AND INSPECTIONS, SEDIMENT CONTROL, UPON COMPLETION OF SAID INSTALLATION.
8. WITH THE APPROVAL OF BALTIMORE COUNTY DEPARTMENT OF PERMITS, APPROVALS AND INSPECTIONS, SEDIMENT CONTROL, AND THE SEDIMENT CONTROL INSPECTOR CLEAR AND GRUB AND BEGIN DEMOLITION OF EXISTING SITE FENCING WITHIN THE LOD AS SHOWN ON C402.
9. CONTRACTOR SHALL INSPECT AND MAINTAIN ALL EROSION & SEDIMENT CONTROL MEASURES AND DEVICES AFTER EACH STORM EVENT. MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO, REMOVAL OF ALL ACCUMULATED SEDIMENT. GEOTEXTILE FABRIC SHALL BE REPLACED AS NEEDED TO ENSURE PROPER FUNCTION.
10. WITH THE APPROVAL OF BALTIMORE COUNTY DEPARTMENT OF PERMITS, APPROVALS AND INSPECTIONS, SEDIMENT CONTROL, BEGIN MASS GRADING AND EXCAVATION, INCLUDING ROUGH GRADING OF SWM FACILITIES (SENSITIVE COMPONENTS TO BE DELAYED UNTIL STEP #14), FIELD CONSTRUCTION, AND INSTALLATION OF STORM DRAINS ASSOCIATED WITH THE ATHLETIC FIELD AS SHOWN ON C411 & C412. SEE PLAN VIEW FOR AREAS OF DAILY STABILIZATION. STANDARD INLET PROTECTION SHALL BE INSTALLED ON INLETS UPON THE COMPLETION OF THEIR CONSTRUCTION AS SHOWN ON SHEETS C411 AND C412. STABILIZE ALL AREAS OF THE SITE AS THEY REACH THEIR FINAL GRADE.
11. WITH THE APPROVAL OF BALTIMORE COUNTY DEPARTMENT OF PERMITS, APPROVALS AND INSPECTIONS, SEDIMENT CONTROL, PROCEED WITH FINAL INSTALLATION OF THE ATHLETIC FIELD, AND INSTALLATION OF HARDSCAPE AREAS.
12. FINE GRADE AND PERMANENTLY STABILIZE ALL REMAINING DISTURBED AREAS AS THEY ARE COMPLETED. STABILIZE STEEP SLOPES AND SWALES WITH PERMANENT SEED AND SOIL STABILIZATION MATTING.
13. ONCE CONTRIBUTING DRAINAGE AREAS TO THE TRAP ARE COMPLETED AND STABILIZED WITH ESTABLISHED VEGETATION AND WITH APPROVAL OF THE SEDIMENT CONTROL INSPECTOR REMOVE SFD DIRECTING FLOWS INTO TRAP. FLUSH STORM DRAINS, DEWATER TRAP AND TAKE FINAL DREDGE TO A SITE WITH AN OPEN GRADING PERMIT AND APPROVED SEDIMENT CONTROL PLAN. DURING A 3 DAY DRY WEATHER FORECAST, REMOVE TRAP AND APPURTENANCES AND RESTORE AREA TO ORIGINAL GRADES. STABILIZE AREA WITH PERMANENT SEED AND MULCH.
14. ONCE CONTRIBUTING DRAINAGE AREAS TO THE SWM FACILITIES ARE COMPLETED AND STABILIZED WITH ESTABLISHED VEGETATION AND WITH APPROVAL OF SEDIMENT CONTROL INSPECTOR, COMPLETE INSTALLATION OF SWM FACILITIES PER APPROVED SWM PLANS.
15. UPON COMPLETION AND STABILIZATION OF THE SITE WITH ESTABLISHED VEGETATION AND WITH THE APPROVAL AND THE SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROLS AND STABILIZE AREAS DISTURBED BY THIS PROCESS.
16. SUBMIT AS BUILT PLANS AND COMPUTATIONS TO THE APPROVING AGENCIES WITHIN 30 DAYS OF COMPLETION.

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL
Jeffrey P. Wast 12-23-24
Date

DWG. FILENAME: Z:\23\23003-BACO CLOVERLAND PARK CRICKET FIELD\04-DWG\C423_ESC NOTES.DWG
© SITE RESOURCES, INC. 12/19/2024 5:17 PM KRH

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

SEAL: STATE OF MARYLAND · KATHRYN R. HEIL · 52868 · PROFESSIONAL ENGINEER
DATE : 12/19/2024

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 52868, EXPIRATION DATE 05/31/2025.
ENGINEER: KATHRYN R. HEIL
AS-BUILT PER RECORD PRINT
BY:
DATE:
DGN BY:
DWN BY:
CHKD BY:

AS-BUILT / REVISION

BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT
			USE 112 113	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14
		R.O.W NO.		

CONTRACT COMPLETION BOX

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

DRAWING SCALE
PLAN SCALE: AS SHOWN
PROFILE SCALE:

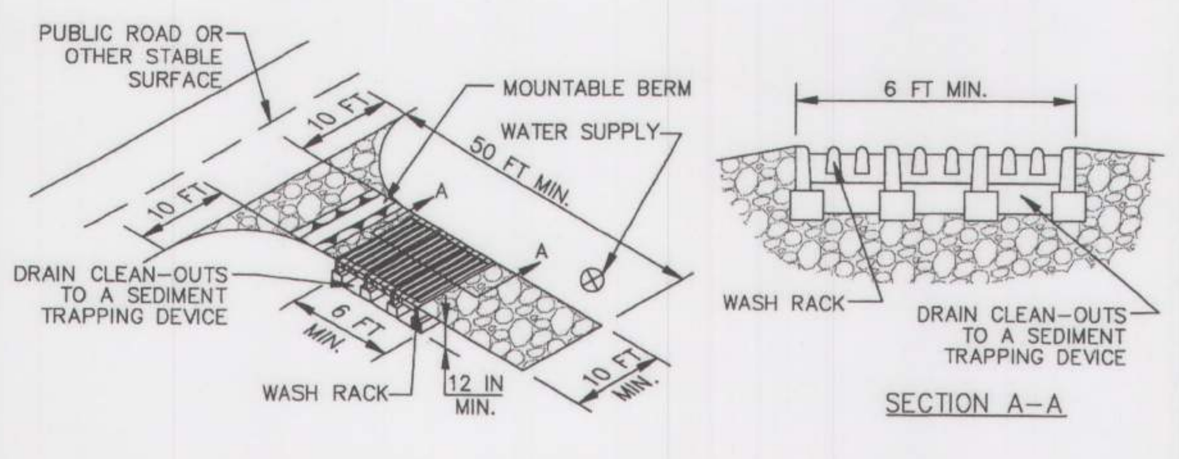
PROPERTY MANAGEMENT
APPROVED BY: PROPERTY MANAGER
DATE:

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT
CLOVERLAND PARK CRICKET FIELD
EROSION & SEDIMENT CONTROL NOTES II
CONSTRUCTION DOCUMENTS
SUBDIVISION: PHOENIX
12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131
ELECTION DIST. NO.: 10C3
ESC SHEET 6 OF 9

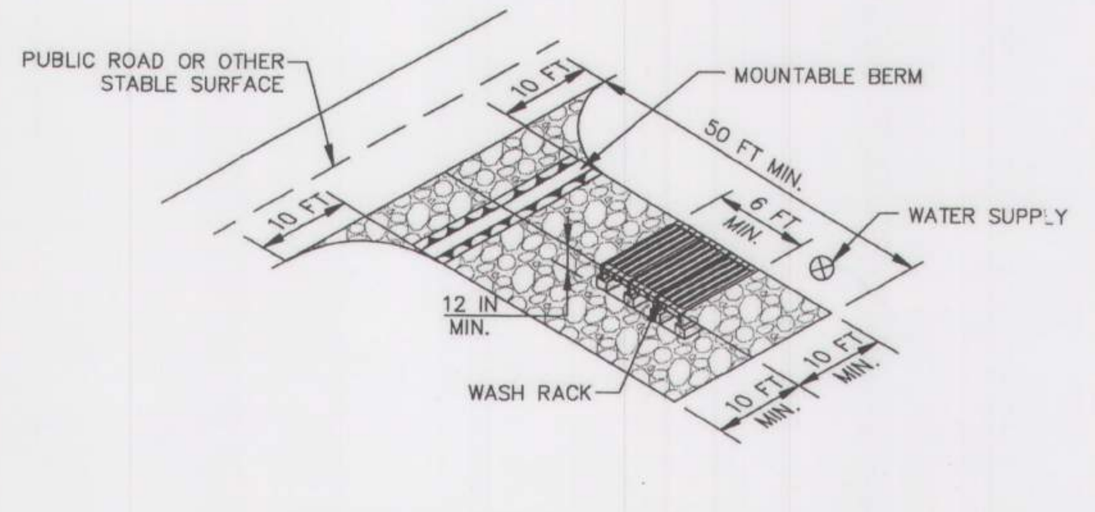
SHEET DESIGNATION	CONTRACT NUMBER
C422	25067 GXO
	JOB ORDER NUMBER
	PROJ-10000752
	SHEET 19 OF 40
	DRAWING NUMBER
	2025-1650
	FILE NO.: 9

DETAIL B-2 WASH RACK OPTION

STANDARD SYMBOL WR



ISOMETRIC VIEW – WASH RACK IN SCE



ISOMETRIC VIEW– WASH RACK ALONG SCE

CONSTRUCTION SPECIFICATIONS

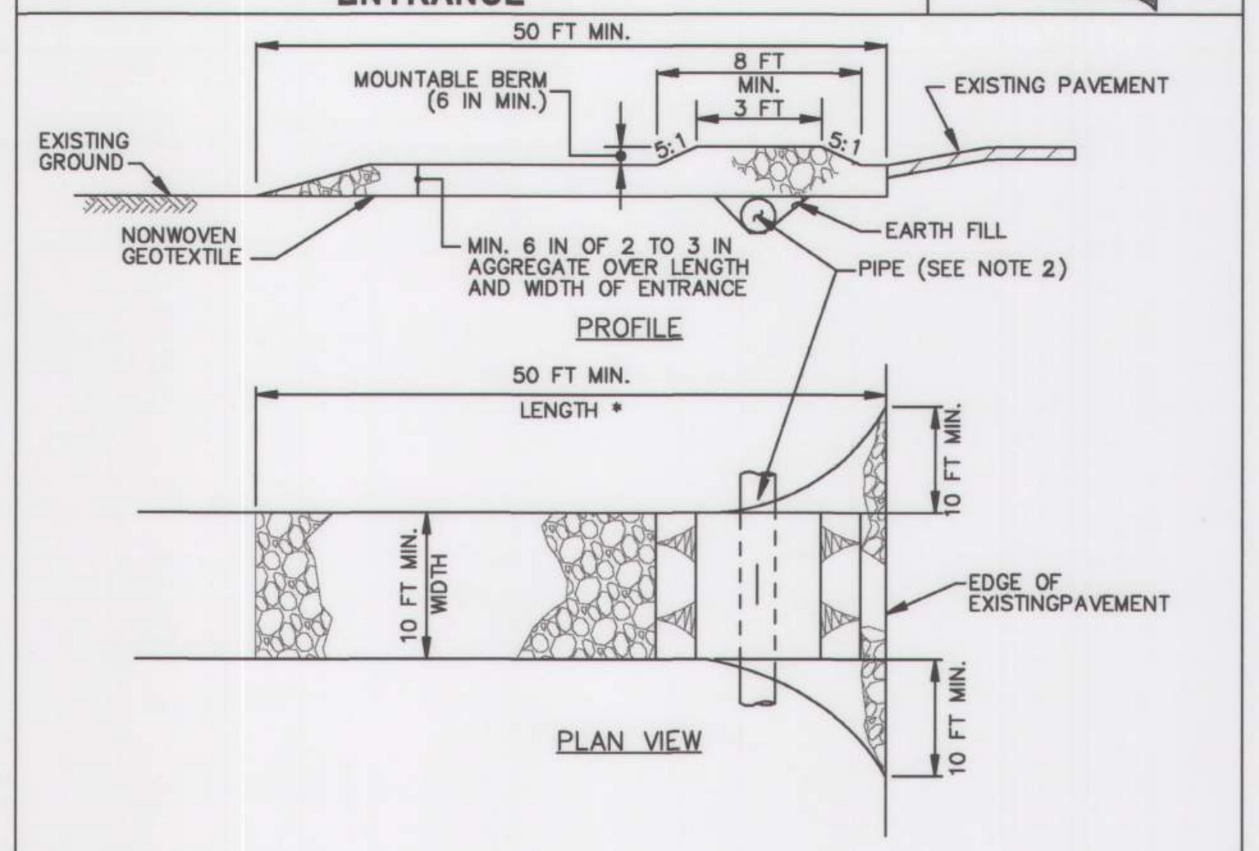
1. USE A WASH RACK DESIGNED AND CONSTRUCTED/MANUFACTURED FOR THE ANTICIPATED TRAFFIC LOADS. CONCRETE, STEEL, OR OTHER MATERIALS ARE ACCEPTABLE. PRE-FABRICATED UNITS SUCH AS CATTLE GUARDS ARE ACCEPTABLE. USE MINIMUM DIMENSION OF 6 FEET x 10 FEET. ORIENT DIRECTION OF RIBS AS SHOWN ON THE DETAIL.
2. INSTALL PRIOR TO, ALONG SIDE OF, OR AS PART OF THE SCE.
3. DIRECT WASH WATER TO AN APPROVED SEDIMENT TRAPPING DEVICE.
4. KEEP AREA UNDER WASH RACK FREE OF ACCUMULATED SEDIMENT. IF DAMAGED, REPAIR OR REPLACE WASH RACK.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL B-1 STABILIZED CONSTRUCTION ENTRANCE

STANDARD SYMBOL SCE



CONSTRUCTION SPECIFICATIONS

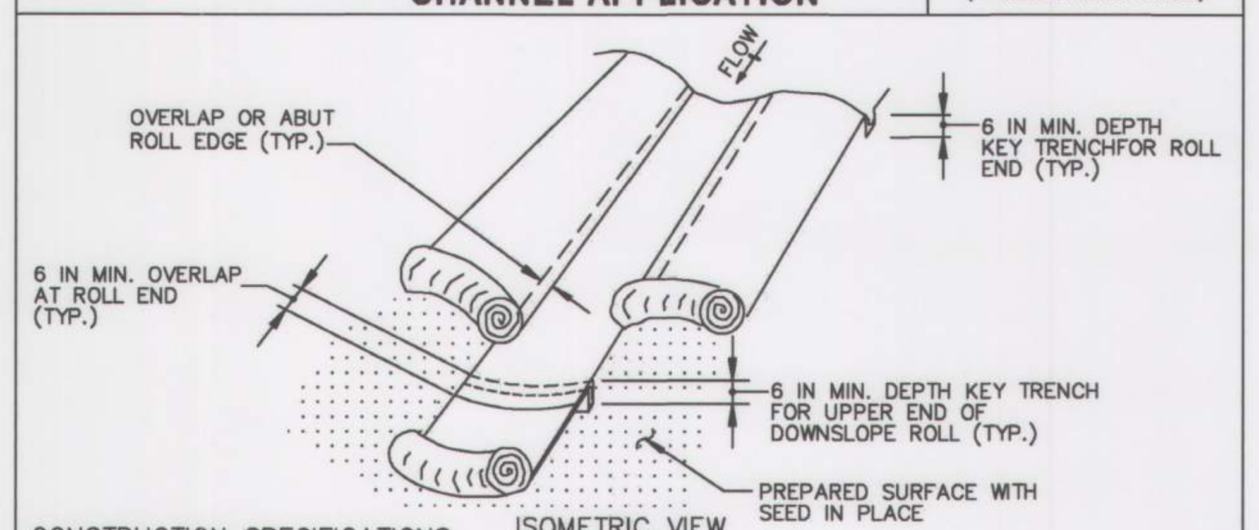
1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.
3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
4. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL B-4-6-A TEMPORARY SOIL STABILIZATION MATTING CHANNEL APPLICATION

STANDARD SYMBOL
TSSMC – 2.25 lb/ft² (* INCLUDE SHEAR STRESS)



CONSTRUCTION SPECIFICATIONS

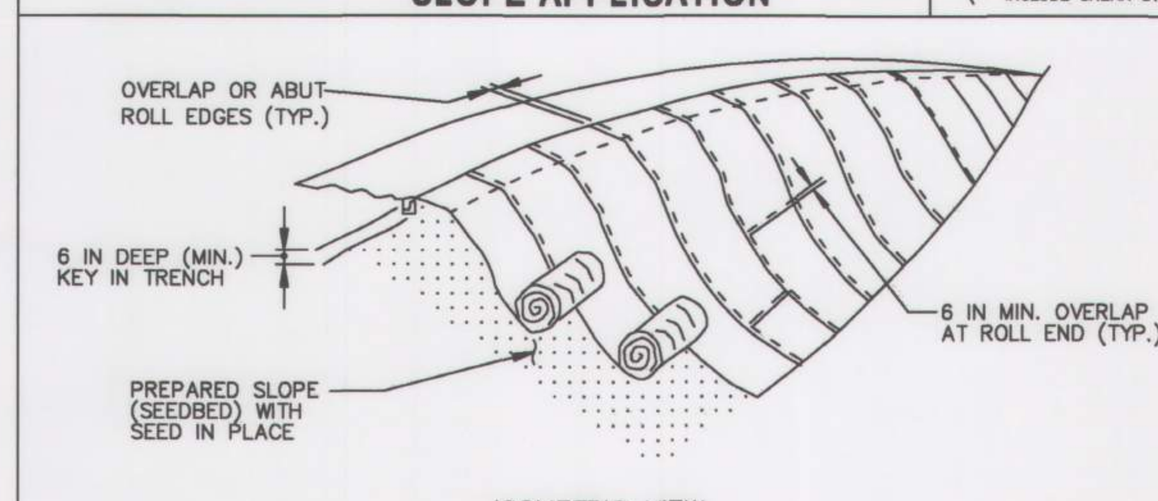
1. USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS DESIGNATED ON APPROVED PLANS.
2. USE TEMPORARY SOIL STABILIZATION MATTING MADE OF DEGRADABLE (LASTS 6 MONTHS MINIMUM) NATURAL OR MAN-MADE FIBERS (MOSTLY ORGANIC). MAT MUST HAVE UNIFORM THICKNESS AND DISTRIBUTION OF FIBERS THROUGHOUT AND BE SMOLDER RESISTANT. CHEMICALS USED IN THE MAT MUST BE NON-LEACHING AND NON-TOXIC TO VEGETATION AND SEED GERMINATION AND NON-INJURIOUS TO THE SKIN. IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF 2x2 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT MATERIAL.
3. SECURE MATTING USING STEEL STAPLES, WOOD STAKES, OR BIODEGRADABLE EQUIVALENT. STAPLES MUST BE "U" OR "T" SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO 1½ INCHES WIDE AND BE A MINIMUM OF 6 INCHES LONG. "T" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 1 INCH SECONDARY LEG, AND A MINIMUM 4 INCH HEAD. WOOD STAKES MUST BE ROUGH-SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPED AT THE BOTTOM.
4. PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
5. UNROLL MATTING IN DIRECTION OF WATER FLOW, CENTERING THE FIRST ROLL ON THE CHANNEL CENTERLINE. WORK FROM CENTER OF CHANNEL OUTWARD WHEN PLACING ROLLS. LAY MAT SMOOTHLY AND FIRMLY ON THE SEEDED SURFACE. AVOID STRETCHING THE MATTING.
6. KEY-IN UPSTREAM END OF EACH MAT ROLL BY DIGGING A 6 INCH (MINIMUM) TRENCH AT THE UPSTREAM END OF THE MATTING, PLACING THE ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL, AND TAMPING TO SECURE THE MAT END.
7. OVERLAP OR ABUT THE ROLL EDGES PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSTREAM MAT OVERLAPPING ON TOP OF THE NEXT DOWNSTREAM MAT.
8. STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS.
9. ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL B-4-6-B TEMPORARY SOIL STABILIZATION MATTING SLOPE APPLICATION

STANDARD SYMBOL
TSSMS – 2.25 lb/ft² (* INCLUDE SHEAR STRESS)



CONSTRUCTION SPECIFICATIONS

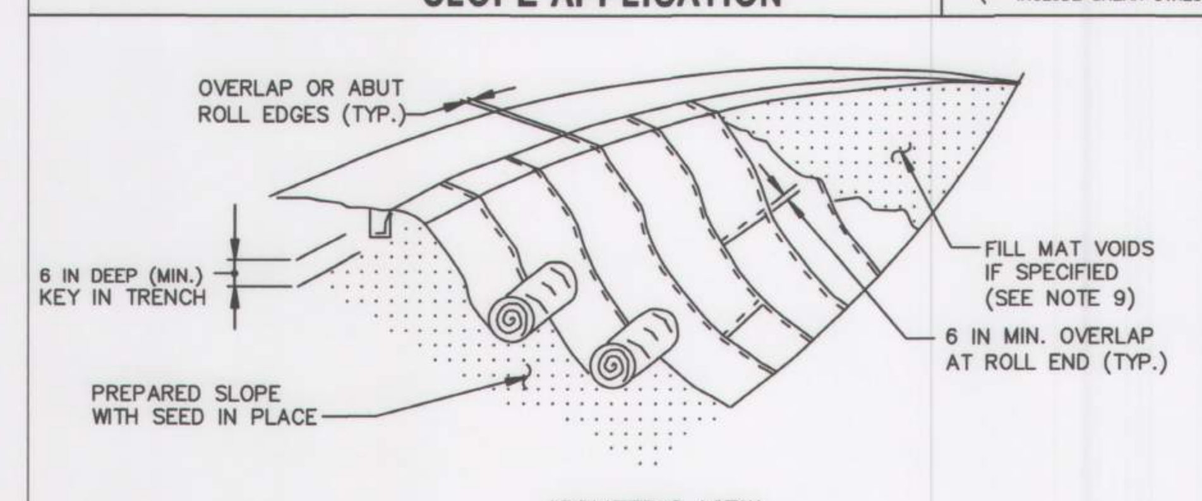
1. USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS DESIGNATED ON APPROVED PLANS.
2. USE TEMPORARY SOIL STABILIZATION MATTING MADE OF DEGRADABLE (LASTS 6 MONTHS MINIMUM) NATURAL OR MAN-MADE FIBERS (MOSTLY ORGANIC). MAT MUST HAVE UNIFORM THICKNESS AND DISTRIBUTION OF FIBERS THROUGHOUT AND BE SMOLDER RESISTANT. CHEMICALS USED IN THE MAT MUST BE NON-LEACHING AND NON-TOXIC TO VEGETATION AND SEED GERMINATION AND NON-INJURIOUS TO THE SKIN. IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF 2x2 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT MATERIAL.
3. SECURE MATTING USING STEEL STAPLES, WOOD STAKES, OR BIODEGRADABLE EQUIVALENT. STAPLES MUST BE "U" OR "T" SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO 1½ INCHES WIDE AND BE A MINIMUM OF 6 INCHES LONG. "T" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 1 INCH SECONDARY LEG, AND A MINIMUM 4 INCH HEAD. WOOD STAKES MUST BE ROUGH-SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPED AT THE BOTTOM.
4. PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION & SEDIMENT CONTROL PLAN.
5. UNROLL MATTING DOWNSLOPE. LAY MAT SMOOTHLY AND FIRMLY UPON THE SEEDED SURFACE. AVOID STRETCHING THE MATTING.
6. OVERLAP OR ABUT ROLL EDGES PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSLOPE MAT OVERLAPPING ON TOP OF THE DOWNSLOPE MAT.
7. KEY IN THE UPSLOPE END OF MAT 6 INCHES (MINIMUM) BY DIGGING A TRENCH, PLACING THE MATTING ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL, AND TAMPING TO SECURE THE MAT END IN THE KEY.
8. STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS.
9. ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL B-4-6-D PERMANENT SOIL STABILIZATION MATTING SLOPE APPLICATION

STANDARD SYMBOL
PSSMS – ≥ 2.25 lb/ft² (* INCLUDE SHEAR STRESS)



CONSTRUCTION SPECIFICATIONS

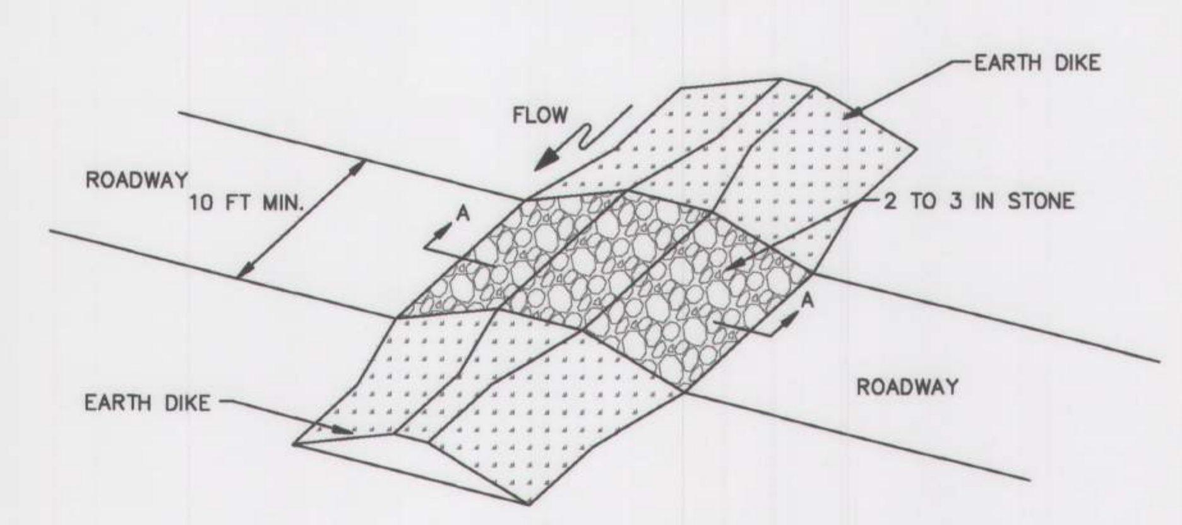
1. USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS DESIGNATED ON APPROVED PLANS.
2. USE PERMANENT SOIL STABILIZATION MATTING MADE OF OPEN WEAVE SYNTHETIC, NON-DEGRADABLE FIBERS OR ELEMENTS OF UNIFORM THICKNESS AND DISTRIBUTION THROUGHOUT. CHEMICALS USED IN THE MAT MUST BE NON-LEACHING AND NON-TOXIC TO VEGETATION AND SEED GERMINATION AND NON-INJURIOUS TO THE SKIN. IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF 2x2 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT MATERIAL.
3. SECURE MATTING USING STEEL STAPLES OR WOOD STAKES. STAPLES MUST BE "U" OR "T" SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO 1½ INCHES WIDE AND BE A MINIMUM OF 6 INCHES LONG. "T" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 1 INCH SECONDARY LEG, AND MINIMUM 4 INCH HEAD. WOOD STAKES MUST BE ROUGH-SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPE AT THE BOTTOM.
4. PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS, UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
5. UNROLL MATTING DOWN SLOPE. LAY MATTING SMOOTHLY AND FIRMLY UPON THE SEEDED SURFACE. AVOID STRETCHING THE MATTING.
6. OVERLAP OR ABUT EDGES OF MATTING ROLLS PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSTREAM MAT OVERLAPPING ON TOP OF THE DOWNSLOPE MAT.
7. KEY IN THE TOP OF SLOPE END OF MAT 6 INCHES (MINIMUM) BY DIGGING A TRENCH, PLACING THE MATTING ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL, AND TAMPING TO SECURE THE MAT END IN THE KEY.
8. STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS.
9. IF SPECIFIED BY THE DESIGNER OR MANUFACTURER AND DEPENDING ON THE TYPE OF MAT BEING INSTALLED, ONCE THE MATTING IS KEYED AND STAPLED IN PLACE, FILL THE MAT VOIDS WITH TOP SOIL OR GRANULAR MATERIAL AND LIGHTLY COMPACT OR ROLL TO MAXIMIZE SOIL/MAT CONTACT WITHOUT CRUSHING MAT.
10. ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

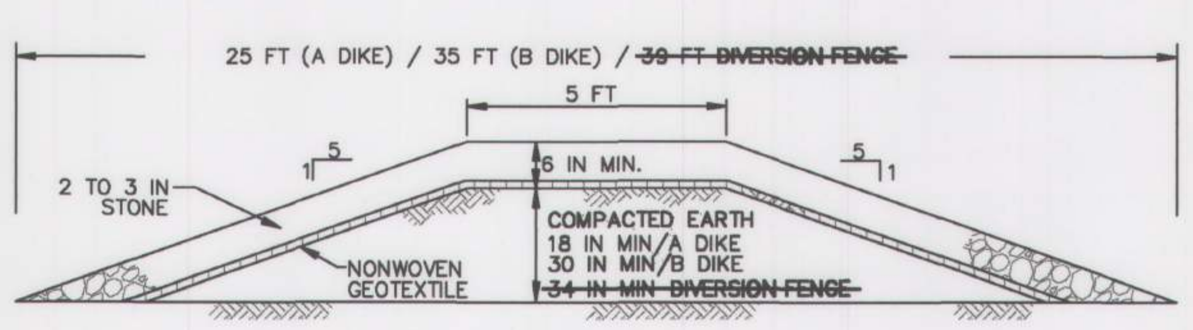
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL C-8 MOUNTABLE BERM

STANDARD SYMBOL MB



ISOMETRIC VIEW



SECTION A–A

CONSTRUCTION SPECIFICATIONS

1. USE MINIMUM WIDTH OF 10 FEET TO ALLOW FOR VEHICULAR PASSAGE.
2. PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, OVER THE EARTH MOUND PRIOR TO PLACING STONE.
3. PLACE 2 TO 3 INCH STONE OR EQUIVALENT RECYCLED CONCRETE AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE MOUNTABLE BERM.
4. MAINTAIN LINE, GRADE, AND CROSS SECTION. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN SPECIFIED DIMENSIONS. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. MAINTAIN POSITIVE DRAINAGE.

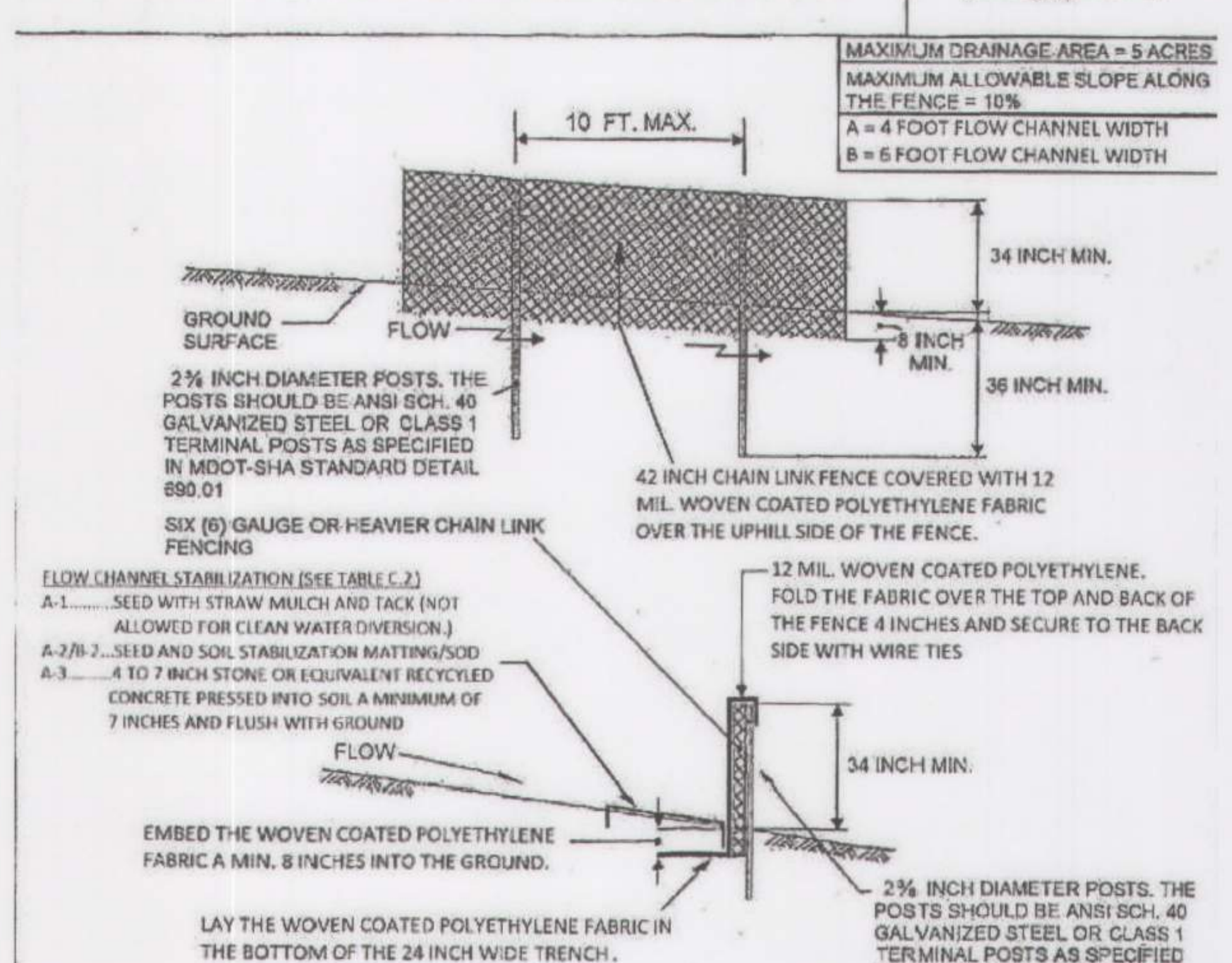
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL C-9 SUPER FENCE DIVERSION

STANDARD SYMBOL SFD

MAXIMUM DRAINAGE AREA = 5 ACRES
MAXIMUM ALLOWABLE SLOPE ALONG THE FENCE = 10%
A = 4 FOOT FLOW CHANNEL WIDTH
B = 6 FOOT FLOW CHANNEL WIDTH



CONSTRUCTION SPECIFICATIONS

1. USE 42 INCH HIGH, 6 GAUGE OR HEAVIER CHAIN LINK FENCING (2⅜ INCH MAXIMUM OPENING).
2. USE 2⅜ INCH DIAMETER, GALVANIZED STEEL POSTS. THE POSTS SHALL BE SIX FEET IN LENGTH SPACED NO FURTHER THAN TEN FEET APART. THE POSTS DO NOT NEED TO BE SET IN CONCRETE.
3. FASTEN CHAIN LINK FENCE SECURELY TO THE FENCE POSTS WITH WIRE TIES.
4. SECURE THE WOVEN COATED POLYETHYLENE FABRIC TO THE CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP, 18 INCHES BELOW THE TOP AND BELOW THE GROUND.
5. EMBED THE WOVEN COATED POLYETHYLENE FABRIC A MINIMUM OF 8 INCHES INTO THE GROUND. LAY THE WOVEN COATED POLYETHYLENE FABRIC IN THE BOTTOM OF THE 24 INCH WIDE TRENCH AND PROVIDE THE DESIGNATED FLOW CHANNEL STABILIZATION.
6. WHEN TWO SECTIONS OF WOVEN COATED POLYETHYLENE FABRIC ADJOIN EACH OTHER, OVERLAP BY 6 INCHES AND FOLD WITH THE SEAM FACING DOWNGRADE.
7. KEEP FLOW SURFACE ALONG THE FENCE AND POINT OF DISCHARGE FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS, AND RE-ESTABLISH THE DESIGNATED VEGETATIVE STABILIZATION OR PROVIDE CLEAN STONE. MAINTAIN POSITIVE DRAINAGE. REPLACE WOVEN COATED POLYETHYLENE IF TORN. IF UNDERMINING OCCURS, REINSTALL FENCE.

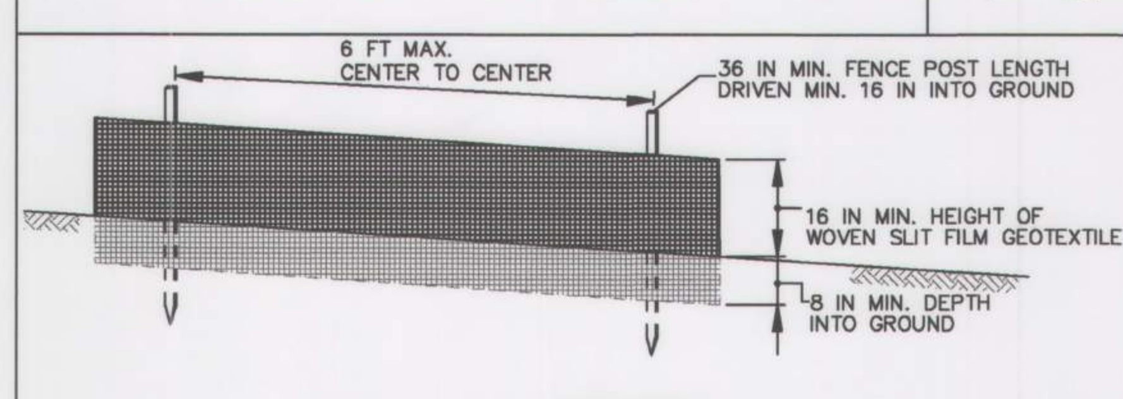
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL
MODIFIED FOR USE IN BALTIMORE COUNTY

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	MODIFIED FOR USE IN BALTIMORE COUNTY	MARYLAND DEPARTMENT OF THE ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

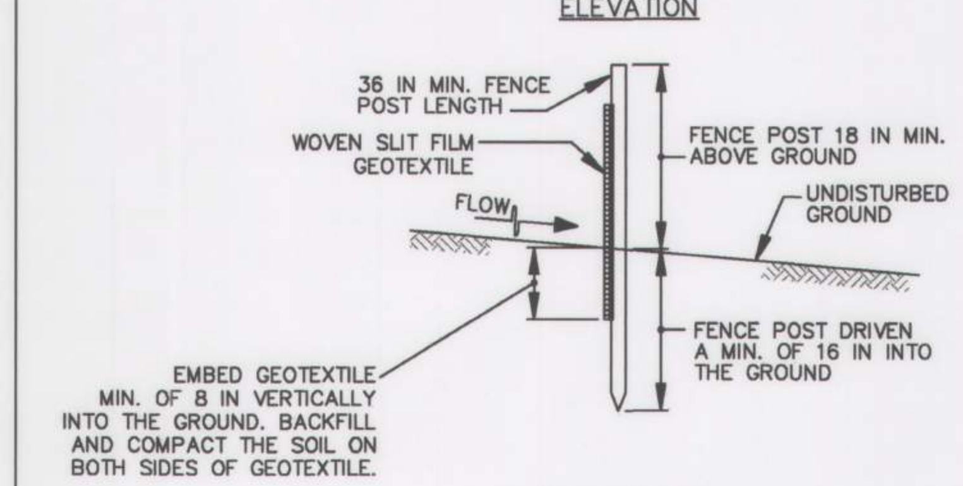
REVISED 2020

DETAIL E-1 SILT FENCE

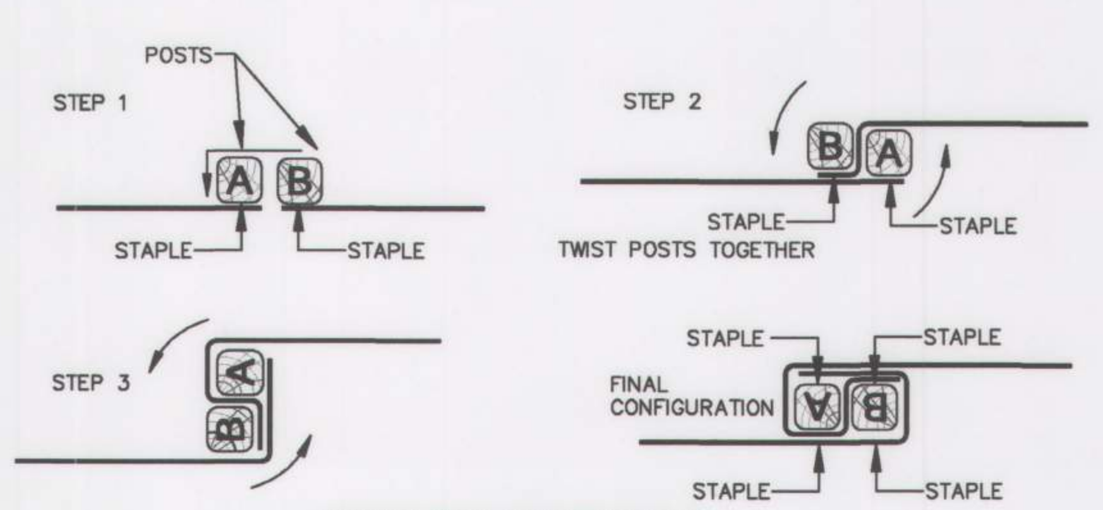
STANDARD SYMBOL SF



ELEVATION



CROSS SECTION



JOINING TWO ADJACENT SILT FENCE SECTIONS (TOP VIEW)

1 OF 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-1 SILT FENCE

STANDARD SYMBOL SF

CONSTRUCTION SPECIFICATIONS

1. USE WOOD POSTS 1¾ X 1¾ ± 1/16 INCH (MINIMUM) SQUARE CUT OF SOUND QUALITY HARDWOOD. AS AN ALTERNATIVE TO WOODEN POST USE STANDARD "T" OR "U" SECTION STEEL POSTS WEIGHING NOT LESS THAN 1 POUND PER LINEAR FOOT.
2. USE 36 INCH MINIMUM POSTS DRIVEN 16 INCH MINIMUM INTO GROUND NO MORE THAN 6 FEET APART.
3. USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS AND FASTEN GEOTEXTILE SECURELY TO UPSLOPE SIDE OF FENCE POSTS WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION.
4. PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
5. EMBED GEOTEXTILE A MINIMUM OF 8 INCHES VERTICALLY INTO THE GROUND. BACKFILL AND COMPACT THE SOIL ON BOTH SIDES OF FABRIC.
6. WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL.
7. EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SILT FENCE.
8. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL FENCE.

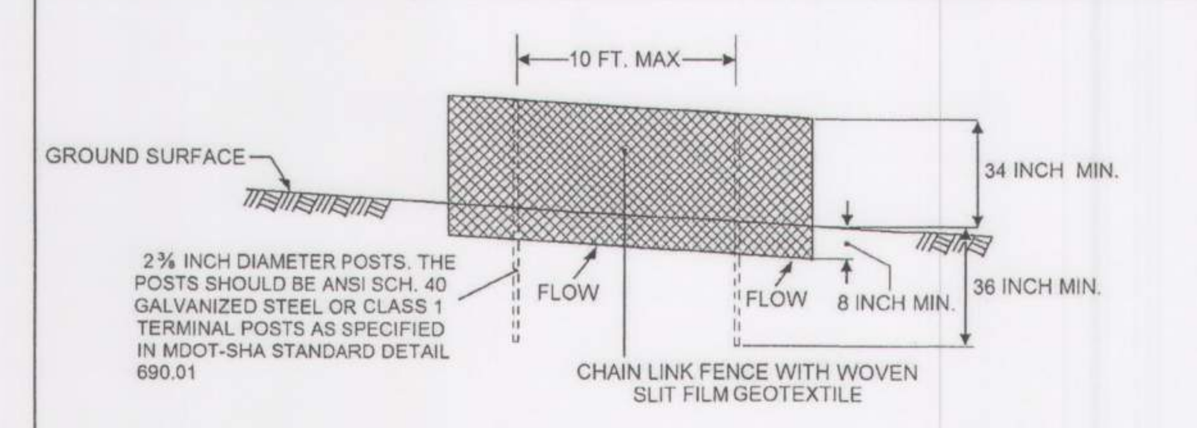
2 OF 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

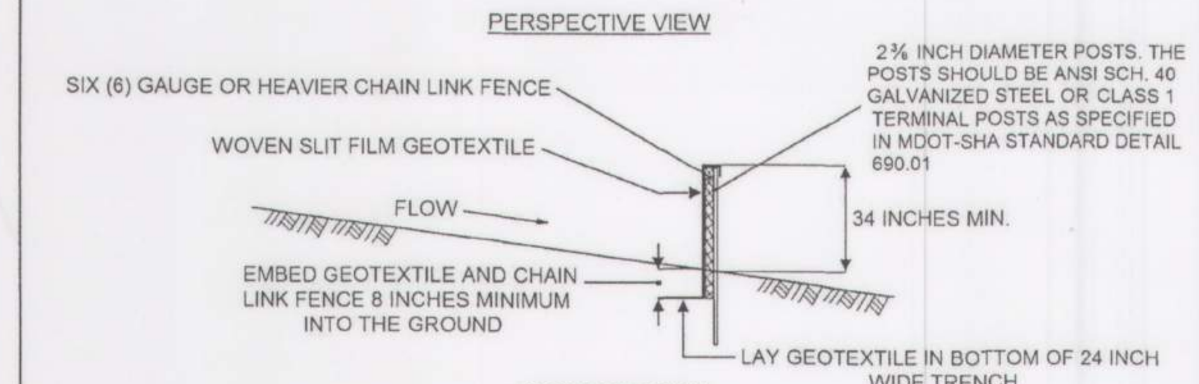
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-3 SUPER SILT FENCE

STANDARD SYMBOL SSF



PERSPECTIVE VIEW



CROSS SECTION

CONSTRUCTION SPECIFICATIONS

1. INSTALL 2⅜ INCH DIAMETER GALVANIZED STEEL POSTS OF 0.15 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
2. FASTEN 6 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2⅜ INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.
3. FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF THE CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND. LAY THE GEOTEXTILE IN THE BOTTOM OF THE 24 INCH WIDE TRENCH.
4. WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BYPASS.
5. EXTEND BOTH ENDS OF THE SUPER SILT FENCE UPHILL A MINIMUM OF 3 VERTICAL FEET TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.
6. PROVIDE MANUFACTURERS CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H - 1 MATERIALS.
7. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF THE FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL
MODIFIED FOR USE IN BALTIMORE COUNTY

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	MODIFIED - 2012 REVISED - 5/2023	MARYLAND DEPARTMENT OF THE ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL
[signature] 12-23-24
Date

SEAL: STATE OF MARYLAND KATHRYN R. HEIL 52868 PROFESSIONAL ENGINEER
DATE : 12/19/2024

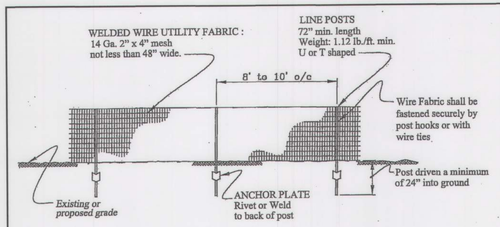
PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 52868, EXPIRATION DATE 05/31/2025.
ENGINEER: KATHRYN R. HEIL
AS-BUILT PER RECORD PRINT
BY:
DATE:
DGN BY:
DWN BY:
CHKD BY:

AS-BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWING SCALE		PROPERTY MANAGEMENT
				USE 112 113	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14	PLAN SCALE:	AS SHOWN	APPROVED BY: PROPERTY MANAGER
			R.O.W NO.			PROFILE SCALE:		DATE:
CONTRACT COMPLETION BOX								
BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER	
REVIEWED BY:								
DATE REVIEWED:								

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT
CLOVERLAND PARK CRICKET FIELD
EROSION & SEDIMENT CONTROL DETAILS I
CONSTRUCTION DOCUMENTS
12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131
SUBDIVISION: PHOENIX
ESC SHEET 7 OF 9
ELECTION DIST. NO.: 10C3

SHEET DESIGNATION	CONTRACT NUMBER
C423	25067 GXO
	JOB ORDER NUMBER
	PROJ–10000752
	SHEET 20 OF 40
	DRAWING NUMBER
	2025 - 1651
	FILE NO.: 9

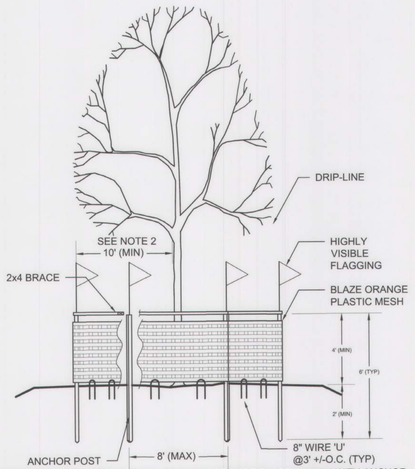
BALTIMORE COUNTY MARYLAND



TEMPORARY SAFETY FENCE FOR SEDIMENT TRAPPING DEVICES

NOT TO SCALE

Baltimore County
Department of Environmental Protection and Resource Management



1. TREE PROTECTION FENCE SHALL BE BLAZE ORANGE PLASTIC MESH WITH ANCHOR POSTS. ANCHOR POSTS SHALL BE MINIMUM 2" STEEL 'U' CHANNEL OR 'T' POST, 6' IN LENGTH, SPACED 8' O.C. (MAXIMUM) MARKED WITH HIGHLY VISIBLE FLAGGING. ANCHOR POSTS MUST BE INSTALLED TO A DEPTH OF NO LESS THAN 1/3 OF THE TOTAL HEIGHT OF THE POST. USE 2" X 4" LUMBER FOR CROSS BRACING ALONG TOP OF FENCE. USE 8" WIRE 'U' TO SECURE FENCE BOTTOM.
2. PLACE FENCE AS SHOWN ON PLAN, AT DRIPLINE AROUND TREES WITH GREATER THAN 20' SPREAD. FOR SMALLER TREES, PLACE FENCE 10' (MINIMUM) FROM TRUNK.
3. ROOT DAMAGE SHOULD BE AVOIDED DURING INSTALLATION OF ANCHOR POSTS AND FENCE.
4. PLACE PROTECTION SIGNAGE IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.
5. NO CONSTRUCTION EQUIPMENT, MATERIALS OR EXCAVATED EARTH PERMITTED INSIDE TREE PROTECTION FENCES.
6. MAINTAIN TREE PROTECTION DEVICES THROUGHOUT CONSTRUCTION.
7. THIS FENCE IS A TREE PROTECTION DEVICE ONLY.

TREE PROTECTION NOTES

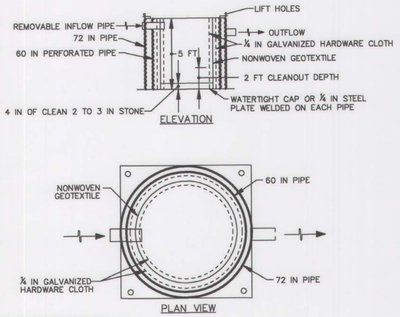
1. THERE WILL BE NO CLEARING IN THE TREE PROTECTION AREAS SHOWN ON THE PLAN TO REMAIN SHALL HAVE BLAZE ORANGE PLASTIC MESH TREE PROTECTION FENCE INSTALLED TO TREES AS SHOWN ON THE PLAN.
2. STOCKPILE AREAS, EMPLOYEE PARKING, AND EQUIPMENT STAGING AREAS SHALL BE CONTAINED WITHIN THE LIMIT OF CLEARING AS SHOWN ON THE FOREST CONSERVATION PLAN OR SEDIMENT CONTROL PLAN.
3. TREE PROTECTION FENCING:
   A. ALL TREE PROTECTION FENCING SHALL BE THE STANDARD ORANGE FENCE FABRIC.
   B. ALL TREE PROTECTION FENCING SHALL BE SIX FEET-ZERO INCHES (6'-0") HIGH MEASURED TO THE TOP OF THE FENCE FABRIC, AS INDICATED ON THE DRAWINGS.
   C. FENCE MATERIALS SHALL MEET THE REQUIREMENTS AS STATED IN THE SPECIFICATIONS AND AS SHOWN ON THE DETAIL DRAWING.

TREE PROTECTION FENCE

NOT TO SCALE

DETAIL F-3 PORTABLE SEDIMENT TANK

STANDARD SYMBOL ☒PST



CONSTRUCTION SPECIFICATIONS

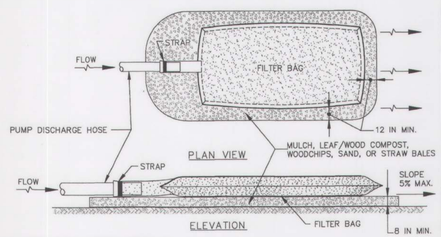
1. PROVIDE 1 CUBIC FOOT OF STORAGE FOR EACH GALLON PER MINUTE OF PUMP CAPACITY. REQUIRED STORAGE VOLUME MAY BE ATTAINED BY PLACEMENT OF TANKS IN PARALLEL WITH INFLOW EVENLY DISTRIBUTED AMONG TANKS. OVERTOPPING OF TANKS IS NOT PERMITTED.
2. USE 60 INCH CORRUGATED METAL OR PLASTIC PIPE WITH 1 INCH DIAMETER PERFORATIONS, 6 INCHES ON CENTER FOR THE INNER PIPE. LINE PIPE WITH NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H–1 MATERIALS, SANDWICHED BETWEEN, AND ATTACHED TO, ¼ INCH HARDWARE CLOTH.
3. OVERLAP GEOTEXTILE 8 INCHES MINIMUM AT VERTICAL SEAM AND AT THE BOTTOM PLATE.
4. ANCHOR GEOTEXTILE AT BOTTOM OF TANK WITH 4 INCHES OF 2 TO 3 INCH CLEAN STONE OR EQUIVALENT RECYCLED CONCRETE.
5. USE 72 INCH CORRUGATED METAL OR PLASTIC OUTER PIPE WITH PERMANENT OUTFLOW PIPE WITH INVERT LOWER THAN INFLOW PIPE
6. INFLOW PIPE MUST DISCHARGE INTO INNER PIPE AND BE REMOVABLE.
7. PLACE TANK ON LEVEL SURFACE AND DISCHARGE TO A STABLE AREA AT A NONEROSIVE RATE.
8. A PORTABLE SEDIMENT TANK REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT FROM INNER PIPE WHEN IT REACHES TWO FEET IN DEPTH. IF SYSTEM CLOGS, PULL OUT INNER PIPE, REMOVE ACCUMULATED SEDIMENT, AND REPLACE GEOTEXTILE. KEEP POINT OF DISCHARGE FREE OF EROSION.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL F-4 FILTER BAG

STANDARD SYMBOL ☒FB



CONSTRUCTION SPECIFICATIONS

1. TIGHTLY SEAL SLEEVE AROUND THE PUMP DISCHARGE HOSE WITH A STRAP OR SIMILAR DEVICE.
2. PLACE FILTER BAG ON SUITABLE BASE (E.G., MULCH, LEAF/WOOD COMPOST, WOODCHIPS, SAND, OR STRAW BALES) LOCATED ON A LEVEL OR 5% MAXIMUM SLOPING SURFACE. DISCHARGE TO A STABILIZED AREA. EXTEND BASE A MINIMUM OF 12 INCHES FROM EDGES OF BAG.
3. CONTROL PUMPING RATE TO PREVENT EXCESSIVE PRESSURE WITHIN THE FILTER BAG IN ACCORDANCE WITH THE MANUFACTURER RECOMMENDATIONS. AS THE BAG FILLS WITH SEDIMENT, REDUCE PUMPING RATE.
4. REMOVE AND PROPERLY DISPOSE OF FILTER BAG UPON COMPLETION OF PUMPING OPERATIONS OR AFTER BAG HAS REACHED CAPACITY, WHICHEVER OCCURS FIRST. SPREAD THE DEWATERED SEDIMENT FROM THE BAG IN AN APPROVED UPLAND AREA AND STABILIZE WITH SEED AND MULCH BY THE END OF THE WORK DAY. RESTORE THE SURFACE AREA BENEATH THE BAG TO ORIGINAL CONDITION UPON REMOVAL OF THE DEVICE.
5. USE NONWOVEN GEOTEXTILE WITH DOUBLE STITCHED SEAMS USING HIGH STRENGTH THREAD. SIZE SLEEVE TO ACCOMMODATE A MAXIMUM 4 INCH DIAMETER PUMP DISCHARGE HOSE. THE BAG MUST BE MANUFACTURED FROM A NONWOVEN GEOTEXTILE THAT MEETS OR EXCEEDS MINIMUM AVERAGE ROLL VALUES (MARV) FOR THE FOLLOWING:

GRAB TENSILE	250 LB	ASTM D–4632
PUNCTURE	150 LB	ASTM D–4833
FLOW RATE	70 GAL/MIN/FT²	ASTM D–4491
PERMITTIVITY (SEC⁻¹)	1.2 SEC⁻¹	ASTM D–4491
UV RESISTANCE	70% STRENGTH @ 500 HOURS	ASTM D–4355
APPARENT OPENING SIZE (AOS)	0.15–0.18 MM	ASTM D–4751
SEAM STRENGTH	90%	ASTM D–4632

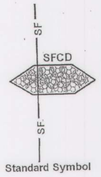
6. REPLACE FILTER BAG IF BAG CLOGS OR HAS RIPS, TEARS, OR PUNCTURES. DURING OPERATION KEEP CONNECTION BETWEEN PUMP HOSE AND FILTER BAG WATER TIGHT. REPLACE BEDDING IF IT BECOMES DISPLACED.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

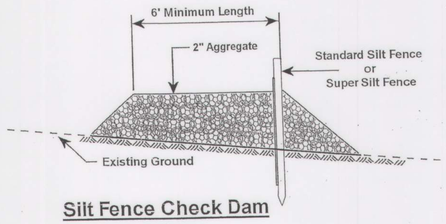
Standard Silt Fence	Super Silt Fence
# 2 Stone	# 2 Stone
12" High	24" High
24" Wide	36" Wide

Placement Engineered Based on Slope Gradient



Standard Symbol

* AT THE DISCRETION OF THE INSPECTOR EXTRA POST(S) MAY BE REQUIRED ON THE DOWNSLOPE SIDE OF THE FENCE IN LIEU OF STONE.



Silt Fence Check Dam

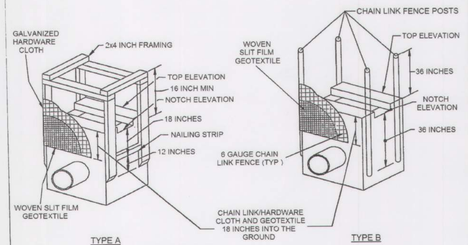
Not To Scale

APPENDIX 18

DETAIL E-9-1 STANDARD INLET PROTECTION

STANDARD SYMBOL SIP

TYPE A MAXIMUM DRAINAGE AREA = ¼ ACRE
TYPE B MAXIMUM DRAINAGE AREA = 1 ACRE



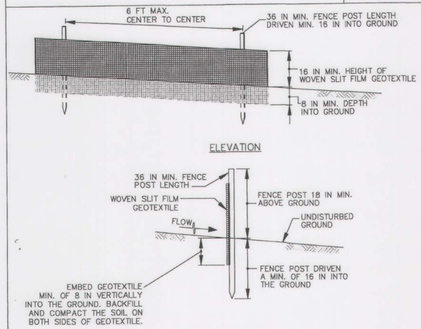
1 OF 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MODIFIED FOR USE IN BALTIMORE COUNTY

U S DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	MODIFIED - 2012	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-1 SILT FENCE

STANDARD SYMBOL —SF—



JOINING TWO ADJACENT SILT FENCE SECTIONS (TOP VIEW)

1 OF 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-9-1 STANDARD INLET PROTECTION

STANDARD SYMBOL SIP

CONSTRUCTION SPECIFICATIONS

1. USE WOVEN GEOTEXTILE (AS INDICATED ON THE STANDARD INLET PROTECTION DETAIL) AS SPECIFIED IN SECTION H - 1 MATERIALS.
2. EXCAVATE COMPLETELY AROUND THE INLET TO A DEPTH OF 18 INCHES BELOW THE NOTCH ELEVATION
3. FOR TYPE A, USE NOMINAL 2x4 INCH CONSTRUCTION GRADE LUMBER POSTS, DRIVEN 1 FOOT INTO THE GROUND AT EACH CORNER OF THE INLET. PLACE NAIL STRIPS BETWEEN THE POSTS ON THE ENDS OF THE INLET ASSEMBLE THE TOP PORTION OF THE 2x4 INCH FRAME AS SHOWN STRETCH ¼ INCH GALVANIZED HARDWARE CLOTH TIGHTLY AROUND THE FRAME AND FASTEN SECURELY FASTEN GEOTEXTILE SECURELY TO THE HARDWARE CLOTH WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION EMBED GEOTEXTILE AND HARDWARE CLOTH A MINIMUM OF 18 INCHES BELOW THE WEIR CREST. THE ENDS OF THE GEOTEXTILE MUST MEET AT A POST, BE OVERLAPPED AND FOLDED, THEN FASTENED TO THE POST.

   FOR TYPE B, USE 2⅜ INCH DIAMETER GALVANIZED STEEL POSTS OF 0.15 INCH WALL THICKNESS AND 6 FOOT LENGTH, DRIVEN A MINIMUM OF 36 INCHES BELOW THE WEIR CREST AT EACH CORNER OF THE STRUCTURE. FASTEN 6 GAUGE OR HEAVIER CHAIN LINK FENCE, 42 INCHES IN HEIGHT, SECURELY TO THE FENCE POSTS WITH WIRE TIES. FASTEN GEOTEXTILE SECURELY TO THE CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 18 INCHES BELOW THE WEIR CREST
4. BACKFILL AROUND THE INLET IN LOOSE 4 INCH LIFTS AND COMPACT UNTIL SOIL IS LEVEL WITH THE NOTCH ELEVATION ON THE ENDS AND TOP ELVATION ON THE SIDES.
5. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STONE.

2 of 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MODIFIED FOR USE IN BALTIMORE COUNTY

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	MODIFIED - 2012 REVISED 6/2023	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-1 SILT FENCE

STANDARD SYMBOL —SF—

CONSTRUCTION SPECIFICATIONS

1. USE WOOD POSTS 1¾ X 1¾ ± 1/8 INCH (MINIMUM) SQUARE CUT OF SOUND QUALITY HARDWOOD. AS AN ALTERNATIVE TO WOODEN POST USE STANDARD "T" OR "U" SECTION STEEL POSTS WEIGHING NOT LESS THAN 1 POUND PER LINEAR FOOT.
2. USE 36 INCH MINIMUM POSTS DRIVEN 16 INCH MINIMUM INTO GROUND NO MORE THAN 6 FEET APART.
3. USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H–1 MATERIALS AND FASTEN GEOTEXTILE SECURELY TO UPSLOPE SIDE OF FENCE POSTS WITH WIRE TIES OR STAPLES AT TOP AND MID–SECTION.
4. PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H–1 MATERIALS.
5. EMBED GEOTEXTILE A MINIMUM OF 8 INCHES VERTICALLY INTO THE GROUND. BACKFILL AND COMPACT THE SOIL ON BOTH SIDES OF FABRIC.
6. WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL.
7. EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SILT FENCE.
8. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL FENCE.

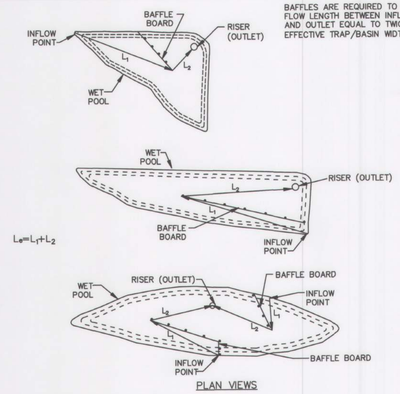
2 OF 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL G-2-4 BAFFLE BOARDS

STANDARD SYMBOL —BB—



BAFFLES ARE REQUIRED TO PROVIDE A FLOW LENGTH BETWEEN INFLOW POINT AND OUTLET EQUAL TO TWICE THE EFFECTIVE TRAP/BASIN WIDTH.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

OWNER/DEVELOPER:	DESIGN PROFESSIONAL:	PROJECT INFORMATION:
BALTIMORE COUNTY PROPERTY MANAGEMENT 12200 LONG GREEN PIKE GLEN ARM, MARYLAND 21057 CONTACT: MATTHEW LEEBEL EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV PHONE: 410-887-3834	SITE RESOURCES, INC. 4 NORTH PARK DRIVE, SUITE 100 COCKEYSVILLE, MD 21030 CONTACT: PETER SOPRANO EMAIL: PSOPRANO@SITERESOURCESINC.COM PHONE: 410-689-0438	CLOVERLAND PARK CRICKET FIELD 12340 DULANEY VALLEY ROAD PHOENIX, MD 21131 ELECTION DISTRICT: 10C3 COUNCILMANIC DISTRICT:3

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL
Jeffrey P. West 12-23-24
Date

SEAL: STATE OF MARYLAND · KATHRYN R. HEIL · 52868 · PROFESSIONAL ENGINEER
DATE : 12/19/2024

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 52868 EXPIRATION DATE 05/31/2025
ENGINEER: KATHRYN R. HEIL
DGN BY:
DWN BY:
AS–BUILT PER RECORD PRINT
CHKD BY:
BY:
DATE:

AS–BUILT / REVISION | BY | DATE | P.W.A. NO. | KEY SHEET | POSITION SHT

				USE 112 113	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14
			R.O.W NO.		
CONTRACT COMPLETION BOX					

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

DRAWING SCALE
PLAN SCALE: AS SHOWN
PROFILE SCALE:

PROPERTY MANAGEMENT
APPROVED BY: PROPERTY MANAGER
DATE:

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT

CLOVERLAND PARK CRICKET FIELD

EROSION & SEDIMENT CONTROL DETAILS II

CONSTRUCTION DOCUMENTS

SUBDIVISION: PHOENIX

12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131

ELECTION DIST. NO.: 10C3

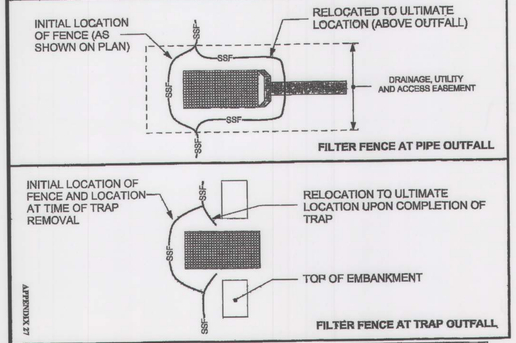
ESC SHEET 8 OF 9

SHEET DESIGNATION	CONTRACT NUMBER
C424	25067 GXO
	JOB ORDER NUMBER
	PROJ–10000752
	SHEET 21 OF 40
	DRAWING NUMBER
	2025 - 1652
	FILE NO.: 9

BALTIMORE COUNTY MARYLAND

DWG. FILENAME: Z:\2023\23060_PARCO_CLOVERLAND_PARK_CRICKET_FIELD\04-DWG\CAD_BSC_DETAILS.DWG 12/19/2024 5:17 PM KBEI

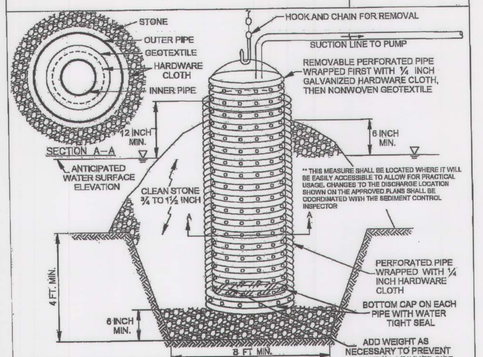
FILTER FENCE OUTFALL PROTECTION



APPENDIX 37

DETAIL F-1 REMOVABLE PUMPING STATION

STANDARD SYMBOL: RPS



CONSTRUCTION SPECIFICATIONS

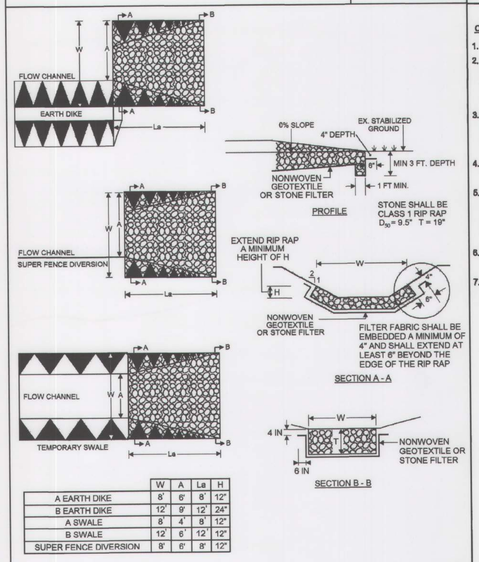
1. USE CORRUGATED METAL OR PLASTIC PIPE WITH 1 INCH DIAMETER PERFORATIONS 6 INCHES ON CENTER.
2. USE A MINIMUM 12 INCH DIAMETER INNER PIPE WITH AN OUTER PIPE A MINIMUM 6 INCHES LARGER IN DIAMETER. BOTTOM OF EACH PIPE MUST BE CAPPED WITH WATERTIGHT SEAL.
3. WRAP EACH PIPE WITH ¼ INCH GALVANIZED HARDWARE CLOTH. ON INNER PIPE WRAP NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, OVER THE HARDWARE CLOTH.
4. EXCAVATE 8 FEET X 8 FEET X 4 FEET DEEP PIT FOR PIPE PLACEMENT. PLACE CLEAN ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE, 6 INCHES IN DEPTH PRIOR TO PIPE PLACEMENT.
5. SET TOP OF INNER AND OUTER PIPES MINIMUM 12 INCHES ABOVE ANTICIPATED WATER SURFACE ELEVATION (OR RISER CREST ELEVATION WHEN DEWATERING A BASIN).
6. BACKFILL PIT AROUND THE OUTER PIPE WITH ¾ TO 1½ INCH CLEAN STONE OR EQUIVALENT RECYCLED CONCRETE AND EXTEND STONE A MINIMUM OF 6 INCHES ABOVE ANTICIPATED WATER SURFACE ELEVATION.
7. DISCHARGE TO A STABLE AREA AT A NONEROSIVE RATE.
8. A REMOVABLE PUMPING STATION REQUIRES FREQUENT MAINTENANCE. IF SYSTEM CLOGS, PULL OUT INNER PIPE AND REPLACE GEOTEXTILE. KEEP POINT OF DISCHARGE FREE OF EROSION.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL
MODIFIED FOR USE IN BALTIMORE COUNTY

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	MODIFIED - 2012	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

ROCK OUTLET PROTECTION III

STANDARD SYMBOL: ROP III



	W	A	La	H
A EARTH DIKE	8'	6'	8'	12"
B EARTH DIKE	12'	9'	12'	24"
A SWALE	8'	4'	8'	12"
B SWALE	12'	6'	12'	12"
SUPER FENCE DIVERSION	8'	6'	8'	12"

1 of 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	MODIFIED - 2012	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

ROCK OUTLET PROTECTION III

STANDARD SYMBOL: ROP III

CONSTRUCTION SPECIFICATIONS

1. RIP RAP AND STONE MUST CONFORM TO SPECIFIED CLASS.
2. USE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS AND PROTECT FROM PUNCTURING, CUTTING OR TEARING. REPAIR ANY DAMAGE OTHER THAN AN OCCASIONAL SMALL HOLE BY PLACING ANOTHER PIECE OF GEOTEXTILE OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE. PROVIDE A MINIMUM OF ONE FOOT OVERLAP FOR ALL REPAIRS AND FOR JOINING TWO PIECES OF GEOTEXTILE TOGETHER.
3. PREPARE THE SUBGRADE FOR GEOTEXTILE OR STONE FILTER (⅜ TO 1½ INCH MINIMUM STONE FOR 6 INCH MINIMUM DEPTH) AND RIP RAP TO THE REQUIRED LINES AND GRADES. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
4. EXTEND THE GEOTEXTILE AT LEAST 6 INCHES BEYOND EDGES OF RIP RAP AN EMBED AT LEAST 4 INCHES AT SIDES OF RIP RAP.
5. CONSTRUCT RIP RAP OUTLET TO FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. PLACE STONE FOR RIP RAP OUTLET IN A MANNER THAT WILL ENSURE THAT IT IS REASONABLY HOMOGENOUS WITH THE SMALLER STONES AND SPALLS FILLING THE VOIDS BETWEEN THE LARGER STONES. PLACE RIP RAP IN A MANNER TO PREVENT DAMAGE TO THE FILTER BLANKET OR GEOTEXTILE. HAND PLACE TO THE EXTENT NECESSARY.
6. CONSTRUCT APRON WITH 0% SLOPE ALONG ITS LENGTH AND WITHOUT OBSTRUCTIONS. PLACE STONE SO THAT IT BLENDS IN WITH EXISTING GROUND.
7. MAINTAIN LINE, GRADE, AND CROSS SECTION. KEEP OUTLET FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. AFTER HIGH FLOWS INSPECT FOR SCOUR AND DISLODGED RIP RAP. MAKE NECESSARY REPAIRS IMMEDIATELY.

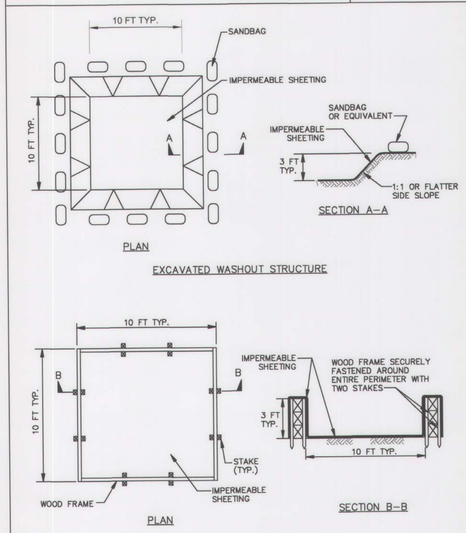
2 of 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL
MODIFIED FOR USE IN BALTIMORE COUNTY

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	MODIFIED - 2012	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL H-6 ONSITE CONCRETE WASHOUT STRUCTURE

STANDARD SYMBOL: CWS



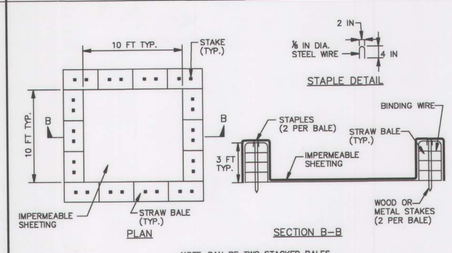
1 of 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL H-6 ONSITE CONCRETE WASHOUT STRUCTURE

STANDARD SYMBOL: CWS



NOTE: CAN BE TWO STACKED BALES OR PARTIALLY EXCAVATED TO REACH 3 FT DEPTH

WASHOUT STRUCTURE WITH STRAW BALES

CONSTRUCTION SPECIFICATIONS

1. LOCATE WASHOUT STRUCTURE A MINIMUM OF 50 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS AND WATER COURSES AND AWAY FROM CONSTRUCTION TRAFFIC.
2. SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH WATER AND SOLIDS AND MAINTAIN AT LEAST 4 INCHES OF FREEBOARD. TYPICAL DIMENSIONS ARE 10 FEET X 10 FEET X 3 FEET DEEP.
3. PREPARE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE LINER. FOR LINER, USE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING, FREE OF HOLES AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL.
4. PROVIDE A SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY.
5. KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAMAGED (E.G., RIPPED OR PUNCTURED). EMPTY OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT FULL, AND DISPOSE OF ACCUMULATED MATERIAL PROPERLY. DO NOT REUSE PLASTIC LINER. WET-VACUUM STORED LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER. PRIOR TO FORECASTED RAINSTORMS, REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOWS. REMOVE HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED.

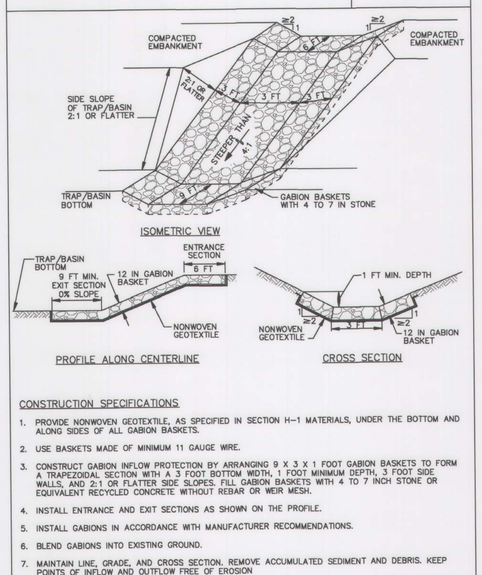
2 OF 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL D-3-2 GABION INFLOW PROTECTION

STANDARD SYMBOL: GP



CONSTRUCTION SPECIFICATIONS

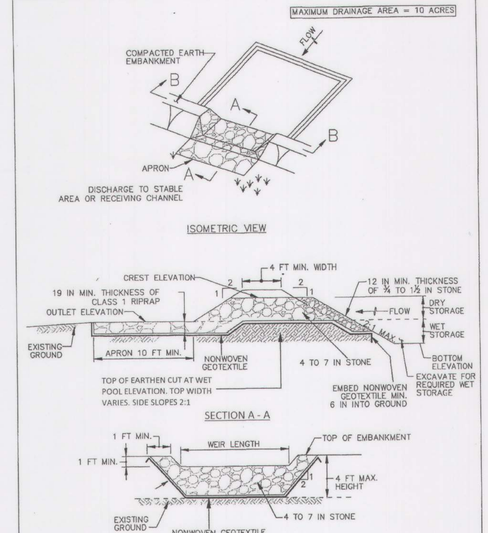
1. PROVIDE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, UNDER THE BOTTOM AND ALONG SIDES OF ALL GABION BASKETS.
2. USE BASKETS MADE OF MINIMUM 11 GAUGE WIRE.
3. CONSTRUCT GABION INFLOW PROTECTION BY ARRANGING 9 X 3 X 1 FOOT GABION BASKETS TO FORM A TRAPEZOIDAL SECTION WITH A 3 FOOT BOTTOM WIDTH, 1 FOOT MINIMUM DEPTH, 3 FOOT SIDE WALLS, AND 2:1 OR FLATTER SIDE SLOPES. FILL GABION BASKETS WITH 4 TO 7 INCH STONE OR EQUIVALENT RECYCLED CONCRETE WITHOUT REBAR OR WEIR MESH.
4. INSTALL ENTRANCE AND EXIT SECTIONS AS SHOWN ON THE PROFILE.
5. INSTALL GABIONS IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.
6. BLEND GABIONS INTO EXISTING GROUND.
7. MAINTAIN LINE, GRADE, AND CROSS SECTION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. KEEP POINTS OF INFLOW AND OUTFLOW FREE OF EROSION

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL G-1-2 STONE/RIPRAP OUTLET SEDIMENT TRAP ST-II

STANDARD SYMBOL: ST-II



1 of 3

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

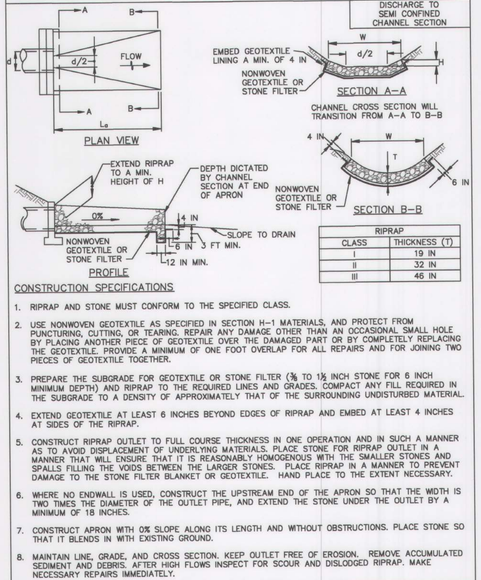
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	MODIFIED FOR USE IN BALTIMORE COUNTY	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

G.11 REVISED 2020

DETAIL D-4-1-A ROCK OUTLET PROTECTION I

STANDARD SYMBOL: ROP1

DISCHARGE TO SEMI CONFINED CHANNEL SECTION



RIPRAP	
CLASS	THICKNESS (T)
I	19 IN
II	32 IN
III	46 IN

CONSTRUCTION SPECIFICATIONS

1. RIPRAP AND STONE MUST CONFORM TO THE SPECIFIED CLASS.
2. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, AND PROTECT FROM PUNCTURING, CUTTING, OR TEARING. REPAIR ANY DAMAGE OTHER THAN AN OCCASIONAL SMALL HOLE BY PLACING ANOTHER PIECE OF GEOTEXTILE OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE. PROVIDE A MINIMUM OF ONE FOOT OVERLAP FOR ALL REPAIRS AND FOR JOINING TWO PIECES OF GEOTEXTILE TOGETHER.
3. PREPARE THE SUBGRADE FOR GEOTEXTILE OR STONE FILTER (⅜ TO 1½ INCH STONE FOR 6 INCH MINIMUM DEPTH) AND RIPRAP TO THE REQUIRED LINES AND GRADES. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
4. EXTEND GEOTEXTILE AT LEAST 6 INCHES BEYOND EDGES OF RIPRAP AND EMBED AT LEAST 4 INCHES AT SIDES OF THE RIPRAP.
5. CONSTRUCT RIPRAP OUTLET TO FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. PLACE STONE FOR RIPRAP OUTLET IN A MANNER THAT WILL ENSURE THAT IT IS REASONABLY HOMOGENOUS WITH THE SMALLER STONES AND SPALLS FILLING THE VOIDS BETWEEN THE LARGER STONES. PLACE RIPRAP IN A MANNER TO PREVENT DAMAGE TO THE STONE FILTER BLANKET OR GEOTEXTILE. HAND PLACE TO THE EXTENT NECESSARY.
6. WHERE NO ENDWALL IS USED, CONSTRUCT THE UPSTREAM END OF THE APRON SO THAT THE WIDTH IS TWO TIMES THE DIAMETER OF THE OUTLET PIPE, AND EXTEND THE STONE UNDER THE OUTLET BY A MINIMUM OF 18 INCHES.
7. CONSTRUCT APRON WITH 0% SLOPE ALONG ITS LENGTH AND WITHOUT OBSTRUCTIONS. PLACE STONE SO THAT IT BLENDS IN WITH EXISTING GROUND.
8. MAINTAIN LINE, GRADE, AND CROSS SECTION. KEEP OUTLET FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. AFTER HIGH FLOWS INSPECT FOR SCOUR AND DISLODGED RIPRAP. MAKE NECESSARY REPAIRS IMMEDIATELY.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL G-1-2 STONE/RIPRAP OUTLET SEDIMENT TRAP ST-II

STANDARD SYMBOL: ST-II

CONSTRUCTION SPECIFICATIONS

1. CONSTRUCT TRAP IN SUCH A MANNER THAT EROSION AND WATER POLLUTION ARE AVOIDED.
2. CLEAR, GRUB, AND STRIP ANY VEGETATION AND ROOT MAT FROM THE AREA UNDER THE EMBANKMENT AND TRAP BOTTOM.
3. USE FILL MATERIAL FREE OF ROOTS, WOODY VEGETATION, OVERSIZED STONES, ROCKS, ORGANIC MATERIAL, OR OTHER OBJECTIONABLE MATERIAL FOR THE EMBANKMENT.
4. CONSTRUCT TOP OF EMBANKMENT 1 FOOT MINIMUM ABOVE WEIR CREST. COMPACT THE EMBANKMENT BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
5. MAKE ALL CUT AND FILL SLOPES 2:1 OR FLATTER.
6. PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, OVER THE BOTTOM AND SIDES OF OUTLET AND APRON PRIOR TO PLACEMENT OF RIPRAP. OVERLAP SECTIONS OF GEOTEXTILE AT LEAST 1 FOOT WITH THE SECTION NEARER TO THE TRAP PLACED ON TOP. EMBED GEOTEXTILE AT LEAST 6 INCHES INTO EXISTING GROUND AT ENTRANCE OF OUTLET CHANNEL.
7. USE CLEAN 4 TO 7 INCH RIPRAP TO CONSTRUCT THE WEIR. USE CLASS I RIPRAP FOR THE APRON. USE OF RECYCLED CONCRETE EQUIVALENT IS ACCEPTABLE.
8. PLACE 1 FOOT OF CLEAN ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE ON THE UPSTREAM FACE OF THE WEIR.
9. CONSTRUCT AND MAINTAIN THE OUTLET ACCORDING TO APPROVED PLAN, AND IN SUCH A MANNER THAT EROSION AT OR BELOW THE OUTLET DOES NOT OCCUR.
10. STABILIZE THE EMBANKMENT AND INTERIOR SLOPES WITH SEED AND MULCH. STABILIZE POINTS OF CONCENTRATED INFLOW AS SHOWN ON APPROVED PLAN.
11. REMOVE SEDIMENT AND RESTORE TRAP TO ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO CLEANOUT ELEVATION (50% OF WET STORAGE DEPTH). DEPOSIT REMOVED SEDIMENT IN AN APPROVED AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE. KEEP POINTS OF INFLOW AND OUTFLOW AS WELL AS INTERIOR OF THE TRAP FREE FROM EROSION, AND REMOVE ACCUMULATED DEBRIS. MAINTAIN EMBANKMENTS TO CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION. REMOVE ANY TREES, BRUSH, OR OTHER WOODY VEGETATION GROWING ON EMBANKMENT OR NEAR PRINCIPAL SPILLWAY. MAINTAIN LINE, GRADE, AND CROSS SECTION.
12. WHEN DEWATERING TRAP, PASS REMOVED WATER THROUGH AN APPROVED SEDIMENT CONTROL PRACTICE.
13. UPON REMOVAL, GRADE AND STABILIZE THE AREA OCCUPIED BY TRAP.

2 of 3

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL
Jeffrey P. West 12-23-24
Date

DWG. FILENAME: 2\231203-BACO CLOVERLAND PARK CRICKET FIELD\04-DWG\C425 ESC DETAILS.DWG 12/19/2024 5:17 PM XREF

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

SEAL: STATE OF MARYLAND — KATHRYN R. HEIL — 52868 — PROFESSIONAL ENGINEER
DATE: 12/19/2024

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 52868 EXPIRATION DATE 05/31/2025
ENGINEER: KATHRYN R. HEIL
AS-BUILT PER RECORD PRINT
BY:
DATE:
DGN BY:
DWN BY:
CHKD BY:

AS-BUILT / REVISION | BY | DATE
CONTRACT COMPLETION BOX

P.W.A. NO.	KEY SHEET	POSITION SHT
R.O.W NO.	USE 112 113	65NE12 66NE13 64NE12 64NE13 63NE12 66NE13 64NE14

DRAWING SCALE: PLAN SCALE: AS SHOWN; PROFILE SCALE:

PROPERTY MANAGEMENT
APPROVED BY: PROPERTY MANAGER
DATE:

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT
CLOVERLAND PARK CRICKET FIELD
EROSION & SEDIMENT CONTROL DETAILS III
CONSTRUCTION DOCUMENTS
SUBDIVISION: PHOENIX
12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131
ELECTION DIST. NO.: 10C3

ESC SHEET 9 OF 9

SHEET DESIGNATION	CONTRACT NUMBER
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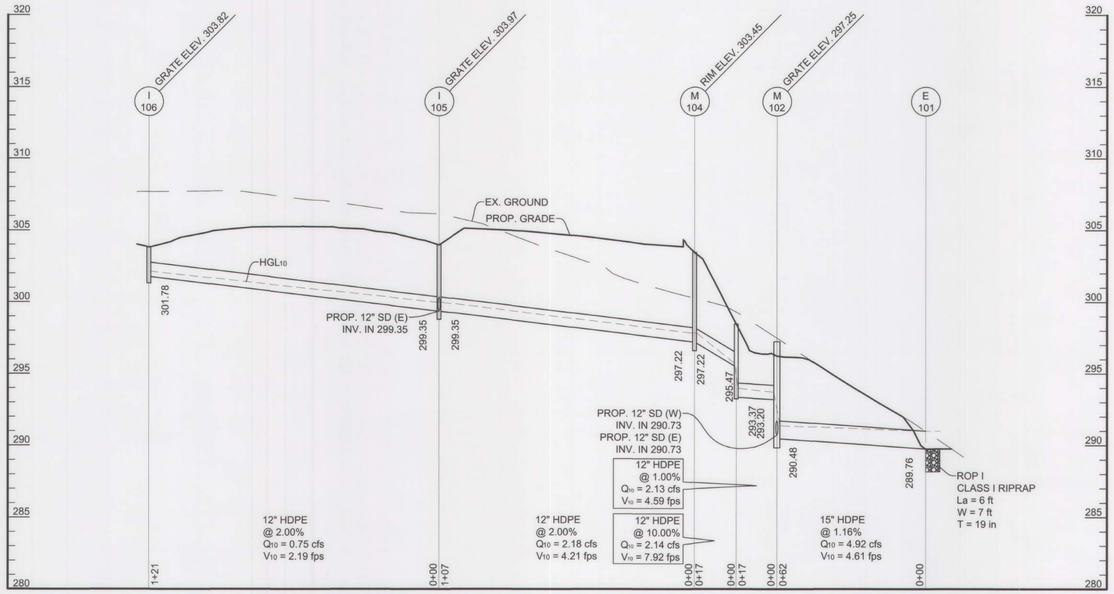
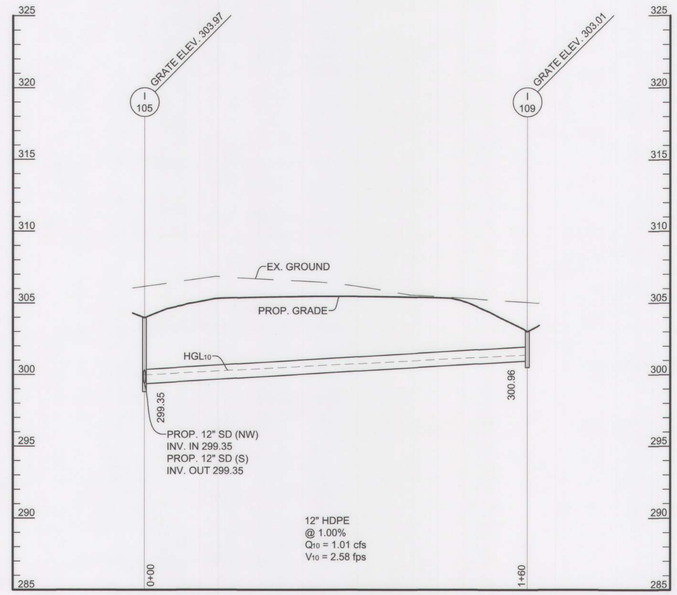
JOB ORDER NUMBER	
PROJ-10000752	
SHEET 22 OF 40	
DRAWING NUMBER	
2025-1653	
FILE NO.: 9	



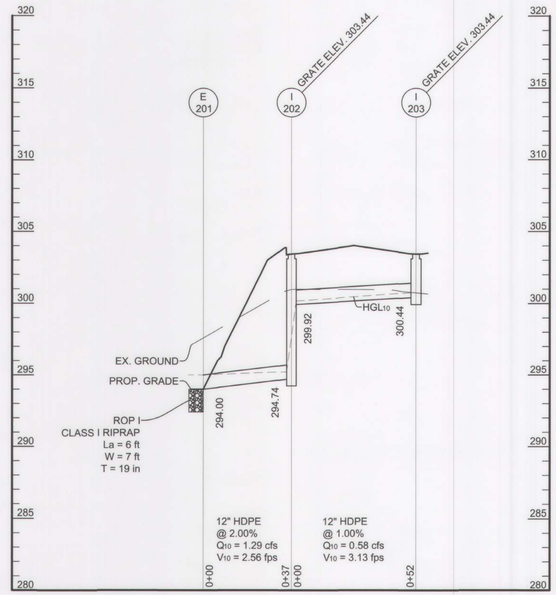
1 I-106 TO E-101

SCALES: HORIZ. 1" = 30'
VERT. 1" = 5'



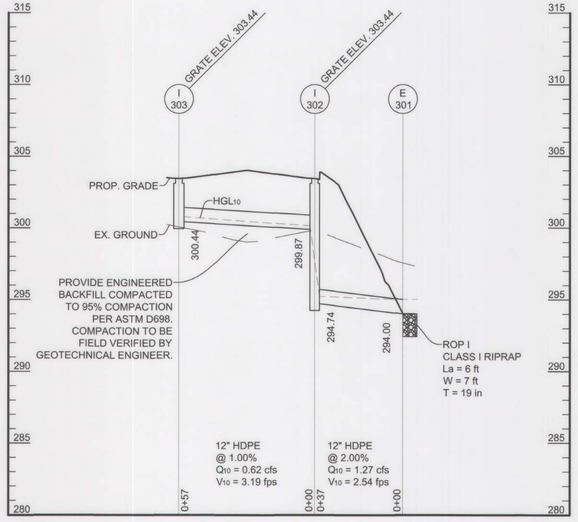
2 I-107 TO I-105

SCALES: HORIZ. 1" = 30'
VERT. 1" = 5'



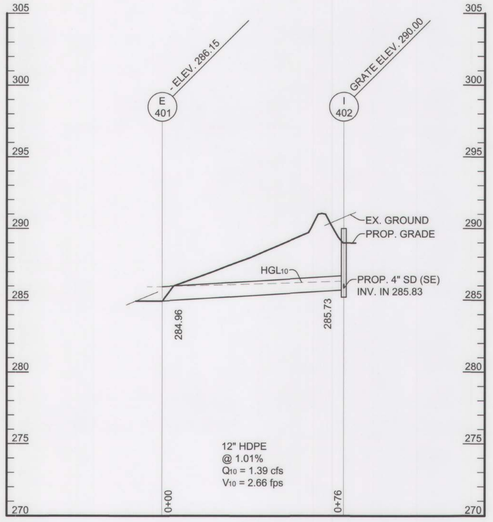
3 I-203 TO E-201

SCALES: HORIZ. 1" = 30'
VERT. 1" = 5'



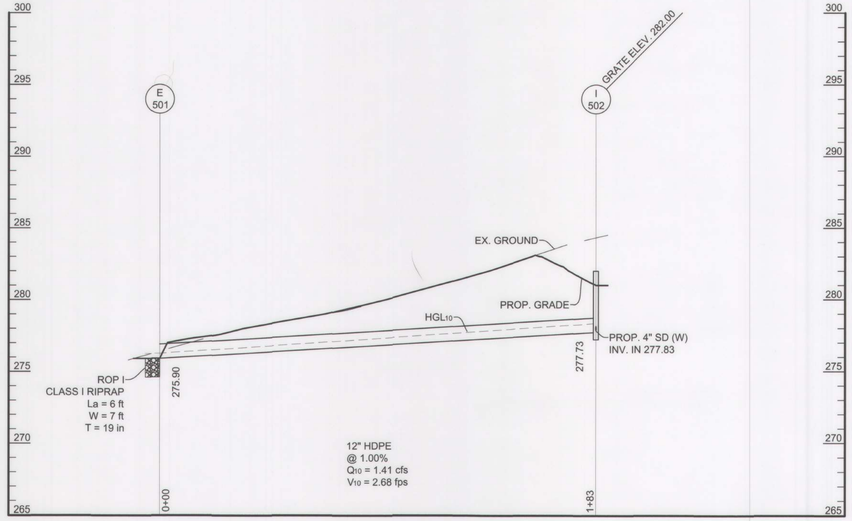
4 I-303 TO E-301

SCALES: HORIZ. 1" = 30'
VERT. 1" = 5'



5 I-402 TO E-401

SCALES: HORIZ. 1" = 30'
VERT. 1" = 5'



6 I-502 TO E-501

SCALES: HORIZ. 1" = 30'
VERT. 1" = 5'

EXISTING UTILITY NOTE

THE ENGINEER IN NO WAY GUARANTEES THE ACCURACY OR COMPLETENESS OF EXISTING UTILITIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION AND ELEVATION OF EXISTING UTILITIES TO HIS OWN SATISFACTION AND NOTIFY THE ENGINEER IMMEDIATELY, PRIOR TO CONSTRUCTION, IF FINDINGS CONTRADICT THOSE LOCATIONS AND ELEVATIONS SHOWN.

GENERAL UTILITY NOTE

MAINTAIN AT LEAST 12" OF VERTICAL CLEARANCE BETWEEN UTILITIES. WHEREVER UTILITY CLEARANCES ARE LESS THAN 12" OR DO NOT PERMIT FULL COMPACTION OF BACKFILL WITH POWER EQUIPMENT, CONTRACTOR SHALL PROVIDE CONCRETE ENCASEMENT WITH FLOWABLE FILL EXTENDING AT LEAST 5' ON ALL SIDES OF CROSSING.

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

SEAL

DATE : 01/15/2025

PROFESSIONAL CERTIFICATION		AS-BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWING SCALE		PROPERTY MANAGEMENT
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.						USE 112 113	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14	PLAN SCALE:	AS SHOWN	APPROVED BY: PROPERTY MANAGER
LICENSE NO. 42977 EXPIRATION DATE 06/07/2025		CONTRACT COMPLETION BOX			R.O.W NO.			PROFILE SCALE:		DATE:
ENGINEER: PETER C. SOPRANO	DGN BY: SPM/KRH	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER	
SITE RESOURCES, INC.										
AS-BUILT PER RECORD PRINT	DWN BY: SPM/KRH	REVIEWED BY:								
BY:	CHKD BY: KPR/PCS	DATE REVIEWED:								
DATE:										

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT

CLOVERLAND PARK CRICKET FIELD

STORM DRAIN PROFILES I

CONSTRUCTION DOCUMENTS

SUBDIVISION: PHOENIX — 12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131 — ELECTION DIST. NO.: 10C3

SWM SHEET 8 OF 12

APPROVED: Charu Makhetia Chief
STORMWATER ENGINEERING
BALTO. CO. DEPT. OF
ENVIRONMENTAL PROTECTION
AND SUSTAINABILITY

SHEET DESIGNATION	CONTRACT NUMBER
C431	25067 GX0
JOB ORDER NUMBER	PROJ-10000752
SHEET 23 OF 40	
DRAWING NUMBER	2025-1654
FILE NO.: 9	

DWG. FILENAME: © SITE RESOURCES, INC. Z:\25\25053-BACO CLOVERLAND PARK CRICKET FIELD\04-DWG\C301 UTILITY PROFILE.DWG 9/23/2024 12:56 PM KRH

EXISTING UTILITY NOTE

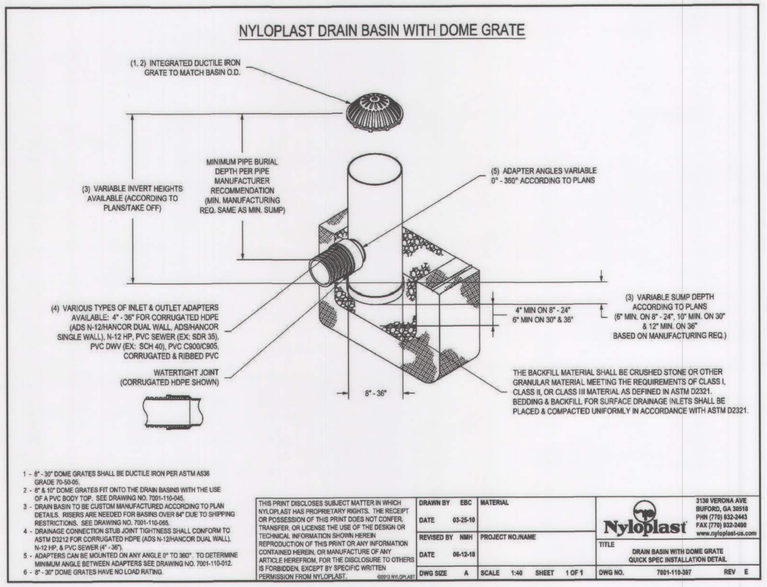
THE ENGINEER IN NO WAY GUARANTEES THE ACCURACY OR COMPLETENESS OF EXISTING UTILITIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION AND ELEVATION OF EXISTING UTILITIES TO HIS OWN SATISFACTION AND NOTIFY THE ENGINEER IMMEDIATELY, PRIOR TO CONSTRUCTION, IF FINDINGS CONTRADICT THOSE LOCATIONS AND ELEVATIONS SHOWN.

GENERAL UTILITY NOTES

1. MAINTAIN AT LEAST 12" OF VERTICAL CLEARANCE BETWEEN UTILITIES. WHEREVER UTILITY CLEARANCES ARE LESS THAN 12" OR DO NOT PERMIT FULL COMPACTION OF BACKFILL WITH POWER EQUIPMENT, CONTRACTOR SHALL PROVIDE CONCRETE ENCASEMENT WITH FLOWABLE FILL EXTENDING AT LEAST 5' ON ALL SIDES OF CROSSING.
2. PROVIDE SUMP INSERTS FOR ALL NYLOPLAST DRAIN BASINS.

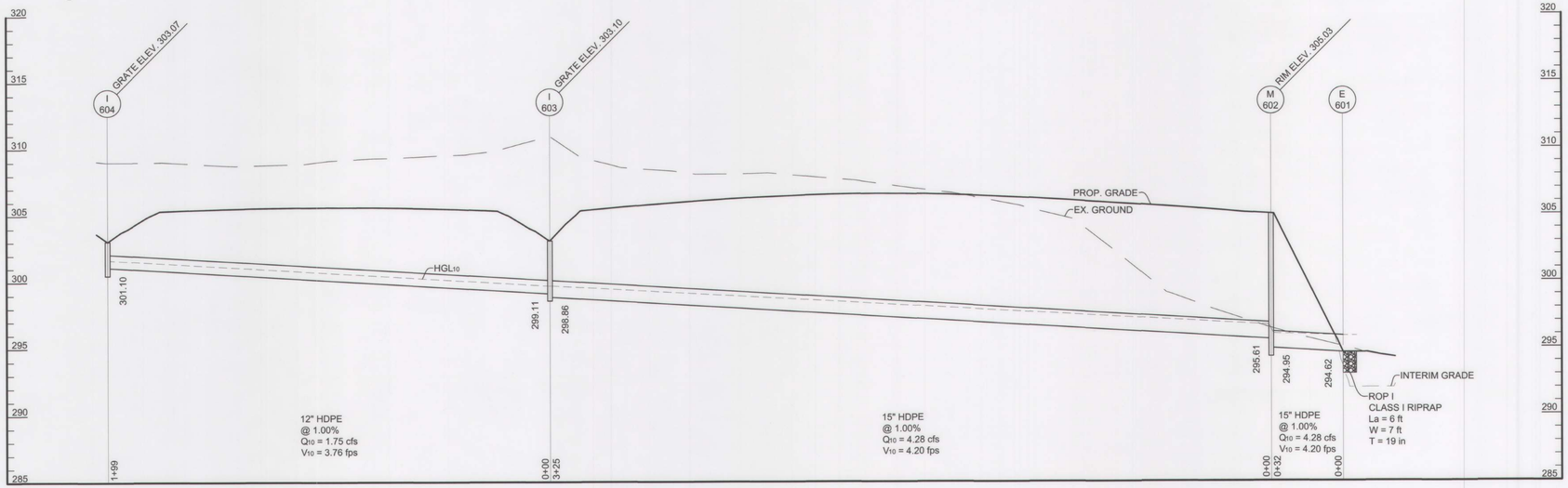
STRUCTURE TABLE

STRUCTURE #	STRUCTURE TYPE	TOP ELEV.	INV. IN	INV. OUT	COORDINATES
E-101	HPDE END SECTION	- 291.22	15" HDPE (N) 289.76		N: 656,800.56 E: 1,439,750.62
M-102	30" NYLOPLAST DRAIN BASIN	GRATE 297.25	12" HDPE (E) 290.74 12" HDPE (N) 293.20 12" HDPE (W) 290.73	15" HDPE (S) 290.48	N: 656,860.82 E: 1,439,766.02
M-104	18" NYLOPLAST DRAIN BASIN	RIM 303.45	12" HDPE (N) 297.22	12" HDPE (S) 297.22	N: 656,895.29 E: 1,439,767.03
I-105	18" NYLOPLAST DRAIN BASIN	GRATE 303.97	12" HDPE (E) 299.35 12" HDPE (NW) 299.35	12" HDPE (S) 299.35	N: 656,995.36 E: 1,439,804.72
I-106	18" NYLOPLAST DRAIN BASIN	GRATE 303.82		12" HDPE (SE) 301.78	N: 657,060.90 E: 1,439,702.47
I-107	24" NYLOPLAST DRAIN BASIN	GRATE 295.00	4" PERF. PVC (E) 290.83	12" HDPE (W) 290.83	N: 656,859.72 E: 1,439,775.65
I-109	18" NYLOPLAST DRAIN BASIN	GRATE 303.01		12" HDPE (W) 300.96	N: 657,013.72 E: 1,439,963.90
E-201	HPDE END SECTION	- 295.19	12" HDPE (NE) 294.00		N: 656,900.78 E: 1,439,682.21
I-202	TYPE S INLET SINGLE GRATE BACO D-2.16A	GRATE 303.44	12" HDPE (SE) 299.92	12" HDPE (SW) 294.74	N: 656,932.39 E: 1,439,701.34
I-203	TYPE S INLET SINGLE GRATE BACO D-2.16A	GRATE 303.44		12" HDPE (NW) 300.44	N: 656,909.11 E: 1,439,747.98
E-301	HPDE END SECTION	- 295.11	12" HDPE (N) 294.00		N: 656,850.56 E: 1,439,867.03
I-302	TYPE S INLET SINGLE GRATE BACO D-2.16A	GRATE 303.44	12" HDPE (W) 299.87	12" HDPE (S) 294.74	N: 656,887.41 E: 1,439,866.23
I-303	TYPE S INLET SINGLE GRATE BACO D-2.16A	GRATE 303.44		12" HDPE (E) 300.44	N: 656,891.84 E: 1,439,809.55
E-401	HPDE END SECTION	- 286.15	12" HDPE (E) 284.96		N: 656,695.40 E: 1,439,756.24
I-402	24" NYLOPLAST DRAIN BASIN	GRATE 290.00	4" PERF. PVC (SE) 285.83	12" HDPE (W) 285.73	N: 656,693.70 E: 1,439,832.22
E-501	HPDE END SECTION	- 277.09	12" HDPE (SE) 275.90		N: 656,536.04 E: 1,439,574.07
I-502	24" NYLOPLAST DRAIN BASIN	GRATE 282.00	4" PERF. PVC (E) 277.83	12" HDPE (NW) 277.73	N: 656,450.93 E: 1,439,735.53
E-601	HPDE END SECTION	- 296.08	15" HDPE (W) 294.62		N: 657,279.65 E: 1,440,099.21
I-603	24" NYLOPLAST DRAIN BASIN	GRATE 303.10	12" HDPE (SW) 299.11	15" HDPE (E) 298.86	N: 657,383.06 E: 1,439,764.01
I-604	24" NYLOPLAST DRAIN BASIN	GRATE 303.07		12" HDPE (NE) 301.10	N: 657,217.76 E: 1,439,653.06



1 NYLOPLAST DETAIL

NOT TO SCALE



2 I-503 TO E-501

SCALES: HORIZ. 1" = 30'
VERT. 1" = 5'

APPROVED: Charu Malhotra Chief
STORMWATER ENGINEERING
BALTO. CO. DEPT. OF
ENVIRONMENTAL PROTECTION
AND SUSTAINABILITY

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

SEAL — STATE OF MARYLAND — PETER C. SOPRANO — 21978 — PROFESSIONAL ENGINEER
DATE : 01/15/2025

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 42977, EXPIRATION DATE 06/07/2025.
ENGINEER: PETER C. SOPRANO
SITE RESOURCES, INC.
AS-BUILT PER RECORD PRINT
BY:
DATE:
DGN BY: SPM/KRH
DWN BY: SPM/KRH
CHKD BY: KPR/PCS

AS-BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT
				USE 112 113	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14
			R.O.W NO.		
CONTRACT COMPLETION BOX					

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

DRAWING SCALE
PLAN SCALE: AS SHOWN
PROFILE SCALE:

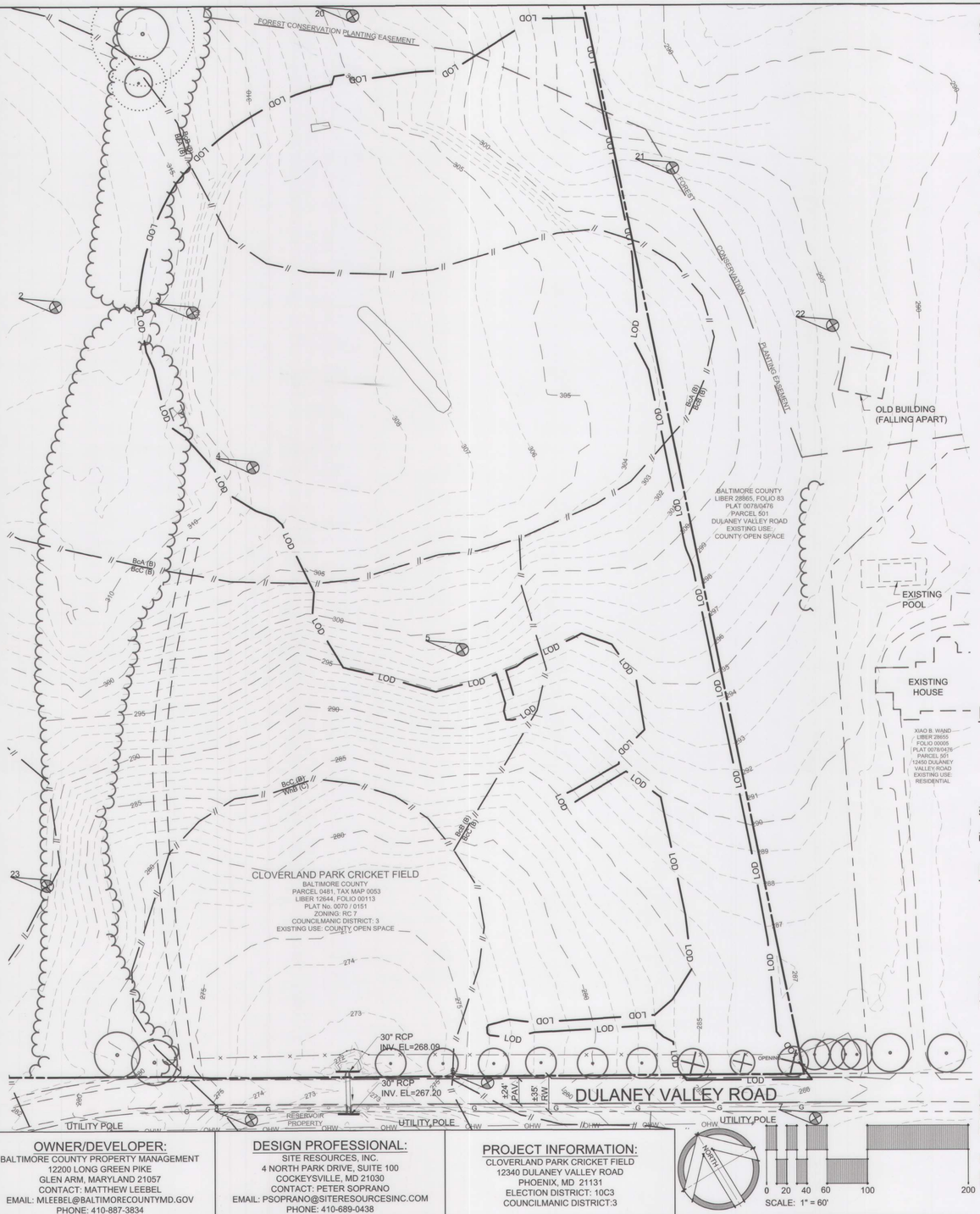
PROPERTY MANAGEMENT
APPROVED BY: PROPERTY MANAGER
DATE:

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT
CLOVERLAND PARK CRICKET FIELD
STORM DRAIN PROFILES II
CONSTRUCTION DOCUMENTS
SUBDIVISION: PHOENIX — 12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131 — ELECTION DIST. NO.: 10C3
SWM SHEET 9 OF 12

SHEET DESIGNATION	CONTRACT NUMBER
C432	25067 GX0
JOB ORDER NUMBER	PROJ-10000752
SHEET 24 OF 40	
DRAWING NUMBER	2025-1655
FILE NO.: 9	

BALTIMORE COUNTY MARYLAND

DWG. FILENAME: Z:\25\25053-BACO CLOVERLAND PARK CRICKET FIELD\04 - DWG\C500 UTILITY PROFILE.DWG 9/23/2024 12:56 PM KRH



GENERAL NOTES:

1. UNLESS OTHERWISE NOTED, ALL CONSTRUCTION AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH:
   a. BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS STANDARD SPECIFICATIONS FOR CONSTRUCTION MATERIALS, DECEMBER 2007, ERRATA & ADDENDA.
   b. NATURAL RESOURCES CONSERVATION SERVICE OF MARYLAND STANDARDS AND SPECIFICATIONS, POND, CODE 378, JANUARY 2000.
   c. MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION, JULY 2008, STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS.
2. STORMWATER MANAGEMENT APPROVED UNDER BILL NO. 25-10.
3. IT IS THE PROPERTY OWNER'S RESPONSIBILITY TO MAINTAIN THESE SWM FACILITIES.
4. UTILITY EXTENSIONS (INCLUDING WATER, SANITARY, TELECOM AND ELECTRIC) ARE NOT INCLUDED IN THE SWM STUDY AREA. AREAS OF DISTURBED FOR UTILITY EXTENSIONS OUTSIDE OF THE SWM STUDY AREA WILL BE RETURNED TO EXISTING CONDITIONS.
5. UNIFIED SIZING CRITERIA REQUIREMENTS WERE DETERMINED IN ACCORDANCE WITH THE 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUMES I AND II, AS AMENDED.

AS-BUILT CERTIFICATION:

I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

Signature _____ P.E. No. _____

Print Name _____ Date _____

CERTIFY MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION BASED UPON ON-SITE INSPECTIONS AND MATERIAL TESTS WHICH ARE CONDUCTED DURING CONSTRUCTION. THE ON-SITE INSPECTIONS AND MATERIAL TESTS ARE THOSE INSPECTIONS AND TESTS DEEMED SUFFICIENT AND APPROPRIATE BY COMMONLY ACCEPTED ENGINEERING STANDARDS. CERTIFY DOES NOT MEAN IMPLY OR GUARANTEE BY THE ENGINEER NOR DOES AN ENGINEER'S CERTIFICATION RELIEVE ANY OTHER PARTY FROM MEETING REQUIREMENTS IMPOSED BY CONTRACT, EMPLOYMENT, OR OTHER MEANS, INCLUDING MEETING COMMONLY ACCEPTED PRACTICES.

CONTRACTOR AS-BUILT NOTE:

AS-BUILT PLANS AND CERTIFICATIONS ARE REQUIRED FOR THIS STORMWATER MANAGEMENT FACILITY. THESE MUST BE PREPARED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER. BALTIMORE COUNTY WILL NOT PERFORM THE INSPECTION OR PREPARE THE AS-BUILT PLANS OR CERTIFICATION. THE STORMWATER MANAGEMENT PERMIT SECURITY WILL NOT BE RELEASED UNTIL THE AS-BUILT PLANS AND CERTIFICATION ARE APPROVED BY BALTIMORE COUNTY. IT IS THE CONTRACTOR'S RESPONSIBILITY, ON BEHALF OF THE OWNER, TO ENGAGE A LICENSED PROFESSIONAL ENGINEER TO CERITY THE STORMWATER MANAGEMENT FACILITIES AND TO PREPARE, SUBMIT AND PROCESS AS-BUILT DRAWINGS WITH BALTIMORE COUNTY.

IN ORDER TO PREPARE THE REQUIRED AS-BUILT PLANS AND CERTIFICATION, THIS STORMWATER MANAGEMENT FACILITY MUST BE INSPECTED BY THE ENGINEER AT SPECIFIC STAGES DURING CONSTRUCTION AS REQUIRED BY THE AMENDED BALTIMORE COUNTY CODE, TITLE 4, STORMWATER MANAGEMENT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST FIVE (5) WORKING DAYS PRIOR TO STARTING ANY WORK SHOWN ON THESE PLANS.

LANDOWNER'S/DEVELOPER'S CERTIFICATION:

I/WE HEREBY CERTIFY THAT ALL WORK SHOWN ON THESE CONSTRUCTION DRAWINGS WILL BE ACCOMPLISHED PURSUANT TO THESE PLANS. I/WE ALSO UNDERSTAND THAT IT IS MY/OUR RESPONSIBILITY TO HAVE THE CONSTRUCTION SUPERVISED AND CERTIFIED, INCLUDING THE SUBMITTAL OF "AS-BUILT" PLANS WITHIN THIRTY (30) DAYS OF COMPLETION, BY A MARYLAND REGISTERED PROFESSIONAL ENGINEER.

SIGNATURE OF OWNER/DEVELOPER — DATE: 2/20/2024

GREGORY DORAN — CHIEF, CAPITAL CONSTRUCTION

PRINT NAME — TITLE

ENGINEER'S CERTIFICATION:

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED BY ME OR UNDER MY SUPERVISION AND MEETS THE MINIMUM STANDARDS OF THE BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY AND THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT.

THIS PLAN IS SEALED AND CERTIFIED AS BEING IN ACCORDANCE WITH THE APPROVED DEVELOPMENT PLAN.

SIGNATURE — 42977 P.E. No.

PETER C. SOPRANO — 1/16/2025

PRINT NAME — DATE

FIELD VERIFICATION CERTIFICATION

I HEREBY CONFIRM THAT I COMPLETED A FIELD VERIFICATION TO THE INFORMATION SHOWN ON THE PLANS ON FEBRUARY 29, 2024 AND THAT THE INFORMATION SHOWN ON THE PLANS IS IN AGREEMENT WITH THE ACTUAL FIELD CONDITIONS.

SIGNATURE

KEVIN RILEY — 2/29/2024

PRINT NAME — DATE

SURVEY NOTES:

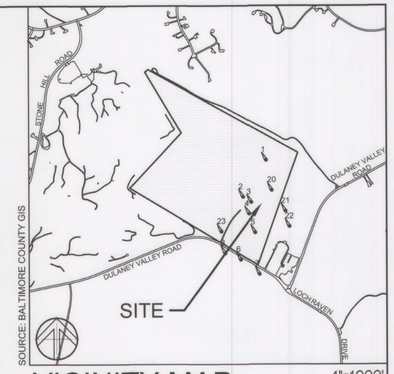
BASE INFORMATION REFLECTED ON THESE PLANS WAS TAKEN FROM THE FOLLOWING SOURCES:

A. PLAN ENTITLED "TOPOGRAPHIC SURVEY OF CLOVERLAND PARK", PREPARED BY DIETZ SURVEYING INC. DATED DECEMBER 1, 2023.
B. COORDINATES SHOWN ON ARE BASED ON THE MARYLAND COORDINATE SYSTEM, NAD 83-2011, ESTABLISHED BY GPS OBSERVATION. ELEVATIONS AND CONTOURS SHOWN ARE BASED ON THE NAVD-88 VERTICAL DATUM.
C. BALTIMORE COUNTY GIS INFORMATION.

SURVEY REFERENCE NOTES

ALL HORIZONTAL AND VERTICAL SURVEY DATA CONTAINED HEREIN ARE REFERENCED TO SURVEY CONTROL POINTS

PT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	657,918.4	1,439,865.4	314.61	MAG NAIL SET
2	657,401.1	1,439,543.5	318.59	MAG NAIL SET
3	657,326.2	1,439,656.8	315.18	MAG NAIL SET
4	657,164.5	1,439,628.5	311.03	MAG NAIL SET
5	656,902.1	1,439,712.0	299.67	MAG NAIL SET
6	656,523.1	1,439,511.3	274.88	MAG NAIL SET
7	656,324.2	1,439,770.7	286.00	MAG NAIL SET
8	656,612.8	1,439,292.0	274.45	MAG NAIL SET
20	657,494.6	1,439,944.2	305.35	MAG NAIL SET
21	657,202.0	1,444,137.1	297.09	MAG NAIL SET
22	656,986.4	1,440,192.1	297.00	MAG NAIL SET
23	656,915.6	1,439,239.4	291.25	MAG NAIL SET



VICINITY MAP 1"=1000'

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BUILDING
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING GUARDRAIL
- FOREST CONSERVATION PLANTING EASEMENT
- EXISTING TREES (CRITICAL ROOT ZONE)
- EXISTING STORM DRAIN (EX. 15" SD)
- EXISTING GAS (EX. 2" GAS)
- EXISTING OVERHEAD ELECTRIC (EX. ELEC, OHW)
- EXISTING CONTOURS (350, 348)
- SURVEY BENCHMARKS/ TRAVERSE POINTS (22)
- EXISTING SOIL GROUP DELINEATION (UtD)
- LIMIT OF DISTURBANCE (LOD)

NATURAL RESOURCE MAPPING

WETLANDS (NONTIDAL)	NO
WETLANDS OF SPECIAL STATE CONCERN	NO
WETLAND BUFFERS	NO
MAJOR WATERWAYS	NO
FLOODPLAINS	NO
PERENNIAL STREAMS	NO
INTERMITTENT STREAMS	NO
STREAM BUFFERS	NO
ENHANCED STREAM BUFFERS	NO
FORESTS	NO
FOREST BUFFERS	NO
CRITICAL AREAS	NO
STEEP SLOPES	YES
HIGHLY ERODIBLE SOILS**	YES
TOPOGRAPHY / SLOPES	PROVIDED
SPRINGS	NO
SEEPS	NO
VEGETATIVE COVER	YES
SOILS	PROVIDED
BEDROCK / GEOLOGY	PROVIDED
EXISTING DRAINAGE AREAS	PROVIDED

LIMIT OF DISTURBANCE: 297,150 SF / 6.82 AC

APPROVED: Charu Malhotra — Chief
STORMWATER ENGINEERING
BALTO. CO. DEPT. OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY

6331

Baltimore County Soil Conservation District
APPROVED FOR STORMWATER MANAGEMENT
Charu Malhotra 02-07-25 021-20B7-25
DISTRICT OFFICIAL — DATE — PLAN NO.
TECHNICAL REVIEW FOR DISTRICT
BY: Charu Malhotra 02-07-25
BALTO. CO. DEPT. OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY — DATE

OWNER/DEVELOPER:	DESIGN PROFESSIONAL:	PROJECT INFORMATION:
BALTIMORE COUNTY PROPERTY MANAGEMENT 12200 LONG GREEN PIKE GLEN ARM, MARYLAND 21057 CONTACT: MATTHEW LEEBEL EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV PHONE: 410-887-3834	SITE RESOURCES, INC. 4 NORTH PARK DRIVE, SUITE 100 COCKEYSVILLE, MD 21030 CONTACT: PETER SOPRANO EMAIL: PSOPRANO@SITERESOURCESINC.COM PHONE: 410-689-0438	CLOVERLAND PARK CRICKET FIELD 12340 DULANEY VALLEY ROAD PHOENIX, MD 21131 ELECTION DISTRICT: 10C3 COUNCILMANIC DISTRICT:3

SEAL — STATE OF MARYLAND — PETER C. SOPRANO — 42977 — PROFESSIONAL ENGINEER

DATE : 01/15/2025

PROFESSIONAL CERTIFICATION		AS–BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWING SCALE	PROPERTY MANAGEMENT
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.						USE 112 115	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14	PLAN SCALE: AS SHOWN	APPROVED BY: _____ PROPERTY MANAGER
LICENSE NO. 42977 EXPIRATION DATE 06/07/2025					R.O.W NO.			PROFILE SCALE:	DATE:
ENGINEER: PETER C. SOPRANO SITE RESOURCES, INC.	DGN BY: SPM/KRH	CONTRACT COMPLETION BOX	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
	DWN BY: SPM/KRH	REVIEWED BY:								
AS–BUILT PER RECORD PRINT	CHKD BY: KPR/PCS	DATE REVIEWED:								
BY: DATE:										

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT

CLOVERLAND PARK CRICKET FIELD

RESOURCE MAPPING PLAN

CONSTRUCTION DOCUMENTS

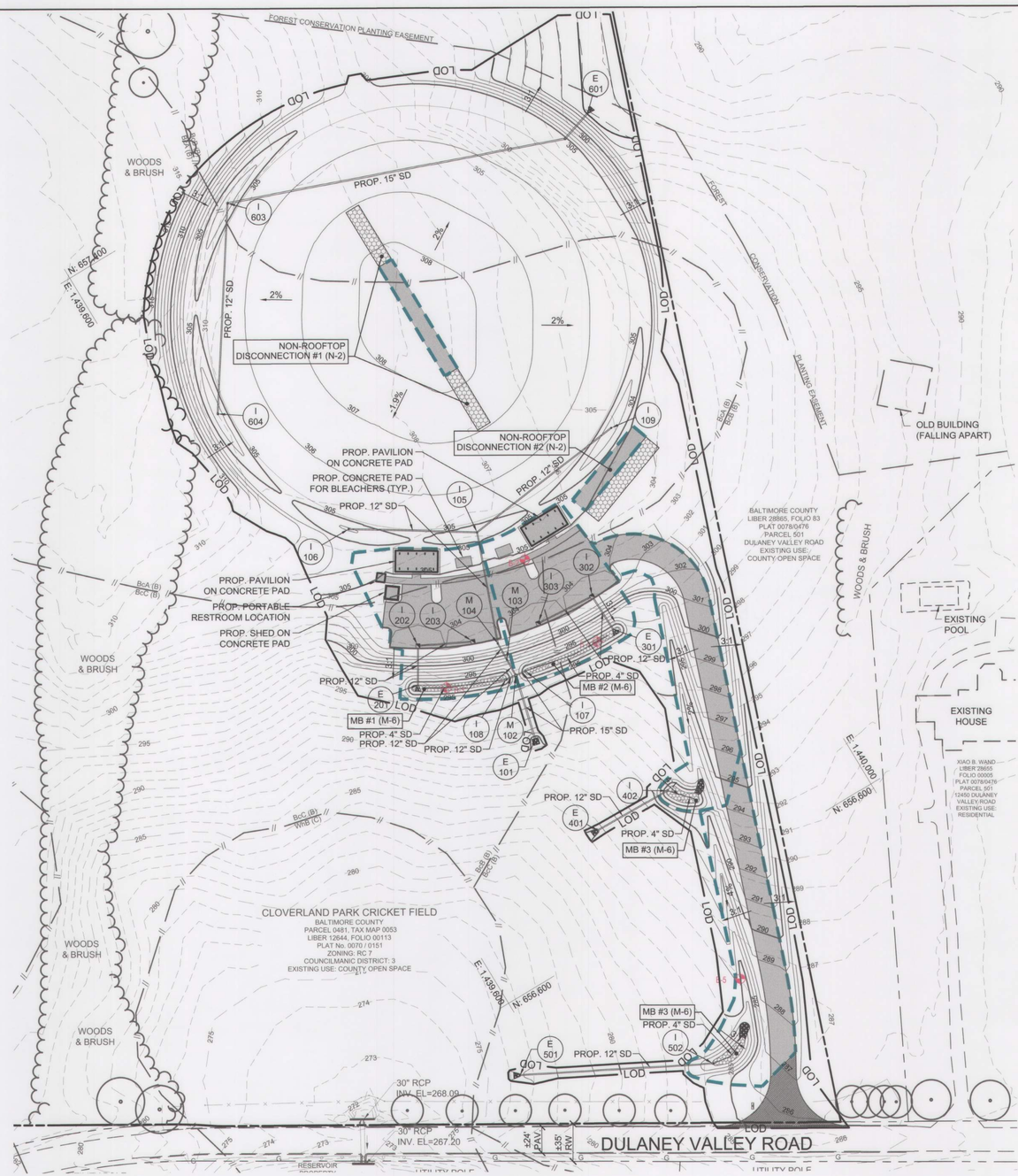
SUBDIVISION: PHOENIX — 12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131 — ELECTION DIST. NO.: 10C3

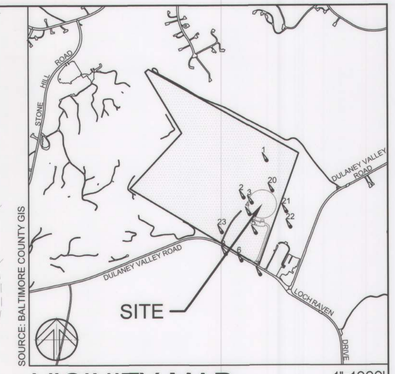
SWM SHEET 1 OF 12
09/24/2024

SHEET DESIGNATION	CONTRACT NUMBER
C500	25067 GXO
	JOB ORDER NUMBER
	PROJ–10000752
	SHEET 25 OF 40
	DRAWING NUMBER
	2025-1656
	FILE NO.: 9

BALTIMORE COUNTY MARYLAND

DWG. FILENAME: © SITE RESOURCES, INC. Z:\25\25053-BACO CLOVERLAND PARK CRICKET FIELD\04-DWG\CROD_SWM_EXISTING PLAN.DWG 9/23/2024 2:47 PM KRH





VICINITY MAP

1"=1000'

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BUILDING
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING GUARDRAIL
- FOREST CONSERVATION PLANTING EASEMENT
- EXISTING TREES
- EXISTING STORM DRAIN (EX. 15" SD)
- EXISTING GAS (EX. 2" GAS)
- EXISTING OVERHEAD ELECTRIC (EX. ELEC)
- EXISTING CONTOURS (350 / 348)
- EXISTING SOIL GROUP DELINEATION (UID)
- PROPOSED BUILDING
- PROPOSED ASPALT SIDEWALK
- PROPOSED ATHLETIC FIELD
- PROPOSED CURB/PAVING
- PROPOSED WOODSLINE
- PROPOSED SIGN
- PROPOSED SWM
- PROPOSED STORM DRAIN
- PROPOSED CONTOURS (350 / 348)
- LIMIT OF DISTURBANCE (LOD)
- DRAINAGE AREA
- IMPERVIOUS AREA
- FEE-IN-LIEU AREA
- SOIL BORINGS

LIMIT OF DISTURBANCE: 297,150 SF / 6.82 AC

SOILS INFORMATION

MAP UNIT SYMBOL	MAP UNIT NAME	HSG	K_f
BcA	BALTIMORE GRAVELLY LOAM, 0-3% SLOPES	B	0.20
BcB	BALTIMORE GRAVELLY LOAM, 3-8% SLOPES	B	0.20
BcC	BALTIMORE GRAVELLY LOAM, 8-15 SLOPES	B	0.20
WhB	WILTSHIRE SILT LOAM, 3-8% SLOPES	C	0.37

DESIGN SUMMARY TABLE

LIMIT OF DISTURBANCE (LOD)	6.82 AC	
EXISTING IMPERVIOUS AREA WITHIN LOD	0.00 AC	
PROPOSED IMPERVIOUS AREA WITHIN LOD	0.80 AC	
ESDV / PE REQUIRED	3,888 CU FT	1.00 in
ESDV / PE PROVIDED	4,447 CU FT	1.14 in
WATERSHED	LOCH RAVEN RESERVOIR	

ESD SUMMARY TABLE

ESD FACILITIES	DRAINAGE AREA		IMPERVIOUS AREA		ESDv
M-6 MICRO-BIORETENTION #1	15,943 sf	0.37 ac	7,760 sf	0.18 ac	1,272 cu ft
M-6 MICRO-BIORETENTION #2	15,417 sf	0.35 ac	7,929 sf	0.18 ac	1,404 cu ft
M-6 MICRO-BIORETENTION #3	14,489 sf	0.33 ac	6,966 sf	0.16 ac	732 cu ft
M-6 MICRO-BIORETENTION #4	15,573 sf	0.36 ac	6,603 sf	0.15 ac	792 cu ft
N-2 NON ROOFTOP DISCONNECTION #1	1,680 sf	0.04 ac	1,680 sf	0.04 ac	133 cu ft
N-2 NON ROOFTOP DISCONNECTION #2	1440 sf	0.03 ac	1440 sf	0.03 ac	114 cu ft
IART	**64,542 sf**	**1.48 ac**	**32,378 sf**	**0.74 ac**	**4,447 cu ft**
IMPERVIOUS TREATED			**35,044 sf**	**0.80 ac**	**3,888 cu ft**
FEE-IN-LIEU				**0.06 ac**	

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

NORTH (MAGNETIC)

0 20 40 60 100 200
SCALE: 1" = 60'
MARYLAND COORDINATE SYSTEM NAD83/2011 & NAVD88

APPROVED: Cheru Mathetha Chief
STORMWATER ENGINEERING
BALTO. CO. DEPT. OF
ENVIRONMENTAL PROTECTION
AND SUSTAINABILITY

SEAL

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 42977, EXPIRATION DATE 06/07/2025
ENGINEER: PETER C. SOPRANO
SITE RESOURCES, INC.
AS-BUILT PER RECORD PRINT
BY:
DATE:
DATE : 01/15/2025

DGN BY: SPM/KRH
DWN BY: SPM/KRH
CHKD BY: KPR/PCS

AS-BUILT / REVISION | BY | DATE

CONTRACT COMPLETION BOX

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

P.W.A. NO.
R.O.W NO.
KEY SHEET: 112 113
POSITION SHT: 65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14

DRAWING SCALE
PLAN SCALE: AS SHOWN
PROFILE SCALE:

PROPERTY MANAGEMENT
APPROVED BY: PROPERTY MANAGER
DATE:

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT

CLOVERLAND PARK CRICKET FIELD
ESD DRAINAGE AREA MAP
CONSTRUCTION DOCUMENTS

SUBDIVISION: PHOENIX
12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131
ELECTION DIST. NO.: 10C3

SWM SHEET 2 OF 12

SHEET DESIGNATION	CONTRACT NUMBER
C501	25067 GXO
	JOB ORDER NUMBER
	PROJ-10000752
	SHEET 26 OF 40
	DRAWING NUMBER
	2025-1657
	FILE NO.: 9

DWG. FILENAME: Z:\25\25053-BACO_CLOVERLAND_PARK_CRICKET_FIELD\04-DWG\C501_SWM_PLAN.DWG 9/23/2024 2:47 PM KRH

MARYLAND STORMWATER DESIGN MANUAL CONSTRUCTION SPECS FOR MICRO-BIORETENTION

B.4.C SPECIFICATIONS FOR MICRO-BIORETENTION, RAIN GARDENS, LANDSCAPE INFILTRATION AND INFILTRATION BERMS

1. MATERIAL SPECIFICATIONS
THE ALLOWABLE MATERIALS TO BE USED IN THESE PRACTICES ARE DETAILED IN TABLE B.4.1.

2. FILTERING MEDIA OR PLANTING SOIL
THE SOIL SHALL BE SHA 920.01.05 BIORETENTION SOIL MIX (BSM)

3. COMPACTION
IT IS VERY IMPORTANT TO MINIMIZE COMPACTION OF BOTH THE BASE OF BIORETENTION PRACTICES AND THE REQUIRED BACKFILL. WHEN POSSIBLE, USE EXCAVATION HOES TO REMOVE ORIGINAL SOIL. IF PRACTICES ARE EXCAVATED USING A LOADER, THE CONTRACTOR SHOULD USE WIDE TRACK OR MARSH TRACK EQUIPMENT, OR LIGHT EQUIPMENT WITH TURF TYPE TIRES. USE OF EQUIPMENT WITH NARROW TRACKS OR NARROW TIRES, RUBBER TIRES WITH LARGE LUGS, OR HIGH-PRESSURE TIRES WILL CAUSE EXCESSIVE COMPACTION RESULTING IN REDUCED INFILTRATION RATES AND IS NOT ACCEPTABLE. COMPACTION WILL SIGNIFICANTLY CONTRIBUTE TO DESIGN FAILURE.

COMPACTION CAN BE ALLEVIATED AT THE BASE OF THE BIORETENTION FACILITY BY USING A PRIMARY TILLING OPERATION SUCH AS A CHISEL PLOW, RIPPER, OR SUBSOILER. THESE TILLING OPERATIONS ARE TO REFRACTURE THE SOIL PROFILE THROUGH THE 12 INCH COMPACTION ZONE. SUBSTITUTE METHODS MUST BE APPROVED BY THE ENGINEER. ROTOTILLERS TYPICALLY DO NOT TILL DEEP ENOUGH TO REDUCE THE EFFECTS OF COMPACTION FROM HEAVY EQUIPMENT.

ROTOTILL 2 TO 3 INCHES OF SAND INTO THE BASE OF THE BIORETENTION FACILITY BEFORE BACKFILLING THE OPTIONAL SAND LAYER. PUMP ANY PONDED WATER BEFORE PREPARING (ROTOTILLING) BASE.

WHEN BACKFILLING THE TOPSOIL OVER THE SAND LAYER, FIRST PLACE 3 TO 4 INCHES OF TOPSOIL OVER THE SAND, THEN ROTOTILL THE SAND/TOPSOIL TO CREATE A GRADATION ZONE. BACKFILL THE REMAINDER OF THE TOPSOIL TO FINAL GRADE.

WHEN BACKFILLING THE BIORETENTION FACILITY, PLACE SOIL IN LIFTS 12" TO 18". DO NOT USE HEAVY EQUIPMENT WITHIN THE BIORETENTION BASIN. HEAVY EQUIPMENT CAN BE USED AROUND THE PERIMETER OF THE BASIN TO SUPPLY SOILS AND SAND. GRADE BIORETENTION MATERIALS WITH LIGHT EQUIPMENT SUCH AS A COMPACT LOADER OR A DOZER/LOADER WITH MARSH TRACKS.

4. PLANT MATERIAL
RECOMMENDED PLANT MATERIAL FOR MICRO-BIORETENTION PRACTICES CAN BE FOUND IN APPENDIX A, SECTION A.2.3.

5. PLANT INSTALLATION
COMPOST IS A BETTER ORGANIC MATERIAL SOURCE, IS LESS LIKELY TO FLOAT, AND SHOULD BE PLACED IN THE INVERT AND OTHER LOW AREAS. MULCH SHOULD BE PLACED IN SURROUNDING TO A UNIFORM THICKNESS OF 2" TO 3". SHREDDED OR CHIPPED HARDWOOD MULCH IS THE ONLY ACCEPTED MULCH. PINE MULCH AND WOOD CHIPS WILL FLOAT AND MOVE TO THE PERIMETER OF THE BIORETENTION AREA DURING A STORM EVENT AND ARE NOT ACCEPTABLE. SHREDDED MULCH MUST BE WELL AGED (6 TO 12 MONTHS) FOR ACCEPTANCE. ROOTSTOCK OF THE PLANT MATERIAL SHALL BE KEPT MOIST DURING TRANSPORT AND ON-SITE STORAGE. THE PLANT ROOT BALL SHOULD BE PLANTED SO 1/8TH OF THE BALL IS ABOVE FINAL GRADE SURFACE. THE DIAMETER OF THE PLANTING PIT SHALL BE AT LEAST SIX INCHES LARGER THAN THE DIAMETER OF THE PLANTING BALL. SET AND MAINTAIN THE PLANT STRAIGHT DURING THE ENTIRE PLANTING PROCESS. THOROUGHLY WATER GROUND BED COVER AFTER INSTALLATION.

TREES SHALL BE BRACED USING 2" BY 2" STAKES ONLY AS NECESSARY AND FOR THE FIRST GROWING SEASON ONLY. STAKES ARE TO BE EQUALLY SPACED ON THE OUTSIDE OF THE TREE BALL.

GRASSES AND LEGUME SEED SHOULD BE DRILLED INTO THE SOIL TO A DEPTH OF AT LEAST ONE INCH. GRASS AND LEGUME PLUGS SHALL BE PLANTED FOLLOWING THE NON-GRASS GROUND COVER PLANTING SPECIFICATIONS.

THE TOPSOIL SPECIFICATIONS PROVIDE ENOUGH ORGANIC MATERIAL TO ADEQUATELY SUPPLY NUTRIENTS FROM NATURAL CYCLING. THE PRIMARY FUNCTION OF THE BIORETENTION STRUCTURE IS TO IMPROVE WATER QUALITY. ADDING FERTILIZERS DEFEATS, OR AT A MINIMUM, IMPEDES THIS GOAL. ONLY ADD FERTILIZER IF WOOD CHIPS OR MULCH ARE USED TO AMEND THE SOIL. ROTOTILL UREA FERTILIZER AT A RATE OF 2 POUNDS PER 1000 SQUARE FEET.

6. UNDERDRAINS
UNDERDRAINS SHOULD MEET THE FOLLOWING CRITERIA:
- PIPE- SHOULD BE 4" TO 6" DIAMETER, SLOTTED OR PERFORATED RIGID PLASTIC PIPE (ASTMF 758, TYPE PS 28, OR AASHTO-M-278) IN A GRAVEL LAYER. THE PREFERRED MATERIAL IS SLOTTED, 4" RIGID PIPE (E.G., PVC).
- PERFORATIONS - IF PERFORATED PIPE IS USED, PERFORATIONS SHOULD BE 3/8" DIAMETER LOCATED 6" ON CENTER WITH A MINIMUM OF FOUR HOLES PER ROW. PIPE SHALL BE WRAPPED WITH A 1/4" (NO. 4 OR 4X4) GALVANIZED HARDWARE CLOTH.
- GRAVEL - THE GRAVEL LAYER (NO. 7 STONE PREFERRED) SHALL BE AT LEAST 3" THICK ABOVE AND BELOW THE UNDERDRAIN.
- A RIGID, NON-PERFORATED OBSERVATION WELL MUST BE PROVIDED (ONE PER EVERY 1,000 SQUARE FEET) TO PROVIDE A CLEAN-OUT PORT AND MONITOR PERFORMANCE OF THE FILTER.
- A 4" LAYER OF PEA GRAVEL (1/8" TO 3/8" STONE) SHALL BE LOCATED BETWEEN THE FILTER MEDIA AND UNDERDRAIN TO PREVENT MIGRATION OF FINES INTO THE UNDERDRAIN. THIS LAYER MAY BE CONSIDERED PART OF THE FILTER BED WHEN BED THICKNESS EXCEEDS 24".

OBSERVATION WELLS AND/OR CLEAN-OUT PIPES MUST BE PROVIDED (ONE MINIMUM PER EVERY 1000 SQUARE FEET OF SURFACE AREA).

7. MISCELLANEOUS
THESE PRACTICES MAY NOT BE CONSTRUCTED UNTIL ALL CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED

OPERATION AND MAINTENANCE SCHEDULE

MICRO-BIORETENTION AREAS (M-6) AND BIORETENTION AREAS (F-6)

1. INSPECTION SHALL BE PERFORMED DURING WET WEATHER TO DETERMINE IF THE FACILITY IS FUNCTIONING PROPERLY. VISUAL INSPECTION OF ALL COMPONENTS SHALL BE COMPLETED BY THE OWNER. ALL DRAINS SHALL BE OPENED BY THE OWNER ONCE A YEAR. THE OWNER SHALL KEEP NOTES OF EACH INSPECTION.
2. ANNUAL MAINTENANCE OF PLANT MATERIAL, MULCH LAYER AND SOIL LAYER IS REQUIRED. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING.
3. DEBRIS AND LITTER SHALL BE REMOVED AS A REGULAR OPERATION AND AS NEEDED. ALL APPURTENANCES SHALL BE KEPT FREE OF TRASH.
4. SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR IN SPRING AND FALL. THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, TREATMENT OF ALL DISEASED TREES AND SHRUBS AND REPLACEMENT OF ALL DEFICIENT STAKES AND WIRES. WATERING OF PLANT MATERIAL MAY BE REQUIRED DURING PROLONGED DRY PERIODS.
5. MULCH SHALL BE INSPECTED EACH SPRING. REPLACE MULCH ANNUALLY WHERE PRACTICE TREATS AREAS WITH HIGH CONCENTRATIONS OF HEAVY METALS. OTHERWISE, REPLACE TOP 2-3 INCHES OF MULCH AS NECESSARY.
6. SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.
7. REMOVE ACCUMULATED SEDIMENT FROM THE SURFACE OF THE FILTER BED WHEN ACCUMULATION EXCEEDS ONE INCH.
8. REMOVE AND REPLACE THE TOP FEW INCHES OF FILTER MATERIAL IF WATER REMAINS ON THE SURFACE OF THE FILTER BED FOR MORE THAN 24 HOURS FOLLOWING ANY STORM EVENT.
9. ALL REQUIRED MAINTENANCE SHALL BE PERFORMED BY THE OWNER OR THE OWNER'S REPRESENTATIVE AT THE OWNER'S EXPENSE.

SWM AS-BUILT NOTES

1. IT IS THE CONTRACTOR'S RESPONSIBILITY, ON BEHALF OF THE OWNER, TO ENGAGE A LICENSED PROFESSIONAL ENGINEER TO CERTIFY THE STORMWATER MANAGEMENT FACILITIES AND TO PREPARE, SUBMIT, AND PROCESS AS-BUILT DRAWINGS WITH THE AUTHORITIES HAVING JURISDICTION. "CERTIFY" MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION BASED ON SUFFICIENT AND APPROPRIATE ONSITE OBSERVATIONS AND/OR INSPECTIONS AT CRUCIAL MILESTONES DURING CONSTRUCTION OF THE FACILITY, MATERIAL TESTS CONDUCTED DURING CONSTRUCTION, AND POST-CONSTRUCTION SURVEYING AND VERIFICATION. VERIFICATION SHALL INCLUDE PHOTODOCUMENTATION CONSISTING OF AT LEAST TEN (10) PHOTOS AT EACH STAGE OF CONSTRUCTION PROGRESS.
2. CRUCIAL MILESTONES INCLUDE, AT A MINIMUM, REGULAR INSPECTIONS MADE AND DOCUMENTED DURING AND AT COMPLETION OF THE FOLLOWING STAGES OF CONSTRUCTION:
   A) EXCAVATION TO SUBGRADE
   B) INSTALLATION OF GEOTEXTILE FABRIC
   C) INSTALLATION OF UNDERDRAIN SYSTEM WITH DRAINAGE STRUCTURE AND OUTFALL PIPE
   D) INSTALLATION ON WETLAND SOIL, PEA GRAVEL AND GRAVEL MEDIA.
   E) UPON COMPLETION OF FINAL GRADING, MULCH INSTALLATION, AND ESTABLISHMENT OF PERMANENT STABILIZATION
3. THE FOLLOWING INFORMATION SHALL BE INCLUDED IN THE SWM AS-BUILT DOCUMENTATION:
   A) COMPLY WITH INSPECTION REQUIREMENTS DURING CONSTRUCTION FOR AS-BUILT CERTIFICATION AS DESCRIBED IN THE MDE STORMWATER MANUAL AND AMENDED TO DATE.
   B) NOTE CHANGES AND DEVIATIONS FROM THE ORIGINAL APPROVED SWM PLANS BY MARKING IN RED OR GREEN ON TOP OF THE ASSOCIATED APPROVED ITEM.
   C) NOTE CONSTRUCTED DATA FOR GRADING CONTOURS, SPOT ELEVATIONS, HORIZONTAL AND VERTICAL DIMENSIONS, INVERTS, PLAN VIEWS, CROSS-SECTIONS, AND DETAILS.
   D) IF CONSTRUCTED VALUES ARE THE SAME AS DESIGN VALUES, PLACE A CHECK MARK NEXT TO THE ASSOCIATED DATA TO INDICATE THE VALUE HAS BEEN VERIFIED.
   E) COMPLETE AS-BUILT TABLES INCLUDED ON DRAWINGS AND SIGN AND SEAL CERTIFICATIONS.

   PROVIDE ADDITIONAL DOCUMENTS SUCH AS PROGRESS AND FINAL PHOTOGRAPHS, INSPECTION REPORTS AND OTHER RELEVANT INFORMATION IN SUPPORT OF THE AS-BUILT DRAWINGS AND DATA TABLES.
4. SUBMIT SWM AS-BUILTS TO THE AUTHORITIES HAVING JURISDICTION AND PROCESS FOR FINAL APPROVAL AND CLOSEOUT OF ASSOCIATED PERMIT(S).

MICRO-BIORETENTION SEQUENCE OF CONSTRUCTION

1. THE MICRO-BIORETENTION FACILITIES SHALL BE INSTALLED PER THE SEQUENCE OF OPERATIONS IN THE APPROVED EROSION & SEDIMENT CONTROL PLANS. ALL CONTRIBUTING AREA TO THE FACILITY SHALL BE STABILIZED PRIOR TO INSTALLATION. REFER TO ESC DRAWINGS FOR EROSION AND SEDIMENT CONTROL SEQUENCE OF OPERATIONS.
2. CONTRACTOR SHALL NOTIFY AS-BUILT ENGINEER AND BALTIMORE COUNTY EROSION AND SEDIMENT CONTROL INSPECTOR AT LEAST 3 DAYS BEFORE BEGINNING CONSTRUCTION OF MICRO-BIORETENTION FACILITIES. AS-BUILT ENGINEER IS REQUIRED TO BE ONSITE THROUGHOUT CONSTRUCTION OF THESE FACILITIES.
3. EXCAVATE FOR MICRO-BIORETENTION FACILITIES AND ROTOTILL THE BOTTOM OF THE EXCAVATION AS CALLED FOR IN THE CONSTRUCTION SPECIFICATIONS FOR MICRO-BIORETENTION (THIS SHEET).
4. INSTALL GRAVEL AND UNDERDRAIN SYSTEM AND CONNECT TO OVERFLOW INLET.
5. COMPLETE INSTALLATION OF GRAVEL AND INSTALL PLANTING MEDIA.
6. INSTALL INFLOW PROTECTION AS APPLICABLE.
7. INSTALL PLANTINGS PER LANDSCAPE PLANS IN THIS SET. PLACE 3-INCH MULCH LAYER ALONG FACILITY BOTTOM.
8. AS-BUILT ENGINEER TO TURN AS-BUILT WITHIN 30 DAYS FOLLOWING CONSTRUCTION COMPLETION.

*NOTE: AT ALL TIMES, AVOID COMPACTION WITHIN THE FILTER AREA FOOTPRINT. THESE FACILITIES ARE INTENDED TO INFILTRATE WATER TO THE GRAVEL RESERVOIR. COMPACTION, ESPECIALLY OF THE PLANTING SOIL, LIMITS THE INFILTRATIVE EFFECTIVENESS OF MICRO-BIORETENTION FACILITIES AND MAY RESULT IN A FAILING SYSTEM THAT PERMANENTLY PONDS WATER AT THE SURFACE.

TABLE B.4.1 MATERIAL SPECIFICATIONS FOR MICRO-BIORETENTION, BIO-SWALE RAIN GARDENS & LANDSCAPE INFILTRATION

MATERIAL	SPECIFICATION	SIZE	NOTES
PLANTINGS	SEE PLANTING PLAN	N/A	PLANTINGS ARE SITE-SPECIFIC
PLANTING SOIL (2' TO 4' DEEP)	LOAMY SAND (60-65%) & COMPOST (35-40%) OR SANDY LOAM (30%), COARSE SAND (30%) & COMPOST (40%)	N/A	USDA SOIL TYPES LOAMY SAND OR SANDY LOAM; CLAY CONTENT < 5%
ORGANIC CONTENT	MIN. 10% BY DRY WEIGHT (ASTM D 2974)		
MULCH	SHREDDED HARDWOOD		AGED 6 MONTHS, MINIMUM; NO PINE OR WOOD CHIPS
PEA GRAVEL DIAPHRAGM	PEA GRAVEL: ASTM-D-448	NO. 8 OR NO. 9 (1/8" TO 3/8")	
CURTAIN DRAIN	ORNAMENTAL STONE: WASHED COBBLES	STONE: 2" TO 5"	
GEOTEXTILE		N/A	PE TYPE 1 NONWOVEN
GRAVEL (UNDERDRAINS AND INFILTRATION BERMS)	AASHTO M-43	NO. 57 OR NO. 6 AGGREGATE (⅜" TO ¾")	
UNDERDRAIN PIPING	F 758, TYPE PS 28 OR AASHTO M-278	4" TO 6" RIGID SCHEDULE 40 PVC OR SDR 35	SLOTTED OR PERFORATED PIPE: 3/8" PERF. @ 6" ON CENTER, 4 HOLES PER ROW. MINIMUM OF 3" OF GRAVEL OVER PIPES; NOT NECESSARY UNDERNEATH PIPES. PERFORATED PIPE SHALL BE WRAPPED WITH 1/4 INCH GALVANIZED HARDWARE CLOTH.
POURED IN PLACE CONCRETE (IF REQUIRED)	MSHA MIX NO. 3; F'c=3500 PSI @ 28 DAYS, NORMAL WEIGHT, AIR-ENTRAINED; REINFORCING TO MEET ASTM-615-60.	N/A	ON-SITE TESTING OF POURED-IN-PLACE CONCRETE REQUIRED: 28 DAY STRENGTH AND SLUMP TEST; ALL CONCRETE DESIGN (CAST-IN-PLACE OR PRE-CAST) *NOT USING PREVIOUSLY APPROVED STATE OR LOCAL STANDARDS* REQUIRES DESIGN DRAWINGS SEALED AND APPROVED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF MARYLAND - DESIGN TO INCLUDE MEETING ACI CODE 350.R/89: VERTICAL LOADING (H-10 OR H-20); ALLOWABLE HORIZONTAL LOADING (BASED ON SOIL PRESSURES); AND ANALYSIS OF POTENTIAL CRACKING.
SAND	AASHTO-M-6 OR ASTM-C-33	0.02" TO 0.04"	SAND SUBSTITUTIONS SUCH AS DIABASE AND GRAYSTONE (AASHTO) #10 ARE NOT ACCEPTABLE. NO CALCIUM CARBONATED OR DOLOMITIC SAND SUBSTITUTIONS ARE ACCEPTABLE. NO "ROCK DUST" CAN BE USED FOR SAND.

*SEE MATERIAL SPECIFICATIONS FOR SHA BIORETENTION SOIL MIX (BSM) THIS SHEET FOR SPECIFIC BIORETENTION SOIL MIX FOR THIS PROJECT.

BIORETENTION SOIL MIX

BIORETENTION SOIL MIX (BSM). A HOMOGENEOUS MIXTURE COMPOSED BY LOOSE VOLUME OF 5 PARTS COARSE SAND, 3 PARTS BASE SOIL, AND 2 PARTS FINE BARK. BSM SHALL CONFORM TO THE FOLLOWING:

a. COMPONENTS. COMPONENTS OF BSM SHALL BE SAMPLED, TESTED AND APPROVED BEFORE MIXING AS FOLLOWS:
   1. COARSE SAND. MSMT 356. COARSE SAND SHALL BE WASHED SILICA SAND OR CRUSHED GLASS THAT CONFORMS TO ASTM FINE AGGREGATE C-33. COARSE SAND SHALL INCLUDE LESS THAN 1% BY WEIGHT OF CLAY OR SILT SIZE PARTICLES, AND LESS THAN 5% BY WEIGHT OF ANY COMBINATION OF DIABASE, GREYSTONE, CALCAREOUS OR DOLOMITIC SAND.
   2. BASE SOIL. BASE SOIL SHALL BE TESTED AND CERTIFIED BY THE PRODUCER TO CONFORM TO THE FOLLOWING REQUIREMENTS:

COMPOSITION - BASE SOIL					
TEST PROPERTY	TEST METHOD	TEST VALUE AND AMENDMENT			
PROHIBITED WEEDS	-	FREE OF SEED AND VIABLE PLANT PARTS OF SPECIES IN 920.06.02(a)(b)(c)† WHEN INSPECTED.			
DEBRIS	-	NO OBSERVABLE CONTENT OF CEMENT, CONCRETE, ASPHALT, CRUSHED GRAVEL OR CONSTRUCTION DEBRIS WHEN INSPECTED.			
GRADING ANALYSIS	T 87	SIEVE SIZE		PASSING BY WEIGHT MINIMUM %	
		2 IN.		100	
		NO. 4		90	
		NO. 10		80	
TEXTURAL ANALYSIS	T 88	PARTICLE		% PASSING BY WEIGHT	
		SIZE	mm	MINIMUM	MAXIMUM
		SAND	2.0-0.050	50	85
		SILT	0.050-0.002	5	45
		CLAY	LESS THAN 0.002	5	10
SOIL pH	D 4972	pH OF 5.7 TO 6.9			
ORGANIC MATTER	T 194	1.0 TO 10.0% BY WEIGHT			
SOLUBLE SALTS	EC1:2 (V:V)	500 ppm (1.25 mmhos/cm) OR LESS			
HARMFUL MATERIALS	-	920.01.01(a)**			

   3. FINE BARK. FINE BARK SHALL BE THE BARK OF HARDWOOD TREES THAT IS MILLED AND SCREENED TO A UNIFORM PARTICLE SIZE OF 2 IN. OR LESS. FINE BARK SHALL BE COMPOSTED AND AGED FOR 6 MONTHS OR LONGER, AND BE FREE FROM SAWDUST AND FOREIGN MATERIALS. A 1 TO 2 LB SAMPLE OF FINE BARK SHALL BE SUBMITTED TO THE LANDSCAPE OPERATIONS DIVISION FOR EXAMINATION.

b. COMPOSITION. BSM SHALL BE SAMPLED AND TESTED ACCORDING TO THE REQUIREMENTS OF MSMT 356 AND CONFORM TO THE FOLLOWING:

COMPOSITION - BIORETENTION SOIL MIX (BSM)					
TEST PROPERTY	TEST METHOD	TEST VALUE AND AMENDMENT			
WEEDS	-	FREE OF SEED AND VIABLE PLANT PARTS OF SPECIES IN 920.06.02(a)(b)(c)† WHEN INSPECTED.			
DEBRIS	-	920.01.05(a)(2)**			
TEXTURAL ANALYSIS	T 88	PARTICLE		% PASSING BY WEIGHT	
		SIZE	mm	MINIMUM	MAXIMUM
		SAND	2.0-0.050	55	85
		SILT	0.050-0.002	-	20
		CLAY	LESS THAN 0.002	1	8
SOIL pH	D 4972	pH OF 5.7 TO 7.1			
ORGANIC MATTER	T 194	MINIMUM 1.5% BY WEIGHT			
NUTRIENT ANALYSIS AND SOLUBLE SALTS	MEHLICH-3	CONCENTRATION			
		ELEMENT	MINIMUM ppm	MINIMUM FIV	MAXIMUM ppm	MAXIMUM FIV
		CALCIUM (Ca)	32	25	NO LIMIT	NO LIMIT
		MAGNESIUM (Mg)	15	25	NO LIMIT	NO LIMIT
		PHOSPHORUS (P)	18	25	92	100
		POTASSIUM (K)	22	25	NO LIMIT	NO LIMIT
		SULFUR (SO_4)	25	N/A	NO LIMIT	NO LIMIT
	EC1:2 (V:V)	SOLUBLE SALTS	40	N/A	500	N/A
HARMFUL MATERIALS	-	920.01.01(a)**				

c. AMENDMENT OR FAILURE. BSM THAT DOES NOT CONFORM TO COMPOSITION REQUIREMENTS FOR PH OR NUTRIENT ANALYSIS SHALL BE AMENDED AS SPECIFIED BY THE NMP. BSM THAT EXCEEDS MAXIMUM PHOSPHORUS CONCENTRATION OR FAILS OTHER COMPOSITION REQUIREMENTS WILL NOT BE ACCEPTED, AND SHALL NOT BE DELIVERED OR USED AS BSM.

d. STORAGE. 920.01.02(B)** BSM SHALL BE STORED IN A STOCKPILE THAT IS PROTECTED FROM WEATHER UNDER TARP OR SHED. BSM STORED FOR 6 MONTHS OR LONGER SHALL BE RESAMPLED, RETESTED, AND REAPPROVED BEFORE USE.

e. APPROVAL. 920.01.02(C).**

f. CERTIFICATION AND DELIVERY. 920.01.02(D).**

**SEE CURRENT SHA SPECIFICATIONS FOR DETAILS

APPROVED: Charu Malhotra Chief
STORMWATER ENGINEERING
BALTO. CO. DEPT. OF
ENVIRONMENTAL PROTECTION
AND SUSTAINABILITY

OWNER/DEVELOPER:	DESIGN PROFESSIONAL:	PROJECT INFORMATION:
BALTIMORE COUNTY PROPERTY MANAGEMENT 12200 LONG GREEN PIKE GLEN ARM, MARYLAND 21057 CONTACT: MATTHEW LEEBEL EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV PHONE: 410-887-3834	SITE RESOURCES, INC. 4 NORTH PARK DRIVE, SUITE 100 COCKEYSVILLE, MD 21030 CONTACT: PETER SOPRANO EMAIL: PSOPRANO@SITERESOURCESINC.COM PHONE: 410-689-0438	CLOVERLAND PARK CRICKET FIELD 12340 DULANEY VALLEY ROAD PHOENIX, MD 21131 ELECTION DISTRICT: 10C3 COUNCILMANIC DISTRICT:3

SEAL

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 42977, EXPIRATION DATE 06/07/2025
ENGINEER: PETER C. SOPRANO
SITE RESOURCES, INC.
AS-BUILT PER RECORD PRINT
DATE: 01/15/2025
BY:
DATE:

AS-BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT
			R.O.W NO.	USE 112 113	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14
CONTRACT COMPLETION BOX					

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

DRAWING SCALE
PLAN SCALE: AS SHOWN
PROFILE SCALE:

PROPERTY MANAGEMENT
APPROVED BY: PROPERTY MANAGER
DATE:

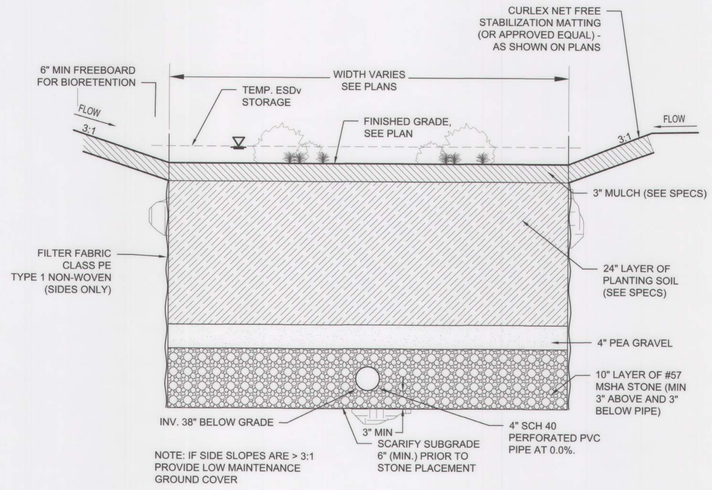
DGN BY: SPM/KRH
DWN BY: SPM/KRH
CHKD BY: KPR/PCS

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT
CLOVERLAND PARK CRICKET FIELD
STORMWATER MANAGEMENT NOTES & DETAILS I
CONSTRUCTION DOCUMENTS
SUBDIVISION: PHOENIX 12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131 ELECTION DIST. NO.: 10C3
SWM SHEET 3 OF 12

BALTIMORE COUNTY MARYLAND

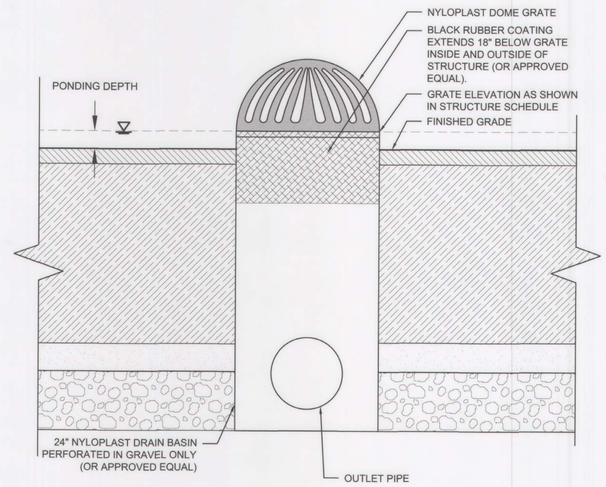
SHEET DESIGNATION	CONTRACT NUMBER
C511	25067 GXO
	JOB ORDER NUMBER
	PROJ-10000752
SHEET 27 OF 40	DRAWING NUMBER
	2025-1658
FILE NO.: 9	REV. NO.

DWG. FILENAME: 2_\23\23053-BACO CLOVERLAND PARK CRICKET FIELD\04-DWG\C521_SWM NOTES AND DETAILS I.DWG 9/20/2024 12:55 PM KRH



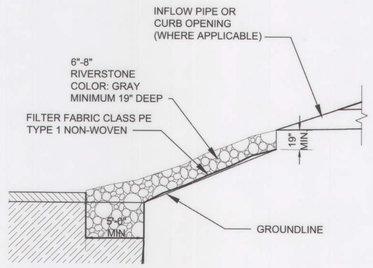
1 MICRO BIORETENTION SECTION

NOT TO SCALE



2 OUTLET STRUCTURE

NOT TO SCALE



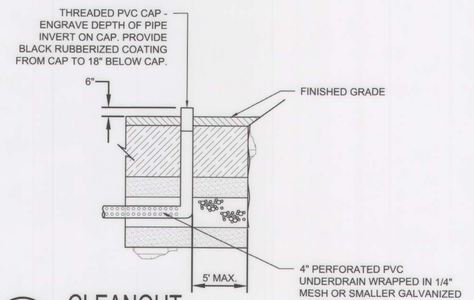
NOTES

1. FILTER FABRIC FROM SIDES OF MICRO-BIORETENTION THROUGH STONE SHALL BE CONTIGUOUS. WHERE ENDS OF THE FABRIC COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED AND STAPLED.
2. CONTRACTOR SHALL EVENLY WET DOWN FACILITY TO SETTLE PLANTING MEDIA AND REDRESS TOP SURFACE WITH ADDITIONAL PLANTING MEDIA TO SPECIFIED SURFACE ELEVATION PRIOR TO INSTALLING MULCH AND PLANT MATERIAL.
3. SEE SWM3.01 FOR RIPRAP PLAN DIMENSIONS.

SLOPED EDGE OF FACILITY

3 INFLOW RIP RAP DETAIL

NOT TO SCALE

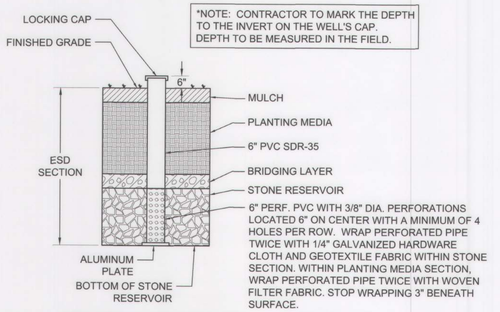


4 CLEANOUT

SEE PLAN VIEW FOR LOCATIONS

NOT TO SCALE

*NOTE: CONTRACTOR TO MARK THE DEPTH TO THE INVERT ON THE WELL'S CAP. DEPTH TO BE MEASURED IN THE FIELD.



5 OBSERVATION WELL DETAIL

NOT TO SCALE

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
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DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

SEAL

DATE : 01/15/2025

PROFESSIONAL CERTIFICATION

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AS-BUILT PER RECORD PRINT
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AS-BUILT / REVISION | BY | DATE | P.W.A. NO. | KEY SHEET | POSITION SHT

R.O.W NO. | USE 112 113 | 65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14

CONTRACT COMPLETION BOX

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

DRAWING SCALE
PLAN SCALE: AS SHOWN
PROFILE SCALE:

PROPERTY MANAGEMENT
APPROVED BY: PROPERTY MANAGER
DATE:

APPROVED: Charu Malhotra Chief
STORMWATER ENGINEERING
BALTO. CO. DEPT. OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT
CLOVERLAND PARK CRICKET FIELD
STORMWATER MANAGEMENT NOTES & DETAILS II
CONSTRUCTION DOCUMENTS
SUBDIVISION: PHOENIX
12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131
ELECTION DIST. NO.: 10C3
SWM SHEET 4 OF 12

SHEET DESIGNATION	CONTRACT NUMBER
C512	25067 GXO
JOB ORDER NUMBER	PROJ-10000752
SHEET 28 OF 40	DRAWING NUMBER 2025-1659
FILE NO.: 9	

DWG. FILENAME: Z:\25\25053-BACO CLOVERLAND PARK CRICKET FIELD\04-DWG\C501.DWG 9/23/2024 12:55 PM KRH
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RECORD OF SOIL / ROCK EXPLORATION

Page 1 of 1

Contracted With: Site Resources, Inc
Project Name: Cloverland Park Cricket Field
Location: Phoenix, Maryland
Boring #: B-3
Job #: 22-0007.01

SAMPLER

Datum: —
Surf. Elev.: 298.0 ft
Date Started: 3/27/24
Hammer Wt.: 140 lb
Hammer Drop: 30 in
Spoon Size: 2 in
Hole Diameter: 8 in
Rock Core Dia.: N/A
Boring Method: HSA
Foreman: B.S.
Inspector: —
Date Completed: 3/27/24

ELEV. (ft)	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH (ft)	SOIL SYMBOL	DEPTH SCALE	SAMPLE Cond	Blows/6"	No.	Type	Rec (in)	BORING & SAMPLE NOTES
297.7	3" of **TOPSOIL**	0.3								1. No groundwater encountered.
	Brown to red-brown, moist, medium stiff to stiff, lean **CLAY**, trace rock fragments				I/D	2-2-3-4	1	DS	10	2. Drill Rig: CME 55
					I/D	4-5-6-6	2	DS	18	3. Borehole offset 5 ft and infiltration casing set at 8 feet.
292.0	Brown and light brown, moist, medium stiff to stiff, sandy **SILT**, some mica, little rock fragments	6.0		5	I/D	3-4-4-3	3	DS	24	
	[USDA: SANDY LOAM]				I/D	3-3-4-6	4	DS	22	
				10	I/D	4-3-4-4	5	DS	24	
286.0	Bottom of Boring at 12.0 ft	12.0			I/D	5-5-5-6	6	DS	24	
				15						
				20						
				25						

SAMPLER TYPE
DS - DRIVEN SPLIT SPOON
PT - PRESSED SHELBY TUBE
CA - CONTINUOUS FLIGHT AUGER
RC - ROCK CORE

SAMPLE CONDITIONS
D - DISINTEGRATED
I - INTACT
U - UNDISTURBED
L - LOST

GROUNDWATER DEPTH
AT COMPLETION Dry ft
AFTER ____ HRS ____ ft
AFTER 24 HRS. Dry ft
CAVED AT 4.0 ft

BORING METHOD
HSA - HOLLOW STEM AUGERS
CFA - CONTINUOUS FLIGHT AUGERS
DC - DRIVING CASING
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30". COUNT MADE AT 6" INTERVALS

RECORD OF SOIL / ROCK EXPLORATION

Page 1 of 1

Contracted With: Site Resources, Inc
Project Name: Cloverland Park Cricket Field
Location: Phoenix, Maryland
Boring #: B-4
Job #: 22-0007.01

SAMPLER

Datum: —
Surf. Elev.: 297.0 ft
Date Started: 3/27/24
Hammer Wt.: 140 lb
Hammer Drop: 30 in
Spoon Size: 2 in
Hole Diameter: 8 in
Rock Core Dia.: N/A
Boring Method: HSA
Foreman: B.S.
Inspector: —
Date Completed: 3/27/24

ELEV. (ft)	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH (ft)	SOIL SYMBOL	DEPTH SCALE	SAMPLE Cond	Blows/6"	No.	Type	Rec (in)	BORING & SAMPLE NOTES
296.7	3" of **TOPSOIL**	0.3								1. No groundwater encountered.
	Brown to orange-brown, moist, medium stiff to stiff, lean **CLAY**, WITH fine SAND				I/D	2-2-3-2	1	DS	15	2. Drill Rig: CME 55
	[USDA: CLAY LOAM]				I/D	1-3-6-3	2	DS	18	3. Borehole offset 5 ft and infiltration casing set at 6 feet.
291.0	Brown and light brown, moist, loose to medium dense, silty **SAND**, some mica, little rock fragments	6.0		5	I/D	2-3-3-5	3	DS	24	
	[USDA: SANDY LOAM]				I/D	4-3-6-7	4	DS	24	
287.0	Bottom of Boring at 10.0 ft	10.0		10	I/D	3-4-7-9	5	DS	24	
				15						
				20						
				25						

SAMPLER TYPE
DS - DRIVEN SPLIT SPOON
PT - PRESSED SHELBY TUBE
CA - CONTINUOUS FLIGHT AUGER
RC - ROCK CORE

SAMPLE CONDITIONS
D - DISINTEGRATED
I - INTACT
U - UNDISTURBED
L - LOST

GROUNDWATER DEPTH
AT COMPLETION Dry ft
AFTER ____ HRS ____ ft
AFTER 24 HRS. Dry ft
CAVED AT 4.5 ft

BORING METHOD
HSA - HOLLOW STEM AUGERS
CFA - CONTINUOUS FLIGHT AUGERS
DC - DRIVING CASING
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30". COUNT MADE AT 6" INTERVALS

RECORD OF SOIL / ROCK EXPLORATION

Page 1 of 1

Contracted With: Site Resources, Inc
Project Name: Cloverland Park Cricket Field
Location: Phoenix, Maryland
Boring #: B-5
Job #: 22-0007.01

SAMPLER

Datum: —
Surf. Elev.: 286.0 ft
Date Started: 3/27/24
Hammer Wt.: 140 lb
Hammer Drop: 30 in
Spoon Size: 2 in
Hole Diameter: 8 in
Rock Core Dia.: N/A
Boring Method: HSA
Foreman: B.S.
Inspector: —
Date Completed: 3/27/24

ELEV. (ft)	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRA DEPTH (ft)	SOIL SYMBOL	DEPTH SCALE	SAMPLE Cond	Blows/6"	No.	Type	Rec (in)	BORING & SAMPLE NOTES
285.7	3" of **TOPSOIL**	0.3								1. No groundwater encountered.
	Brown to red-brown, moist, medium stiff, lean **CLAY**, trace fine sand				I/D	3-3-4-6	1	DS	18	2. Drill Rig: CME 55
					I/D	2-2-3-4	2	DS	24	3. Bulk sample obtained 1 ft to 5 ft.
280.0	Brown, moist, medium stiff, **SILT**, WITH SAND, some mica, little rock fragments [USDA: SILT LOAM]	6.0		5	I/D	2-2-2-3	3	DS	24	4. Borehole offset 5 ft and infiltration casing set at 6 feet.
278.0	Brown, moist, loose, clayey **SAND**, little rock fragments	8.0			I/D	2-2-3-3	4	DS	24	
276.0	Bottom of Boring at 10.0 ft	10.0		10	I/D	2-2-3-5	5	DS	22	
				15						
				20						
				25						

SAMPLER TYPE
DS - DRIVEN SPLIT SPOON
PT - PRESSED SHELBY TUBE
CA - CONTINUOUS FLIGHT AUGER
RC - ROCK CORE

SAMPLE CONDITIONS
D - DISINTEGRATED
I - INTACT
U - UNDISTURBED
L - LOST

GROUNDWATER DEPTH
AT COMPLETION Dry ft
AFTER ____ HRS ____ ft
AFTER 24 HRS. Dry ft
CAVED AT ____ ft

BORING METHOD
HSA - HOLLOW STEM AUGERS
CFA - CONTINUOUS FLIGHT AUGERS
DC - DRIVING CASING
MD - MUD DRILLING

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1' WITH 140# HAMMER FALLING 30". COUNT MADE AT 6" INTERVALS

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

SEAL

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SITE RESOURCES, INC.
DATE : 01/15/2025

AS-BUILT PER RECORD PRINT
BY:
DATE:

DGN BY: SPM/KRH
DWN BY: SPM/KRH
CHKD BY: KPR/PCS

AS-BUILT / REVISION | BY | DATE | P.W.A. NO. | KEY SHEET | POSITION SHT | DRAWING SCALE | PROPERTY MANAGEMENT
R.O.W NO. | USE 112 113 | 65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14 | PLAN SCALE: AS SHOWN | APPROVED BY: PROPERTY MANAGER
PROFILE SCALE: | DATE:

CONTRACT COMPLETION BOX

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT
CLOVERLAND PARK CRICKET FIELD
SWM SOIL BORING LOGS
CONSTRUCTION DOCUMENTS
SUBDIVISION: PHOENIX
12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131
ELECTION DIST. NO.: 10C3
SWM SHEET 5 OF 12

APPROVED: Charu Malhotra Chief
STORMWATER ENGINEERING
BALTO. CO. DEPT. OF
ENVIRONMENTAL PROTECTION
AND SUSTAINABILITY

SHEET DESIGNATION	CONTRACT NUMBER
C513	25067 GXO
	JOB ORDER NUMBER
	PROJ-10000752
	SHEET 29 OF 40
	DRAWING NUMBER
	2025-1660
	FILE NO.: 9

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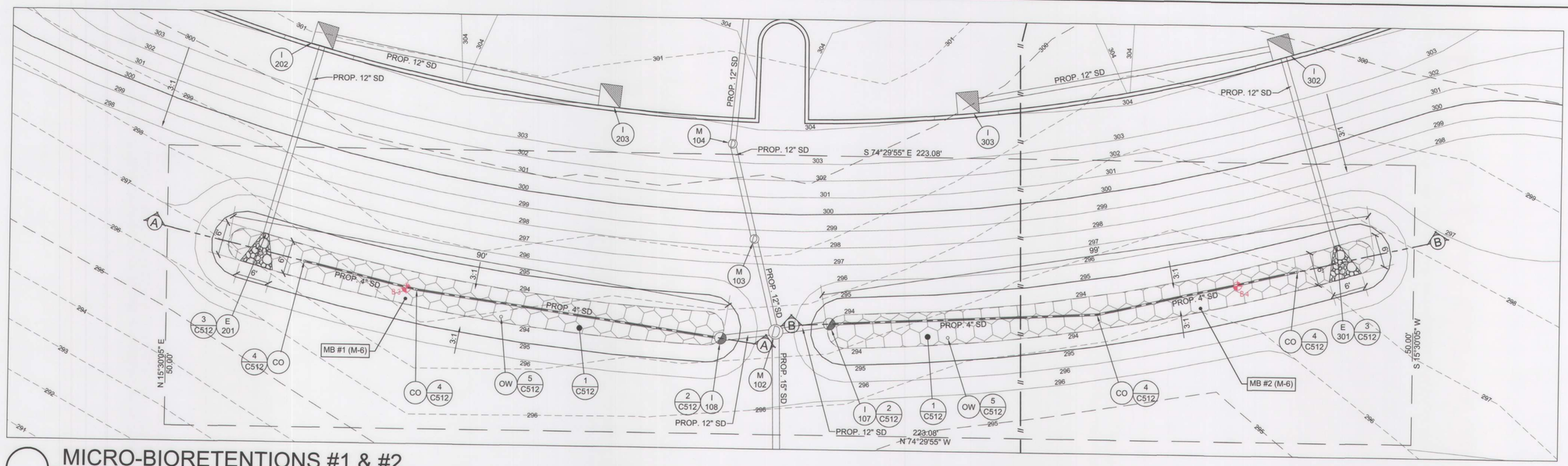
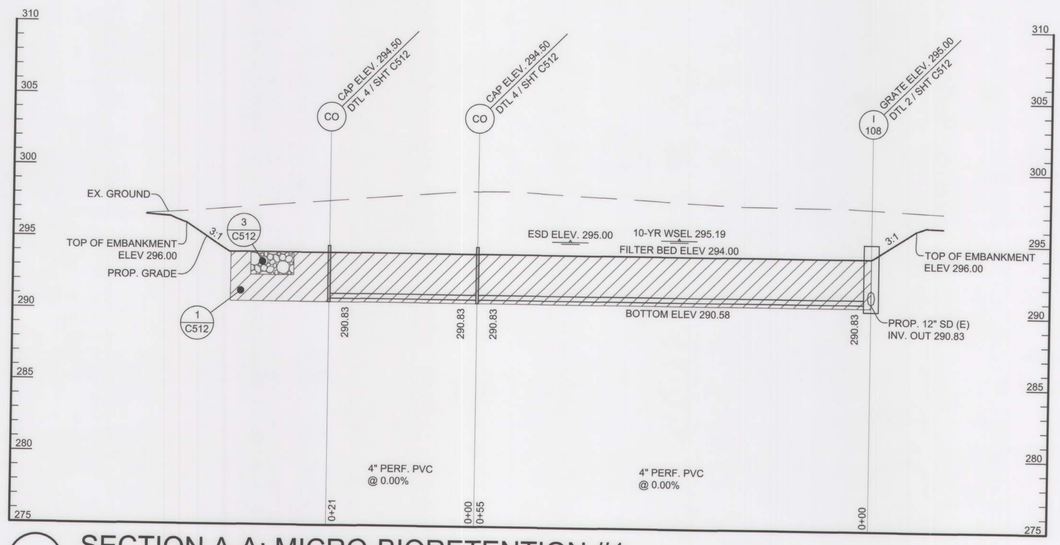


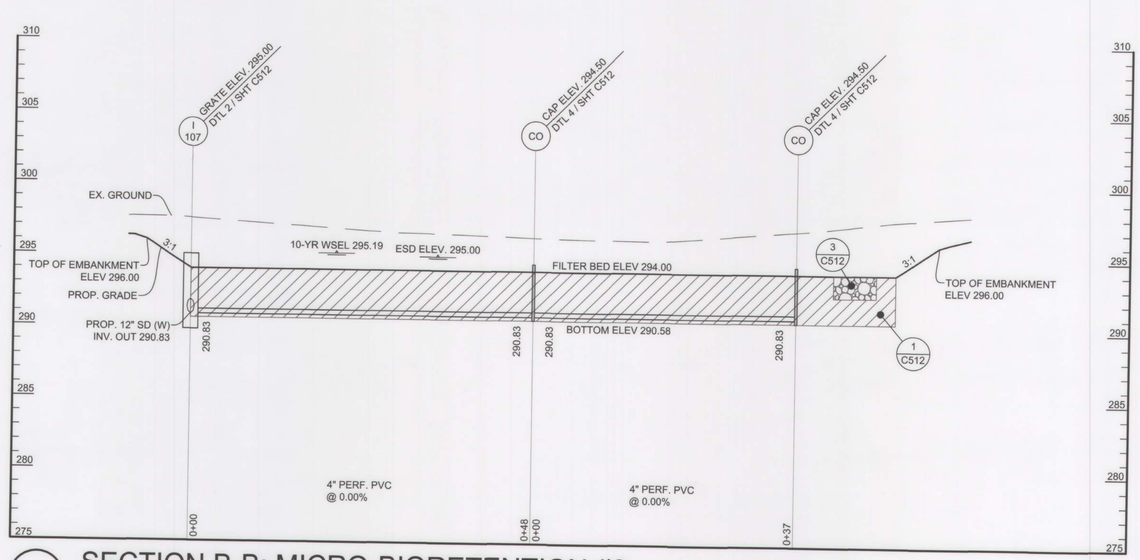
MICRO-BIORETENTIONS #1 & #2

SCALE: 1" = 10'



SECTION A-A: MICRO-BIORETENTION #1

SCALES: HORIZ. 1" = 10'
VERT. 1" = 5'

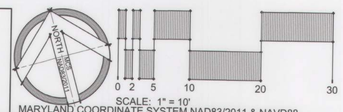


SECTION B-B: MICRO-BIORETENTION #2

SCALES: HORIZ. 1" = 10'
VERT. 1" = 5'

GENERAL NOTE

FOR PROFILES OF OUTFALL PIPES, SEE STORM DRAIN PROFILES C301 & C302.



SCALE: 1" = 10'
MARYLAND COORDINATE SYSTEM NAD83/2011 & NAVD88

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
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EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

APPROVED: Charu Malhotra Chief
STORMWATER ENGINEERING
BALTO. CO. DEPT. OF
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ENGINEER: PETER C. SOPRANO
SITE RESOURCES, INC.
AS-BUILT PER RECORD PRINT
BY:
DATE:

DATE : 01/15/2025

AS-BUILT / REVISION	BY	DATE
CONTRACT COMPLETION BOX		

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

DGN BY: SPM/KRH
DWN BY: SPM/KRH
CHKD BY: KPR/PCS

P.W.A. NO.	KEY SHEET	POSITION SHT
R.O.W NO.	USE 112 113	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14

DRAWING SCALE	
PLAN SCALE:	AS SHOWN
PROFILE SCALE:	

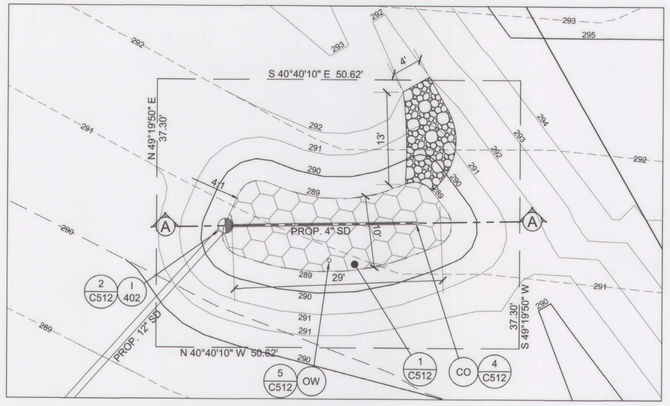
PROPERTY MANAGEMENT
APPROVED BY: PROPERTY MANAGER
DATE:

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT
CLOVERLAND PARK CRICKET FIELD
SWM SECTIONS I
CONSTRUCTION DOCUMENTS
SUBDIVISION: PHOENIX
12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131
ELECTION DIST. NO.: 10C3
SWM SHEET 6 OF 12

SHEET DESIGNATION	CONTRACT NUMBER
C521	25067 GXO
	JOB ORDER NUMBER
	PROJ-10000752
	SHEET 30 OF 40
	DRAWING NUMBER
	2025-1661
	FILE NO.: 9

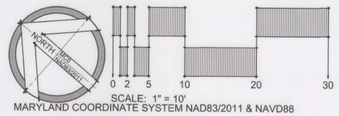
BALTIMORE COUNTY MARYLAND

DWG. FILENAME: Z:\23\23053-BACO CLOVERLAND PARK CRICKET FIELD\04-DWG\C521_SWM NOTES AND DETAILS.DWG 9/23/2024 12:55 PM KRH

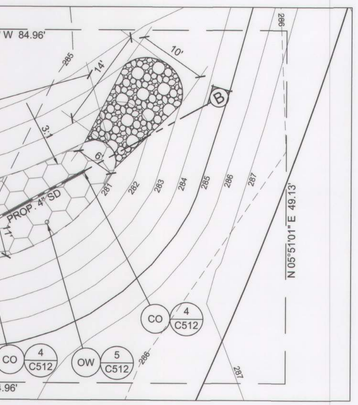


MICRO-BIORETENTION #3 ENLARGEMENT

SCALE: 1" = 10'

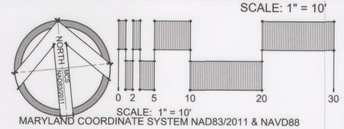


MARYLAND COORDINATE SYSTEM NAD83/2011 & NAVD88

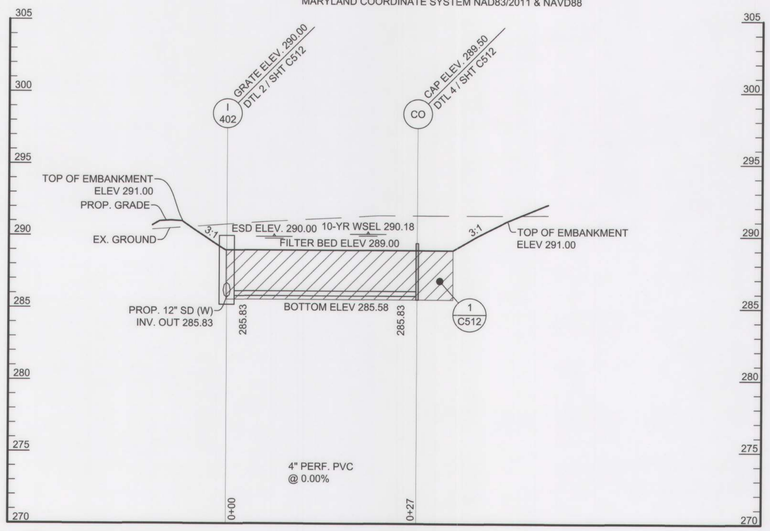


MICRO-BIORETENTION #4 ENLARGEMENT

SCALE: 1" = 10'

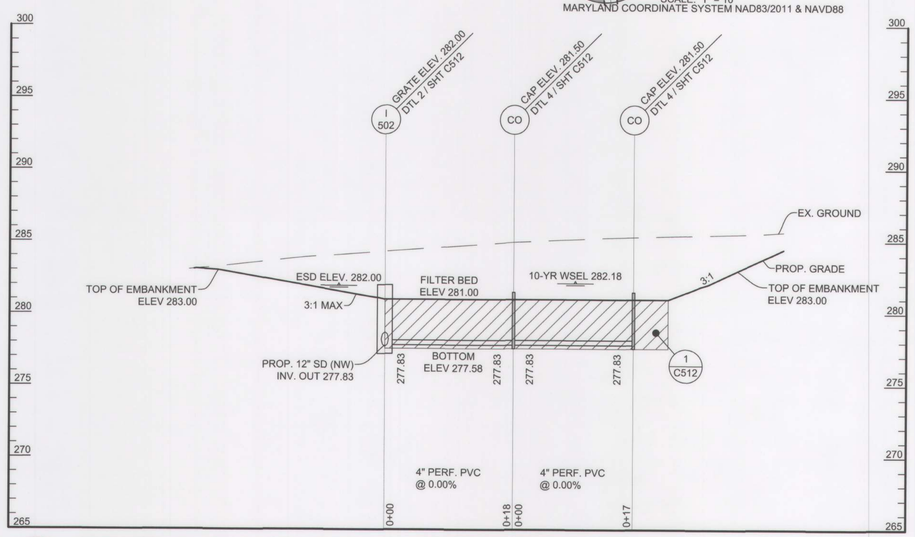


MARYLAND COORDINATE SYSTEM NAD83/2011 & NAVD88



SECTION A-A: MICRO-BIORETENTION #3

SCALES: HORIZ. 1" = 10'
VERT. 1" = 5'



SECTION B-B: MICRO-BIORETENTION #4

SCALES: HORIZ. 1" = 10'
VERT. 1" = 5'

GENERAL NOTE

FOR PROFILES OF OUTFALL PIPES, SEE STORM DRAIN PROFILES C301 & C302.

APPROVED: Chara Galbreth Chief.
STORMWATER ENGINEERING
BALTO. CO. DEPT. OF
ENVIRONMENTAL PROTECTION
AND SUSTAINABILITY

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

SEAL

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO. 42977, EXPIRATION DATE 06/07/2025

ENGINEER: PETER C. SOPRANO
SITE RESOURCES, INC.

AS-BUILT PER RECORD PRINT
BY:
DATE:

DATE : 01/15/2025

DGN BY: SPM/KRH
DWN BY: SPM/KRH
CHKD BY: KPR/PCS

AS-BUILT / REVISION	BY	DATE
CONTRACT COMPLETION BOX		

P.W.A. NO.	KEY SHEET	POSITION SHT
R.O.W NO.	USE 112 113	65N12 65N13 64N12 64N13 63N12 63N13 64N14

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

DRAWING SCALE
PLAN SCALE: AS SHOWN
PROFILE SCALE:

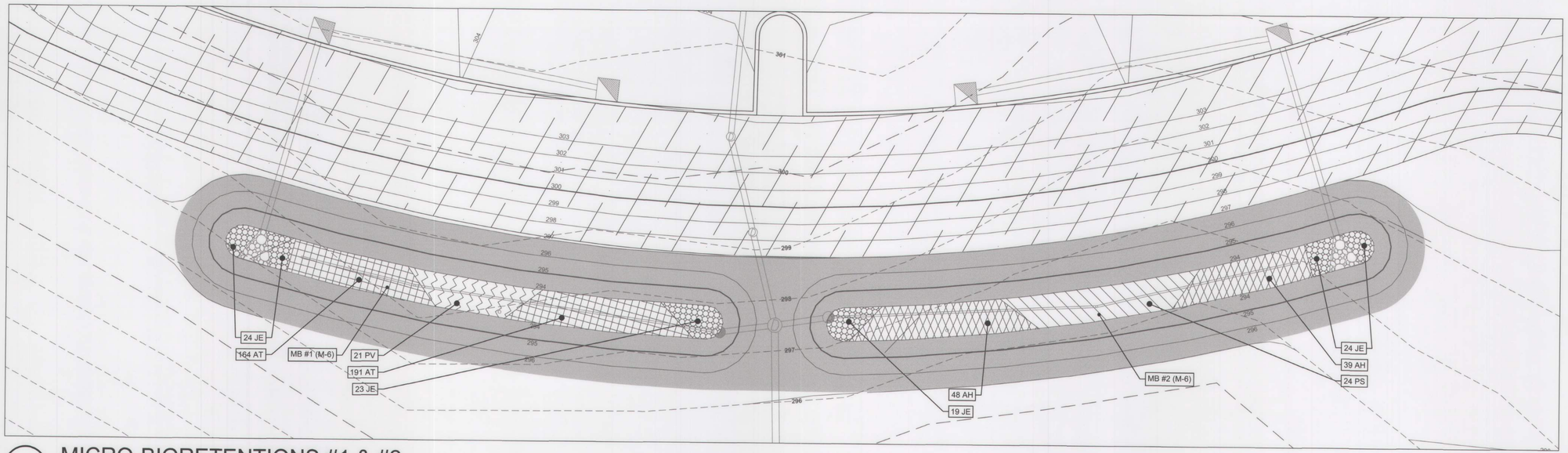
PROPERTY MANAGEMENT
APPROVED BY: PROPERTY MANAGER
DATE:

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT

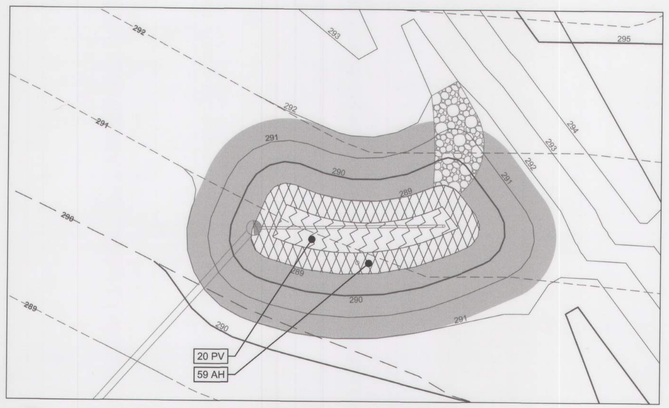
CLOVERLAND PARK CRICKET FIELD
SWM SHEET 7 OF 12
SWM SECTIONS II
CONSTRUCTION DOCUMENTS
SUBDIVISION: PHOENIX
12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131
ELECTION DIST. NO.: 10C3

SHEET DESIGNATION	CONTRACT NUMBER
C522	25067 GXO
	JOB ORDER NUMBER
	PROJ-10000752
	SHEET 31 OF 40
	DRAWING NUMBER
	2025-1662
	FILE NO.: 9

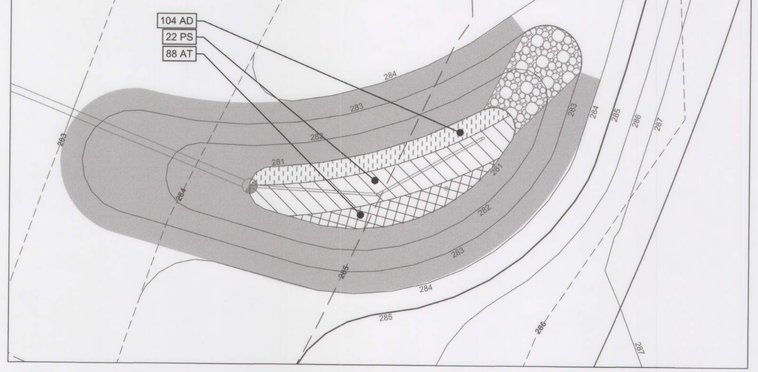
DWG. FILENAME: © SITE RESOURCES, INC. Z:\GIS\25053_BACO_CLOVERLAND PARK CRICKET FIELD\04-DWG\C522_SWM NOTES AND DETAILS.DWG 9/23/2024 12:56 PM KRH



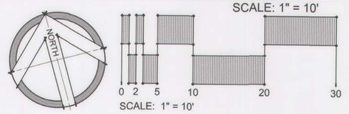
MICRO-BIORETENTIONS #1 & #2



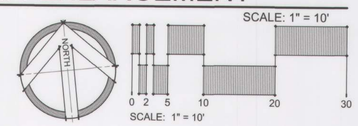
MICRO-BIORETENTION #3 ENLARGEMENT



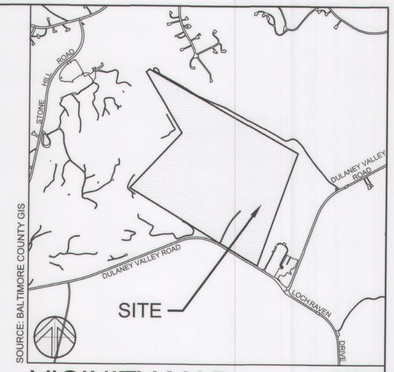
MICRO-BIORETENTION #4 ENLARGEMENT



SCALE: 1" = 10'



SCALE: 1" = 10'



VICINITY MAP

1"=1000'

LEGEND

- EXISTING CONTOURS (350 / 348)
- PROPOSED CURB
- PROPOSED STORM DRAIN (D)
- PROPOSED CONTOURS (350 / 348)
- PROPOSED SWM PLANTINGS
- PROPOSED SOD

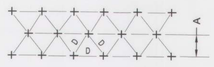
LANDSCAPE NOTES

(THESE NOTES APPLY TO ALL PLANTING IN THIS CONTRACT)

1. QUANTITIES SHOWN ON THE PLANT LIST ARE FOR THE CONTRACTOR'S CONVENIENCE ONLY. SYMBOLS ON THE PLAN SHALL TAKE PRECEDENCE. CONTRACTOR SHALL VERIFY ALL PLANT QUANTITIES TO HIS OWN SATISFACTION.
2. PLANT MATERIAL SUBSTITUTIONS ARE SUBJECT TO APPROVAL BY THE PROJECT LANDSCAPE ARCHITECT.
3. PLANT MATERIAL SHALL BE TAGGED AT THE SOURCE BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE UNLESS THE REQUIREMENT IS SPECIFICALLY WAIVED.
4. LOCATIONS OF ALL PLANT MATERIAL SHALL BE STAKED FOR APPROVAL BY THE PROJECT LANDSCAPE ARCHITECT.
5. ALL SHRUB AND GROUND COVER AREAS SHALL BE PLANTED IN CONTINUOUS PREPARED BEDS MULCHED WITH COMPOSTED HARDWOOD MULCH AS DETAILED AND SPECIFIED.
6. PLANTING BEDS SHALL HAVE POSITIVE DRAINAGE WITH A MINIMUM 2% SLOPE.
7. CONTRACTOR SHALL VERIFY ACCURACY OF BASE INFORMATION AND EXISTING CONDITIONS AND UTILITIES IN THE FIELD TO HIS OWN SATISFACTION. UTILITIES BID SHALL BE BASED ON ACTUAL SITE CONDITIONS. NO EXTRA PAYMENT SHALL BE MADE FOR WORK ARISING FROM SITE CONDITIONS DIFFERING FROM THOSE INDICATED ON DRAWINGS AND SPECIFICATIONS.
8. THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 A MINIMUM OF TWO WORKING DAYS PRIOR TO BEGINNING PLANTING AND CONSTRUCTION.
9. DAMAGE TO EXISTING CONDITIONS AND UTILITIES SHALL BE REPAIRED AND RESTORED AT THE EXPENSE OF THE CONTRACTOR.
10. ALL PLANT MATERIAL SHALL BE NURSERY GROWN AND SHALL CONFORM TO AMERICAN NURSERY & LANDSCAPE ASSOCIATION'S AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60.1.

STORMWATER MANAGEMENT PLANT SCHEDULE

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	REMARKS
PERENNIALS, GRASSES & GROUNDCOVERS						
AD	104	ASTER DIVARICATUS	WHITE WOOD ASTER	1 GAL	12" O.C.	FULLY ROOTED CONTAINER
AH	144	AMSONIA HUBRICHTII	THEADED LEAF BLUESTAR	3 GAL.	24" O.C.	FULLY ROOTED CONTAINER
AT	421	ASCLEPIAS TUBEROSA	BUTTERFLY WEED	1 GAL.	12" O.C.	FULLY ROOTED CONTAINER
JE	90	JUNCUS EFFUSUS	SOFT RUSH	1 GAL	18" O.C.	FULLY ROOTED CONTAINER
PV	41	PANICUM VIRGATUM 'HEAVY METAL'	SWITCHGRASS	1 GAL.	30" O.C.	FULLY ROOTED CONTAINER
PS	46	PANICUM VIRGATUM 'SHENANDOAH'	RED SWITCHGRASS	1 GAL.	36" O.C.	FULLY ROOTED CONTAINER

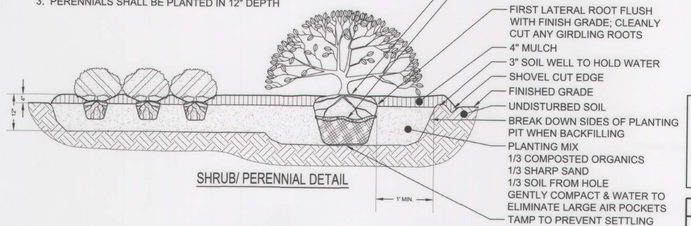


SPACING "D"	ROW "A"	PLANTS / S.F.
6" O.C.	5.20"	4.81
8" O.C.	6.93"	2.60
10" O.C.	8.66"	1.66
12" O.C.	10.40"	1.15
15" O.C.	13.00"	.738
18" O.C.	15.60"	.512
24" O.C.	20.80"	.290
30" O.C.	26.00"	.185
36" O.C.	30.00"	.128

PLANT SPACING CHART

NOTE:
FOR USE ONLY WHEN PLANTS ARE SPACED EQUIDISTANT FROM EACH OTHER AS SHOWN, AND SPECIFIED IN THE PLANT LIST.

NOTES:
1. CONTRACTOR SHALL LOOSEN ROOTS OF ALL CONTAINER GROWN MATERIAL TO ENCOURAGE LATERAL GROWTH OF ROOTS.
2. CONTRACTOR SHALL SCARIFY SIDES OF SHRUB PIT TO ELIMINATE SPADE GLAZING.
3. PERENNIALS SHALL BE PLANTED IN 12" DEPTH



SHRUB/ PERENNIAL DETAIL

APPROVED: Charu Malhotra, Chief
STORMWATER ENGINEERING
BALTO. CO. DEPT. OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY

DWG. FILENAME: © SITE RESOURCES, INC. Z:\25\25063-RACO CLOVERLAND PARK CRICKET FIELD\L04-DWG\C531_SWM PLANTING PLAN.DWG 9/23/2024 12:57 PM KRK

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

STATE OF MARYLAND — KEVIN PAT RICK RILEY — No. 3231 — LANDSCAPE ARCHITECT

DATE : 01/15/2025

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 3231, EXPIRATION DATE 02/11/2026
LANDSCAPE ARCHITECT: KEVIN RILEY
SITE RESOURCES, INC.

AS-BUILT PER RECORD PRINT
BY:
DATE:

AS-BUILT / REVISION

BY	DATE	P.W.A. NO.
		R.O.W NO.

CONTRACT COMPLETION BOX

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

DGN BY: SPM/KRH
DWN BY: SPM/KRH
CHKD BY: KPR/PCS

KEY SHEET	POSITION SHT
USE 112 113	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE24

DRAWING SCALE
PLAN SCALE: AS SHOWN
PROFILE SCALE:

PROPERTY MANAGEMENT
APPROVED BY: PROPERTY MANAGER
DATE:

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT
CLOVERLAND PARK CRICKET FIELD
SWM PLANTING PLAN, SCHEDULE & DETAILS
CONSTRUCTION DOCUMENTS
SUBDIVISION: PHOENIX — 12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131 — ELECTION DIST. NO.: 10C3
SWM SHEET 10 OF 12

SHEET DESIGNATION	CONTRACT NUMBER
C531	25067 GXO
JOB ORDER NUMBER	PROJ-10000752
SHEET 32 OF 40	
DRAWING NUMBER	2025-1663
FILE NO.: 9	

BALTIMORE COUNTY MARYLAND

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BUILDING
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING GUARDRAIL
- EXISTING TREES
- EX. 15" SD — EXISTING STORM DRAIN
- EX. 2" GAS — EXISTING GAS
- EXISTING OVERHEAD ELECTRIC
- EXISTING CONTOURS
- EXISTING SOIL GROUP DELINEATION
- LOD — LIMIT OF DISTURBANCE
- DRAINAGE AREA
- IMPERVIOUS AREA

EXISTING SWM QUANTITY MANAGEMENT SUMMARY TABLE

POI	AREA	IMPERVIOUS AREA	TC	RCN	Q10
A	16.57 AC	0.51 AC	0.32 hr	61	26.09 CFS
B	4.18 AC	0.00 AC	0.18 hr	58	6.98 CFS

SOILS INFORMATION

MAP UNIT SYMBOL	MAP UNIT NAME	HSG	K_f
BcA	BALTIMORE GRAVELLY LOAM, 0-3% SLOPES	B	0.20
BcB	BALTIMORE GRAVELLY LOAM, 3-8% SLOPES	B	0.20
BcC	BALTIMORE GRAVELLY LOAM, 8-15 SLOPES	B	0.20
WhB	WILTSHIRE SILT LOAM, 3-8% SLOPES	C	0.37

SCALE: 1" = 80'

MARYLAND COORDINATE SYSTEM NAD83/2011 & NAVD88

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

SEAL — STATE OF MARYLAND — PETER C. SOPRANO — No. 42977 — PROFESSIONAL ENGINEER

DATE : 01/15/2025

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO. 42977, EXPIRATION DATE 06/07/2025

ENGINEER: PETER C. SOPRANO
SITE RESOURCES, INC.

AS-BUILT PER RECORD PRINT
BY:
DATE:

DGN BY: SPM/KRH
DWN BY: SPM/KRH
CHKD BY: KPR/PCS

AS-BUILT / REVISION	BY	DATE	P.W.A. NO.
			R.O.W NO.
CONTRACT COMPLETION BOX			

KEY SHEET: USE 112 113

POSITION SHT: 65NE12 65NE13, 64NE12 64NE13, 63NE12 63NE13, 64NE14

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

DRAWING SCALE — PLAN SCALE: AS SHOWN; PROFILE SCALE:

PROPERTY MANAGEMENT
APPROVED BY: PROPERTY MANAGER
DATE:

FIELD VERIFICATION CERTIFICATION

I HEREBY CONFIRM THAT I COMPLETED A FIELD VERIFICATION TO THE INFORMATION SHOWN ON THE PLANS ON FEBRUARY 29, 2024 AND THAT THE INFORMATION SHOWN ON THE PLANS IS IN AGREEMENT WITH THE ACTUAL FIELD CONDITIONS.

SIGNATURE
KEVIN RILEY
PRINT NAME
2/29/2024
DATE

APPROVED: Charu Mathatra Chief
STORMWATER ENGINEERING
BALTO. CO. DEPT. OF
ENVIRONMENTAL PROTECTION
AND SUSTAINABILITY

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT

CLOVERLAND PARK CRICKET FIELD

SWM SHEET 11 OF 12

EXISTING SWM DRAINAGE AREA MAP

CONSTRUCTION DOCUMENTS

SUBDIVISION: PHOENIX

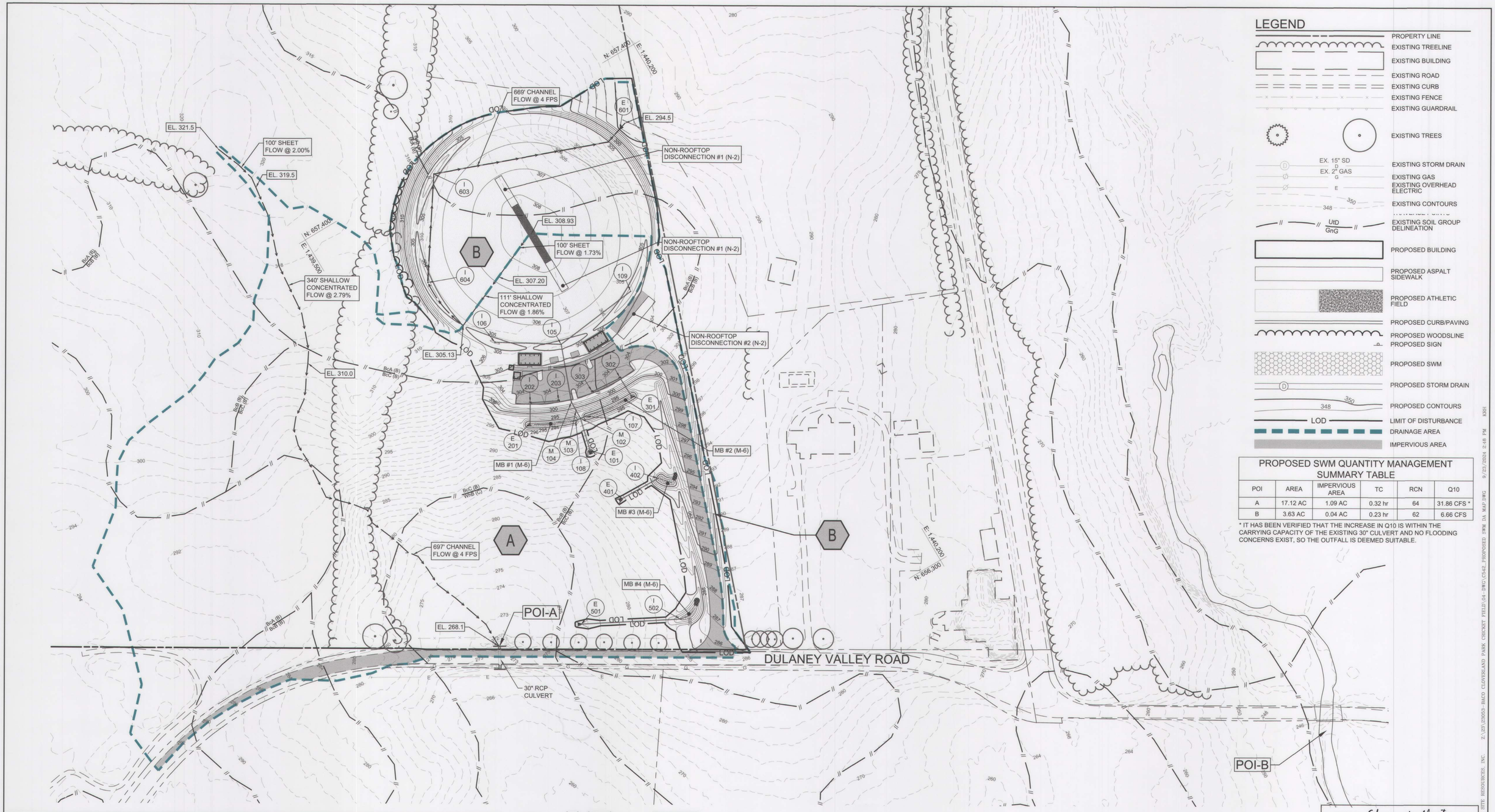
12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131

ELECTION DIST. NO.: 10C3

SHEET DESIGNATION	CONTRACT NUMBER
C541	25067 GXO
JOB ORDER NUMBER	PROJ-10000752
SHEET 33 OF 40	DRAWING NUMBER 2025-1664
FILE NO.: 9	

BALTIMORE COUNTY MARYLAND

DWG. FILENAME: © SITE RESOURCES, INC. Z:\23\23053-BACO CLOVERLAND PARK CRICKET FIELD\04-DWG\C541_EXISTING_SWM_DA_MAP.DWG 9/23/2024 1:07 PM KRH



LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BUILDING
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING GUARDRAIL
- EXISTING TREES
- EXISTING STORM DRAIN (EX. 15" SD)
- EXISTING GAS (EX. 2" GAS)
- EXISTING OVERHEAD ELECTRIC
- EXISTING CONTOURS
- EXISTING SOIL GROUP DELINEATION (UtD / GnG)
- PROPOSED BUILDING
- PROPOSED ASPALT SIDEWALK
- PROPOSED ATHLETIC FIELD
- PROPOSED CURB/PAVING
- PROPOSED WOODSLINE
- PROPOSED SIGN
- PROPOSED SWM
- PROPOSED STORM DRAIN
- PROPOSED CONTOURS
- LIMIT OF DISTURBANCE
- DRAINAGE AREA
- IMPERVIOUS AREA

PROPOSED SWM QUANTITY MANAGEMENT SUMMARY TABLE

POI	AREA	IMPERVIOUS AREA	TC	RCN	Q10
A	17.12 AC	1.09 AC	0.32 hr	64	31.86 CFS *
B	3.63 AC	0.04 AC	0.23 hr	62	6.66 CFS

* IT HAS BEEN VERIFIED THAT THE INCREASE IN Q10 IS WITHIN THE CARRYING CAPACITY OF THE EXISTING 30" CULVERT AND NO FLOODING CONCERNS EXIST, SO THE OUTFALL IS DEEMED SUITABLE.

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

NORTH (MAGNETIC)

0 20 40 80 160 240
SCALE: 1" = 80'
MARYLAND COORDINATE SYSTEM NAD83/2011 & NAVD88

APPROVED: Chara Kalbrenner Chief
STORMWATER ENGINEERING
BALTO. CO. DEPT. OF
ENVIRONMENTAL PROTECTION
AND SUSTAINABILITY

SEAL
STATE OF MARYLAND — PETER C. SOPRANO — No. 22401 — PROFESSIONAL ENGINEER
DATE : 01/15/2025

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 42977, EXPIRATION DATE 06/07/2025
ENGINEER: PETER C. SOPRANO
SITE RESOURCES, INC.
AS-BUILT PER RECORD PRINT
BY:
DATE:

DGN BY: SPM/KRH
DWN BY: SPM/KRH
CHKD BY: KPR/PCS

AS-BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT
				USE 112 113	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14
CONTRACT COMPLETION BOX			R.O.W NO.		

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

DRAWING SCALE	AS SHOWN
PLAN SCALE:	
PROFILE SCALE:	

PROPERTY MANAGEMENT
APPROVED BY: PROPERTY MANAGER
DATE:

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT

CLOVERLAND PARK CRICKET FIELD — SWM SHEET 12 OF 12

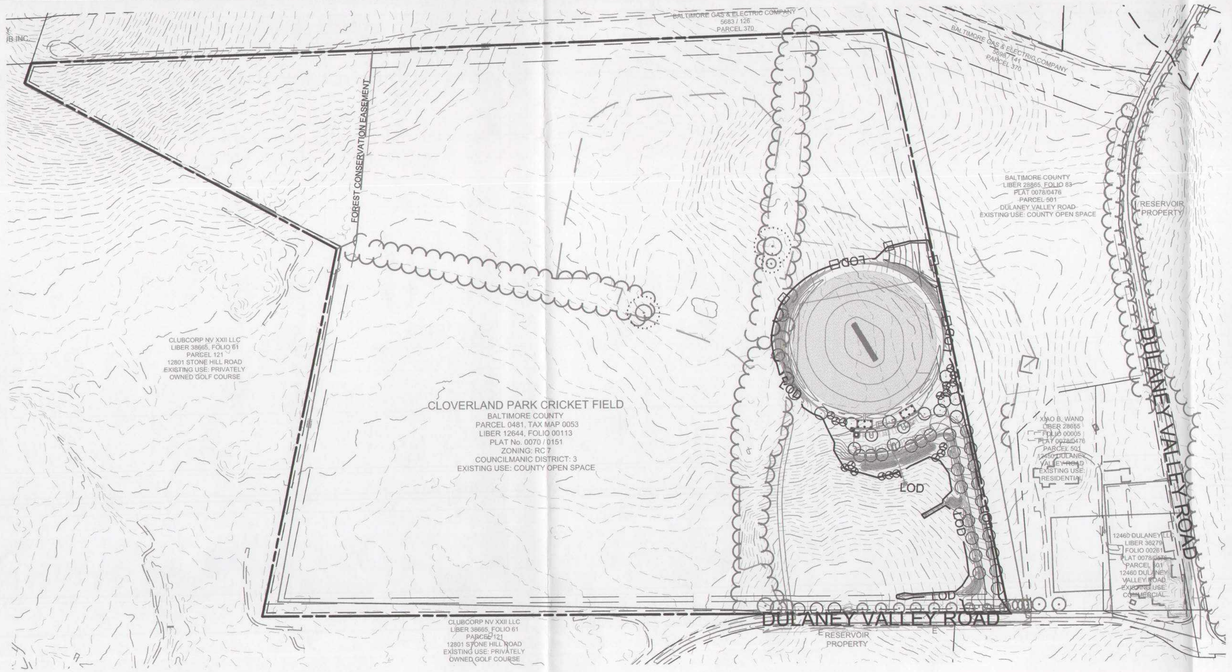
PROPOSED SWM DRAINAGE AREA MAP

CONSTRUCTION DOCUMENTS

SUBDIVISION: PHOENIX — 12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131 — ELECTION DIST. NO.: 10C3

SHEET DESIGNATION	CONTRACT NUMBER
C542	25067 GXO

JOB ORDER NUMBER: PROJ-10000752
SHEET 34 OF 40
DRAWING NUMBER: 2025-1665
FILE NO.: 9



1 SITE CONTEXT PLAN

1" = 200'

GENERAL NOTES

1. REFER TO SHEET L102 & L201 FOR LANDSCAPE DETAILS, SCHEDULE, AND TABULATIONS.
2. REFER TO SHEET C531 FOR SWM PLANTING PLAN ENLARGEMENTS AND SCHEDULE.
3. PLANTING UNITS ARE CALCULATED BASED ON THE AREA WITHIN THE LIMIT OF DISTURBANCE.
4. DIMENSIONS SHOWN ON THIS PLAN ARE FOR PERMIT REVIEW PURPOSES ONLY.

SITE DATA NOTES

1. PROPERTY ADDRESS:	12340 DULANEY VALLEY ROAD
2. OWNER	BALTIMORE COUNTY PROPERTY MANAGEMENT
3. APPLICANT:	SITE RESOURCES, INC.
4. APPLICANT ADDRESS:	4 NORTH PARK DRIVE, SUITE 100 COCKEYSVILLE, MD 21030
5. TAX MAP:	0053
6. TAX ACCOUNT NO.:	2300002327
7. DEED REFERENCE:	12644 / 00113
8. PLAT REFERENCE:	0070 / 0151
9. ZONING:	RC 7
10. SETBACKS:	
PRINCIPAL STRUCTURE:	35' FROM RW 80' FROM PRINCIPAL BUILDING 50' FROM REAR LOT LINE
PRINCIPAL BUILDING OR WELL:	300' FROM ADJACENT PROPERTY
11. IMPERVIOUS COVERAGE:	NO MORE THAN 10%
12. ADJOINING PROPERTY ZONING:	RC 7 / RC 6
13. ACREAGE:	71.93 ACRES
14. PROPOSED USE:	CRICKET FIELD

15. NO RELEVANT ZONING CASES PERTAIN TO LANDSCAPING.
16. NO SITE LIGHTING WILL BE PROVIDED.
17. PARKING:

REQUIRED:	TO BE DETERMINED
PROPOSED:	40 TOTAL (2 HC SPACES PROVIDED)

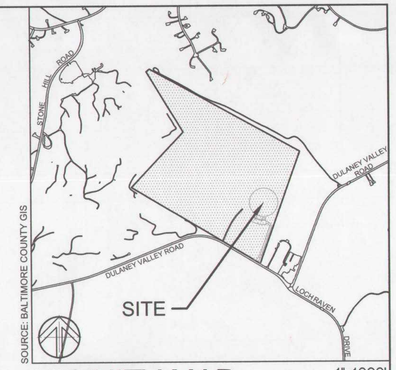
LANDSCAPE NOTES

(THESE NOTES APPLY TO ALL PLANTING IN THIS CONTRACT)

1. QUANTITIES SHOWN ON THE PLANT LIST ARE FOR THE CONTRACTOR'S CONVENIENCE ONLY. SYMBOLS ON THE PLAN SHALL TAKE PRECEDENCE. CONTRACTOR SHALL VERIFY ALL PLANT QUANTITIES TO HIS OWN SATISFACTION.
2. PLANT MATERIAL SUBSTITUTIONS ARE SUBJECT TO APPROVAL BY THE PROJECT LANDSCAPE ARCHITECT.
3. PLANT MATERIAL SHALL BE TAGGED AT THE SOURCE BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE UNLESS THE REQUIREMENT IS SPECIFICALLY WAIVED.
4. LOCATIONS OF ALL PLANT MATERIAL SHALL BE STAKED FOR APPROVAL BY THE PROJECT LANDSCAPE ARCHITECT.
5. ALL SHRUB AND GROUND COVER AREAS SHALL BE PLANTED IN CONTINUOUS PREPARED BEDS MULCHED WITH COMPOSTED HARDWOOD MULCH AS DETAILED AND SPECIFIED.
6. PLANTING BEDS SHALL HAVE POSITIVE DRAINAGE WITH A MINIMUM 2% SLOPE.
7. CONTRACTOR SHALL VERIFY ACCURACY OF BASE INFORMATION AND EXISTING CONDITIONS AND UTILITIES IN THE FIELD TO HIS OWN SATISFACTION. UTILITIES BID SHALL BE BASED ON ACTUAL SITE CONDITIONS. NO EXTRA PAYMENT SHALL BE MADE FOR WORK ARISING FROM SITE CONDITIONS DIFFERING FROM THOSE INDICATED ON DRAWINGS AND SPECIFICATIONS.
8. THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 A MINIMUM OF TWO WORKING DAYS PRIOR TO BEGINNING PLANTING AND CONSTRUCTION.
9. DAMAGE TO EXISTING CONDITIONS AND UTILITIES SHALL BE REPAIRED AND RESTORED AT THE EXPENSE OF THE CONTRACTOR.
10. ALL PLANT MATERIAL SHALL BE NURSERY GROWN AND SHALL CONFORM TO AMERICAN NURSERY & LANDSCAPE ASSOCIATION'S AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60.1.

MINIMUM LANDSCAPE MAINTENANCE REQUIREMENTS

1. LAWN AREAS SHALL BE MOWED TO A HEIGHT OF 2 TO 3 INCHES AND NOT ALLOWED TO REACH A HEIGHT OF 4 INCHES BEFORE MOWING.
2. ALL CURBS AND WALKS SHALL BE EDGED AS NEEDED.
3. ALL LAWN AREAS ADJACENT TO BUILDING FACES OR STRUCTURES SHALL BE TRIMMED.
4. A SLOW RELEASE NITROGEN BALANCED FERTILIZER WITH A 2-1-1 RATIO SHALL BE APPLIED AT A RATE OF 2 POUNDS OF NITROGEN PER 1000 SQUARE FEET IN SEPTEMBER, OCTOBER, AND FEBRUARY.
5. LIME SHALL BE APPLIED AT THE RATE DETERMINED BY A SOILS REPORT.
6. IT IS RECOMMENDED THAT LAWN AREAS BE TREATED IN MID-MARCH TO EARLY APRIL WITH PRE-EMERGENT HERBICIDE (BETASAN) OR EQUAL APPLIED AT THE MANUFACTURER'S RECOMMENDED RATE.
7. A POST-EMERGENT HERBICIDE (TRIMEC) OR EQUAL IS RECOMMENDED TO BE SPRAYED ON LAWN AREAS IN THE LATE SPRING OR THE EARLY FALL. FOLLOW MANUFACTURER'S RATES AND RECOMMENDATIONS.
8. INSECTICIDES AND FUNGICIDES ARE RECOMMENDED FOR INSECT AND DISEASE CONTROL.
9. RESEED BARE AREAS OF LAWN AS NECESSARY. YEARLY AERATION IS RECOMMENDED.
10. ALL TRASH, LITTER, AND DEBRIS SHALL BE REMOVED FROM LAWN AREAS, PARKING LOTS, AND SHRUB BEDS AS NEEDED.
11. MULCH ALL SHRUB AND GROUNDCOVER BEDS YEARLY WITH 3 INCHES OF SHREDDED HARDWOOD BARK.
12. PERMIT SHRUBS AND TREES TO GROW AND ENLARGE TO THEIR DESIGN SIZE. CONSULT PROJECT LANDSCAPE ARCHITECT FOR DETAILS.
13. PRUNE TREES IN ACCORDANCE WITH LANDSCAPE CONTRACTORS ASSOCIATION GUIDELINES.



VICINITY MAP 1"=1000'

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BUILDING
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING GUARDRAIL
- FOREST CONSERVATION PLANTING EASEMENT
- EXISTING TREES (CRITICAL ROOT ZONE)
- EX. 15" SD — EXISTING STORM DRAIN
- EX. 2" GAS — EXISTING GAS
- EX. ELEC — EXISTING OVERHEAD ELECTRIC
- 350 / 348 — EXISTING CONTOURS
- SURVEY EXTENTS
- ZONING LINE
- PROPOSED BUILDING
- PROPOSED PAVILION OVERHANG
- PROPOSED ASPALT SIDEWALK
- PROPOSED ATHLETIC FIELD
- PROPOSED CURB/PAVING
- PROPOSED WOODSLINE
- PROPOSED SIGN
- PROPOSED SWM
- PROPOSED STORM DRAIN
- 350 / 348 — PROPOSED CONTOURS
- LOD — LIMIT OF DISTURBANCE
- TREE PROTECTION FENCE
- PROPOSED SHADE TREE
- PROPOSED ORNAMENTAL TREE

FINAL LANDSCAPE PLAN OWNER CERTIFICATION FORM

I certify that I have reviewed this Final Landscape Plan; that I am aware of the regulations presented in the Baltimore County Landscape Manual; and I agree to comply with these regulations and all applicable policy, guidelines and ordinances. I agree to certify the implementation of this approved Final Landscape Plan upon completion of the landscape installation prior to PWA closeout if applicable or not later than one (1) year from the date of approval of this plan to the Department of Permits and Development Management, Development Plans Review, Room 107, County Office Building, 111 W. Chesapeake Avenue, Towson, MD 21204.

Applicant Signature — 9/30/2024 Date — Gregory DoPrano Print Name

12200 Address (Print) — Long Green Pike Street

Glen Arm City — MD State — 21057 Zip

PDM # _____ Permit # _____

FINAL LANDSCAPE PLAN LANDSCAPE ARCHITECT CERTIFICATION FORM

It is certified that this Landscape Plan is in compliance with all plans previously approved by Baltimore County and the Baltimore County comments attendant thereto.

Signature — Kevin Riley Print Name

11/19/24 Date

STATE OF MARYLAND · KEVIN PAT RILEY · No. 3231 · LANDSCAPE ARCHITECT

APPROVED Final Landscape Plans
Baltimore County
Dept. of Permits, Approvals & Inspections

RECEIVED
NOV 19 2024
DEPARTMENT OF PERMITS APPROVALS AND INSPECTIONS

Name — 11.27.24 Date

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

NORTH (MAGNETIC)

0 40 100 200 400 600
SCALE: 1" = 200'
MARYLAND COORDINATE SYSTEM NAD83/2011 & NAVD88

SEAL

DATE : 11/19/2024

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 3231, EXPIRATION DATE 02/11/2026
LANDSCAPE ARCHITECT: KEVIN RILEY
AS-BUILT PER RECORD PRINT
BY:
DATE:

DGN BY: _____
DWN BY: _____
CHKD BY: _____

AS-BUILT / REVISION | BY | DATE | P.W.A. NO. | KEY SHEET | POSITION SHT

R.O.W NO. | USE 112 113 | 65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14

CONTRACT COMPLETION BOX

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

DRAWING SCALE: PLAN SCALE: AS SHOWN; PROFILE SCALE: _____

PROPERTY MANAGEMENT: APPROVED BY: _____ PROPERTY MANAGER; DATE: _____

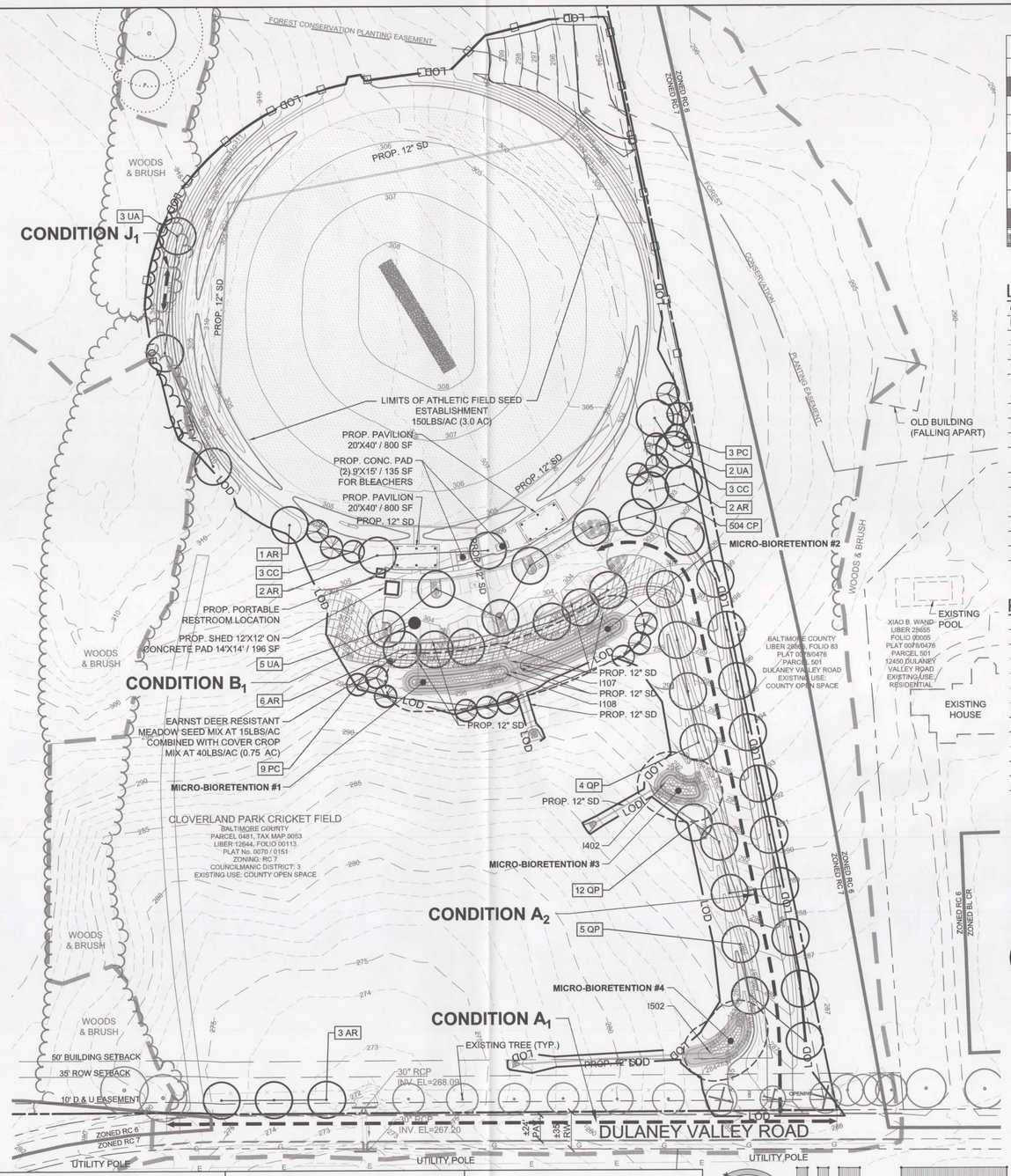
BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT
CLOVERLAND PARK CRICKET FIELD
FINAL LANDSCAPE PLAN I
CONSTRUCTION DOCUMENTS
SUBDIVISION: PHOENIX — 12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131 — ELECTION DIST. NO.: 10C3

LANDSCAPE SHEET 1 OF 3
11/19/2024

SHEET DESIGNATION	CONTRACT NUMBER
L101	25067 GXO
JOB ORDER NUMBER	PROJ-10000752
SHEET 35 OF 40	DRAWING NUMBER 2025-1666
FILE NO.: 9	REV. 05/06

BALTIMORE COUNTY MARYLAND

DWG. FILENAME: © SITE RESOURCES, INC. Z:\25\25053-BACO CLOVERLAND PARK CRICKET FIELD\04-SWM\L101_LANDSCAPE PLAN.DWG 11/14/2024 6:30 PM sjmm



PLANT SCHEDULE

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE/ ROOT CONT.	SPACING	REMARKS
MAJOR DECIDUOUS TREES						
AR	14	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	2 1/2" CAL. / B&B	AS SHOWN	STRONG SINGLE LEADER, SPECIMEN
QP	21	QUERCUS PHELLOS 'HIGH TOWER'	WILLOW OAK	2 1/2" CAL. / B&B	AS SHOWN	STRONG SINGLE LEADER, SPECIMEN
UA	10	ULMUS AMERICANA 'PRINCETON'	PRINCETON AMERICAN ELM	2 1/2" CAL. / B&B	AS SHOWN	STRONG SINGLE LEADER, SPECIMEN
MINOR DECIDUOUS TREES						
CC	6	CERCIS CANADENSIS	EASTERN REDBUD	1" CAL. MIN. / 8' HT. B&B	AS SHOWN	SINGLE STEM, CONSISTENT FORM
PC	12	PRUNUS CERASIFERA 'THUNDERCLOUD'	THUNDERCLOUD CHERRY PLUM	1" CAL. MIN. / 8' HT. B&B	AS SHOWN	STRONG SINGLE LEADER/SPECIMEN
GROUND COVER / PERENNIALS						
CP	1107	CAREX PENSYLVANICA	OAK SEDGE	1 GAL	12" O.C.	FULLY ROOTED CONTAINER

LANDSCAPE REQUIREMENTS FOR PROJECT CONDITIONS

CONDITION A: STREET FRONTAGE AND STREETSCAPE

KEY	ELEMENT	RATE	LINEAR FEET (LF)	PLANTING UNITS REQUIRED (PU)
A_1	ADJACENT ROADWAY	1 PU / 40 LF	640	16
A_2	INTERIOR ROADWAY	1 PU / 20 LF	619	31
				TOTAL REQUIRED 47 PU

CONDITION B: PARKING LOTS

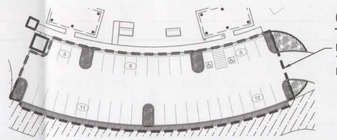
KEY	ELEMENT	RATE	SPACES OR SF	PLANTING UNITS REQUIRED (PU)
B_1	PARKING LOT INTERIOR	1 PU / 12 SPACES	40 SPACES	4
				TOTAL REQUIRED 4 PU
	PARKING LOT INTERIOR AREA	7% TO BE LANDSCAPED	13,098 SF	917
				TOTAL REQUIRED LANDSCAPE 917 SF

CONDITION J: SLOPES 3:1 OR GREATER EXCEEDING 10'

KEY	ELEMENT	RATE	LINEAR FEET (LF)	PLANTING UNITS REQUIRED (PU)
J_1	SLOPE LENGTH	1 PU / 15 LF	41	3
				TOTAL REQUIRED 3 PU

PROVIDED LANDSCAPE TABULATIONS

QTY	TYPE	RATE	PU
7	EXISTING MAJOR TREE PRESERVED		
45	MAJOR DECIDUOUS TREE	1 PU / 1 TREE	45
	EVERGREEN TREE	1 PU / 2 TREES	
18	MINOR DECIDUOUS TREE	1 PU / 2 TREES	9
1,273 SF	GROUNDCOVER/PERENNIALS	1 PU / 500 SF	2
		TOTAL PROVIDED	56 PU
		TOTAL REQUIRED	54 PU
1,821 SF	PARKING LOT INTERIOR LANDSCAPE AREA		
		TOTAL PROVIDED	13.9%
		TOTAL REQUIRED	7%

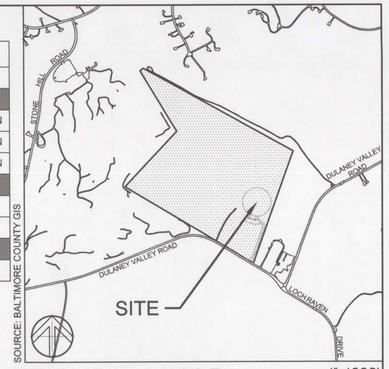


CALCULATIONS

PARKING LOT INTERIOR AREA: 13,098 SF
7% REQUIRED INTERIOR LANDSCAPING (13,098 X 0.07): 917 SF
PROVIDED INTERIOR LANDSCAPING: 1,821 SF (1,821 / 13,098 = 13.9%)

INTERIOR LANDSCAPING

1" = 60'



VICINITY MAP

1"=1000'

LEGEND

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- PROPOSED CONTOURS (350 / 348)
- LOD — LIMIT OF DISTURBANCE
- TREE PROTECTION FENCE
- PROPOSED SHADE TREE
- PROPOSED ORNAMENTAL TREE
- TREE/SHRUB RESTRICTION ZONE FOR SWM FACILITY
- PROPOSED MEADOW SEED MIX
- PROPOSED SOD

APPROVED Final Landscape Plans
Baltimore County
Dept. of Permits, Approvals & Inspections
Name
Date 11.27.2024

FINAL LANDSCAPE PLAN OWNER CERTIFICATION FORM

I certify that I have reviewed this Final Landscape Plan; that I am aware of the regulations presented in the Baltimore County Landscape Manual; and I agree to comply with these regulations and all applicable policy, guidelines and ordinances. I agree to certify the implementation of this approved Final Landscape Plan upon completion of the landscape installation prior to PWA closeout if applicable or not later than one (1) year from the date of approval of this plan to the Department of Permits and Development Management, Development Plans Review, Room 107, County Office Building, 111 W. Chesapeake Avenue, Towson, MD 21204.

Applicant Signature — 9/30/2024 Date — Gregory Dorro Print Name
132.00 Address (Print) — Long Green Pike Street
Glen Arm City — MD State — 21057 Zip
PDM # _____ Permit # _____

FINAL LANDSCAPE PLAN LANDSCAPE ARCHITECT CERTIFICATION FORM

It is certified that this Landscape Plan is in compliance with all plans previously approved by Baltimore County and the Baltimore County comments attendant thereto.

Signature — Kevin J Riley Print Name
11/19/24 Date

STATE OF MARYLAND · KEVIN PAT RICK RILEY · No. 3231 · REGISTERED LANDSCAPE ARCHITECT

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
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CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
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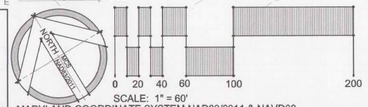
PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3



SEAL

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 3231, EXPIRATION DATE 02/11/2026
LANDSCAPE ARCHITECT: KEVIN RILEY
AS-BUILT PER RECORD PRINT
BY: DATE:
DGN BY: DWN BY: CHKD BY:
DATE : 11/19/2024

AS-BUILT / REVISION | BY | DATE | P.W.A. NO. | KEY SHEET | POSITION SHT
R.O.W NO. | USE 112 113 | 65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14

DRAWING SCALE
PLAN SCALE: AS SHOWN
PROFILE SCALE:

PROPERTY MANAGEMENT
APPROVED BY: PROPERTY MANAGER
DATE:

CONTRACT COMPLETION BOX

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT
CLOVERLAND PARK CRICKET FIELD
FINAL LANDSCAPE PLAN II
CONSTRUCTION DOCUMENTS
SUBDIVISION: PHOENIX — 12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131 — ELECTION DIST. NO.: 10C3
LANDSCAPE SHEET 2 OF 3
11/19/2024

SHEET DESIGNATION	CONTRACT NUMBER
L102	25067 GXO
JOB ORDER NUMBER	
PROJ-10000752	
SHEET 36 OF 40	
DRAWING NUMBER	
2025-1667	
FILE NO.: 9	

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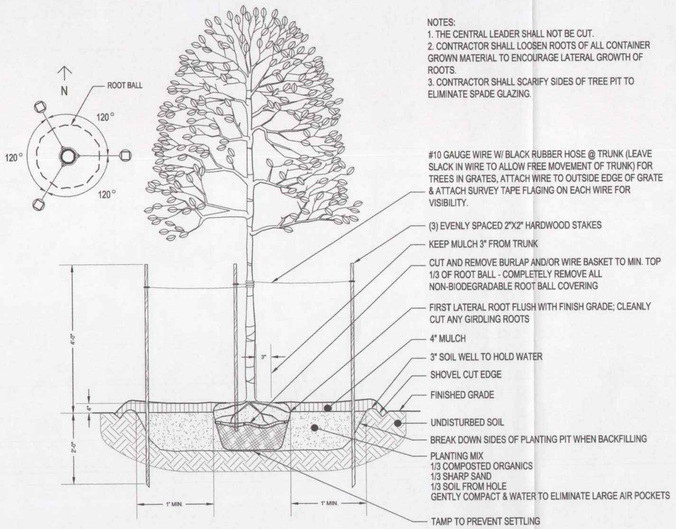


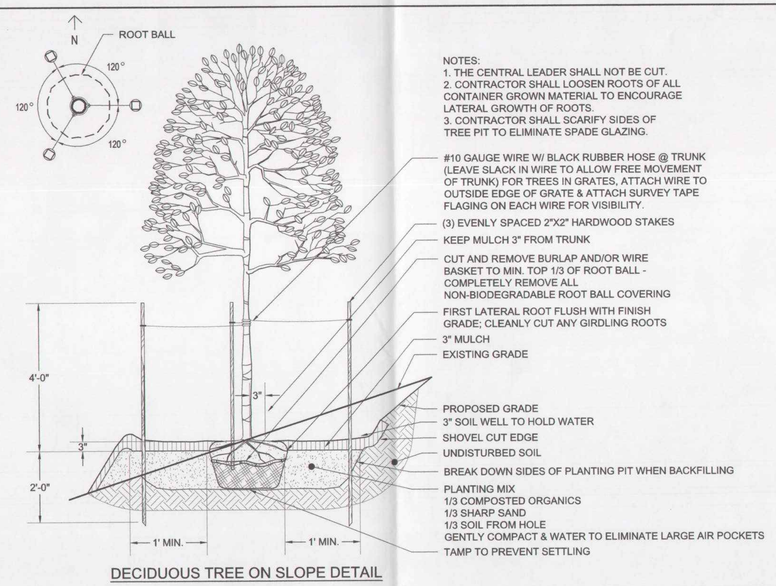
NOTES:
1. THE CENTRAL LEADER SHALL NOT BE CUT.
2. CONTRACTOR SHALL LOOBEN ROOTS OF ALL CONTAINER GROWN MATERIAL TO ENCOURAGE LATERAL GROWTH OF ROOTS.
3. CONTRACTOR SHALL SCARIFY SIDES OF TREE PIT TO ELIMINATE SPADE GLAZING.

- #10 GAUGE WIRE W/ BLACK RUBBER HOSE @ TRUNK (LEAVE SLACK IN WIRE TO ALLOW FREE MOVEMENT OF TRUNK) FOR TREES IN GRATES, ATTACH WIRE TO OUTSIDE EDGE OF GRATE & ATTACH SURVEY TAPE FLAGING ON EACH WIRE FOR VISIBILITY.
- (3) EVENLY SPACED 2"X2" HARDWOOD STAKES
- KEEP MULCH 3" FROM TRUNK
- CUT AND REMOVE BURLAP AND/OR WIRE BASKET TO MIN. TOP 1/3 OF ROOT BALL - COMPLETELY REMOVE ALL NON-BIODEGRADABLE ROOT BALL COVERING
- FIRST LATERAL ROOT FLUSH WITH FINISH GRADE; CLEANLY CUT ANY GIRDLING ROOTS
- 4" MULCH
- 3" SOIL WELL TO HOLD WATER
- SHOVEL CUT EDGE
- FINISHED GRADE
- UNDISTURBED SOIL
- BREAK DOWN SIDES OF PLANTING PIT WHEN BACKFILLING
- PLANTING MIX
  1/3 COMPOSTED ORGANICS
  1/3 SHARP SAND
  1/3 SOIL FROM HOLE
  GENTLY COMPACT & WATER TO ELIMINATE LARGE AIR PockETS
- TAMP TO PREVENT SETTLING

DECIDUOUS TREE DETAIL

TREE PLANTING DETAILS

NOT TO SCALE



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  1/3 COMPOSTED ORGANICS
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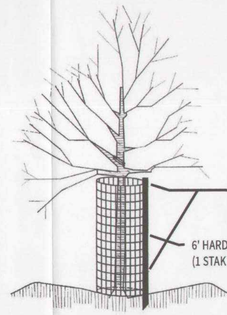
  1/3 SOIL FROM HOLE
  GENTLY COMPACT & WATER TO ELIMINATE LARGE AIR POCKETS
- TAMP TO PREVENT SETTLING

DECIDUOUS TREE ON SLOPE DETAIL

TREE ON SLOPE PLANTING DETAILS

NOT TO SCALE

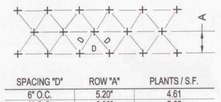


- NO. 14 GAUGE WIRE FABRIC WITH 2" x 4" OPENINGS. CREA TE 1-FOOT DIAMETER CAGE AROUND TREE AND FASTEN TO ST AKE.
- 6' HARDWOOD GUYING STAKE (2' INTOGROUND), (1 STAKE PER TREE)

Notes:
1. Height of cage shall be 4-feet (min.).
2. Cage shall be fastened to stake with two (min.) 11-inch releasable cable ties (one at top and one 6" (min.) above the ground.
3. Do not damage tree during installation.
4. Substitutions must be approved by Forest Conservation Inspector.
5. Cases to be removed at direction of Forest Conservation Inspector.

DEER PROTECTION FENCING

NOT TO SCALE

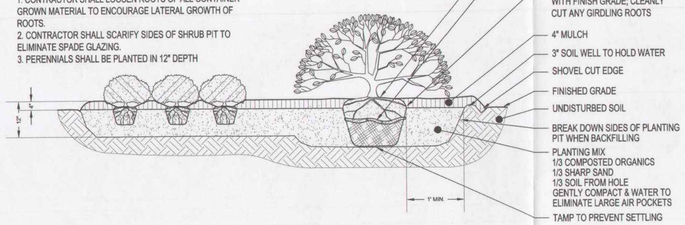


SPACING "D"	ROW "A"	PLANTS / S.F.
6" O.C.	5.20"	4.61
8" O.C.	6.93"	2.60
10" O.C.	8.66"	1.66
12" O.C.	10.40"	1.15
15" O.C.	13.00"	.738
18" O.C.	15.60"	.512
24" O.C.	20.80"	.290
30" O.C.	26.00"	.185
36" O.C.	30.00"	.128

PLANT SPACING CHART

NOTE:
FOR USE ONLY WHEN PLANTS ARE SPACED EQUIDISTANT FROM EACH OTHER AS SHOWN, AND SPECIFIED IN THE PLANT LIST.

NOTES:
1. CONTRACTOR SHALL LOOSEN ROOTS OF ALL CONTAINER GROWN MATERIAL TO ENCOURAGE LATERAL GROWTH OF ROOTS.
2. CONTRACTOR SHALL SCARIFY SIDES OF SHRUB PIT TO ELIMINATE SPADE GLAZING.
3. PERENNIALS SHALL BE PLANTED IN 12" DEPTH

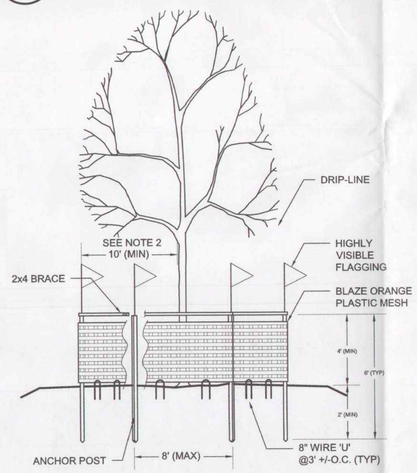


- KEEP MULCH 3" FROM TRUNK
- CUT AND REMOVE BURLAP TO MIN. TOP 1/3 OF ROOT BALL - COMPLETELY REMOVE ALL NON-BIODEGRADABLE ROOT BALL COVERING
- FIRST LATERAL ROOT FLUSH WITH FINISH GRADE; CLEANLY CUT ANY GIRDLING ROOTS
- 4" MULCH
- 3" SOIL WELL TO HOLD WATER
- SHOVEL CUT EDGE
- FINISHED GRADE
- UNDISTURBED SOIL
- BREAK DOWN SIDES OF PLANTING PIT WHEN BACKFILLING
- PLANTING MIX
  1/3 COMPOSTED ORGANICS
  1/3 SHARP SAND
  1/3 SOIL FROM HOLE
  GENTLY COMPACT & WATER TO ELIMINATE LARGE AIR POCKETS
- TAMP TO PREVENT SETTLING

SHRUB/ PERENNIAL DETAIL

SHRUB/PERENNIAL PLANTING DETAILS

NOT TO SCALE



TREE PROTECTION NOTES

1. THERE WILL BE NO CLEARING IN THE TREE PROTECTION AREAS SHOWN ON THE PLAN TO REMAIN SHALL HAVE BLAZE ORANGE PLASTIC MESH TREE PROTECTION FENCE INSTALLED TO TREES AS SHOWN ON THE PLAN.
2. STOCKPILE AREAS, EMPLOYEE PARKING, AND EQUIPMENT STAGING AREAS SHALL BE CONTAINED WITHIN THE LIMIT OF CLEARING AS SHOWN ON THE FOREST CONSERVATION PLAN OR SEDIMENT CONTROL PLAN.
3. TREE PROTECTION FENCING:
   A. ALL TREE PROTECTION FENCING SHALL BE THE STANDARD ORANGE FENCE FABRIC.
   B. ALL TREE PROTECTION FENCING SHALL BE SIX FEET-ZERO INCHES (6'-0") HIGH MEASURED TO THE TOP OF THE FENCE FABRIC, AS INDICATED ON THE DRAWINGS.
   C. FENCE MATERIALS SHALL MEET THE REQUIREMENTS AS STATED IN THE SPECIFICATIONS AND AS SHOWN ON THE DETAIL DRAWING.

1. TREE PROTECTION FENCE SHALL BE BLAZE ORANGE PLASTIC MESH WITH ANCHOR POSTS. ANCHOR POSTS SHALL BE MINIMUM 2" STEEL 'U' CHANNEL OR "T' POST, 6' IN LENGTH, SPACED 8' O.C. (MAXIMUM) MARKED WITH HIGHLY VISIBLE FLAGGING. ANCHOR POSTS MUST BE INSTALLED TO A DEPTH OF NO LESS THAN 1/3 OF THE TOTAL HEIGHT OF THE POST. USE 2" X 4" LUMBER FOR CROSS BRACING ALONG TOP OF FENCE. USE 8" WIRE 'U' TO SECURE FENCE BOTTOM.
2. PLACE FENCE AS SHOWN ON PLAN, AT DRIPLINE AROUND TREES WITH GREATER THAN 20' SPREAD. FOR SMALLER TREES, PLACE FENCE 10' (MINIMUM) FROM TRUNK.
3. ROOT DAMAGE SHOULD BE AVOIDED DURING INSTALLATION OF ANCHOR POSTS AND FENCE.
4. PLACE PROTECTION SIGNAGE IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.
5. NO CONSTRUCTION EQUIPMENT, MATERIALS OR EXCAVATED EARTH PERMITTED INSIDE TREE PROTECTION FENCES.
6. MAINTAIN TREE PROTECTION DEVICES THROUGHOUT CONSTRUCTION.
7. THIS FENCE IS A TREE PROTECTION DEVICE ONLY.

TREE PROTECTION FENCE

NOT TO SCALE

APPROVED Final Landscape Plans
Baltimore County
Dept. of Permits, Approvals & Inspections

Name — Date: 11.27.2024

FINAL LANDSCAPE PLAN
OWNER CERTIFICATION FORM

I certify that I have reviewed this Final Landscape Plan; that I am aware of the regulations presented in the Baltimore County Landscape Manual; and I agree to comply with these regulations and all applicable policy, guidelines and ordinances. I agree to certify the implementation of this approved Final Landscape Plan upon completion of the landscape installation prior to PWA closeout if applicable or not later than one (1) year from the date of approval of this plan to the Department of Permits and Development Management, Development Plans Review, Room 107, County Office Building, 111 W. Chesapeake Avenue, Towson, MD 21204.

A.M. Dorn — 9/30/2024 — Gregory Dorn
Applicant Signature — Date — Print Name

12200 — Long Green Pike
Address (Print) — Street

Glen Arm — MD — 21057
City — State — Zip

PDM # _____ Permit # _____

FINAL LANDSCAPE PLAN
LANDSCAPE ARCHITECT CERTIFICATION FORM

It is certified that this Landscape Plan is in compliance with all plans previously approved by Baltimore County and the Baltimore County comments attendant thereto.

Signature — Kevin Riley — Print Name

11/19/24
Date

STATE OF MARYLAND · KEVIN PATRICK RILEY · No. 3231 · LANDSCAPE ARCHITECT

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200 LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: MATTHEW LEEBEL
EMAIL: MLEEBEL@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-3834

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10C3
COUNCILMANIC DISTRICT:3

SEAL

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 3231 EXPIRATION DATE 02/11/2026
LANDSCAPE ARCHITECT: KEVIN RILEY
AS-BUILT PER RECORD PRINT
BY:
DATE: 11/19/2024

DGN BY: _____
DWN BY: _____
CHKD BY: _____

AS-BUILT / REVISION | BY | DATE | P.W.A. NO. | KEY SHEET | POSITION SHT
CONTRACT COMPLETION BOX | | | R.O.W NO. | USE 112 113 | 65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

DRAWING SCALE
PLAN SCALE: AS SHOWN
PROFILE SCALE:

PROPERTY MANAGEMENT
APPROVED BY: _____ PROPERTY MANAGER
DATE: _____

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT
CLOVERLAND PARK CRICKET FIELD
LANDSCAPE NOTES & DETAILS
CONSTRUCTION DOCUMENTS
SUBDIVISION: PHOENIX — 12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131 — ELECTION DIST. NO.: 10C3
LANDSCAPE SHEET 3 OF 3
11/19/2024

SHEET DESIGNATION	CONTRACT NUMBER
L201	25067 GXO
JOB ORDER NUMBER	PROJ-10000752
SHEET 37 OF 40	DRAWING NUMBER 2025-1668
FILE NO.: 9	

DWG. FILENAME: © SITE RESOURCES, INC. 2-25-25\25067-TECH CLOVERLAND PARK\MARKET FIELD\04 - DWG\L201_LANDSCAPE NOTES AND DETAILS.DWG 11/14/2024 5:40 PM sjrm

GENERAL NOTES

CONTRACTORS RESPONSIBILITIES:

1. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE, AND TO ENSURE THE STABILITY OF THE BUILDING AND ITS COMPONENT PARTS, AND THE ADEQUACY OF TEMPORARY OR INCOMPLETE CONNECTIONS, DURING ERECTING. THIS INCLUDES THE ADDITION OF ANY SHORING, SHEETING, TEMPORARY GUYS, BRACING, OR TIEDOWNS THAT MIGHT BE NECESSARY. SUCH MATERIAL IS NOT SHOWN ON THE DRAWINGS. IF APPLIED, THEY SHALL BE REMOVED AS CONDITIONS PERMIT AND SHALL REMAIN THE CONTRACTOR'S PROPERTY.
2. CONTRACTOR SHALL VERIFY CONDITION IN THE FIELD AND IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER OF ANY CONDITIONS NOT AS ASSUMED; HE SHALL TAKE FIELD MEASUREMENTS AS REQUIRED AND BE RESPONSIBLE FOR THE SAME.
3. CONTRACTOR SHALL COORDINATE WITH ALL RELATED TRADES FOR DETAILING, FABRICATION AND ERECTION PRIOR TO SUBMITTING SHOP DRAWINGS FOR APPROVAL.
4. ALL STRUCTURAL WORK SHALL BE COORDINATED WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, ETC. REQUIREMENTS. DISCREPANCIES AND/OR INTERFERENCES SHALL BE REPORTED TO THE ARCHITECT/ENGINEER IMMEDIATELY.
5. THE ENGINEER HAS NO EXPERTISE IN, AND TAKES NO RESPONSIBILITY FOR, CONSTRUCTION MEANS AND METHODS OR JOBSITE SAFETY DURING CONSTRUCTION.
6. PROCESSING AND/OR APPROVED SUBMITTALS MADE BY THE CONTRACTOR WHICH MAY CONTAIN INFORMATION RELATED TO CONSTRUCTION METHODS OF SAFETY ISSUES, OR PARTICIPATION IN MEETINGS WHERE SUCH ISSUES MIGHT BE DISCUSSED, SHALL NOT BE CONSTRUED AS VOLUNTARY ASSUMPTION BY THE ENGINEER OF ANY RESPONSIBILITY OF EACH CONTRACTOR TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
7. THE ENGINEER IS NOT ENGAGED IN AND DOES NOT SUPERVISE CONSTRUCTION.
8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL SITE ELEMENTS ARE CONSTRUCTED IN ACCORDANCE WITH THE ADA 2010 STANDARDS FOR ACCESSIBLE DESIGN OR MOST CURRENT.

CONCRETE:

1. ALL CONCRETE WORK SHALL CONFORM TO ALL THE PROVISIONS OF THE "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" (ACI 301) AND TO THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318).
2. CONCRETE PROPERTIES FOR EACH STRUCTURAL ELEMENT IS DEFINED IN THE DESIGN DATA SECTION ON THIS SHEET.
3. CONCRETE SHALL CONFORM TO ALL THE PROVISIONS OF "RECOMMENDED PRACTICE FOR HOT WEATHER CONCRETING" (ACI 305) AND "RECOMMENDED PRACTICE FOR COLD WEATHER CONCRETING" (ACI 306).
4. ALL FORMWORK SHALL BE IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE "FORMWORK FOR CONCRETE" SPECIAL PUBLICATION NO. 4 AND ACI'S "STANDARD RECOMMENDED PRACTICE FOR CONCRETE FORMWORK" (ACI 347).
5. CONCRETE MIX DESIGN SHALL BE BASED ON LABORATORY TRIAL BATCH METHOD DESCRIBED IN ACI-318. CONCRETE SHALL ALSO CONFORM TO THE FOLLOWING REQUIREMENTS.
6. ALL CONCRETE EXPOSED TO THE WEATHER SHALL HAVE AN AIR ENTRAINMENT OF 6% +/- 1%.
7. THE MAXIMUM WATER CEMENT RATIO W/C SHALL NOT EXCEED 0.45.
8. NO ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL BE PERMITTED.
9. THE MAXIMUM SLUMP OF ALL CONCRETE SHALL BE 4".
10. ALL CONCRETE SHALL BE CURED WITH LIQUID SEALING COMPOUND CONFORMING TO ASTM C-309, TYPE I AND FEDERAL SPECIFICATION TT-C-00800 OR OTHER APPROVED METHOD WHICH IS COMPATIBLE WITH FLOORING ADHESIVES AND OTHER SURFACE TREATMENTS.
11. ALL CONCRETE LEFT EXPOSED AT THE COMPLETION OF THE PROJECT SHALL BE TREATED WITH A CLEAR, PENETRATING ACRYLIC BASE POLYMER CAPABLE OF PREVENTING INFILTRATION OF WATER BORNE CHLORIDES SUCH AS "US CURE & SEAL" BY US CONCRETE PRODUCTS OR APPROVED EQUAL
12. CONTRACTOR SHALL SUPPORT ADJACENT STRUCTURES, UTILITIES, AND EXCAVATIONS AS REQUIRED FOR COMPLETION OF WORK.
13. THE CONTRACTOR SHALL PREPARE ONE SET OF COMPRESSIVE TEST CYLINDERS FOR EACH 100 CUBIC YARDS POURED, BUT NOT LESS THAN ONE SET FOR EACH DAY'S POUR AND EACH CLASS OF CONCRETE, ALONG WITH SLUMP TESTS SHALL BE PERFORMED BY A TESTING LABORATORY APPROVED BY THE STRUCTURAL ENGINEER. CONTRACTOR SHALL HIRE AND PAY FOR INDEPENDENT THIRD PARTY INSPECTOR TO COMPLETE TESTING.
14. NO CONCRETE SHALL BE PLACED UNTIL CONCRETE DESIGN MIXES HAVE BEEN SUBMITTED FOR EACH CLASS OF CONCRETE AND HAVE BEEN APPROVED BY THE ENGINEER.

REINFORCING STEEL:

1. REINFORCING STEEL SHALL BE DEFORMED BARS IN ACCORDANCE WITH ASTM A 615, GRADE 60.
2. BENDS AND HOOKS ARE TO BE FABRICATED IN ACCORDANCE WITH ACI SP-66 ACI DETAILING MANUAL AND AS PER DETAILS.
3. LAP DEFORMED BARS IN ACCORDANCE WITH LAP SPLICE SCHEDULE ON THESE DRAWINGS, UNO.
4. HOOKS SHALL BE STANDARD HOOKS, UNO.
5. PROVIDE ACCESSORIES AND BAR SUPPORTS IN ACCORDANCE WITH THE MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES (ACI 315).

PRE-ENGINEERED BUILDING DESIGN AND CONSTRUCTION CRITERIA:

1. A REGISTERED PROFESSIONAL ENGINEER SHALL CERTIFY THE DESIGN, FABRICATION, AND ERECTION OF THE PRE-ENGINEERED BUILDING. CERTIFICATION SHALL BE BY THE SEAL AND SIGNATURE OF THE REGISTERED PROFESSIONAL ENGINEER ON THE MANUFACTURED DRAWINGS AND ON THE FINAL SHOP AND FIELD INSPECTION REPORTS.
2. THE TOTAL RESPONSIBILITY, INCLUDING PROFESSIONAL LIABILITY, FOR THE DESIGN AND CONSTRUCTION OF THE PRE-ENGINEERED BUILDING SHALL BE BORNE BY THE CONTRACTOR, THE PRE-ENGINEERED BUILDING MANUFACTURER, AND THEIR REGISTERED PROFESSIONAL ENGINEER. MORABITO CONSULTANTS, INC., WILL NOT BE RESPONSIBLE UNDER ANY CONDITION(S) FOR THE STRUCTURAL DESIGN, FABRICATION AND ERECTION OF THE PRE-ENGINEERED BUILDING AND ITS COMPONENTS.
3. THE DESIGN OF THE PRE-ENGINEERED BUILDING SHALL BE IN ACCORDANCE WITH THE PROJECT DOCUMENTS, ALL REFERENCED CODES, AND THE CONTAINED MINIMUM DESIGN CRITERIA CONTAINED THEREIN.
4. MINIMUM DESIGN CRITERIA:
   A. MINIMUM ROOF LIVE LOAD (SNOW) SHALL BE 30 POUNDS PER SQUARE FOOT.
   B. MINIMUM WIND AND EARTHQUAKE LOADS SHALL BE IN ACCORDANCE WITH IBC BUILDING CODE, ASCE 7, AND AS MODIFIED BY THE PROJECT DOCUMENTS.
   C. THE PRE-ENGINEERED BUILDING MANUFACTURER SHALL DESIGN THE ROOF STRUCTURE TO SUPPORT ALL SPRINKLER LINES AND SHALL PROVIDE A PROFESSIONAL ENGINEER TO SIGN AND SEAL THE SPRINKLER CERTIFICATION AS MANDATED BY BALTIMORE COUNTY.
   D. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, THE PRE-ENGINEERED BUILDING MANUFACTURER AND THEIR REGISTERED PROFESSIONAL ENGINEERS TO DETERMINE AND OBTAIN ALL OTHER PERTINENT DEAD LOADS AND OTHER DESIGN CRITERIA AS MAY BE REQUIRED FOR THE DESIGN OF A SAFE STRUCTURE.
   E. MINIMUM WIND LOAD FOR THE BUILDING'S LATERAL FORCE RESISTANT SYSTEM AND COMPONENT AND CLADDING DESIGN SHALL BE 113 MPH PER IBC AND ASCE 7.
   F. THE PRE-ENGINEERED BUILDING SHALL BE DESIGNED FOR ANY DIFFERENTIAL SETTLEMENT AS MAY BE REQUIRED BY THE GEOTECHNICAL ENGINEERING REPORT.
   G. THE PRE-ENGINEERED BUILDING SHALL BE DESIGNED FOR A MAXIMUM DRIFT IN ALL DIRECTIONS OF THE HEIGHT IN INCHES OVER 180 (L/180).
5. THE FOUNDATIONS OF THE PRE-ENGINEERED SHALL BE DESIGNED BY THE PRE-ENGINEERED METAL BUILDING DESIGNER / FABRICATOR.
6. DIAMETER OF ANCHOR BOLTS SHALL BE DETERMINED BY THE PRE-ENGINEERED BUILDING MANUFACTURER AND THEIR REGISTERED PROFESSIONAL ENGINEER.
7. THE PRE-ENGINEERED BUILDING MUST BE ADEQUATELY BRACED AGAINST LATERAL FORCES AND UPLIFT UNTIL THE SLAB-ON-GRADE IS POURED AND CURED. THE FOUNDATIONS WITHOUT THE SLAB-ON-GRADE HAVE NOT BEEN DESIGNED TO RESIST THE REQUIRED FORCES.
8. PLACEMENT AND DIMENSIONS OF BUILDING COMPONENTS MUST BE FIELD COORDINATED WITH BUILDING MANUFACTURER ERECTION DRAWINGS AND INSTRUCTIONS. BUILDING ERECTION MUST NOT BEGIN WITHOUT EXAMINATION OF THESE DOCUMENTS. SPECIAL ATTENTION IS DIRECTED TO ANCHOR BOLT LAYOUT, FRAME LINE PIER HEIGHTS AND OVERPOUR OF SLAB.
9. THE PRE-ENGINEERED BUILDING SHALL BE INSPECTED BY AN INDEPENDENT TESTING LABORATORY APPROVED BY MORABITO CONSULTANTS, INC. TO VERIFY THAT ALL BOLTS HAVE BEEN PROPERLY TORQUED AND THAT ALL STEEL IS PLUMB AND INSTALLED WITHIN ACCEPTABLE TOLERANCES AS REQUIRED BY AISC CODE.

SUBMITTALS:

1. SHOP DRAWINGS FOR ALL STRUCTURAL ELEMENTS SHOWN ON THE CONTRACT DOCUMENTS MUST BE SUBMITTED BY GENERAL CONTRACTOR AND REVIEWED BY THE ENGINEER.
2. ALL SHOP DRAWINGS USED FOR WORK SHALL BEAR THE STAMP OF THE ARCHITECT/ENGINEER AND SHALL BE MARKED "APPROVED" OR "APPROVED AS NOTED"
3. CONTRACTOR SHALL CHECK SHOP DRAWINGS THOROUGHLY BEFORE SUBMITTING. VERIFY DIMENSIONS REQUIRING FIELD VERIFICATION BEFORE SUBMITTING AND MARK AS HAVING BEEN VERIFIED.
4. SUBMIT CONCRETE MIX DESIGNS FOR EACH CLASS OR USE.
5. SUBMIT CONCRETE REINFORCING STEEL SHOP DRAWINGS.
6. ALL CONTRACTOR MODIFICATIONS (INCLUDING PRODUCTS SUBMISSION) MUST BE IDENTIFIED IN WRITING AS A PROPOSED "AS EQUAL" CHANGES AT TIME OF SUBMISSION.
7. IF A CONTRACTOR OR OWNER FAILS TO SUBMIT THE SHOP DRAWINGS OR FAILS TO FOLLOW THE ABOVE "AS EQUAL" PROCEDURE, THE FIRM MORABITO CONSULTANTS, INC. WILL NOT BE RESPONSIBLE FOR THE STRUCTURAL CERTIFICATION AND DESIGN OF THE PROJECT.
8. SHOP DRAWINGS ARE REVIEWED BY THE ENGINEER AS A CONVENIENCE TO THE CONTRACTOR AND ARE NOT A CONTRACT DOCUMENT.

INSPECTION:

1. ALL WORK SPECIFIED HEREIN SHALL BE INSPECTED IN ACCORDANCE WITH THE BUILDING CODE AND ALL LOCAL ORDINANCES.
2. THE CONTRACTOR SHALL HIRE AN EXPERIENCED QUALIFIED INSPECTOR TO PERFORM ALL REQUIRED INSPECTION WORK.
3. THE CONTRACTOR SHALL HIRE A REGISTERED GEOTECHNICAL ENGINEER TO PROVIDE FULL TIME INSPECTION AND OBSERVATION SERVICES OF HELICAL PILE INSTALLATION AND LOAD TEST, FILL, AND SLAB SUBGRADES, AND FIELD DENSITY TESTING OF COMPACTED STRUCTURAL FILL. SEE GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.
4. INSPECTION SHALL CONSIST OF VISUAL OBSERVATIONS OF MATERIALS, EQUIPMENT OR CONSTRUCTION WORK FOR THE PURPOSE OF ASCERTAINING THAT THE WORK IS IN SUBSTANTIAL CONFORMANCE WITH THE CONTRACT DOCUMENTS AND WITH THE DESIGN INTENT.
5. MAKE, CURE AND TEST CONCRETE TEST SPECIMENS IN ACCORDANCE WITH ASTM C31, FROM CONCRETE SAMPLED AT POINT OF DISCHARGE FOR COMPRESSIVE STRENGTH.
6. THE ENGINEER WILL NOT PERFORM THE REQUIRED INSPECTION AS PART OF THIS PRESENT CONTRACT WITH THE ARCHITECT/OWNER.
7. UNDER THIS PRESENT CONTRACT, THE ENGINEER MAY PERFORM CONSTRUCTION ADMINISTRATION SERVICES TO ASCERTAIN GENERAL CONFORMANCE TO THE CONTRACT DOCUMENTS. HOWEVER, SUCH SERVICES SHALL NOT BE RELIED UPON BY OTHERS AS INSPECTION OR ACCEPTANCE OF THE WORK, NOR SHOULD IT BE CONSTRUED TO RELIEVE THE CONTRACTOR IN ANY WAY FROM HIS OBLIGATIONS AND RESPONSIBILITIES UNDER THE CONSTRUCTION CONTRACT.
8. IT IS AGREED THAT IF THE OWNER DOES NOT ENGAGE MORABITO CONSULTANTS OR AN INDEPENDENT THIRD PARTY INSPECTION AGENCY, THEN THE OWNER WILL DEFEND, INDEMNIFY AND HOLD HARMLESS MORABITO CONSULTANTS, INC., FROM ANY CLAIM OR SUIT WHATSOEVER, INCLUDING BUT NOT LIMITED TO ALL PAYMENTS, EXPENSES OR COSTS INVOLVED, ARISING FROM OR ALLEGED TO HAVE ARISEN FROM THE CONTRACTOR'S PERFORMANCE OR THE FAILURE OF THE CONTRACTOR'S WORK TO CONFORM TO THE DESIGN INTENT AND THE CONTRACT DOCUMENTS.
9. MORABITO CONSULTANTS, INC., AGREES TO BE RESPONSIBLE FOR ITS OWN OR ITS EMPLOYEES' NEGLIGENT ACTS, ERRORS OR OMISSIONS.

OWNERSHIP OF DOCUMENTS:

1. THE CONTRACTOR ACKNOWLEDGES THESE PLANS AND SPECIFICATIONS PREPARED BY MORABITO CONSULTANTS, INC., AS INSTRUMENTS OF PROFESSIONAL SERVICE.
2. THE CONTRACTOR AGREES TO HOLD HARMLESS AND INDEMNIFY MORABITO CONSULTANTS, INC., AGAINST ALL DAMAGES, CLAIMS, AND LOSSES, INCLUDING DEFENSE COSTS, ARISING OUT OF ANY REUSE OF THE PLANS AND SPECIFICATIONS WITHOUT THE WRITTEN AUTHORIZATION OF MORABITO CONSULTANTS, INC.

DESIGN DATA:

BUILDING CODE: THE INTERNATIONAL BUILDING CODE - IBC 2018

CONCRETE:

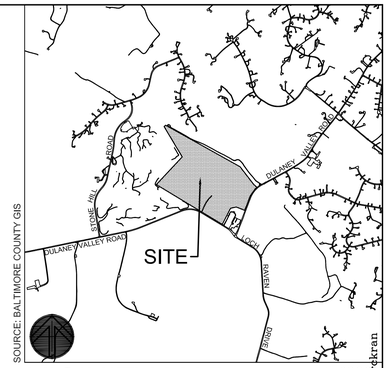
NORMAL WEIGHT CONCRETE HAVING A MINIMUM 28 DAY COMPRESSIVE STRENGTH (f'c) AS FOLLOWS:
SLAB ON GRADE, TURNDOWN SLABS = 4500 PSI

REINFORCING STEEL:

Fy = 60,000 PSI (UNO)

LIVE LOADS:

SLAB ON GRADE = 100 PSF



VICINITY MAP 1"=2000'

OWNER/DEVELOPER:	DESIGN PROFESSIONAL:	PROJECT INFORMATION:	STRUCTURAL DESIGN:
BALTIMORE COUNTY PROPERTY MANAGEMENT 12200A LONG GREEN PIKE GLEN ARM, MARYLAND 21057 CONTACT: ADAM WIENHOLD EMAIL: AWIENHOLD@BALTIMORECOUNTYMD.GOV PHONE: 410-887-4585	SITE RESOURCES, INC. 4 NORTH PARK DRIVE, SUITE 100 COCKEYSVILLE, MD 21030 CONTACT: PETER SOPRANO EMAIL: PSOPRANO@SITERESOURCESINC.COM PHONE: 410-689-0438	CLOVERLAND PARK CRICKET FIELD 12340 DULANEY VALLEY ROAD PHOENIX, MD 21131 ELECTION DISTRICT: 10 COUNCILMANIC DISTRICT:3	MORABITO CONSULTANTS 952 RIDGEBROOK ROAD, SUITE 1700 SPARKS, MD 21152 CONTACT: FRED MORABITO EMAIL: FRED@MORABITOCONSULTANTS.COM PHONE: 410-773-0236

SEAL

STATE OF MARYLAND — FREDERICK JOSEPH MORABITO — No. 16110 — PROFESSIONAL ENGINEER

DATE : 03/18/2025

PROFESSIONAL CERTIFICATION		AS-BUILT / REVISION	BY	DATE
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.				
LICENSE NO. 16110, EXPIRATION DATE 7/19/2026		CONTRACT COMPLETION BOX		
ENGINEER: FREDERICK J. MORABITO MORABITO CONSULTANTS	DGN BY: TJB	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS
AS-BUILT PER RECORD PRINT	DWN BY: TJB	REVIEWED BY:		
BY: DATE:	CHKD BY: FJM	DATE REVIEWED:		

P.W.A. NO.	KEY SHEET	POSITION SHT
R.O.W NO.	USE 112 113	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14

STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER

DRAWING SCALE
PLAN SCALE: AS SHOWN
PROFILE SCALE:

PROPERTY MANAGEMENT
APPROVED BY: _____ PROPERTY MANAGER
DATE: _____

100% CD SUBMISSION

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT

CLOVERLAND PARK CRICKET FIELD — STRUCTURAL SHEET 1 OF 3

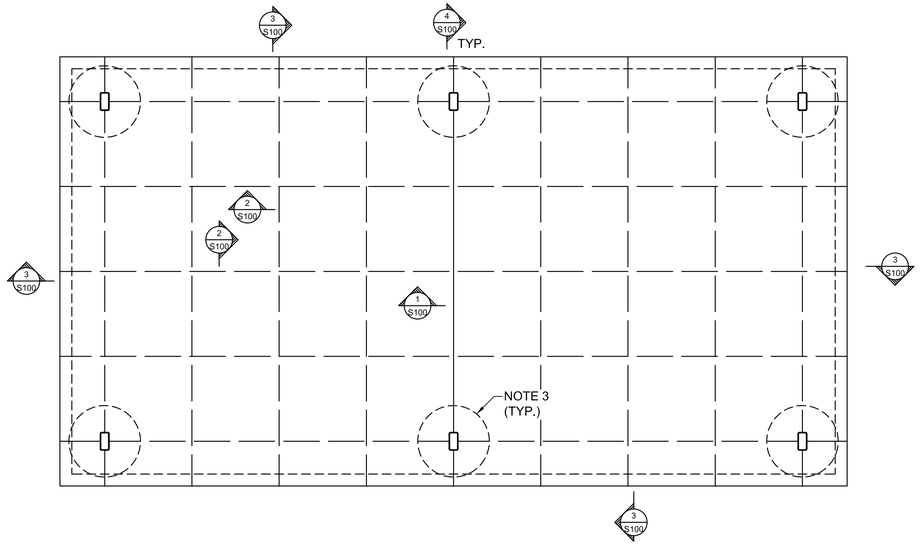
STRUCTURAL GENERAL NOTES
DESIGN DEVELOPMENT

SUBDIVISION: PHOENIX — 12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131 — ELECTION DIST. NO.: 10C3

SHEET DESIGNATION	CONTRACT NUMBER
S001	25067 GXO
JOB ORDER NUMBER	PROJ-10000752
SHEET 38 OF 40	
DRAWING NUMBER	2025-1669
FILE NO.:	

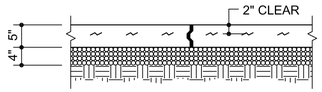
BALTIMORE COUNTY MARYLAND

DWG. FILENAME: © SITE RESOURCES, INC. G:\2023\23469 - Cloverland Park Cricket Field\CAD\23469 - Cloverland Park Cricket Field.dwg-S001 Mar 18, 2025 10:42am joshkran



PAVILION FOUNDATION PLAN SCALE: 1/4"= 1'-0"

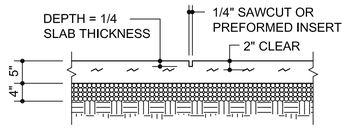
1. REFERENCE ELEVATION TOP OF SLAB ON GRADE = 100.00.
2. STRUCTURAL SLAB ON GRADE SHALL BE 5" CONCRETE (f'c = 4500 PSI) SLAB ON GRADE REINFORCED WITH 6"x6" - W2.9/W2.9 WELDED WIRE FABRIC OVER VAPOR BARRIER OVER 4" POROUS FILL.
3. COLUMN FOOTINGS SHALL BE DESIGNED AND DETAILED BY ICON SHELTER SYSTEMS, INC.
4. ASSUMED SOIL BEARING VALUE = 2000 PSF USED IN THE DESIGN OF THE STRUCTURE. THIS VALUE SHALL BE FIELD VERIFIED BY A REGISTERED GEOTECHNICAL ENGINEER.
5. PROVIDE HAIRPINS IN CONCRETE SLAB ON GRADE IF REQUIRED BY ICON SHELTER SYSTEMS, INC.
6. THESE DRAWINGS ARE BASED OFF OF PLANS AND DETAILS BY ICON SHELTER SYSTEMS INC. CONTRACTOR TO COORDINATE ALL DIMENSIONS INCLUDING COLUMN GRID LOCATIONS AND FOUNDATION DEPTH WITH FINAL DRAWINGS.



- TONGUE AND GROOVE 24 GAUGE GALVANIZED STEEL JOINT BY DAYTON SUPERIOR OR APPROVED EQUAL
- CONTROL JOINTS MAY BE USED IN LIEU OF CONSTRUCTION JOINTS AT COLUMN CENTERLINES INSIDE CONTINUOUS POURS

1 TYP. CONSTRUCTION JOINT

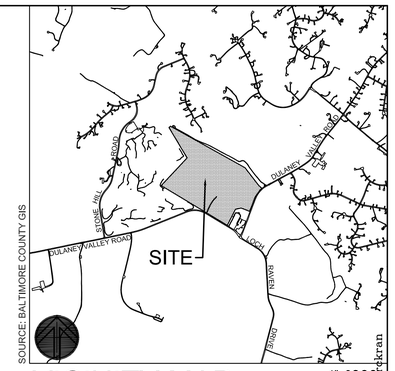
SCALE: 3/4" = 1'-0"



- FILL WITH JOINT SEALANT
- SAWCUTS SHALL BE MADE WITHIN 8 HOURS OF POURING SLAB
- CONTROL JOINTS MAY BE USED IN LIEU OF CONSTRUCTION JOINTS AT COLUMN CENTERLINES INSIDE CONTINUOUS POURS
- MAXIMUM CONTROL JOINT SPACING = 5'-4"

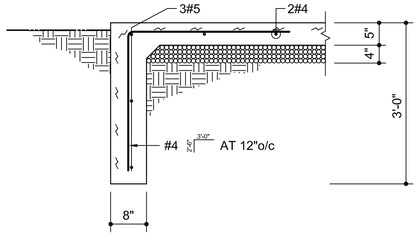
2 TYP. CONTROL JOINT

SCALE: 3/4" = 1'-0"



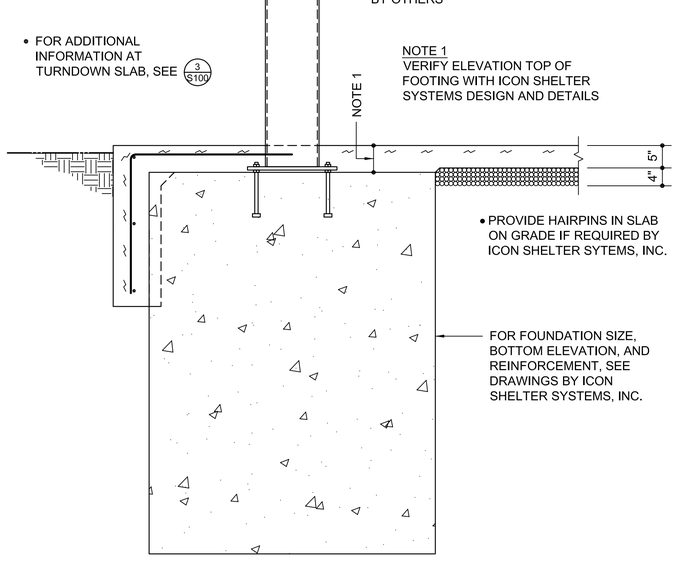
VICINITY MAP

1"=2000'



3 TURN DOWN SLAB

SCALE: 3/4" = 1'-0"



4 TYPICAL SPREAD FOOTING

OWNER/DEVELOPER:
BALTIMORE COUNTY PROPERTY MANAGEMENT
12200A LONG GREEN PIKE
GLEN ARM, MARYLAND 21057
CONTACT: ADAM WIENHOLD
EMAIL: AWIENHOLD@BALTIMORECOUNTYMD.GOV
PHONE: 410-887-4585

DESIGN PROFESSIONAL:
SITE RESOURCES, INC.
4 NORTH PARK DRIVE, SUITE 100
COCKEYSVILLE, MD 21030
CONTACT: PETER SOPRANO
EMAIL: PSOPRANO@SITERESOURCESINC.COM
PHONE: 410-689-0438

PROJECT INFORMATION:
CLOVERLAND PARK CRICKET FIELD
12340 DULANEY VALLEY ROAD
PHOENIX, MD 21131
ELECTION DISTRICT: 10
COUNCILMANIC DISTRICT:3

STRUCTURAL DESIGN:
MORABITO CONSULTANTS
952 RIDGEBROOK ROAD, SUITE 1700
SPARKS, MD 21152
CONTACT: FRED MORABITO
EMAIL: FRED@MORABITOCONSULTANTS.COM
PHONE: 410-773-0236

SEAL

DATE : 03/18/2025

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 16110 EXPIRATION DATE 7/19/2026
ENGINEER: FREDERICK J. MORABITO
MORABITO CONSULTANTS
AS-BUILT PER RECORD PRINT
BY:
DATE:
DGN BY: TJB
DWN BY: TJB
CHKD BY: FJM

AS-BUILT / REVISION | BY | DATE
CONTRACT COMPLETION BOX

P.W.A. NO.	KEY SHEET	POSITION SHT
R.O.W NO.	USE 112 113	65NE12 65NE13 64NE12 64NE13 63NE12 63NE13 64NE14

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

DRAWING SCALE
PLAN SCALE: AS SHOWN
PROFILE SCALE:

PROPERTY MANAGEMENT
APPROVED BY: PROPERTY MANAGER
DATE:

ADD ALTERNATE 1

100% CD SUBMISSION

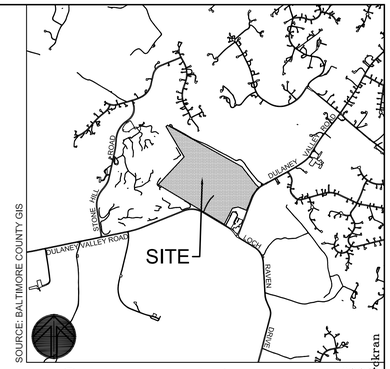
BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT
CLOVERLAND PARK CRICKET FIELD
STRUCTURAL SHEET 2 OF 3

PAVILLION FOUNDATION PLAN AND DETAILS
DESIGN DEVELOPMENT

SUBDIVISION: PHOENIX
12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131
ELECTION DIST. NO.: 10C3

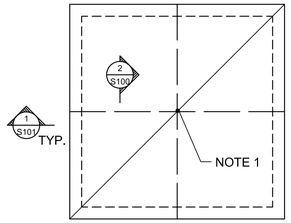
SHEET DESIGNATION	CONTRACT NUMBER
S100	25067 GXO
	JOB ORDER NUMBER
	PROJ-10000752
	SHEET 39 OF 40
	DRAWING NUMBER
	2025-1670
	FILE NO.:

DWG. FILENAME: © SITE RESOURCES, INC. G:\2023\23469 - Cloverland Park Cricket Field\CAD\23469 - Cloverland Park Cricket Field dwg-S100 Mar 18, 2025 10:43am joskran



VICINITY MAP

1"=2000'

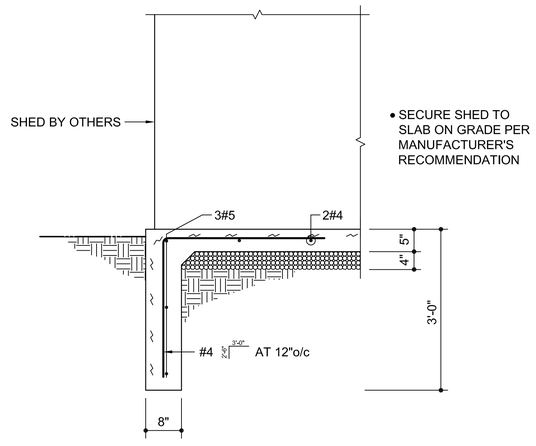


SHED FOUNDATION PLAN

SCALE: 1/4"= 1'-0"

1. STRUCTURAL SLAB ON GRADE SHALL BE 5" CONCRETE (f'c = 4500 PSI) SLAB ON GRADE REINFORCED WITH 6"x6" - W2.9/W2.9 WELDED WIRE FABRIC OVER VAPOR BARRIER OVER 4" POROUS FILL.

2. SEE CIVIL DRAWINGS FOR EXACT LOCATION OF SHED.



1 TURN DOWN SLAB

SCALE: 3/4" = 1'-0"

ADD ALTERNATE 2

OWNER/DEVELOPER:
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GLEN ARM, MARYLAND 21057
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SPARKS, MD 21152
CONTACT: FRED MORABITO
EMAIL: FRED@MORABITOCONSULTANTS.COM
PHONE: 410-773-0236

SEAL

STATE OF MARYLAND — FREDERICK JOSEPH MORABITO — 16110 — PROFESSIONAL ENGINEER

DATE : 03/18/2025

PROFESSIONAL CERTIFICATION

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ENGINEER: FREDERICK J. MORABITO
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REVIEWED BY:							
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DRAWING SCALE	
PLAN SCALE:	AS SHOWN
PROFILE SCALE:	

PROPERTY MANAGEMENT
APPROVED BY: PROPERTY MANAGER
DATE:

100% CD SUBMISSION

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT

CLOVERLAND PARK CRICKET FIELD

STRUCTURAL SHEET 3 OF 3

SHED FOUNDATION PLAN AND DETAILS
DESIGN DEVELOPMENT

SUBDIVISION: PHOENIX

12340 DULANEY VALLEY ROAD, PHOENIX, MD 21131

ELECTION DIST. NO.: 10C3

BALTIMORE COUNTY MARYLAND

SHEET DESIGNATION	CONTRACT NUMBER
S101	25067 GXO
	JOB ORDER NUMBER
	PROJ-10000752
	SHEET 40 OF 40
	DRAWING NUMBER
	2025-1671
	FILE NO.:

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